



JUNOScript API Reference

Release 5.4

Juniper Networks, Inc.

1194 North Mathilda Avenue

Sunnyvale, CA 94089

USA

408-745-2000

www.juniper.net

Part Number: 530-007547-01, Revision 2

- This product includes the Envoy SNMP Engine, developed by Epilogue Technology, an Integrated Systems Company. Copyright © 1986–1997, Epilogue Technology Corporation. All rights reserved. This program and its documentation were developed at private expense, and no part of them is in the public domain.
 - This product includes memory allocation software developed by Mark Moraes, copyright © 1988, 1989, 1993, University of Toronto.
 - This product includes FreeBSD software developed by the University of California, Berkeley, and its contributors. All of the documentation and software included in the 4.4BSD and 4.4BSD-Lite Releases is copyrighted by The Regents of the University of California. Copyright © 1979, 1980, 1983, 1986, 1988, 1989, 1991, 1992, 1993, 1994. The Regents of the University of California. All rights reserved.
 - GateD software copyright © 1995, The Regents of the University. All rights reserved. Gate Daemon was originated and developed through release 3.0 by Cornell University and its collaborators. Gated is based on Kirton's EGP, UC Berkeley's routing daemon (routed), and DCN's HELLO routing protocol. Development of Gated has been supported in part by the National Science Foundation. Portions of the GateD software copyright © 1988, Regents of the University of California. All rights reserved. Portions of the GateD software copyright © 1991, D. L. S. Associates.
 - This product includes software developed by Maker Communications, Inc., Copyright © 1996, 1997, Maker Communications, Inc.
 - Juniper Networks is registered in the U.S. Patent and Trademark Office and in other countries as a trademark of Juniper Networks, Inc. Broadband Cable Processor, G10, Internet Processor, JUNOS, JUNOScript, M5, M10, M20, M40, M40e, M160, M-series, T320, T640, and T-series are trademarks of Juniper Networks, Inc. All other trademarks, service marks, registered trademarks, or registered service marks are the property of their respective owners. All specifications are subject to change without notice.
 - JUNOScript API Reference*, Release 5.4
Copyright © 2002, Juniper Networks, Inc.
All rights reserved. Printed in USA.
 - Writer: Tony Mauro
Editor: Sonia Saruba
Covers and template design: Edmonds Design
 - Revision History
15 July 2002—Second edition.
8 July 2002—First edition.
 - The information in this document is current as of the date listed in the revision history above.
 - Juniper Networks assumes no responsibility for any inaccuracies in this document. Juniper Networks reserves the right to change, modify, transfer or otherwise revise this publication without notice.
 - Products made or sold by Juniper Networks (including the G10 CMTS, the M5 router, the M10 router, the M20 router, the M40 router, the M40e router, the M160 router, the T320 router, the T640 routing node, and the JUNOS software) or components thereof may be covered by one or more of the following patents which are owned by or licensed to Juniper Networks: U.S. Patent Nos. 5,473,599, 5,905,725, 5,909,440.
 - YEAR 2000 NOTICE
Juniper Networks hardware and software products are Year 2000 compliant. The JUNOS software has no known time-related limitations through the year 2038. However, the NTP application is known to have some difficulty in the year 2036.
 - SOFTWARE LICENSE
The terms and conditions for using this software are described in the software license contained in the acknowledgment to your purchase order or, to the extent applicable, to any reseller agreement or end-user purchase agreement executed between you and Juniper Networks. By using this software, you indicate that you understand and agree to be bound by those terms and conditions.
 - Generally speaking, the software license restricts the manner in which you are permitted to use the software and may contain prohibitions against certain uses. The software license may state conditions under which the license is automatically terminated. You should consult the license for further details.
 - For complete product documentation, please see the Juniper Networks Web site at www.juniper.net/techpubs.

Abbreviated Table of Contents

About This Manual

Part 1

Session Control, Operational Request, and Configuration API Reference

Chapter 1 Summary of Session Control Tags 3

Chapter 2 Mapping between Operational Tags and CLI Commands 17

Chapter 3 Summary of Operational Request Tags 25

Chapter 4 Summary of Operational Response Tags 67

Chapter 5 Summary of Configuration Tags 301

Part 2

JUNOScript Document Type Definitions

Chapter 6 DTD for Session Control Response Tags 1481

Chapter 7 DTD for Accounting Response Tags 1483

Chapter 8 DTD for Alarm Response Tags 1487

Chapter 9 DTD for Chassis Response Tags 1489

Chapter 10 DTD for Class of Service Response Tags 1495

Chapter 11	DTD for Firewall Filter Response Tags	1501
Chapter 12	DTD for Forwarding and Routing Table Response Tags	1503
Chapter 13	DTD for Interface Response Tags	1505
Chapter 14	DTD for IPSec Response Tags	1527
Chapter 15	DTD for IPv6 Neighbor Discovery Response Tags	1531
Chapter 16	DTD for Routing Protocols Response Tags	1533
Chapter 17	DTD for SNMP Response Tags	1569
Chapter 18	DTD for UDP Forwarding Helper Response Tags	1573

Part 3

Index

Table of Contents

About This Manual

Objectives	lxiii
Audience	lxiv
Document Organization	lxiv
General Document Conventions	lxv
Conventions for Tag Summaries	lxvi
List of Technical Publications	lxvii
Documentation Feedback	lxviii
How to Request Support	lxviii

Part 1

Session Control, Operational Request, and Configuration API Reference

Chapter 1

Summary of Session Control Tags 3

< abort>	3
< abort-acknowledgment>	3
< command>	4
< commit-configuration>	4
< configuration>	5
< configuration-text>	6
< end-session>	6
< get-configuration>	6
< get-xnm-information>	7
< junoscript>	8
< load-configuration>	9
< lock-configuration>	11
< output>	11
< request-end-session>	11
< rpc>	12
< rpc-reply>	12
< undocumented>	12
< unlock-configuration>	13
< xnm:error>	13
< xnm:warning>	14

• • • • •

Chapter 2

Mapping between Operational Tags and CLI Commands 17

• • • • •

Chapter 3

Summary of Operational Request Tags 25

< clear-helper-statistics-information>	25
< clear-ipv6-nd-information>	25
< file-compare>	26
< file-copy>	26
< file-delete>	26
< file-list>	27
< file-rename>	27
< file-show>	27
< get-accounting-profile-information>	28
< get-accounting-record-information>	28
< get-alarm-information>	28
< get-bgp-group-information>	28
< get-bgp-neighbor-information>	29
< get-bgp-summary-information>	29
< get-chassis-inventory>	29
< get-cos-classifier-information>	30
< get-cos-classifier-table-information>	30
< get-cos-classifier-table-map-information>	30
< get-cos-code-point-map-information>	31
< get-cos-drop-profile-information>	31
< get-cos-forwarding-class-information>	31
< get-cos-information>	31
< get-cos-interface-map-information>	32
< get-cos-red-information>	32
< get-cos-rewrite-information>	32
< get-cos-rewrite-table-information>	33
< get-cos-rewrite-table-map-information>	33
< get-cos-scheduler-map-information>	33
< get-cos-scheduler-map-table-information>	33
< get-cos-table-information>	33
< get-destination-class-statistics>	34
< get-environment-information>	34
< get-fabric-queue-information>	34
< get-feb-information>	34
< get-firewall-information>	35
< get-firewall-log-information>	35
< get-firmware-information>	35
< get-forwarding-table-information>	36
< get-fpc-information>	36
< get-helper-statistics-information>	36
< get-ike-security-associations-information>	37
< get-instance-information>	37
< get-instance-summary-information>	37
< get-interface-filter-information>	37
< get-interface-information>	38
< get-interface-policer-information>	38
< get-interface-queue-information>	39
< get-ipv6-nd-information>	39

< get-ipv6-ra-information>	39
< get-isis-adjacency-information>	40
< get-isis-database-information>	40
< get-isis-hostname-information>	40
< get-isis-interface-information>	41
< get-isis-route-information>	41
< get-isis-spf-information>	41
< get-isis-statistics-information>	42
< get-l2ckt-connection-information>	42
< get-l2vpn-connection-information>	43
< get-ldp-database-information>	44
< get-ldp-interface-information>	44
< get-ldp-neighbor-information>	45
< get-ldp-path-information>	45
< get-ldp-route-information>	46
< get-ldp-session-information>	46
< get-ldp-statistics-information>	46
< get-ldp-traffic-statistics-information>	47
< get-lm-information>	47
< get-lm-peer-information>	47
< get-lm-routing-information>	47
< get-lm-routing-peer-information>	47
< get-lm-routing-te-link-information>	48
< get-lm-te-link-information>	48
< get-mpls-admin-group-information>	48
< get-mpls-cspf-information>	48
< get-mpls-interface-information>	48
< get-mpls-lsp-information>	49
< get-mpls-path-information>	50
< get-ospf-database-information>	50
< get-ospf-interface-information>	51
< get-ospf-io-statistics-information>	51
< get-ospf-log-information>	51
< get-ospf-neighbor-information>	52
< get-ospf-route-information>	52
< get-ospf-statistics-information>	53
< get-pic-information>	53
< get-rmon-alarm-information>	53
< get-rmon-event-information>	53
< get-rmon-information>	54
< get-route-engine-information>	54
< get-route-information>	55
< get-route-summary-information>	57
< get-rsvp-interface-information>	57
< get-rsvp-neighbor-information>	57
< get-rsvp-session-information>	58
< get-rsvp-statistics-information>	59
< get-rsvp-version-information>	59
< get-rtexport-instance-information>	59
< get-rtexport-table-information>	59
< get-rtexport-target-information>	60
< get-scb-information>	60
< get-security-associations-information>	60
< get-sfm-information>	61
< get-snmp-information>	61
< get-source-class-statistics>	61
< get-spmb-information>	61

< get-spmb-sib-information>	61
< get-ssb-information>	62
< get-syslog-tag-information>	62
< get-ted-database-information>	62
< get-ted-link-information>	63
< get-ted-protocol-information>	63
< request-halt>	63
< request-package-add>	64
< request-package-delete>	64
< request-package-validate>	64
< request-reboot>	65
 Summary of Operational Response Tags	67
 Summary of Accounting Response Tags	68
< accounting-profile-columns>	68
< accounting-profile-filter>	68
< accounting-profile-header>	68
< accounting-profile-information>	69
< accounting-profile-interfaces>	69
< accounting-record-information>	70
< cu-accounting-record>	70
< cu-accounting-statistics>	71
< filter-accounting-record>	71
< filter-accounting-statistics>	72
< interface-accounting-record>	72
< interface-accounting-statistics>	73
< routing-engine-accounting-record>	73
< routing-engine-accounting-statistics>	74
Summary of Alarm Response Tags	75
< alarm-detail>	75
< alarm-information>	75
< alarm-summary>	75
Summary of Chassis Response Tags	76
< alarm-indicators>	76
< cb>	76
< cb-panel>	77
< chassis>	77
< chassis-inventory>	77
< chassis-module>	78
< chassis-sub-module>	78
< craft-information>	79
< display-panel>	79
< environment-information>	80
< environment-item>	80
< firmware>	80
< firmware-information>	81
< fpc>	81
< fpc-information>	82
< fpc-panel>	82
< front-panel>	83
< i2c-information>	83
< mcs>	84

< mcs-panel>	84
< pcg>	85
< pcg-panel>	85
< pic>	85
< pic-detail>	86
< re>	87
< re-panel>	87
< route-engine>	88
< route-engine-information>	89
< scb>	89
< scb-information>	90
< scg>	91
< scg-panel>	91
< sfm>	91
< sfm-panel>	92
< sib-panel>	92
Summary of Class of Service Response Tags	92
< alias-map>	92
< alias-map-item>	92
< classifier>	93
< classifier-map>	93
< classifier-map-item>	93
< classifier-table>	94
< classifier-table-entry>	94
< classifier-table-map>	95
< code-point-map>	95
< cos-classifier-information>	95
< cos-classifier-table-information>	96
< cos-classifier-table-map-information>	96
< cos-code-point-map-information>	96
< cos-drop-profile-information>	96
< cos-forwarding-class-information>	97
< cos-information>	97
< cos-interface-information>	97
< cos-red-information>	98
< cos-rewrite-information>	98
< cos-rewrite-table-information>	98
< cos-rewrite-table-map-information>	98
< cos-scheduler-map-information>	99
< cos-scheduler-map-table-information>	99
< cos-table-information>	99
< drop-profile>	100
< fabric-queue-information>	100
< fc-map>	100
< fc-map-item>	101
< fpc-queue-information>	101
< i-logical-map>	101
< i-logical-objects>	102
< interface-map>	102
< policy>	103
< policy-entry>	103
< policy-packet-loss-profile>	104
< profile-map>	104
< profile-map-item>	105
< queue-information>	105
< queue-information-item>	106
< red>	107

< red-entry>	108
< rewrite>	108
< rewrite-map>	108
< rewrite-map-item>	109
< rewrite-table>	109
< rewrite-table-entry>	109
< rewrite-table-map>	110
< scheduler>	110
< scheduler-map>	111
Summary of Firewall Filter Response Tags	112
< counter>	112
< filter-information>	112
< firewall-information>	112
< firewall-log-information>	113
< log-information>	113
< policer>	114
Summary of Forwarding and Routing Table Response Tags	114
< forwarding-table-information>	114
< nexthop>	115
< routing-table>	115
< routing-table-entry>	116
< routing-table-summary>	116
< rpf-information>	116
Summary of Interface Response Tags	117
< active-alarms>	117
< active-defects>	117
< address-family>	118
< address-family-flags>	119
< atm-defects>	120
< atm-information>	120
< atm-statistics>	121
< bundle>	122
< cds1-information>	122
< coc12-information>	122
< cos-information>	122
< cos-queue-config>	123
< ct3-information>	123
< destination-class-statistics>	124
< ds1-bert-information>	124
< ds3-bert-information>	125
< dsu-information>	126
< e3-bert-information>	126
< es-ifd-stats>	127
< ethernet-autonegotiation>	127
< ethernet-filter-statistics>	128
< ethernet-mac-statistics>	129
< filter-information>	130
< fragments>	131
< hdlc-information>	131
< if-config-flags>	132
< if-device-flags>	133
< if-media-flags>	134
< ifa-flags>	135
< ifvc-flags>	136
< ifvc-multipoint-destination>	136
< in-arp-statistics>	137
< input-error-list>	138

< interface-address>	139
< interface-alarms>	140
< interface-filter-information>	142
< interface-information>	143
< interface-policer-information>	143
< interface-tx-queue>	143
< keepalive-config>	144
< keepalive-statistics>	144
< lag-bundle>	145
< lag-link>	145
< lag-marker>	146
< lag-traffic-statistics>	146
< link>	147
< lmi-dce-config>	148
< lmi-dte-config>	148
< local-traffic-statistics>	149
< logical-interface>	150
< media-alarm>	151
< media-information>	152
< multilink-bundle-errors>	152
< multilink-bundle-options>	153
< multilink-interface-errors>	153
< multilink-traffic-statistics>	154
< ncp-information>	154
< nxds0-information>	155
< oam-parameters>	155
< oam-statistics>	155
< output-error-list>	156
< packets>	157
< pfe-information>	158
< physical-interface>	159
< plcp-defects>	163
< plcp-statistics>	164
< policer-information>	164
< queue>	165
< queue-counters>	167
< route-rpf-statistics>	167
< sonet-errors>	167
< sonet-line-information>	168
< sonet-path-information>	168
< sonet-physical-information>	168
< sonet-section-information>	168
< sonet-vt-information>	169
< source-class-statistics>	169
< traffic-statistics>	169
< transit-traffic-statistics>	170
< virtual-circuit-information>	171
Summary of IPSec Response Tags	172
< ike-sa-algorithms>	172
< ike-sa-misc>	172
< ike-sa-phase2-information>	173
< ike-sa-traffic-statistics>	173
< ike-security-associations>	174
< ike-security-associations-block>	175
< ike-security-associations-information>	175
< kmd-memory-usage>	175
< kmd-memory-usage-information>	176

< security-associations>	176
< security-associations-block>	177
< security-associations-information>	177
Summary of IPv6 Neighbor Discovery Response Tags	177
< ipv6-modify-nd>	177
< ipv6-modify-nd-entry>	178
< ipv6-nd-entry>	178
< ipv6-nd-information>	179
Summary of Routing Protocols Response Tags	179
< admin-groups>	179
< aggregate>	180
< aggregate-as-path>	180
< aggregated-route>	181
< area-address-tlv>	181
< authentication-tlv>	181
< bgp-error>	182
< bgp-group>	182
< bgp-group-information>	183
< bgp-information>	183
< bgp-option-information>	184
< bgp-output-queue>	185
< bgp-peer>	186
< bgp-rib>	189
< connection>	190
< cspf-paths>	191
< cspf-queue>	191
< cspf-timing>	192
< detour>	192
< detour-bandwidth>	193
< detour-branch>	193
< explicit-route>	194
< history>	194
< hostname-tlv>	194
< idrp-tlv>	195
< instance>	195
< instance-core>	195
< instance-information>	196
< instance-interface>	196
< instance-rib>	197
< instance-vrf>	197
< interface>	198
< interface-level-data>	198
< ip-prefix-tlv>	199
< ipaddress-tlv>	199
< ipv6-ra-advertisement>	200
< ipv6-ra-information>	201
< ipv6-ra-interface>	201
< ipv6-ra-prefix>	202
< ipv6-reachability-tlv>	202
< ipv6address-tlv>	203
< isis-adjacency>	203
< isis-adjacency-information>	204
< isis-adjacency-log>	205
< isis-database>	205
< isis-database-entry>	206
< isis-database-information>	206
< isis-header>	207

< isis-hostname>	208
< isis-hostname-information>	208
< isis-interface>	208
< isis-interface-information>	209
< isis-neighbor>	210
< isis-packet>	210
< isis-prefix>	211
< isis-reachability-subtlv>	212
< isis-route>	213
< isis-route-information>	213
< isis-routing-table>	213
< isis-spf>	214
< isis-spf-information>	214
< isis-spf-log>	215
< isis-spf-log-header>	215
< isis-spf-result>	216
< isis-spf-results-header>	216
< isis-statistics>	217
< isis-statistics-information>	218
< isis-tlv>	218
< isis-tlv-overhead>	219
< l2circuit-connection-information>	219
< l2circuit-neighbor>	220
< l2vpn-connection-information>	220
< label-block>	220
< ldp-binding>	221
< ldp-database>	221
< ldp-database-information>	221
< ldp-event-statistics>	222
< ldp-interface>	222
< ldp-interface-information>	223
< ldp-message-statistics>	223
< ldp-neighbor>	223
< ldp-neighbor-information>	224
< ldp-nexthop>	224
< ldp-path>	225
< ldp-path-information>	225
< ldp-path-route>	226
< ldp-route>	226
< ldp-route-information>	226
< ldp-session>	227
< ldp-session-address>	228
< ldp-session-information>	229
< ldp-statistics>	229
< ldp-statistics-information>	229
< ldp-traffic-statistics>	230
< ldp-traffic-statistics-error>	230
< ldp-traffic-statistics-information>	230
< link-subtlv>	231
< lm-information>	231
< lm-peer-information>	232
< lm-peer-root-information>	232
< lm-peer-te-links>	233
< lm-te-link-information>	233
< lm-te-link-resources>	234
< lm-te-link-root-information>	234
< local-interface>	235

< log-element>	235
< message-statistics>	235
< mpls-admin-group>	236
< mpls-admin-group-information>	236
< mpls-cspf>	236
< mpls-cspf-information>	237
< mpls-error>	237
< mpls-interface>	237
< mpls-interface-information>	238
< mpls-lsp>	238
< mpls-lsp-attributes>	239
< mpls-lsp-autobandwidth>	240
< mpls-lsp-information>	240
< mpls-lsp-path>	241
< mpls-path>	242
< mpls-path-information>	242
< mt-tlv>	243
< next-hop-address>	243
< next-hop-element>	243
< next-hop-name>	244
< nh>	244
< ospf-area-header>	245
< ospf-database>	245
< ospf-database-extensive>	246
< ospf-database-information>	247
< ospf-database-summary>	247
< ospf-errors>	248
< ospf-external-lsa>	249
< ospf-interface>	250
< ospf-interface-information>	251
< ospf-intf-header>	251
< ospf-io-statistics>	252
< ospf-io-statistics-information>	252
< ospf-link>	252
< ospf-log-events>	253
< ospf-log-information>	253
< ospf-log-instance>	253
< ospf-log-maximum-length>	254
< ospf-neighbor>	254
< ospf-neighbor-information>	255
< ospf-network-lsa>	255
< ospf-opaque-area-lsa>	256
< ospf-opaque-link-local-lsa>	256
< ospf-route>	256
< ospf-route-information>	257
< ospf-router-lsa>	257
< ospf-statistics>	258
< ospf-statistics-information>	258
< ospf-summary-lsa>	259
< packet-information>	259
< packet-statistics>	259
< path-history>	260
< prefix-element>	260
< prefix-limit>	261
< protocol-nh>	261
< protocols>	262
< protocols-tlv>	262

< reachability-tlv>	262
< record-route>	263
< reference-site>	263
< remote-interface>	264
< reserved-bandwidth>	264
< rip-error>	264
< rip-general-statistics>	265
< rip-general-statistics-information>	265
< rip-global-statistics>	265
< rip-message-statistics>	266
< rip-neighbor>	266
< rip-neighbor-information>	267
< rip-neighbor-statistics>	267
< rip-statistics-information>	268
< rip-timer-values>	268
< route-filter>	269
< route-flap-damping>	269
< route-information>	270
< route-queue>	270
< route-summary-information>	271
< route-table>	271
< router-id-tlv>	272
< rsvp-error>	272
< rsvp-interface>	272
< rsvp-interface-information>	273
< rsvp-neighbor>	274
< rsvp-neighbor-information>	275
< rsvp-session>	276
< rsvp-session-data>	278
< rsvp-session-information>	278
< rsvp-statistics-information>	279
< rsvp-telink>	279
< rsvp-version>	280
< rsvp-version-information>	280
< rt>	281
< rt-entry>	282
< rt-martians>	284
< rt-test-policy>	284
< rte-instance>	284
< rte-table>	285
< rte-target>	285
< rteexport-table-information>	286
< task>	286
< task-information>	286
< ted-database>	287
< ted-database-information>	287
< ted-database-summary>	288
< ted-link>	288
< ted-link-information>	289
< ted-protocol>	290
< ted-protocol-information>	290
< tlv-block>	290
< tlv-stragglers>	291
< totals-information>	291
< tracing-information>	291
< transmission-status>	292

< unconfigured-peers>	292
< unknown-tlv>	292
Summary of SNMP Response Tags	293
< rmon-alarm>	293
< rmon-alarm-information>	294
< rmon-event>	294
< rmon-event-information>	295
< rmon-information>	295
< snmp-input-statistics>	295
< snmp-output-statistics>	296
< snmp-statistics>	297
< sub-agent-control-blocks>	297
< sub-agent-registration>	298
Summary of UDP Forwarding Helper Response Tags	298
< helper-statistics-information>	298
< helper-statistics-service-information>	299

Chapter 5 Summary of Configuration Tags.....301

< access> (configuration)	301
< access> (configuration/snmp)	301
< accounting> (configuration/interfaces/interface/unit/family/inet).....	302
< accounting> (configuration/interfaces/interface/unit/family/inet6).....	302
< accounting-options> (configuration).....	303
< accounting-profile> (configuration/firewall/family/inet/filter).....	303
< accounting-profile> (configuration/firewall/family/inet6/filter).....	304
< address> (configuration/firewall/family/inet/filter/term/from).....	304
< address> (configuration/firewall/family/inet6/filter/term/from).....	305
< address> (configuration/interfaces/interface/unit/family/inet).....	305
< address> (configuration/interfaces/interface/unit/family/inet6).....	306
< address> (configuration/protocols/pim/rp/static)	307
< address> (configuration/protocols/router-discovery).....	307
< address> (configuration/routing-instances/instance/protocols/pim/rp/static)...	308
< address> (configuration/routing-instances/instance/protocols/router-discovery)	309
< admin-group> (configuration/protocols/mpls)	309
< admin-group> (configuration/protocols/mpls/interface).....	310
< admin-group> (configuration/protocols/mpls/label-switched-path)	310
< admin-group> (configuration/protocols/mpls/label-switched-path/primary)....	311
< admin-group> (configuration/protocols/mpls/label-switched-path/secondary).....	311
< admin-groups> (configuration/protocols/mpls).....	312
< aggregate> (configuration/routing-instances/instance/routing-options).....	312
< aggregate> (configuration/routing-instances/instance/routing-options/rib)....	313
< aggregate> (configuration/routing-options)	313
< aggregate> (configuration/routing-options/rib)	314
< aggregated-devices> (configuration/chassis).....	314
< aggregated-ether-options> (configuration/interfaces/interface).....	314
< aggregated-sonet-options> (configuration/interfaces/interface)	315
< aggregation> (configuration/forwarding-options/sampling/output/cflowd).....	316
< alarm> (configuration/chassis)	316
< alarm> (configuration/snmp/rmon)	317
< alias> (configuration/system/static-host-mapping).....	318

< allow> (configuration/protocols/bgp/group)	318
< allow> (configuration/routing-instances/instance/protocols/bgp/group)	318
< any> (configuration/protocols/bgp/family/inet)	319
< any> (configuration/protocols/bgp/family/inet-vpn)	319
< any> (configuration/protocols/bgp/family/inet6)	320
< any> (configuration/protocols/bgp/group/family/inet)	320
< any> (configuration/protocols/bgp/group/family/inet-vpn)	321
< any> (configuration/protocols/bgp/group/family/inet6)	321
< any> (configuration/protocols/bgp/group/neighbor/family/inet)	322
< any> (configuration/protocols/bgp/group/neighbor/family/inet-vpn)	322
< any> (configuration/protocols/bgp/group/neighbor/family/inet6)	323
< any> (configuration/routing-instances/instance/protocols/bgp/family/inet)	323
< any> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn)	324
< any> (configuration/routing-instances/instance/protocols/bgp/family/inet6)	324
< any> (configuration/routing-instances/instance/protocols/bgp/group/family/inet)	325
< any> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn)	325
< any> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6)	326
< any> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet)	327
< any> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn)	328
< any> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6)	329
< apply-groups>	329
< aps> (configuration/interfaces/interface/sonet-options)	330
< archive> (configuration/system/syslog)	331
< archive> (configuration/system/syslog/file)	331
< archive-sites> (configuration/accounting-options/file)	332
< area> (configuration/protocols/ospf)	332
< area> (configuration/routing-instances/instance/protocols/ospf)	333
< area-range> (configuration/protocols/ospf/area)	334
< area-range> (configuration/protocols/ospf/area/nssa)	334
< area-range> (configuration/routing-instances/instance/protocols/ospf/area)	335
< area-range> (configuration/routing-instances/instance/protocols/ospf/area/nssa)	335
< arp> (configuration/interfaces/interface/unit/family/inet/address)	336
< as-path> (configuration/policy-options)	336
< as-path> (configuration/policy-options/policy-statement/from)	337
< as-path> (configuration/policy-options/policy-statement/term/from)	337
< as-path> (configuration/policy-options/policy-statement/term/to)	338
< as-path> (configuration/policy-options/policy-statement/to)	338
< as-path> (configuration/routing-instances/instance/routing-options/aggregate/defaults)	339
< as-path> (configuration/routing-instances/instance/routing-options/aggregate/route)	340
< as-path> (configuration/routing-instances/instance/routing-options/generate/defaults)	341
< as-path> (configuration/routing-instances/instance/routing-options/generate/route)	342
< as-path> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)	343
< as-path> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)	344

< as-path> (configuration/routing-instances/instance/routing-options/rib/generate/defaults).....	345
< as-path> (configuration/routing-instances/instance/routing-options/rib/generate/route).....	346
< as-path> (configuration/routing-instances/instance/routing-options/rib/static/defaults).....	347
< as-path> (configuration/routing-instances/instance/routing-options/rib/static/route).....	348
< as-path> (configuration/routing-instances/instance/routing-options/static/defaults).....	349
< as-path> (configuration/routing-instances/instance/routing-options/static/route).....	350
< as-path> (configuration/routing-options/aggregate/defaults).....	351
< as-path> (configuration/routing-options/aggregate/route).....	351
< as-path> (configuration/routing-options/generate/defaults).....	352
< as-path> (configuration/routing-options/generate/route).....	353
< as-path> (configuration/routing-options/rib/aggregate/defaults).....	353
< as-path> (configuration/routing-options/rib/aggregate/route).....	354
< as-path> (configuration/routing-options/rib/generate/defaults).....	355
< as-path> (configuration/routing-options/rib/generate/route).....	355
< as-path> (configuration/routing-options/rib/static/defaults).....	356
< as-path> (configuration/routing-options/rib/static/route).....	357
< as-path> (configuration/routing-options/static/defaults).....	357
< as-path> (configuration/routing-options/static/route).....	358
< as-path-expand> (configuration/policy-options/policy-statement/from/route-filter).....	359
< as-path-expand> (configuration/policy-options/policy-statement/from/source-address-filter).....	359
< as-path-expand> (configuration/policy-options/policy-statement/term/from/route-filter).....	360
< as-path-expand> (configuration/policy-options/policy-statement/term/from/source-address-filter).....	360
< as-path-expand> (configuration/policy-options/policy-statement/term/then) ..	361
< as-path-expand> (configuration/policy-options/policy-statement/then).....	361
< atm-options> (configuration/interfaces/interface).....	362
< authentication> (configuration/security/ipsec/security-association/manual/direction).....	362
< authentication> (configuration/system/login/user).....	363
< authentication-key> (configuration/interfaces/interface/sonet-options/aps) ..	363
< authentication-key> (configuration/protocols/ospf/area/interface).....	364
< authentication-key> (configuration/protocols/ospf/area/virtual-link) ..	364
< authentication-key> (configuration/routing-instances/instance/protocols/ospf/area/interface).....	365
< authentication-key> (configuration/routing-instances/instance/protocols/ospf/area/virtual-link).....	365
< authentication-order> (configuration/access/profile) ..	366
< authentication-order> (configuration/system) ..	366
< auto-bandwidth> (configuration/protocols/mpls/label-switched-path) ..	367
< auto-export> (configuration/routing-instances/instance/routing-options) ..	367
< auto-export> (configuration/routing-options).....	368
< auto-rp> (configuration/protocols/pim/rp) ..	368
< auto-rp> (configuration/routing-instances/instance/protocols/pim/rp).....	369
< autonomous-system> (configuration/routing-instances/instance/routing-options) ..	369
< autonomous-system> (configuration/routing-options) ..	370
< auxiliary> (configuration/system/ports) ..	370
< backup-router> (configuration/system) ..	371

< bgp> (configuration/protocols)	372
< bgp> (configuration/routing-instances/instance/protocols)	374
< bootp> (configuration/forwarding-options/helpers)	376
< bootstrap-export> (configuration/protocols/pim/rp)	376
< bootstrap-export> (configuration/routing-instances/instance/protocols/pim/rp)	377
< bootstrap-import> (configuration/protocols/pim/rp)	377
< bootstrap-import> (configuration/routing-instances/instance/protocols/pim/rp)	378
< buffer-size> (configuration/class-of-service/schedulers)	378
< bytes> (configuration/interfaces/interface/sonet-options)	379
< categories> (configuration/snmp/trap-group)	379
< ccc> (configuration/interfaces/interface/unit/family)	380
< ce1> (configuration/chassis/fpc/pic)	380
< certificates> (configuration/security)	381
< cflowd> (configuration/forwarding-options/sampling/output)	381
< channel-group> (configuration/chassis/fpc/pic/ce1/e1)	382
< channel-group> (configuration/chassis/fpc/pic/ct3/port/t1)	382
< chap> (configuration/interfaces/interface/ppp-options)	383
< chassis> (configuration)	383
< class> (configuration/class-of-service/forwarding-policy)	384
< class> (configuration/system/login)	384
< class-of-service> (configuration)	385
< class-usage-profile> (configuration/accounting-options)	385
< classificationOverride> (configuration/class-of-service/forwarding-policy/class)	386
< classifiers> (configuration/class-of-service)	386
< classifiers> (configuration/class-of-service/interfaces/unit)	387
< client> (configuration/access/profile)	387
< clients> (configuration/snmp/access/user)	388
< clients> (configuration/snmp/community)	388
< code-point-aliases> (configuration/class-of-service)	388
< code-points> (configuration/class-of-service/classifiers/dscp/forwarding-class/loss-priority)	389
< code-points> (configuration/class-of-service/classifiers/exp/forwarding-class/loss-priority)	389
< code-points> (configuration/class-of-service/classifiers/ieee-802.1/forwarding-class/loss-priority)	390
< code-points> (configuration/class-of-service/classifiers/inet-precedence/forwarding-class/loss-priority)	390
< color> (configuration/policy-options/policy-statement/from/route-filter)	391
< color> (configuration/policy-options/policy-statement/from/source-address-filter)	391
< color> (configuration/policy-options/policy-statement/term/from/route-filter)	392
< color> (configuration/policy-options/policy-statement/term/from/source-address-filter)	392
< color> (configuration/policy-options/policy-statement/term/then)	393
< color> (configuration/policy-options/policy-statement/then)	393
< color> (configuration/routing-instances/instance/routing-options/aggregate/defaults)	394
< color> (configuration/routing-instances/instance/routing-options/aggregate/route)	394
< color> (configuration/routing-instances/instance/routing-options/generate/defaults)	395
< color> (configuration/routing-instances/instance/routing-options/generate/route)	395

< color> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)	396
< color> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)	396
< color> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)	397
< color> (configuration/routing-instances/instance/routing-options/rib/generate/route)	397
< color> (configuration/routing-instances/instance/routing-options/rib/static/defaults)	398
< color> (configuration/routing-instances/instance/routing-options/rib/static/route)	398
< color> (configuration/routing-instances/instance/routing-options/static/defaults)	399
< color> (configuration/routing-instances/instance/routing-options/static/route)	399
< color> (configuration/routing-options/aggregate/defaults)	400
< color> (configuration/routing-options/aggregate/route)	400
< color> (configuration/routing-options/generate/defaults)	401
< color> (configuration/routing-options/generate/route)	401
< color> (configuration/routing-options/rib/aggregate/defaults)	402
< color> (configuration/routing-options/rib/aggregate/route)	402
< color> (configuration/routing-options/rib/generate/defaults)	403
< color> (configuration/routing-options/rib/generate/route)	403
< color> (configuration/routing-options/rib/static/defaults)	404
< color> (configuration/routing-options/rib/static/route)	404
< color> (configuration/routing-options/static/defaults)	405
< color> (configuration/routing-options/static/route)	405
< color2> (configuration/policy-options/policy-statement/from/route-filter)	406
< color2> (configuration/policy-options/policy-statement/from/source-address-filter)	406
< color2> (configuration/policy-options/policy-statement/term/from/route-filter)	407
< color2> (configuration/policy-options/policy-statement/term/from/source-address-filter)	407
< color2> (configuration/policy-options/policy-statement/term/then)	408
< color2> (configuration/policy-options/policy-statement/then)	408
< color2> (configuration/routing-instances/instance/routing-options/aggregate/defaults)	409
< color2> (configuration/routing-instances/instance/routing-options/aggregate/route)	409
< color2> (configuration/routing-instances/instance/routing-options/generate/defaults)	410
< color2> (configuration/routing-instances/instance/routing-options/generate/route)	410
< color2> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)	411
< color2> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)	411
< color2> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)	412
< color2> (configuration/routing-instances/instance/routing-options/rib/generate/route)	412
< color2> (configuration/routing-instances/instance/routing-options/rib/static/defaults)	413
< color2> (configuration/routing-instances/instance/routing-options/rib/static/route)	413

< color2> (configuration/routing-instances/instance/routing-options/	
static/defaults)	414
< color2> (configuration/routing-instances/instance/routing-options/	
static/route)	414
< color2> (configuration/routing-options/aggregate/defaults).....	415
< color2> (configuration/routing-options/aggregate/route).....	415
< color2> (configuration/routing-options/generate/defaults)	416
< color2> (configuration/routing-options/generate/route)	416
< color2> (configuration/routing-options/rib/aggregate/defaults)	417
< color2> (configuration/routing-options/rib/aggregate/route).....	417
< color2> (configuration/routing-options/rib/generate/defaults)	418
< color2> (configuration/routing-options/rib/generate/route)	418
< color2> (configuration/routing-options/rib/static/defaults)	419
< color2> (configuration/routing-options/rib/static/route)	419
< color2> (configuration/routing-options/static/defaults).....	420
< color2> (configuration/routing-options/static/route).....	420
< community> (configuration/policy-options).....	421
< community> (configuration/policy-options/policy-statement/from)	421
< community> (configuration/policy-options/policy-statement/from/	
route-filter)	422
< community> (configuration/policy-options/policy-statement/from/	
source-address-filter)	423
< community> (configuration/policy-options/policy-statement/term/from).....	424
< community> (configuration/policy-options/policy-statement/term/from/	
route-filter)	424
< community> (configuration/policy-options/policy-statement/term/from/	
source-address-filter)	425
< community> (configuration/policy-options/policy-statement/term/then)	426
< community> (configuration/policy-options/policy-statement/term/to)	427
< community> (configuration/policy-options/policy-statement/then).....	427
< community> (configuration/policy-options/policy-statement/to).....	428
< community> (configuration/routing-instances/instance/routing-options/	
aggregate/defaults).....	428
< community> (configuration/routing-instances/instance/routing-options/	
aggregate/route).....	429
< community> (configuration/routing-instances/instance/routing-options/	
generate/defaults)	429
< community> (configuration/routing-instances/instance/routing-options/	
generate/route)	430
< community> (configuration/routing-instances/instance/routing-options/	
rib/aggregate/defaults)	430
< community> (configuration/routing-instances/instance/routing-options/	
rib/aggregate/route)	431
< community> (configuration/routing-instances/instance/routing-options/	
rib/generate/defaults)	431
< community> (configuration/routing-instances/instance/routing-options/	
rib/generate/route)	432
< community> (configuration/routing-instances/instance/routing-options/	
rib/static/defaults)	432
< community> (configuration/routing-instances/instance/routing-options/	
rib/static/route)	433
< community> (configuration/routing-instances/instance/routing-options/	
static/defaults)	433
< community> (configuration/routing-instances/instance/routing-options/	
static/route)	434
< community> (configuration/routing-options/aggregate/defaults).....	434
< community> (configuration/routing-options/aggregate/route).....	435

< community> (configuration/routing-options/generate/defaults)	435
< community> (configuration/routing-options/generate/route)	435
< community> (configuration/routing-options/rib/aggregate/defaults)	436
< community> (configuration/routing-options/rib/aggregate/route)	436
< community> (configuration/routing-options/rib/generate/defaults)	437
< community> (configuration/routing-options/rib/generate/route)	437
< community> (configuration/routing-options/rib/static/defaults)	438
< community> (configuration/routing-options/rib/static/route)	438
< community> (configuration/routing-options/static/defaults)	439
< community> (configuration/routing-options/static/route)	439
< community> (configuration/snmp)	440
< compatibility-mode> (configuration/interfaces/interface/e3-options)	440
< compatibility-mode> (configuration/interfaces/interface/t3-options)	441
< confederation> (configuration/routing-instances/instance/routing-options) ..	441
< confederation> (configuration/routing-options)	442
< connections> (configuration/protocols)	442
< console> (configuration/system/ports)	443
< console> (configuration/system/syslog)	443
< contents> (configuration/system/syslog/file)	445
< contents> (configuration/system/syslog/host)	446
< contents> (configuration/system/syslog/user)	447
< context> (configuration/snmp/access)	448
< counters> (configuration/accounting-options/filter-profile)	449
< csnp-interval> (configuration/protocols/isis/interface)	449
< csnp-interval> (configuration/routing-instances/instance/protocols/isis/interface)	450
< ct3> (configuration/chassis/fpc/pic)	450
< damping> (configuration/policy-options)	451
< default-lsa> (configuration/protocols/ospf/area/nssa)	451
< default-lsa> (configuration/routing-instances/instance/protocols/ospf/area/nssa)	452
< defaults> (configuration/routing-instances/instance/routing-options/aggregate)	453
< defaults> (configuration/routing-instances/instance/routing-options/generate)	454
< defaults> (configuration/routing-instances/instance/routing-options/rib/aggregate)	456
< defaults> (configuration/routing-instances/instance/routing-options/rib/generate)	457
< defaults> (configuration/routing-instances/instance/routing-options/rib/static)	459
< defaults> (configuration/routing-instances/instance/routing-options/static) ..	460
< defaults> (configuration/routing-options/aggregate)	462
< defaults> (configuration/routing-options/generate)	463
< defaults> (configuration/routing-options/rib/aggregate)	464
< defaults> (configuration/routing-options/rib/generate)	465
< defaults> (configuration/routing-options/rib/static)	467
< defaults> (configuration/routing-options/static)	468
< dense-groups> (configuration/protocols/pim)	469
< dense-groups> (configuration/routing-instances/instance/protocols/pim) ..	470
< destination-address> (configuration/firewall/family/inet/filter/term/from) ..	470
< destination-address> (configuration/firewall/family/inet6/filter/term/from) ..	471
< destination-classes> (configuration/accounting-options/class-usage-profile) ..	471
< destination-port> (configuration/firewall/family/inet/filter/term/from)	472
< destination-port> (configuration/firewall/family/inet6/filter/term/from)	475
< destination-port-except> (configuration/firewall/family/inet/filter/term/from)	477

< destination-port-except> (configuration/firewall/family/inet6/filter/term/ from)	480
< destination-prefix-list> (configuration/firewall/family/inet/filter/term/from)	483
< diag-port-authentication> (configuration/system)	483
< digital-link> (configuration/interfaces/interface/e3-options/ compatibility-mode)	484
< digital-link> (configuration/interfaces/interface/t3-options/ compatibility-mode)	487
< direction> (configuration/security/ipsec/security-association/manual)	493
< domain> (configuration/forwarding-options/helpers).....	494
< domain-id> (configuration/protocols/ospf).....	494
< domain-id> (configuration/routing-instances/instance/protocols/ospf)	495
< domain-search> (configuration/system)	495
< drop-probability> (configuration/class-of-service/drop-profiles/interpolate)	495
< drop-profile-map> (configuration/class-of-service/schedulers)	496
< drop-profiles> (configuration/class-of-service)	496
< ds0-options> (configuration/interfaces/interface)	497
< ds1> (configuration/chassis/alarm).....	498
< dscp> (configuration/class-of-service/classifiers).....	498
< dscp> (configuration/class-of-service/code-point-aliases)	499
< dscp> (configuration/class-of-service/interfaces/unit/classifiers).....	499
< dscp> (configuration/class-of-service/interfaces/unit/rewrite-rules)	500
< dscp> (configuration/class-of-service/rewrite-rules)	500
< dscp> (configuration/firewall/family/inet/filter/term/from)	501
< dscp-except> (configuration/firewall/family/inet/filter/term/from)	502
< dvmrp> (configuration/protocols).....	503
< dynamic> (configuration/security/ipsec/security-association)	503
< e1> (configuration/chassis/fpc/pic/ce1).....	504
< e1-options> (configuration/interfaces/interface)	504
< e3> (configuration/chassis/alarm).....	505
< e3-options> (configuration/interfaces/interface)	507
< egress-policy> (configuration/protocols/ldp)	509
< egress-policy> (configuration/routing-instances/instance/protocols/ldp)	510
< encryption> (configuration/security/ipsec/security-association/manual/ direction)	510
< engine-id> (configuration/snmp)	511
< ethernet> (configuration/chassis/aggregated-devices).....	511
< ethernet> (configuration/chassis/alarm)	511
< event> (configuration/snmp/rmon)	512
< exclude> (configuration/protocols/mpls/admin-group)	512
< exclude> (configuration/protocols/mpls/label-switched-path/admin-group)	513
< exclude> (configuration/protocols/mpls/label-switched-path/fast-reroute),....	513
< exclude> (configuration/protocols/mpls/label-switched-path/primary/ admin-group).....	514
< exclude> (configuration/protocols/mpls/label-switched-path/secondary/ admin-group).....	514
< exp> (configuration/class-of-service/classifiers)	515
< exp> (configuration/class-of-service/code-point-aliases).....	515
< exp> (configuration/class-of-service/interfaces/unit/classifiers)	516
< exp> (configuration/class-of-service/interfaces/unit/rewrite-rules).....	516
< exp> (configuration/class-of-service/rewrite-rules)	517
< export> (configuration/protocols/bgp)	517
< export> (configuration/protocols/bgp/group)	517
< export> (configuration/protocols/bgp/group/neighbor)	518
< export> (configuration/protocols/dvmrp).....	518
< export> (configuration/protocols/isis)	518
< export> (configuration/protocols/ldp)	519

< export> (configuration/protocols/msdp)	519
< export> (configuration/protocols/msdp/group)	519
< export> (configuration/protocols/msdp/group/peer)	520
< export> (configuration/protocols/msdp/peer)	520
< export> (configuration/protocols/ospf)	520
< export> (configuration/protocols/rip/group)	521
< export> (configuration/protocols/ripng/group).....	521
< export> (configuration/routing-instances/instance/protocols/bgp)	521
< export> (configuration/routing-instances/instance/protocols/bgp/group)	522
< export> (configuration/routing-instances/instance/protocols/bgp/group/neighbor).....	522
< export> (configuration/routing-instances/instance/protocols/isis)	523
< export> (configuration/routing-instances/instance/protocols/ldp)	523
< export> (configuration/routing-instances/instance/protocols/ospf)	524
< export> (configuration/routing-instances/instance/protocols/rip/group)	524
< export> (configuration/routing-instances/instance/routing-options/forwarding-table)	525
< export> (configuration/routing-options/forwarding-table).....	525
< external> (configuration/policy-options/policy-statement/from)	525
< external> (configuration/policy-options/policy-statement/from/route-filter)....	526
< external> (configuration/policy-options/policy-statement/from/source-address-filter)	526
< external> (configuration/policy-options/policy-statement/term/from).....	527
< external> (configuration/policy-options/policy-statement/term/from/route-filter)	527
< external> (configuration/policy-options/policy-statement/term/from/source-address-filter)	528
< external> (configuration/policy-options/policy-statement/term/then)	528
< external> (configuration/policy-options/policy-statement/term/to)	529
< external> (configuration/policy-options/policy-statement/then).....	529
< external> (configuration/policy-options/policy-statement/to).....	529
< failover> (configuration/chassis/redundancy)	530
< family> (configuration/firewall)	530
< family> (configuration/forwarding-options/hash-key)	530
< family> (configuration/forwarding-options/monitoring)	531
< family> (configuration/forwarding-options/sampling/input).....	531
< family> (configuration/interfaces/interface/unit)	532
< family> (configuration/protocols/bgp)	532
< family> (configuration/protocols/bgp/group)	533
< family> (configuration/protocols/bgp/group/neighbor)	533
< family> (configuration/routing-instances/instance/protocols/bgp).....	534
< family> (configuration/routing-instances/instance/protocols/bgp/group).....	535
< family> (configuration/routing-instances/instance/protocols/bgp/group/neighbor).....	535
< family> (configuration/routing-instances/instance/routing-options/auto-export).....	536
< family> (configuration/routing-instances/instance/routing-options/interface-routes)	536
< family> (configuration/routing-options/auto-export).....	537
< family> (configuration/routing-options/interface-routes)	537
< fast-reroute> (configuration/protocols/mpls/label-switched-path)	538
< fastether-options> (configuration/interfaces/interface)	538
< fate-sharing> (configuration/routing-instances/instance/routing-options).....	539
< fate-sharing> (configuration/routing-options)	539
< fields> (configuration/accounting-options/interface-profile).....	540
< fields> (configuration/accounting-options/routing-engine-profile).....	541
< file> (configuration/accounting-options)	541

< file> (configuration/forwarding-options/helpers/traceoptions)	542
< file> (configuration/forwarding-options/sampling/output)	542
< file> (configuration/forwarding-options/sampling/traceoptions)	543
< file> (configuration/interfaces/traceoptions)	543
< file> (configuration/protocols/bgp/group/neighbor/traceoptions)	544
< file> (configuration/protocols/bgp/group/traceoptions)	545
< file> (configuration/protocols/bgp/traceoptions)	545
< file> (configuration/protocols/dvmrp/traceoptions)	546
< file> (configuration/protocols/igmp/traceoptions)	547
< file> (configuration/protocols/isis/traceoptions)	547
< file> (configuration/protocols/l2circuit/traceoptions)	548
< file> (configuration/protocols/ldp/traceoptions)	549
< file> (configuration/protocols/ldp/traffic-statistics)	549
< file> (configuration/protocols/link-management/traceoptions)	550
< file> (configuration/protocols/mpls/statistics)	551
< file> (configuration/protocols/mpls/traceoptions)	551
< file> (configuration/protocols/msdp/group/peer/traceoptions)	552
< file> (configuration/protocols/msdp/group/traceoptions)	553
< file> (configuration/protocols/msdp/peer/traceoptions)	554
< file> (configuration/protocols/msdp/traceoptions)	554
< file> (configuration/protocols/ospf/traceoptions)	555
< file> (configuration/protocols/pim/traceoptions)	556
< file> (configuration/protocols/rip/traceoptions)	556
< file> (configuration/protocols/ripng/traceoptions)	557
< file> (configuration/protocols/router-advertisement/traceoptions)	558
< file> (configuration/protocols/router-discovery/traceoptions)	558
< file> (configuration/protocols/rsvp/traceoptions)	559
< file> (configuration/protocols/vrrp/traceoptions)	560
< file> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/traceoptions)	560
< file> (configuration/routing-instances/instance/protocols/bgp/group/traceoptions)	561
< file> (configuration/routing-instances/instance/protocols/bgp/traceoptions)	562
< file> (configuration/routing-instances/instance/protocols/isis/traceoptions)	563
< file> (configuration/routing-instances/instance/protocols/l2vpn/traceoptions)	564
< file> (configuration/routing-instances/instance/protocols/ldp/traceoptions)	565
< file> (configuration/routing-instances/instance/protocols/ldp/traffic-statistics)	566
< file> (configuration/routing-instances/instance/protocols/ospf/traceoptions)	567
< file> (configuration/routing-instances/instance/protocols/pim/traceoptions)	568
< file> (configuration/routing-instances/instance/protocols/rip/traceoptions)	569
< file> (configuration/routing-instances/instance/protocols/router-discovery/traceoptions)	570
< file> (configuration/routing-instances/instance/routing-options/auto-export/traceoptions)	571
< file> (configuration/routing-instances/instance/routing-options/resolution/traceoptions)	572
< file> (configuration/routing-instances/instance/routing-options/traceoptions)	573
< file> (configuration/routing-options/auto-export/traceoptions)	573
< file> (configuration/routing-options/resolution/traceoptions)	574
< file> (configuration/routing-options/traceoptions)	575
< file> (configuration/security/traceoptions)	575
< file> (configuration/snmp/traceoptions)	576
< file> (configuration/system/syslog)	576
< fill-level> (configuration/class-of-service/drop-profiles)	576

< fill-level> (configuration/class-of-service/drop-profiles/interpolate)	577
< filter> (configuration/firewall/family/inet).....	577
< filter> (configuration/firewall/family/inet6).....	578
< filter> (configuration/interfaces/interface/unit/family/inet)	578
< filter> (configuration/interfaces/interface/unit/family/inet6)	579
< filter> (configuration/protocols/bgp/group/neighbor/traceoptions/flag)	580
< filter> (configuration/protocols/bgp/group/traceoptions/flag)	580
< filter> (configuration/protocols/bgp/traceoptions/flag)	581
< filter> (configuration/protocols/rip/traceoptions/flag).....	581
< filter> (configuration/routing-instances/instance/protocols/bgp/group/ neighbor/traceoptions/flag)	582
< filter> (configuration/routing-instances/instance/protocols/bgp/group/ traceoptions/flag).....	583
< filter> (configuration/routing-instances/instance/protocols/bgp/ traceoptions/flag).....	583
< filter> (configuration/routing-instances/instance/protocols/rip/ traceoptions/flag).....	584
< filter-profile> (configuration/accounting-options)	584
< finger> (configuration/system/services).....	585
< firewall> (configuration).....	585
< flag> (configuration/access/traceoptions)	585
< flag> (configuration/forwarding-options/helpers/traceoptions)	586
< flag> (configuration/interfaces/interface/traceoptions)	587
< flag> (configuration/interfaces/traceoptions)	587
< flag> (configuration/protocols/bgp/group/neighbor/traceoptions)	588
< flag> (configuration/protocols/bgp/group/traceoptions)	589
< flag> (configuration/protocols/bgp/traceoptions)	590
< flag> (configuration/protocols/dvmrp/traceoptions).....	591
< flag> (configuration/protocols/igmp/traceoptions)	592
< flag> (configuration/protocols/isis/traceoptions)	593
< flag> (configuration/protocols/l2circuit/traceoptions).....	594
< flag> (configuration/protocols/ldp/traceoptions)	595
< flag> (configuration/protocols/link-management/traceoptions).....	596
< flag> (configuration/protocols/mpls/traceoptions)	597
< flag> (configuration/protocols/msdp/group/peer/traceoptions)	598
< flag> (configuration/protocols/msdp/group/traceoptions)	599
< flag> (configuration/protocols/msdp/peer/traceoptions)	600
< flag> (configuration/protocols/msdp/traceoptions)	601
< flag> (configuration/protocols/ospf/traceoptions)	602
< flag> (configuration/protocols/pim/traceoptions)	603
< flag> (configuration/protocols/rip/traceoptions).....	604
< flag> (configuration/protocols/ripng/traceoptions)	606
< flag> (configuration/protocols/router-advertisement/traceoptions)	607
< flag> (configuration/protocols/router-discovery/traceoptions).....	607
< flag> (configuration/protocols/rsvp/traceoptions)	608
< flag> (configuration/protocols/vrrp/traceoptions).....	609
< flag> (configuration/routing-instances/instance/protocols/bgp/group/ neighbor/traceoptions)	610
< flag> (configuration/routing-instances/instance/protocols/bgp/group/ traceoptions)	611
< flag> (configuration/routing-instances/instance/protocols/bgp/traceoptions)...	612
< flag> (configuration/routing-instances/instance/protocols/isis/traceoptions) ...	614
< flag> (configuration/routing-instances/instance/protocols/l2vpn/ traceoptions)	615
< flag> (configuration/routing-instances/instance/protocols/ldp/traceoptions) ...	616
< flag> (configuration/routing-instances/instance/protocols/ospf/traceoptions)..	617
< flag> (configuration/routing-instances/instance/protocols/pim/traceoptions) ..	618

< flag> (configuration/routing-instances/instance/protocols/rip/traceoptions)	620
< flag> (configuration/routing-instances/instance/protocols/router-discovery/traceoptions).....	621
< flag> (configuration/routing-instances/instance/routing-options/auto-export/traceoptions).....	622
< flag> (configuration/routing-instances/instance/routing-options/resolution/traceoptions).....	623
< flag> (configuration/routing-instances/instance/routing-options/traceoptions).....	624
< flag> (configuration/routing-options/auto-export/traceoptions)	625
< flag> (configuration/routing-options/resolution/traceoptions)	626
< flag> (configuration/routing-options/traceoptions)	627
< flag> (configuration/security/traceoptions)	628
< flag> (configuration/snmp/traceoptions)	628
< forwarding-class> (configuration/class-of-service/classifiers/dscp)	629
< forwarding-class> (configuration/class-of-service/classifiers/exp).....	629
< forwarding-class> (configuration/class-of-service/classifiers/ieee-802.1)	630
< forwarding-class> (configuration/class-of-service/classifiers/inet-precedence)	630
< forwarding-class> (configuration/class-of-service/forwarding-policy/next-hop-map)	631
< forwarding-class> (configuration/class-of-service/rewrite-rules/dscp)	631
< forwarding-class> (configuration/class-of-service/rewrite-rules/exp)	632
< forwarding-class> (configuration/class-of-service/rewrite-rules/inet-precedence)	632
< forwarding-class> (configuration/class-of-service/scheduler-maps)	633
< forwarding-classes> (configuration/class-of-service)	633
< forwarding-options> (configuration).....	633
< forwarding-policy> (configuration/class-of-service).....	634
< forwarding-table> (configuration/routing-instances/instance/routing-options)	634
< forwarding-table> (configuration/routing-options)	634
< fpc> (configuration/chassis).....	635
< fragment-offset> (configuration/firewall/family/inet/filter/term/from)	635
< fragment-offset-except> (configuration/firewall/family/inet/filter/term/from) ..	636
< from> (configuration/firewall/family/inet/filter/term)	637
< from> (configuration/firewall/family/inet6/filter/term)	639
< from> (configuration/policy-options/policy-statement)	641
< from> (configuration/policy-options/policy-statement/term).....	643
< from> (configuration/routing-instances/instance/routing-options/fate-sharing/group)	645
< from> (configuration/routing-options/fate-sharing/group)	645
< ftp> (configuration/system/services).....	646
< generate> (configuration/routing-instances/instance/routing-options).....	646
< generate> (configuration/routing-instances/instance/routing-options/rib)	647
< generate> (configuration/routing-options)	647
< generate> (configuration/routing-options/rib)	647
< gigether-options> (configuration/interfaces/interface)	648
< graceful-restart> (configuration/protocols/bgp)	648
< graceful-restart> (configuration/protocols/bgp/group)	649
< graceful-restart> (configuration/protocols/bgp/group/neighbor)	649
< graceful-restart> (configuration/protocols/isis)	650
< graceful-restart> (configuration/protocols/ospf)	650
< graceful-restart> (configuration/routing-instances/instance/protocols/bgp)	651
< graceful-restart> (configuration/routing-instances/instance/protocols/bgp/group)	651

< graceful-restart> (configuration/routing-instances/instance/protocols/bgp/group/neighbor).....	652
< graceful-restart> (configuration/routing-instances/instance/protocols/isis)	652
< graceful-restart> (configuration/routing-instances/instance/protocols/ospf)	653
< graceful-restart> (configuration/routing-instances/instance/routing-options) ..	653
< graceful-restart> (configuration/routing-options)	654
< group> (configuration/protocols/bgp)	655
< group> (configuration/protocols/igmp/interface/static)	657
< group> (configuration/protocols/msdp)	658
< group> (configuration/protocols/rip).....	659
< group> (configuration/protocols/ripng).....	659
< group> (configuration/routing-instances/instance/protocols/bgp)	660
< group> (configuration/routing-instances/instance/protocols/rip)	662
< group> (configuration/routing-instances/instance/routing-options/fate-sharing)	663
< group> (configuration/routing-options/fate-sharing)	663
< group> (configuration/snmp/access)	664
< group> (configuration/snmp/access/context).....	664
< group-ranges> (configuration/protocols/pim/rp/local)	665
< group-ranges> (configuration/protocols/pim/rp/static/address)	665
< group-ranges> (configuration/routing-instances/instance/protocols/pim/rp/local)	666
< group-ranges> (configuration/routing-instances/instance/protocols/pim/rp/static/address)	666
< groups> (configuration).....	667
< hash-key> (configuration/forwarding-options).....	667
< helpers> (configuration/forwarding-options)	667
< hold-time> (configuration/interfaces/interface)	668
< host> (configuration/system/syslog)	668
< icmp-code> (configuration/firewall/family/inet/filter/term/from).....	669
< icmp-code> (configuration/firewall/family/inet6/filter/term/from).....	670
< icmp-code-except> (configuration/firewall/family/inet/filter/term/from)	672
< icmp-code-except> (configuration/firewall/family/inet6/filter/term/from)	673
< icmp-type> (configuration/firewall/family/inet/filter/term/from)	674
< icmp-type> (configuration/firewall/family/inet6/filter/term/from)	675
< icmp-type-except> (configuration/firewall/family/inet/filter/term/from)	676
< icmp-type-except> (configuration/firewall/family/inet6/filter/term/from)	678
< idle-timeout> (configuration/protocols/bgp/family/inet/any/prefix-limit/teardown).....	679
< idle-timeout> (configuration/protocols/bgp/family/inet/labeled-unicast/prefix-limit/teardown).....	679
< idle-timeout> (configuration/protocols/bgp/family/inet/multicast/prefix-limit/teardown).....	680
< idle-timeout> (configuration/protocols/bgp/family/inet/unicast/prefix-limit/teardown).....	681
< idle-timeout> (configuration/protocols/bgp/family/inet-vpn/any/prefix-limit/teardown).....	681
< idle-timeout> (configuration/protocols/bgp/family/inet-vpn/multicast/prefix-limit/teardown).....	682
< idle-timeout> (configuration/protocols/bgp/family/inet-vpn/unicast/prefix-limit/teardown).....	683
< idle-timeout> (configuration/protocols/bgp/family/inet6/any/prefix-limit/teardown).....	683
< idle-timeout> (configuration/protocols/bgp/family/inet6/labeled-unicast/prefix-limit/teardown).....	684
< idle-timeout> (configuration/protocols/bgp/family/inet6/multicast/prefix-limit/teardown).....	685

< idle-timeout> (configuration/protocols/bgp/family/inet6/unicast/ prefix-limit/teardown).....	685
< idle-timeout> (configuration/protocols/bgp/family/l2vpn/unicast/ prefix-limit/teardown).....	686
< idle-timeout> (configuration/protocols/bgp/group/family/inet/any/ prefix-limit/teardown).....	687
< idle-timeout> (configuration/protocols/bgp/group/family/inet/ labeled-unicast/prefix-limit/teardown).....	688
< idle-timeout> (configuration/protocols/bgp/group/family/inet/multicast/ prefix-limit/teardown).....	689
< idle-timeout> (configuration/protocols/bgp/group/family/inet/unicast/ prefix-limit/teardown).....	690
< idle-timeout> (configuration/protocols/bgp/group/family/inet-vpn/any/ prefix-limit/teardown).....	691
< idle-timeout> (configuration/protocols/bgp/group/family/inet-vpn/multicast/ prefix-limit/teardown).....	692
< idle-timeout> (configuration/protocols/bgp/group/family/inet-vpn/unicast/ prefix-limit/teardown).....	693
< idle-timeout> (configuration/protocols/bgp/group/family/inet6/any/ prefix-limit/teardown).....	694
< idle-timeout> (configuration/protocols/bgp/group/family/inet6/ labeled-unicast/prefix-limit/teardown).....	695
< idle-timeout> (configuration/protocols/bgp/group/family/inet6/multicast/ prefix-limit/teardown).....	696
< idle-timeout> (configuration/protocols/bgp/group/family/inet6/unicast/ prefix-limit/teardown).....	697
< idle-timeout> (configuration/protocols/bgp/group/family/l2vpn/unicast/ prefix-limit/teardown).....	698
< idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet/any/ prefix-limit/teardown).....	699
< idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet/ labeled-unicast/prefix-limit/teardown).....	700
< idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet/ multicast/prefix-limit/teardown).....	701
< idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet/ unicast/prefix-limit/teardown).....	702
< idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/ any/prefix-limit/teardown).....	703
< idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/ multicast/prefix-limit/teardown).....	704
< idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/ unicast/prefix-limit/teardown).....	705
< idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet6/any/ prefix-limit/teardown).....	706
< idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet6/ labeled-unicast/prefix-limit/teardown).....	707
< idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet6/ multicast/prefix-limit/teardown).....	708
< idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet6/ unicast/prefix-limit/teardown).....	709
< idle-timeout> (configuration/protocols/bgp/group/neighbor/family/l2vpn/ unicast/prefix-limit/teardown).....	710
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/ family/inet/any/prefix-limit/teardown).....	711
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/ family/inet/labeled-unicast/prefix-limit/teardown).....	712

< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
family/inet/multicast/prefix-limit/teardown)	713
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
family/inet/unicast/prefix-limit/teardown)	714
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
family/inet-vpn/any/prefix-limit/teardown)	715
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
family/inet-vpn/multicast/prefix-limit/teardown)	716
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
family/inet-vpn/unicast/prefix-limit/teardown)	717
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
family/inet6/any/prefix-limit/teardown)	718
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
family/inet6/labeled-unicast/prefix-limit/teardown)	719
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
family/inet6/multicast/prefix-limit/teardown)	720
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
family/inet6/unicast/prefix-limit/teardown)	721
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
family/l2vpn/unicast/prefix-limit/teardown)	722
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/family/inet/any/prefix-limit/teardown)	723
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/family/inet/labeled-unicast/prefix-limit/teardown)	724
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/family/inet/multicast/prefix-limit/teardown)	725
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/family/inet/unicast/prefix-limit/teardown)	726
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/family/inet-vpn/any/prefix-limit/teardown)	727
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/family/inet-vpn/multicast/prefix-limit/teardown)	728
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/family/inet-vpn/unicast/prefix-limit/teardown)	729
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/family/inet6/any/prefix-limit/teardown)	730
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/family/inet6/labeled-unicast/prefix-limit/teardown)	731
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/family/inet6/multicast/prefix-limit/teardown)	732
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/family/inet6/unicast/prefix-limit/teardown)	733
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/family/l2vpn/unicast/prefix-limit/teardown)	734
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet/any/prefix-limit/teardown)	735
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet/labeled-unicast/prefix-limit/teardown)	736
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet/multicast/prefix-limit/teardown)	737
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet/unicast/prefix-limit/teardown)	738
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet-vpn/any/prefix-limit/teardown)	739
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet-vpn/multicast/prefix-limit/teardown)	740

< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn/unicast/prefix-limit/teardown)	741
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/any/prefix-limit/teardown)	742
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/labeled-unicast/prefix-limit/teardown)	743
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/multicast/prefix-limit/teardown)	744
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/unicast/prefix-limit/teardown)	745
< idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/l2vpn/unicast/prefix-limit/teardown)	746
< ieee-802.1> (configuration/class-of-service/interfaces/unit/classifiers)	747
< ieee-802.1> (configuration/class-of-service/interfaces/unit/rewrite-rules)	747
< ieee-802.1> (configuration/class-of-service/classifiers)	748
< ieee-802.1> (configuration/class-of-service/code-point-aliases)	748
< if-exceeding> (configuration/firewall/family/inet/filter/policer)	749
< if-exceeding> (configuration/firewall/family/inet6/filter/policer)	749
< if-exceeding> (configuration/firewall/policer)	750
< igmp> (configuration/protocols)	750
< igrp> (configuration/policy-options/policy-statement/from/route-filter/metric)	751
< igrp> (configuration/policy-options/policy-statement/from/source-address-filter/metric)	751
< igrp> (configuration/policy-options/policy-statement/term/from/route-filter/metric)	752
< igrp> (configuration/policy-options/policy-statement/term/from/source-address-filter/metric)	752
< igrp> (configuration/policy-options/policy-statement/term/then/metric)	753
< igrp> (configuration/policy-options/policy-statement/then/metric)	753
< igrp> (configuration/protocols/bgp/group/metric-out)	754
< igrp> (configuration/protocols/bgp/group/neighbor/metric-out)	754
< igrp> (configuration/protocols/bgp/metric-out)	755
< igrp> (configuration/routing-instances/instance/protocols/bgp/group/metric-out)	755
< igrp> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/metric-out)	756
< igrp> (configuration/routing-instances/instance/protocols/bgp/metric-out)	756
< ike> (configuration/security)	757
< import> (configuration/protocols/bgp)	758
< import> (configuration/protocols/bgp/group)	758
< import> (configuration/protocols/bgp/group/neighbor)	758
< import> (configuration/protocols/dvmrp)	759
< import> (configuration/protocols/ldp)	759
< import> (configuration/protocols/msdp)	759
< import> (configuration/protocols/msdp/group)	760
< import> (configuration/protocols/msdp/group/peer)	760
< import> (configuration/protocols/msdp/peer)	760
< import> (configuration/protocols/pim)	761
< import> (configuration/protocols/rip)	761
< import> (configuration/protocols/rip/group/neighbor)	761
< import> (configuration/protocols/ripng)	762
< import> (configuration/protocols/ripng/group/neighbor)	762
< import> (configuration/routing-instances/instance/protocols/bgp)	762
< import> (configuration/routing-instances/instance/protocols/bgp/group)	763
< import> (configuration/routing-instances/instance/protocols/bgp/group/neighbor)	763

< import> (configuration/routing-instances/instance/protocols/ldp)	764
< import> (configuration/routing-instances/instance/protocols/pim)	764
< import> (configuration/routing-instances/instance/protocols/rip)	765
< import> (configuration/routing-instances/instance/protocols/rip/group/ neighbor)	765
< import> (configuration/routing-instances/instance/routing-options/ interface-routes/family)	766
< import> (configuration/routing-options/interface-routes/family)	766
< import-policy> (configuration/routing-instances/instance/routing-options/ rib-groups)	767
< import-policy> (configuration/routing-options/rib-groups)	767
< import-rib> (configuration/routing-instances/instance/routing-options/ rib-groups)	768
< import-rib> (configuration/routing-options/rib-groups)	768
< include> (configuration/protocols/mpls/admin-group)	768
< include> (configuration/protocols/mpls/label-switched-path/admin-group)	769
< include> (configuration/protocols/mpls/label-switched-path/fast-reroute)	769
< include> (configuration/protocols/mpls/label-switched-path/primary/ admin-group)	770
< include> (configuration/protocols/mpls/label-switched-path/secondary/ admin-group)	770
< inet> (configuration/firewall/family)	771
< inet> (configuration/forwarding-options/hash-key/family)	771
< inet> (configuration/forwarding-options/monitoring/family)	772
< inet> (configuration/forwarding-options/sampling/input/family)	772
< inet> (configuration/interfaces/interface/unit/family)	773
< inet> (configuration/protocols/bgp/family)	774
< inet> (configuration/protocols/bgp/group/family)	774
< inet> (configuration/protocols/bgp/group/neighbor/family)	775
< inet> (configuration/routing-instances/instance/protocols/bgp/family)	775
< inet> (configuration/routing-instances/instance/protocols/bgp/ group/family)	776
< inet> (configuration/routing-instances/instance/protocols/bgp/ group/neighbor/family)	777
< inet> (configuration/routing-instances/instance/routing-options/ auto-export/family)	778
< inet> (configuration/routing-options/auto-export/family)	778
< inet> (configuration/system/static-host-mapping)	779
< inet-precedence> (configuration/class-of-service/classifiers)	779
< inet-precedence> (configuration/class-of-service/code-point-aliases)	780
< inet-precedence> (configuration/class-of-service/interfaces/unit/classifiers)	780
< inet-precedence> (configuration/class-of-service/interfaces/unit/ rewrite-rules)	781
< inet-precedence> (configuration/class-of-service/rewrite-rules)	781
< inet-vpn> (configuration/protocols/bgp/family)	782
< inet-vpn> (configuration/protocols/bgp/group/family)	782
< inet-vpn> (configuration/protocols/bgp/group/neighbor/family)	783
< inet-vpn> (configuration/routing-instances/instance/protocols/bgp/family)	783
< inet-vpn> (configuration/routing-instances/instance/protocols/bgp/ group/family)	784
< inet-vpn> (configuration/routing-instances/instance/protocols/bgp/ group/neighbor/family)	785
< inet6> (configuration/firewall/family)	785
< inet6> (configuration/interfaces/interface/unit/family)	786
< inet6> (configuration/protocols/bgp/family)	786
< inet6> (configuration/protocols/bgp/group/family)	787
< inet6> (configuration/protocols/bgp/group/neighbor/family)	787

< inet6> (configuration/routing-instances/instance/protocols/bgp/family)	788
< inet6> (configuration/routing-instances/instance/protocols/bgp/group/family)	789
< inet6> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family)	790
< inet6> (configuration/system/static-host-mapping)	790
< inet6-backup-router> (configuration/system)	791
< input> (configuration/forwarding-options/monitoring/family/inet)	791
< input> (configuration/forwarding-options/sampling)	791
< install> (configuration/protocols/mpls/label-switched-path)	792
< install-nexthop> (configuration/policy-options/policy-statement/from/route-filter)	792
< install-nexthop> (configuration/policy-options/policy-statement/from/source-address-filter)	793
< install-nexthop> (configuration/policy-options/policy-statement/term/from/route-filter)	793
< install-nexthop> (configuration/policy-options/policy-statement/term/from/source-address-filter)	794
< install-nexthop> (configuration/policy-options/policy-statement/term/then)	794
< install-nexthop> (configuration/policy-options/policy-statement/then)	795
< instance> (configuration/routing-instances)	795
< instance-export> (configuration/routing-instances/instance/routing-options)	796
< instance-export> (configuration/routing-options)	796
< instance-import> (configuration/routing-instances/instance/routing-options)	797
< instance-import> (configuration/routing-options)	797
< interface> (configuration/forwarding-options/helpers/bootp)	797
< interface> (configuration/forwarding-options/helpers/domain)	798
< interface> (configuration/forwarding-options/helpers/tftp)	799
< interface> (configuration/forwarding-options/monitoring/family/inet/input)	799
< interface> (configuration/forwarding-options/monitoring/family/inet/output)	800
< interface> (configuration/interfaces)	801
< interface> (configuration/interfaces/interface/unit/family/inet/address/vrrp-group/track)	804
< interface> (configuration/policy-options/policy-statement/from)	804
< interface> (configuration/policy-options/policy-statement/term/from)	805
< interface> (configuration/policy-options/policy-statement/term/to)	805
< interface> (configuration/policy-options/policy-statement/to)	806
< interface> (configuration/protocols/connections/interface-switch)	806
< interface> (configuration/protocols/dvmrp)	806
< interface> (configuration/protocols/igmp)	807
< interface> (configuration/protocols/isis)	808
< interface> (configuration/protocols/l2circuit/neighbor)	809
< interface> (configuration/protocols/ldp)	809
< interface> (configuration/protocols/link-management/te-link)	810
< interface> (configuration/protocols/mpls)	810
< interface> (configuration/protocols/ospf/area)	811
< interface> (configuration/protocols/pim)	812
< interface> (configuration/protocols/router-advertisement)	813
< interface> (configuration/protocols/router-discovery)	814
< interface> (configuration/protocols/rsvp)	814
< interface> (configuration/routing-instances/instance)	815
< interface> (configuration/routing-instances/instance/protocols/isis)	816
< interface> (configuration/routing-instances/instance/protocols/l2vpn/site)	817
< interface> (configuration/routing-instances/instance/protocols/ldp)	817
< interface> (configuration/routing-instances/instance/protocols/ospf/area)	818
< interface> (configuration/routing-instances/instance/protocols/pim)	819

< interface> (configuration/routing-instances/instance/protocols/router-discovery)	820
< interface> (configuration/routing-instances/instance/routing-options/multicast/scope)	821
< interface> (configuration/routing-options/multicast/scope)	821
< interface> (configuration/snmp).....	821
< interface-group> (configuration/firewall/family/inet/filter/term/from)	822
< interface-group> (configuration/firewall/family/inet6/filter/term/from)	822
< interface-group-except> (configuration/firewall/family/inet/filter/term/from)..	823
< interface-group-except> (configuration/firewall/family/inet6/filter/term/ from)	823
< interface-profile> (configuration/accounting-options)	824
< interface-routes> (configuration/routing-instances/instance/routing-options)..	824
< interface-routes> (configuration/routing-options)	825
< interface-switch> (configuration/protocols/connections)	825
< interfaces> (configuration).....	825
< interfaces> (configuration/class-of-service).....	826
< interpolate> (configuration/class-of-service/drop-profiles)	826
< ipsec> (configuration/security)	827
< isis> (configuration/protocols).....	828
< isis> (configuration/routing-instances/instance/protocols)	829
< iso> (configuration/interfaces/interface/unit/family)	830
< keepalives> (configuration/interfaces/interface)	831
< key> (configuration/security/ipsec/security-association/manual/direction/ authentication)	831
< key> (configuration/security/ipsec/security-association/manual/direction/ encryption).....	832
< l2circuit> (configuration/protocols)	832
< l2vpn> (configuration/protocols/bgp/family)	833
< l2vpn> (configuration/protocols/bgp/group/family)	833
< l2vpn> (configuration/protocols/bgp/group/neighbor/family).....	834
< l2vpn> (configuration/routing-instances/instance/protocols)	834
< l2vpn> (configuration/routing-instances/instance/protocols/bgp/family).....	835
< l2vpn> (configuration/routing-instances/instance/protocols/bgp/ group/family).....	835
< l2vpn> (configuration/routing-instances/instance/protocols/bgp/ group/neighbor/family).....	836
< label-map> (configuration/protocols/mpls/interface)	836
< label-switched-path> (configuration/protocols/isis).....	837
< label-switched-path> (configuration/protocols/mpls)	838
< label-switched-path> (configuration/protocols/ospf/area)	840
< label-switched-path> (configuration/routing-instances/instance/protocols/ isis).....	840
< label-switched-path> (configuration/routing-instances/instance/protocols/ ospf/area)	841
< labeled-unicast> (configuration/protocols/bgp/family/inet)	841
< labeled-unicast> (configuration/protocols/bgp/family/inet6)	842
< labeled-unicast> (configuration/protocols/bgp/group/family/inet)	842
< labeled-unicast> (configuration/protocols/bgp/group/family/inet6)	843
< labeled-unicast> (configuration/protocols/bgp/group/neighbor/family/inet)	843
< labeled-unicast> (configuration/protocols/bgp/group/neighbor/family/inet6) ..	844
< labeled-unicast> (configuration/routing-instances/instance/protocols/bgp/ family/inet)	845
< labeled-unicast> (configuration/routing-instances/instance/protocols/bgp/ family/inet6)	845
< labeled-unicast> (configuration/routing-instances/instance/protocols/bgp/ group/family/inet)	846

< labeled-unicast> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6)	847
< labeled-unicast> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet)	848
< labeled-unicast> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6)	849
< larscom> (configuration/interfaces/interface/t3-options/compatibility-mode)	849
< last-as> (configuration/policy-options/policy-statement/from/route-filter/as-path-expand)	850
< last-as> (configuration/policy-options/policy-statement/from/source-address-filter/as-path-expand)	850
< last-as> (configuration/policy-options/policy-statement/term/from/route-filter/as-path-expand)	851
< last-as> (configuration/policy-options/policy-statement/term/from/source-address-filter/as-path-expand)	851
< last-as> (configuration/policy-options/policy-statement/term/then/as-path-expand)	851
< last-as> (configuration/policy-options/policy-statement/then/as-path-expand)	852
< ldp> (configuration/protocols)	853
< ldp> (configuration/routing-instances/instance/protocols)	854
< level> (configuration/protocols/isis)	855
< level> (configuration/protocols/isis/interface)	856
< level> (configuration/protocols/isis/label-switched-path)	857
< level> (configuration/routing-instances/instance/protocols/isis)	857
< level> (configuration/routing-instances/instance/protocols/isis/interface)	858
< level> (configuration/routing-instances/instance/protocols/isis/label-switched-path)	859
< level> (configuration/routing-instances/instance/routing-options/options/syslog)	860
< level> (configuration/routing-options/options/syslog)	861
< link-management> (configuration/protocols)	862
< link-protection> (configuration/protocols/rsvp/interface)	862
< listen> (configuration/protocols/sap)	863
< lmi> (configuration/interfaces/interface)	863
< load-balance> (configuration/policy-options/policy-statement/from/route-filter)	864
< load-balance> (configuration/policy-options/policy-statement/from/source-address-filter)	864
< load-balance> (configuration/policy-options/policy-statement/term/from/route-filter)	865
< load-balance> (configuration/policy-options/policy-statement/term/from/source-address-filter)	865
< load-balance> (configuration/policy-options/policy-statement/term/then)	866
< load-balance> (configuration/policy-options/policy-statement/then)	866
< local> (configuration/protocols/pim/rp)	867
< local> (configuration/routing-instances/instance/protocols/pim/rp)	867
< local> (configuration/security/certificates)	868
< local-as> (configuration/protocols/bgp)	868
< local-as> (configuration/protocols/bgp/group)	869
< local-as> (configuration/protocols/bgp/group/neighbor)	869
< local-as> (configuration/routing-instances/instance/protocols/bgp)	870
< local-as> (configuration/routing-instances/instance/protocols/bgp/group)	870
< local-as> (configuration/routing-instances/instance/protocols/bgp/group/neighbor)	871

< local-preference> (configuration/policy-options/policy-statement/from/route-filter)	871
< local-preference> (configuration/policy-options/policy-statement/from/source-address-filter)	872
< local-preference> (configuration/policy-options/policy-statement/term/from/route-filter)	872
< local-preference> (configuration/policy-options/policy-statement/term/from/source-address-filter)	873
< local-preference> (configuration/policy-options/policy-statement/term/then)	873
< local-preference> (configuration/policy-options/policy-statement/then)	874
< location> (configuration/system)	874
< log-updown> (configuration/protocols/mpls)	875
< login> (configuration/system)	875
< loss-priority> (configuration/class-of-service/classifiers/dscp/forwarding-class)	876
< loss-priority> (configuration/class-of-service/classifiers/exp/forwarding-class)	876
< loss-priority> (configuration/class-of-service/classifiers/ieee-802.1/forwarding-class)	877
< loss-priority> (configuration/class-of-service/classifiers/inet-precedence/forwarding-class)	877
< loss-priority> (configuration/class-of-service/rewrite-rules/dscp/forwarding-class)	878
< loss-priority> (configuration/class-of-service/rewrite-rules/exp/forwarding-class)	878
< loss-priority> (configuration/class-of-service/rewrite-rules/inet-precedence/forwarding-class)	879
< lsp-attributes> (configuration/protocols/mpls/label-switched-path)	879
< lsp-next-hop> (configuration/class-of-service/forwarding-policy/next-hop-map/forwarding-class)	881
< lsp-next-hop> (configuration/routing-instances/instance/routing-options/rib/static/route)	881
< lsp-next-hop> (configuration/routing-instances/instance/routing-options/static/route)	882
< lsp-next-hop> (configuration/routing-options/rib/static/route)	882
< lsp-next-hop> (configuration/routing-options/static/route)	883
< lsp-switch> (configuration/protocols/connections)	883
< management-ethernet> (configuration/chassis/alarm)	884
< manual> (configuration/security/ipsec/security-association)	884
< martians> (configuration/routing-instances/instance/routing-options)	885
< martians> (configuration/routing-instances/instance/routing-options/rib)	886
< martians> (configuration/routing-options)	887
< martians> (configuration/routing-options/rib)	887
< maximum-routes> (configuration/routing-instances/instance/routing-options)	888
< maximum-routes> (configuration/routing-instances/instance/routing-options/rib)	889
< maximum-routes> (configuration/routing-options)	889
< maximum-routes> (configuration/routing-options/rib)	890
< members> (configuration/policy-options/community)	890
< members> (configuration/routing-instances/instance/routing-options/confederation)	891
< members> (configuration/routing-options/confederation)	891
< mesh-group> (configuration/protocols/isis/interface)	891
< mesh-group> (configuration/routing-instances/instance/protocols/isis/interface)	892

< metric> (configuration/policy-options/policy-statement/from/route-filter).....	892
< metric> (configuration/policy-options/policy-statement/from/ source-address-filter)	893
< metric> (configuration/policy-options/policy-statement/term/from/ route-filter)	894
< metric> (configuration/policy-options/policy-statement/term/from/ source-address-filter)	895
< metric> (configuration/policy-options/policy-statement/term/then)	895
< metric> (configuration/policy-options/policy-statement/then).....	896
< metric> (configuration/routing-instances/instance/routing-options/ aggregate/defaults).....	897
< metric> (configuration/routing-instances/instance/routing-options/ aggregate/route).....	897
< metric> (configuration/routing-instances/instance/routing-options/ generate/defaults)	898
< metric> (configuration/routing-instances/instance/routing-options/ generate/route)	898
< metric> (configuration/routing-instances/instance/routing-options/ rib/aggregate/defaults)	899
< metric> (configuration/routing-instances/instance/routing-options/ rib/aggregate/route)	899
< metric> (configuration/routing-instances/instance/routing-options/ rib/generate/defaults)	900
< metric> (configuration/routing-instances/instance/routing-options/ rib/generate/route)	900
< metric> (configuration/routing-instances/instance/routing-options/ rib/static/defaults)	901
< metric> (configuration/routing-instances/instance/routing-options/ rib/static/route)	901
< metric> (configuration/routing-instances/instance/routing-options/ static/defaults)	902
< metric> (configuration/routing-instances/instance/routing-options/ static/route)	902
< metric> (configuration/routing-options/aggregate/defaults)	903
< metric> (configuration/routing-options/aggregate/route)	903
< metric> (configuration/routing-options/generate/defaults)	904
< metric> (configuration/routing-options/generate/route)	904
< metric> (configuration/routing-options/rib/aggregate/defaults)	905
< metric> (configuration/routing-options/rib/aggregate/route)	905
< metric> (configuration/routing-options/rib/generate/defaults)	906
< metric> (configuration/routing-options/rib/generate/route)	906
< metric> (configuration/routing-options/rib/static/defaults)	907
< metric> (configuration/routing-options/rib/static/route)	907
< metric> (configuration/routing-options/static/defaults)	908
< metric> (configuration/routing-options/static/route)	908
< metric-out> (configuration/protocols/bgp)	909
< metric-out> (configuration/protocols/bgp/group)	909
< metric-out> (configuration/protocols/bgp/group/neighbor)	910
< metric-out> (configuration/routing-instances/instance/protocols/bgp).....	910
< metric-out> (configuration/routing-instances/instance/protocols/bgp/group)....	911
< metric-out> (configuration/routing-instances/instance/protocols/bgp/ group/neighbor)	911
< metric2> (configuration/policy-options/policy-statement/from/route-filter)....	912
< metric2> (configuration/policy-options/policy-statement/from/ source-address-filter)	912
< metric2> (configuration/policy-options/policy-statement/term/from/ route-filter)	913

< metric2> (configuration/policy-options/policy-statement/term/from/source-address-filter)	914
< metric2> (configuration/policy-options/policy-statement/term/then)	914
< metric2> (configuration/policy-options/policy-statement/then)	915
< metric2> (configuration/routing-instances/instance/routing-options/aggregate/defaults)	915
< metric2> (configuration/routing-instances/instance/routing-options/aggregate/route)	916
< metric2> (configuration/routing-instances/instance/routing-options/generate/defaults)	916
< metric2> (configuration/routing-instances/instance/routing-options/generate/route)	917
< metric2> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)	917
< metric2> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)	918
< metric2> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)	918
< metric2> (configuration/routing-instances/instance/routing-options/rib/generate/route)	919
< metric2> (configuration/routing-instances/instance/routing-options/rib/static/defaults)	919
< metric2> (configuration/routing-instances/instance/routing-options/rib/static/route)	920
< metric2> (configuration/routing-instances/instance/routing-options/static/defaults)	920
< metric2> (configuration/routing-instances/instance/routing-options/static/route)	921
< metric2> (configuration/routing-options/aggregate/defaults)	921
< metric2> (configuration/routing-options/aggregate/route)	922
< metric2> (configuration/routing-options/generate/defaults)	922
< metric2> (configuration/routing-options/generate/route)	923
< metric2> (configuration/routing-options/rib/aggregate/defaults)	923
< metric2> (configuration/routing-options/rib/aggregate/route)	924
< metric2> (configuration/routing-options/rib/generate/defaults)	924
< metric2> (configuration/routing-options/rib/generate/route)	925
< metric2> (configuration/routing-options/rib/static/defaults)	925
< metric2> (configuration/routing-options/rib/static/route)	926
< metric2> (configuration/routing-options/static/defaults)	926
< metric2> (configuration/routing-options/static/route)	927
< metric3> (configuration/policy-options/policy-statement/from/route-filter)	927
< metric3> (configuration/policy-options/policy-statement/from/source-address-filter)	928
< metric3> (configuration/policy-options/policy-statement/term/from/route-filter)	928
< metric3> (configuration/policy-options/policy-statement/term/from/source-address-filter)	929
< metric3> (configuration/policy-options/policy-statement/term/then)	929
< metric3> (configuration/policy-options/policy-statement/then)	930
< metric3> (configuration/routing-instances/instance/routing-options/aggregate/defaults)	930
< metric3> (configuration/routing-instances/instance/routing-options/aggregate/route)	931
< metric3> (configuration/routing-instances/instance/routing-options/generate/defaults)	931
< metric3> (configuration/routing-instances/instance/routing-options/generate/route)	932

< metric3> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)	932
< metric3> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)	933
< metric3> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)	933
< metric3> (configuration/routing-instances/instance/routing-options/rib/generate/route)	934
< metric3> (configuration/routing-instances/instance/routing-options/rib/static/defaults)	934
< metric3> (configuration/routing-instances/instance/routing-options/rib/static/route)	935
< metric3> (configuration/routing-instances/instance/routing-options/static/defaults)	935
< metric3> (configuration/routing-instances/instance/routing-options/static/route)	936
< metric3> (configuration/routing-options/aggregate/defaults)	936
< metric3> (configuration/routing-options/aggregate/route)	937
< metric3> (configuration/routing-options/generate/defaults)	937
< metric3> (configuration/routing-options/generate/route)	938
< metric3> (configuration/routing-options/rib/aggregate/defaults)	938
< metric3> (configuration/routing-options/rib/aggregate/route)	939
< metric3> (configuration/routing-options/rib/generate/defaults)	939
< metric3> (configuration/routing-options/rib/generate/route)	940
< metric3> (configuration/routing-options/rib/static/defaults)	940
< metric3> (configuration/routing-options/rib/static/route)	941
< metric3> (configuration/routing-options/static/defaults)	941
< metric3> (configuration/routing-options/static/route)	942
< metric4> (configuration/policy-options/policy-statement/from/route-filter)	942
< metric4> (configuration/policy-options/policy-statement/from/source-address-filter)	943
< metric4> (configuration/policy-options/policy-statement/term/from/route-filter)	943
< metric4> (configuration/policy-options/policy-statement/term/from/source-address-filter)	944
< metric4> (configuration/policy-options/policy-statement/term/then)	944
< metric4> (configuration/policy-options/policy-statement/then)	945
< metric4> (configuration/routing-instances/instance/routing-options/aggregate/defaults)	945
< metric4> (configuration/routing-instances/instance/routing-options/aggregate/route)	946
< metric4> (configuration/routing-instances/instance/routing-options/generate/defaults)	946
< metric4> (configuration/routing-instances/instance/routing-options/generate/route)	947
< metric4> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)	947
< metric4> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)	948
< metric4> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)	948
< metric4> (configuration/routing-instances/instance/routing-options/rib/generate/route)	949
< metric4> (configuration/routing-instances/instance/routing-options/rib/static/defaults)	949
< metric4> (configuration/routing-instances/instance/routing-options/rib/static/route)	950

< metric4> (configuration/routing-instances/instance/routing-options/static/defaults)	950
< metric4> (configuration/routing-instances/instance/routing-options/static/route)	951
< metric4> (configuration/routing-options/aggregate/defaults)	951
< metric4> (configuration/routing-options/aggregate/route)	952
< metric4> (configuration/routing-options/generate/defaults)	952
< metric4> (configuration/routing-options/generate/route)	953
< metric4> (configuration/routing-options/rib/aggregate/defaults)	953
< metric4> (configuration/routing-options/rib/aggregate/route)	954
< metric4> (configuration/routing-options/rib/generate/defaults)	954
< metric4> (configuration/routing-options/rib/generate/route)	955
< metric4> (configuration/routing-options/rib/static/defaults)	955
< metric4> (configuration/routing-options/rib/static/route)	956
< metric4> (configuration/routing-options/static/defaults)	956
< metric4> (configuration/routing-options/static/route)	957
< minimum-igp> (configuration/policy-options/policy-statement/from/route-filter/metric)	957
< minimum-igp> (configuration/policy-options/policy-statement/from/source-address-filter/metric)	958
< minimum-igp> (configuration/policy-options/policy-statement/term/from/route-filter/metric)	958
< minimum-igp> (configuration/policy-options/policy-statement/term/from/source-address-filter/metric)	959
< minimum-igp> (configuration/policy-options/policy-statement/term/then/metric)	959
< minimum-igp> (configuration/policy-options/policy-statement/then/metric)	960
< minimum-igp> (configuration/protocols/bgp/group/metric-out)	960
< minimum-igp> (configuration/protocols/bgp/group/neighbor/metric-out)	961
< minimum-igp> (configuration/protocols/bgp/metric-out)	961
< minimum-igp> (configuration/routing-instances/instance/protocols/bgp/group/metric-out)	962
< minimum-igp> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/metric-out)	962
< minimum-igp> (configuration/routing-instances/instance/protocols/bgp/metric-out)	963
< mlfr> (configuration/interfaces/interface/unit/family)	963
< mlppp> (configuration/interfaces/interface/unit/family)	964
< monitoring> (configuration/forwarding-options)	964
< mpls> (configuration/forwarding-options/hash-key/family)	965
< mpls> (configuration/interfaces/interface/unit/family)	965
< mpls> (configuration/protocols)	966
< msdp> (configuration/protocols)	968
< multicast> (configuration/protocols/bgp/family/inet)	968
< multicast> (configuration/protocols/bgp/family/inet-vpn)	969
< multicast> (configuration/protocols/bgp/family/inet6)	969
< multicast> (configuration/protocols/bgp/group/family/inet)	970
< multicast> (configuration/protocols/bgp/group/family/inet-vpn)	970
< multicast> (configuration/protocols/bgp/group/family/inet6)	971
< multicast> (configuration/protocols/bgp/group/neighbor/family/inet)	971
< multicast> (configuration/protocols/bgp/group/neighbor/family/inet-vpn)	972
< multicast> (configuration/protocols/bgp/group/neighbor/family/inet6)	972
< multicast> (configuration/routing-instances/instance/protocols/bgp/family/inet)	973
< multicast> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn)	973

< multicast> (configuration/routing-instances/instance/protocols/bgp/family/inet6)	974
< multicast> (configuration/routing-instances/instance/protocols/bgp/group/family/inet)	974
< multicast> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn)	975
< multicast> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6)	976
< multicast> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet)	977
< multicast> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn)	978
< multicast> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6)	979
< multicast> (configuration/routing-instances/instance/routing-options)	979
< multicast> (configuration/routing-instances/instance/routing-options/auto-export/family/inet)	980
< multicast> (configuration/routing-options)	980
< multicast> (configuration/routing-options/auto-export/family/inet)	981
< multihop> (configuration/protocols/bgp)	981
< multihop> (configuration/protocols/bgp/group)	982
< multihop> (configuration/protocols/bgp/group/neighbor)	982
< multihop> (configuration/routing-instances/instance/protocols/bgp)	983
< multihop> (configuration/routing-instances/instance/protocols/bgp/group)	983
< multihop> (configuration/routing-instances/instance/protocols/bgp/group/neighbor)	984
< multipoint-destination> (configuration/interfaces/interface/unit/family/inet/address)	984
< multiservice-options> (configuration/interfaces/interface)	985
< name-server> (configuration/system)	985
< neighbor> (configuration/policy-options/policy-statement/from)	986
< neighbor> (configuration/policy-options/policy-statement/term/from)	986
< neighbor> (configuration/policy-options/policy-statement/term/to)	987
< neighbor> (configuration/policy-options/policy-statement/to)	987
< neighbor> (configuration/protocols/bgp/group)	988
< neighbor> (configuration/protocols/l2circuit)	990
< neighbor> (configuration/protocols/ospf/area/interface)	990
< neighbor> (configuration/protocols/rip/group)	991
< neighbor> (configuration/protocols/ripng/group)	992
< neighbor> (configuration/routing-instances/instance/protocols/bgp/group)	993
< neighbor> (configuration/routing-instances/instance/protocols/ospf/area/interface)	995
< neighbor> (configuration/routing-instances/instance/protocols/rip/group)	995
< next-header> (configuration/firewall/family/inet6/filter/term/from)	996
< next-header-except> (configuration/firewall/family/inet6/filter/term/from)	997
< next-hop> (configuration/class-of-service/forwarding-policy/next-hop-map/forwarding-class)	999
< next-hop> (configuration/policy-options/policy-statement/from)	999
< next-hop> (configuration/policy-options/policy-statement/from/route-filter)	1000
< next-hop> (configuration/policy-options/policy-statement/from/source-address-filter)	1000
< next-hop> (configuration/policy-options/policy-statement/term/from)	1001
< next-hop> (configuration/policy-options/policy-statement/term/from/route-filter)	1001
< next-hop> (configuration/policy-options/policy-statement/term/from/source-address-filter)	1002

< next-hop> (configuration/policy-options/policy-statement/term/then)	1002
< next-hop> (configuration/policy-options/policy-statement/term/to)	1003
< next-hop> (configuration/policy-options/policy-statement/then)	1003
< next-hop> (configuration/policy-options/policy-statement/to)	1004
< next-hop> (configuration/routing-instances/instance/routing-options/rib/static/route)	1004
< next-hop> (configuration/routing-instances/instance/routing-options/static/route)	1005
< next-hop> (configuration/routing-options/rib/static/route)	1005
< next-hop> (configuration/routing-options/static/route)	1006
< next-hop-map> (configuration/class-of-service/forwarding-policy)	1006
< nssa> (configuration/protocols/ospf/area)	1006
< nssa> (configuration/routing-instances/instance/protocols/ospf/area)	1007
< oam-liveness> (configuration/interfaces/interface/unit)	1007
< oam-liveness> (configuration/interfaces/interface/unit/family/inet/address/multipoint-destination)	1008
< oam-period> (configuration/interfaces/interface/unit)	1008
< oam-period> (configuration/interfaces/interface/unit/family/inet/address/multipoint-destination)	1009
< oid> (configuration/snmp/view)	1009
< options> (configuration/routing-instances/instance/routing-options)	1010
< options> (configuration/routing-options)	1010
< ospf> (configuration/protocols)	1011
< ospf> (configuration/routing-instances/instance/protocols)	1012
< output> (configuration/forwarding-options/monitoring/family/inet)	1013
< output> (configuration/forwarding-options/sampling)	1014
< overload> (configuration/protocols/isis)	1014
< overload> (configuration/protocols/ospf)	1014
< overload> (configuration/routing-instances/instance/protocols/isis)	1015
< overload> (configuration/routing-instances/instance/protocols/ospf)	1015
< packet-length> (configuration/firewall/family/inet/filter/term/from)	1016
< packet-length> (configuration/firewall/family/inet6/filter/term/from)	1016
< packet-length-except> (configuration/firewall/family/inet/filter/term/from)	1017
< packet-length-except> (configuration/firewall/family/inet6/filter/term/from)	1017
< path> (configuration/protocols/mpls)	1018
< path> (configuration/protocols/mpls/static-path)	1018
< path-list> (configuration/protocols/mpls/path)	1019
< payload-scrambler> (configuration/interfaces/interface/sonet-options)	1019
< peer> (configuration/protocols/link-management)	1019
< peer> (configuration/protocols/msdp)	1020
< peer> (configuration/protocols/msdp/group)	1021
< perfect-forward-secrecy> (configuration/security/ipsec/policy)	1021
< permissions> (configuration/system/login/class)	1022
< pic> (configuration/chassis/fpc)	1023
< pic-console-authentication> (configuration/system)	1024
< pim> (configuration/protocols)	1024
< pim> (configuration/routing-instances/instance/protocols)	1025
< policer> (configuration/firewall)	1026
< policer> (configuration/firewall/family/inet/filter)	1026
< policer> (configuration/firewall/family/inet6/filter)	1027
< policer> (configuration/interfaces/interface/unit/family/ccc)	1027
< policer> (configuration/interfaces/interface/unit/family/inet)	1028
< policer> (configuration/interfaces/interface/unit/family/tcc)	1028
< policy> (configuration/policy-options/policy-statement/from)	1029
< policy> (configuration/policy-options/policy-statement/term/from)	1029

< policy> (configuration/policy-options/policy-statement/term/to)	1030
< policy> (configuration/policy-options/policy-statement/to)	1030
< policy> (configuration/protocols/bgp/group/neighbor/traceoptions/flag/filter).....	1031
< policy> (configuration/protocols/bgp/group/traceoptions/flag/filter).....	1031
< policy> (configuration/protocols/bgp/traceoptions/flag/filter).....	1032
< policy> (configuration/protocols/rip/traceoptions/flag/filter)	1032
< policy> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/traceoptions/flag/filter).....	1033
< policy> (configuration/routing-instances/instance/protocols/bgp/group/traceoptions/flag/filter).....	1034
< policy> (configuration/routing-instances/instance/protocols/bgp/traceoptions/flag/filter).....	1034
< policy> (configuration/routing-instances/instance/protocols/rip/traceoptions/flag/filter).....	1035
< policy> (configuration/routing-instances/instance/routing-options/aggregate/route).....	1035
< policy> (configuration/routing-instances/instance/routing-options/generate/route).....	1036
< policy> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)	1036
< policy> (configuration/routing-instances/instance/routing-options/rib/generate/route).....	1037
< policy> (configuration/routing-options/aggregate/route)	1037
< policy> (configuration/routing-options/generate/route)	1038
< policy> (configuration/routing-options/rib/aggregate/route)	1038
< policy> (configuration/routing-options/rib/generate/route).....	1039
< policy> (configuration/security/ike)	1039
< policy> (configuration/security/ipsec)	1040
< policy-options> (configuration).....	1040
< policy-statement> (configuration/policy-options).....	1041
< port> (configuration/chassis/fpc/pic/ct3)	1041
< port> (configuration/firewall/family/inet/filter/term/from).....	1042
< port> (configuration/firewall/family/inet6/filter/term/from).....	1044
< port-except> (configuration/firewall/family/inet/filter/term/from)	1047
< port-except> (configuration/firewall/family/inet6/filter/term/from)	1050
< port-mirroring> (configuration/forwarding-options/sampling/output)	1052
< ports> (configuration/system)	1053
< ppp-options> (configuration/interfaces/interface)	1053
< pre-shared-key> (configuration/security/ike/policy)	1053
< precedence> (configuration/firewall/family/inet/filter/term/from)	1054
< precedence-except> (configuration/firewall/family/inet/filter/term/from)	1055
< preference> (configuration/policy-options/policy-statement/from/route-filter)	1056
< preference> (configuration/policy-options/policy-statement/from/source-address-filter)	1056
< preference> (configuration/policy-options/policy-statement/term/from/route-filter)	1057
< preference> (configuration/policy-options/policy-statement/term/from/source-address-filter)	1057
< preference> (configuration/policy-options/policy-statement/term/then)	1058
< preference> (configuration/policy-options/policy-statement/then)	1058
< preference> (configuration/routing-instances/instance/routing-options/aggregate/defaults).....	1059
< preference> (configuration/routing-instances/instance/routing-options/aggregate/route)	1059

< preference> (configuration/routing-instances/instance/routing-options/generate/defaults).....	1060
< preference> (configuration/routing-instances/instance/routing-options/generate/route).....	1060
< preference> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults).....	1061
< preference> (configuration/routing-instances/instance/routing-options/rib/aggregate/route).....	1061
< preference> (configuration/routing-instances/instance/routing-options/rib/generate/defaults).....	1062
< preference> (configuration/routing-instances/instance/routing-options/rib/generate/route).....	1062
< preference> (configuration/routing-instances/instance/routing-options/rib/static/defaults).....	1063
< preference> (configuration/routing-instances/instance/routing-options/rib/static/route).....	1063
< preference> (configuration/routing-instances/instance/routing-options/static/defaults).....	1064
< preference> (configuration/routing-instances/instance/routing-options/static/route).....	1064
< preference> (configuration/routing-options/aggregate/defaults).....	1065
< preference> (configuration/routing-options/aggregate/route).....	1065
< preference> (configuration/routing-options/generate/defaults).....	1066
< preference> (configuration/routing-options/generate/route).....	1066
< preference> (configuration/routing-options/rib/aggregate/defaults).....	1067
< preference> (configuration/routing-options/rib/aggregate/route).....	1067
< preference> (configuration/routing-options/rib/generate/defaults).....	1068
< preference> (configuration/routing-options/rib/generate/route).....	1068
< preference> (configuration/routing-options/rib/static/defaults).....	1069
< preference> (configuration/routing-options/rib/static/route).....	1069
< preference> (configuration/routing-options/static/defaults).....	1070
< preference> (configuration/routing-options/static/route).....	1070
< preference2> (configuration/policy-options/policy-statement/from/route-filter).....	1071
< preference2> (configuration/policy-options/policy-statement/from/source-address-filter).....	1071
< preference2> (configuration/policy-options/policy-statement/term/from/route-filter).....	1072
< preference2> (configuration/policy-options/policy-statement/term/from/source-address-filter).....	1072
< preference2> (configuration/policy-options/policy-statement/term/then).....	1073
< preference2> (configuration/policy-options/policy-statement/then).....	1073
< preference2> (configuration/routing-instances/instance/routing-options/aggregate/defaults).....	1074
< preference2> (configuration/routing-instances/instance/routing-options/aggregate/route).....	1074
< preference2> (configuration/routing-instances/instance/routing-options/generate/defaults).....	1075
< preference2> (configuration/routing-instances/instance/routing-options/generate/route).....	1075
< preference2> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults).....	1076
< preference2> (configuration/routing-instances/instance/routing-options/rib/aggregate/route).....	1076
< preference2> (configuration/routing-instances/instance/routing-options/rib/generate/defaults).....	1077

< preference2> (configuration/routing-instances/instance/routing-options/rib/generate/route).....	1077
< preference2> (configuration/routing-instances/instance/routing-options/rib/static/defaults)	1078
< preference2> (configuration/routing-instances/instance/routing-options/rib/static/route)	1078
< preference2> (configuration/routing-instances/instance/routing-options/static/defaults)	1079
< preference2> (configuration/routing-instances/instance/routing-options/static/route)	1079
< preference2> (configuration/routing-options/aggregate/defaults).....	1080
< preference2> (configuration/routing-options/aggregate/route).....	1080
< preference2> (configuration/routing-options/generate/defaults)	1081
< preference2> (configuration/routing-options/generate/route)	1081
< preference2> (configuration/routing-options/rib/aggregate/defaults)	1082
< preference2> (configuration/routing-options/rib/aggregate/route).....	1082
< preference2> (configuration/routing-options/rib/generate/defaults)	1083
< preference2> (configuration/routing-options/rib/generate/route)	1083
< preference2> (configuration/routing-options/rib/static/defaults)	1084
< preference2> (configuration/routing-options/rib/static/route)	1084
< preference2> (configuration/routing-options/static/defaults).....	1085
< preference2> (configuration/routing-options/static/route)	1085
< prefix> (configuration/protocols/router-advertisement/interface)	1086
< prefix-limit> (configuration/protocols/bgp/family/inet/any).....	1086
< prefix-limit> (configuration/protocols/bgp/family/inet/labeled-unicast)	1087
< prefix-limit> (configuration/protocols/bgp/family/inet/multicast)	1087
< prefix-limit> (configuration/protocols/bgp/family/inet/unicast)	1088
< prefix-limit> (configuration/protocols/bgp/family/inet-vpn/any).....	1088
< prefix-limit> (configuration/protocols/bgp/family/inet-vpn/multicast)	1089
< prefix-limit> (configuration/protocols/bgp/family/inet-vpn/unicast)	1089
< prefix-limit> (configuration/protocols/bgp/family/inet6/any).....	1090
< prefix-limit> (configuration/protocols/bgp/family/inet6/labeled-unicast)	1090
< prefix-limit> (configuration/protocols/bgp/family/inet6/multicast)	1091
< prefix-limit> (configuration/protocols/bgp/family/inet6/unicast)	1091
< prefix-limit> (configuration/protocols/bgp/family/l2vpn/unicast)	1092
< prefix-limit> (configuration/protocols/bgp/group/family/inet/any).....	1092
< prefix-limit> (configuration/protocols/bgp/group/family/inet/labeled-unicast).....	1093
< prefix-limit> (configuration/protocols/bgp/group/family/inet/multicast)	1093
< prefix-limit> (configuration/protocols/bgp/group/family/inet/unicast)	1094
< prefix-limit> (configuration/protocols/bgp/group/family/inet-vpn/any).....	1094
< prefix-limit> (configuration/protocols/bgp/group/family/inet-vpn/multicast)	1095
< prefix-limit> (configuration/protocols/bgp/group/family/inet-vpn/unicast)	1095
< prefix-limit> (configuration/protocols/bgp/group/family/inet6/any).....	1096
< prefix-limit> (configuration/protocols/bgp/group/family/inet6/labeled-unicast).....	1096
< prefix-limit> (configuration/protocols/bgp/group/family/inet6/multicast)	1097
< prefix-limit> (configuration/protocols/bgp/group/family/inet6/unicast)	1097
< prefix-limit> (configuration/protocols/bgp/group/family/l2vpn/unicast)	1098
< prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet/any)	1098
< prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet/labeled-unicast).....	1099
< prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet/multicast)	1099
< prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet/unicast)	1100

< prefix-limit> (configuration/protocols/bgp/group/neighbor/family/	1101
inet-vpn/any)	
< prefix-limit> (configuration/protocols/bgp/group/neighbor/family/	1101
inet-vpn/multicast).....	
< prefix-limit> (configuration/protocols/bgp/group/neighbor/family/	1102
inet-vpn/unicast).....	
< prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet6/	1103
any).....	
< prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet6/	1103
labeled-unicast)	
< prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet6/	1104
multicast)	
< prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet6/	1105
unicast).....	
< prefix-limit> (configuration/protocols/bgp/group/neighbor/family/l2vpn/	1105
unicast).....	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1106
family/inet/any)	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1107
family/inet/labeled-unicast).....	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1107
family/inet/multicast).....	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1108
family/inet/unicast).....	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1109
family/inet-vpn/any)	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1109
family/inet-vpn/multicast)	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1110
family/inet-vpn/unicast)	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1111
family/inet6/any)	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1111
family/inet6/labeled-unicast).....	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1112
family/inet6/multicast).....	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1113
family/inet6/unicast)	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1113
family/l2vpn/unicast)	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1114
group/family/inet/any)	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1115
group/family/inet/labeled-unicast).....	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1116
group/family/inet/multicast).....	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1117
group/family/inet/unicast)	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1118
group/family/inet-vpn/any)	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1119
group/family/inet-vpn/multicast)	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1120
group/family/inet-vpn/unicast)	
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	1121
group/family/inet6/any)	

< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	
group/family/inet6/labeled-unicast)	1122
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	
group/family/inet6/multicast)	1123
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	
group/family/inet6/unicast)	1124
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	
group/family/l2vpn/unicast)	1125
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet/any)	1126
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet/labeled-unicast)	1127
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet/multicast)	1128
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet/unicast)	1129
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet-vpn/any)	1130
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet-vpn/multicast)	1131
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet-vpn/unicast)	1132
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet6/any)	1133
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet6/labeled-unicast)	1134
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet6/multicast)	1135
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/inet6/unicast)	1136
< prefix-limit> (configuration/routing-instances/instance/protocols/bgp/	
group/neighbor/family/l2vpn/unicast)	1137
< prefix-list> (configuration/firewall/family/inet/filter/term/from)	1138
< prefix-list> (configuration/policy-options)	1138
< prefix-list> (configuration/policy-options/policy-statement/from)	1139
< prefix-list> (configuration/policy-options/policy-statement/term/from)	1139
< prefix-list-item> (configuration/policy-options/prefix-list)	1139
< primary> (configuration/protocols/mpls/label-switched-path)	1140
< profile> (configuration/access)	1141
< promiscuous-mode> (configuration/interfaces/interface/atm-options)	1141
< proposal> (configuration/security/ike)	1142
< proposal> (configuration/security/ipsec)	1143
< proposals> (configuration/security/ike/policy)	1143
< proposals> (configuration/security/ipsec/policy)	1144
< protocol> (configuration/firewall/family/inet/filter/term/from)	1144
< protocol> (configuration/policy-options/policy-statement/from)	1145
< protocol> (configuration/policy-options/policy-statement/term/from)	1146
< protocol> (configuration/policy-options/policy-statement/term/to)	1147
< protocol> (configuration/policy-options/policy-statement/to)	1148
< protocol-except> (configuration/firewall/family/inet/filter/term/from)	1149
< protocol-version> (configuration/system/services/ssh)	1150
< protocols> (configuration)	1150
< protocols> (configuration/routing-instances/instance)	1152
< radius-server> (configuration/system)	1152
< receive> (configuration/protocols/rip)	1153
< receive> (configuration/protocols/rip/group/neighbor)	1153
< receive> (configuration/protocols/ripng)	1154

< receive> (configuration/protocols/ripng/group/neighbor).....	1154
< receive> (configuration/routing-instances instance/protocols/rip).....	1155
< receive> (configuration/routing-instances instance/protocols/rip/group/ neighbor).....	1155
< receive-bucket> (configuration/interfaces/interface).....	1156
< redundancy> (configuration/chassis).....	1157
< reject> (configuration/firewall/family/inet/filter/term/then).....	1158
< reject> (configuration/firewall/family/inet6/filter/term/then).....	1159
< remote> (configuration/interfaces/interface/unit/family/tcc).....	1160
< remote-interface-switch> (configuration/protocols/connections)	1161
< resolution> (configuration/routing-instances instance/routing-options)	1161
< resolution> (configuration/routing-options)	1162
< rewrite-rules> (configuration/class-of-service)	1162
< rewrite-rules> (configuration/class-of-service/interfaces/unit)	1163
< rib> (configuration/routing-instances instance/routing-options).....	1163
< rib> (configuration/routing-options)	1164
< rib-group> (configuration/protocols/bgp/ family/inet/any)	1164
< rib-group> (configuration/protocols/bgp/family/inet/labeled-unicast).....	1165
< rib-group> (configuration/protocols/bgp/family/inet/multicast).....	1165
< rib-group> (configuration/protocols/bgp/family/inet/unicast)	1166
< rib-group> (configuration/protocols/bgp/family/inet-vpn/any)	1166
< rib-group> (configuration/protocols/bgp/family/inet-vpn/multicast)	1167
< rib-group> (configuration/protocols/bgp/family/inet-vpn/unicast)	1167
< rib-group> (configuration/protocols/bgp/family/inet6/any)	1168
< rib-group> (configuration/protocols/bgp/family/inet6/labeled-unicast)	1168
< rib-group> (configuration/protocols/bgp/family/inet6/multicast)	1169
< rib-group> (configuration/protocols/bgp/family/inet6/unicast)	1169
< rib-group> (configuration/protocols/bgp/family/l2vpn/unicast)	1170
< rib-group> (configuration/protocols/bgp/group/family/inet/any)	1170
< rib-group> (configuration/protocols/bgp/group/family/inet/labeled-unicast)	1171
< rib-group> (configuration/protocols/bgp/group/family/inet/multicast)	1171
< rib-group> (configuration/protocols/bgp/group/family/inet/unicast)	1172
< rib-group> (configuration/protocols/bgp/group/family/inet-vpn/any)	1172
< rib-group> (configuration/protocols/bgp/group/family/inet-vpn/multicast)	1173
< rib-group> (configuration/protocols/bgp/group/family/inet-vpn/unicast)	1173
< rib-group> (configuration/protocols/bgp/group/family/inet6/any)	1174
< rib-group> (configuration/protocols/bgp/group/family/inet6/ labeled-unicast)	1174
< rib-group> (configuration/protocols/bgp/group/family/inet6/multicast)	1175
< rib-group> (configuration/protocols/bgp/group/family/inet6/unicast)	1175
< rib-group> (configuration/protocols/bgp/group/family/l2vpn/unicast)	1176
< rib-group> (configuration/protocols/bgp/group/neighbor/family/inet/any)	1176
< rib-group> (configuration/protocols/bgp/group/neighbor/family/inet/ labeled-unicast)	1177
< rib-group> (configuration/protocols/bgp/group/neighbor/family/inet/ multicast)	1177
< rib-group> (configuration/protocols/bgp/group/neighbor/family/inet/ unicast).....	1178
< rib-group> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/ any).....	1178
< rib-group> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/ multicast)	1179
< rib-group> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/ unicast).....	1179
< rib-group> (configuration/protocols/bgp/group/neighbor/family/inet6/any) ..	1180

< rib-group> (configuration/protocols/bgp/group/neighbor/family/inet6/ labeled-unicast).....	1180
< rib-group> (configuration/protocols/bgp/group/neighbor/family/inet6/ multicast).....	1181
< rib-group> (configuration/protocols/bgp/group/neighbor/family/inet6/ unicast).....	1181
< rib-group> (configuration/protocols/bgp/group/neighbor/family/l2vpn/ unicast).....	1182
< rib-group> (configuration/protocols/dvmrp)	1182
< rib-group> (configuration/protocols/msdp)	1183
< rib-group> (configuration/protocols/pim).....	1183
< rib-group> (configuration/protocols/rip).....	1183
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ family/inet/any)	1184
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ family/inet/labeled-unicast).....	1184
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ family/inet/multicast).....	1185
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ family/inet/unicast)	1185
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ family/inet-vpn/any)	1186
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ family/inet-vpn/multicast)	1186
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ family/inet-vpn/unicast)	1187
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ family/inet6/any)	1187
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ family/inet6/labeled-unicast)	1188
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ family/inet6/multicast)	1188
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ family/inet6/unicast)	1189
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ family/l2vpn/unicast)	1189
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ group/family/inet/any)	1190
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ group/family/inet/labeled-unicast)	1191
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ group/family/inet/multicast)	1192
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ group/family/inet/unicast)	1193
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ group/family/inet-vpn/any)	1194
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ group/family/inet-vpn/multicast)	1195
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ group/family/inet-vpn/unicast)	1196
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ group/family/inet6/any)	1197
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ group/family/inet6/labeled-unicast)	1198
< rib-group> (configuration/routing-instances/instance/protocols/bgp/ group/family/inet6/multicast)	1199

< rib-group> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6/unicast)	1200
< rib-group> (configuration/routing-instances/instance/protocols/bgp/group/family/l2vpn/unicast)	1201
< rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/any)	1202
< rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/labeled-unicast)	1203
< rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/multicast)	1204
< rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/unicast)	1205
< rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn/any)	1206
< rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn/multicast)	1207
< rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn/unicast)	1208
< rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/any)	1209
< rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/labeled-unicast)	1210
< rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/multicast)	1211
< rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/unicast)	1212
< rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/l2vpn/unicast)	1213
< rib-group> (configuration/routing-instances/instance/protocols/pim)	1213
< rib-group> (configuration/routing-instances/instance/protocols/rip)	1214
< rib-group> (configuration/routing-instances/instance/routing-options/interface-routes)	1214
< rib-group> (configuration/routing-options/interface-routes)	1215
< rib-groups> (configuration/routing-instances/instance/routing-options)	1215
< rib-groups> (configuration/routing-options)	1216
< rip> (configuration/protocols)	1216
< rip> (configuration/routing-instances/instance/protocols)	1217
< ripng> (configuration/protocols)	1218
< rmon> (configuration/snmp)	1219
< root-authentication> (configuration/system)	1219
< route> (configuration/routing-instances/instance/routing-options/aggregate)	1220
< route> (configuration/routing-instances/instance/routing-options/generate)	1221
< route> (configuration/routing-instances/instance/routing-options/rib/aggregate)	1223
< route> (configuration/routing-instances/instance/routing-options/rib/generate)	1225
< route> (configuration/routing-instances/instance/routing-options/rib/static)	1227
< route> (configuration/routing-instances/instance/routing-options/static)	1229
< route> (configuration/routing-options/aggregate)	1231
< route> (configuration/routing-options/generate)	1232
< route> (configuration/routing-options/rib/aggregate)	1234
< route> (configuration/routing-options/rib/generate)	1235
< route> (configuration/routing-options/rib/static)	1237
< route> (configuration/routing-options/static)	1239

< route-distinguisher> (configuration/routing-instances/instance).....	1240
< route-filter> (configuration/policy-options/policy-statement/from).....	1241
< route-filter> (configuration/policy-options/policy-statement/term/from)	1244
< router-advertisement> (configuration/protocols)	1246
< router-discovery> (configuration/protocols)	1247
< router-discovery> (configuration/routing-instances/instance/protocols)	1247
< routing-engine> (configuration/chassis/redundancy)	1248
< routing-engine-profile> (configuration/accounting-options)	1248
< routing-instance> (configuration/interfaces/interface/unit/tunnel)	1249
< routing-instances> (configuration).....	1249
< routing-options> (configuration).....	1250
< routing-options> (configuration/routing-instances/instance)	1251
< rp> (configuration/protocols/pim).....	1253
< rp> (configuration/routing-instances/instance/protocols/pim)	1253
< rpf-check> (configuration/interfaces/interface/unit/family/inet)	1254
< rpf-check> (configuration/interfaces/interface/unit/family/inet6)	1254
< rsvp> (configuration/protocols)	1255
< sampling> (configuration/forwarding-options).....	1255
< sap> (configuration/protocols).....	1256
< scheduler-maps> (configuration/class-of-service).....	1256
< schedulers> (configuration/class-of-service).....	1256
< scope> (configuration/routing-instances/instance/routing-options/multicast).....	1257
< scope> (configuration/routing-options/multicast).....	1258
< secondary> (configuration/protocols/mpls/label-switched-path)	1258
< security> (configuration)	1259
< security-association> (configuration/security/ipsec)	1259
< send> (configuration/protocols/rip)	1260
< send> (configuration/protocols/rip/group/neighbor).....	1261
< send> (configuration/protocols/ripng)	1261
< send> (configuration/protocols/ripng/group/neighbor).....	1262
< send> (configuration/routing-instances/instance/protocols/rip).....	1262
< send> (configuration/routing-instances/instance/protocols/rip/group/neighbor).....	1263
< server> (configuration/forwarding-options/helpers/bootp).....	1263
< server> (configuration/forwarding-options/helpers/bootp/interface)	1264
< services> (configuration/system)	1264
< sfm> (configuration/chassis)	1265
< sfm> (configuration/chassis/redundancy)	1265
< shaping> (configuration/interfaces/interface/unit)	1265
< shaping> (configuration/interfaces/interface/unit/family/inet/address/multipoint-destination)	1266
< site> (configuration/routing-instances/instance/protocols/l2vpn)	1267
< snmp> (configuration).....	1267
< sonet> (configuration/chassis/aggregated-devices)	1268
< sonet> (configuration/chassis/alarm)	1269
< sonet-options> (configuration/interfaces/interface).....	1271
< source> (configuration/protocols/igmp/interface/static/group)	1272
< source-address> (configuration/firewall/family/inet/filter/term/from)	1273
< source-address> (configuration/firewall/family/inet6/filter/term/from)	1273
< source-address-filter> (configuration/interfaces/interface/aggregated-ether-options)	1274
< source-address-filter> (configuration/interfaces/interface/fastether-options).....	1274
< source-address-filter> (configuration/interfaces/interface/gigether-options).....	1274

< source-address-filter> (configuration/policy-options/policy-statement/	1275
from)	
< source-address-filter> (configuration/policy-options/policy-statement/	1278
term/from)	
< source-class-usage> (configuration/interfaces/interface/unit/family/inet/	1280
accounting)	
< source-class-usage> (configuration/interfaces/interface/unit/family/inet/	1281
accounting)	
< source-classes> (configuration/accounting-options/class-usage-profile)	1281
< source-destination-prefix> (configuration/forwarding-options/sampling/	
output/cflowd/aggregation)	1282
< source-port> (configuration/firewall/family/inet/filter/term/from)	1282
< source-port> (configuration/firewall/family/inet6/filter/term/from)	1285
< source-port-except> (configuration/firewall/family/inet/filter/term/from)	1287
< source-port-except> (configuration/firewall/family/inet6/filter/term/from)	1290
< source-prefix-list> (configuration/firewall/family/inet/filter/term/from)	1293
< ssh> (configuration/chassis/redundancy)	1293
< ssh> (configuration/system/services)	1294
< ssh-dsa> (configuration/system/login/user/authentication)	1294
< ssh-dsa> (configuration/system/root-authentication)	1295
< ssh-rsa> (configuration/system/login/user/authentication)	1295
< ssh-rsa> (configuration/system/root-authentication)	1295
< ssm-groups> (configuration/routing-instances/instance/routing-options/	
multicast)	1296
< ssm-groups> (configuration/routing-options/multicast)	1296
< static> (configuration/protocols/igmp/interface)	1296
< static> (configuration/protocols/pim/rp)	1297
< static> (configuration/routing-instances/instance/protocols/pim/rp)	1297
< static> (configuration/routing-instances/instance/routing-options)	1298
< static> (configuration/routing-instances/instance/routing-options/rib)	1298
< static> (configuration/routing-options)	1299
< static> (configuration/routing-options/rib)	1299
< static-host-mapping> (configuration/system)	1300
< static-path> (configuration/protocols/mpls)	1300
< statistics> (configuration/protocols/mpls)	1301
< stub> (configuration/protocols/ospf/area)	1301
< stub> (configuration/routing-instances/instance/protocols/ospf/area)	1302
< syslog> (configuration/routing-instances/instance/routing-options/options) ..	1302
< syslog> (configuration/routing-options/options)	1303
< syslog> (configuration/system)	1304
< system> (configuration)	1305
< t1> (configuration/chassis/fpc/pic/ct3/port)	1306
< t1-options> (configuration/interfaces/interface)	1307
< t3> (configuration/chassis/alarm)	1309
< t3-options> (configuration/interfaces/interface)	1311
< tacplus-server> (configuration/system)	1313
< tag> (configuration/policy-options/policy-statement/from/route-filter)	1314
< tag> (configuration/policy-options/policy-statement/from/	
source-address-filter)	1314
< tag> (configuration/policy-options/policy-statement/term/from/	
route-filter)	1315
< tag> (configuration/policy-options/policy-statement/term/from/	
source-address-filter)	1315
< tag> (configuration/policy-options/policy-statement/term/then)	1316
< tag> (configuration/policy-options/policy-statement/then)	1316
< tag> (configuration/routing-instances/instance/routing-options/	
aggregate/defaults)	1317

< tag> (configuration/routing-instances/instance/routing-options/aggregate/route).....	1317
< tag> (configuration/routing-instances/instance/routing-options/generate/defaults)	1318
< tag> (configuration/routing-instances/instance/routing-options/generate/route)	1318
< tag> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)	1319
< tag> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)	1319
< tag> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)	1320
< tag> (configuration/routing-instances/instance/routing-options/rib/generate/route)	1320
< tag> (configuration/routing-instances/instance/routing-options/rib/static/defaults)	1321
< tag> (configuration/routing-instances/instance/routing-options/rib/static/route)	1321
< tag> (configuration/routing-instances/instance/routing-options/static/defaults)	1322
< tag> (configuration/routing-instances/instance/routing-options/static/route)	1322
< tag> (configuration/routing-options/aggregate/defaults).....	1323
< tag> (configuration/routing-options/aggregate/route).....	1323
< tag> (configuration/routing-options/generate/defaults)	1324
< tag> (configuration/routing-options/generate/route)	1324
< tag> (configuration/routing-options/rib/aggregate/defaults)	1325
< tag> (configuration/routing-options/rib/aggregate/route).....	1325
< tag> (configuration/routing-options/rib/generate/defaults)	1326
< tag> (configuration/routing-options/rib/generate/route)	1326
< tag> (configuration/routing-options/rib/static/defaults)	1327
< tag> (configuration/routing-options/rib/static/route)	1327
< tag> (configuration/routing-options/static/defaults)	1328
< tag> (configuration/routing-options/static/route)	1328
< tag2> (configuration/policy-options/policy-statement/from/route-filter)	1329
< tag2> (configuration/policy-options/policy-statement/from/source-address-filter)	1329
< tag2> (configuration/policy-options/policy-statement/term/from/route-filter)	1330
< tag2> (configuration/policy-options/policy-statement/term/from/source-address-filter)	1330
< tag2> (configuration/policy-options/policy-statement/term/then)	1331
< tag2> (configuration/policy-options/policy-statement/then)	1331
< tag2> (configuration/routing-instances/instance/routing-options/aggregate/defaults).....	1332
< tag2> (configuration/routing-instances/instance/routing-options/aggregate/route).....	1332
< tag2> (configuration/routing-instances/instance/routing-options/generate/defaults)	1333
< tag2> (configuration/routing-instances/instance/routing-options/generate/route)	1333
< tag2> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)	1334
< tag2> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)	1334
< tag2> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)	1335

< tag2> (configuration/routing-instances/instance/routing-options/rib/generate/route).....	1335
< tag2> (configuration/routing-instances/instance/routing-options/rib/static/defaults).....	1336
< tag2> (configuration/routing-instances/instance/routing-options/rib/static/route).....	1336
< tag2> (configuration/routing-instances/instance/routing-options/static/defaults)	1337
< tag2> (configuration/routing-instances/instance/routing-options/static/route)	1337
< tag2> (configuration/routing-options/aggregate/defaults).....	1338
< tag2> (configuration/routing-options/aggregate/route).....	1338
< tag2> (configuration/routing-options/generate/defaults)	1339
< tag2> (configuration/routing-options/generate/route)	1339
< tag2> (configuration/routing-options/rib/aggregate/defaults)	1340
< tag2> (configuration/routing-options/rib/aggregate/route)	1340
< tag2> (configuration/routing-options/rib/generate/defaults)	1341
< tag2> (configuration/routing-options/rib/generate/route)	1341
< tag2> (configuration/routing-options/rib/static/defaults)	1342
< tag2> (configuration/routing-options/rib/static/route)	1342
< tag2> (configuration/routing-options/static/defaults)	1343
< tag2> (configuration/routing-options/static/route)	1343
< targets> (configuration/snmp/trap-group).....	1344
< tcc> (configuration/interfaces/interface/unit/family)	1344
< te-link> (configuration/protocols/link-management)	1345
< te-link> (configuration/protocols/link-management/peer)	1345
< teardown> (configuration/protocols/bgp/family/inet/any/prefix-limit).....	1346
< teardown> (configuration/protocols/bgp/family/inet/labeled-unicast/prefix-limit)	1346
< teardown> (configuration/protocols/bgp/family/inet/multicast/prefix-limit) ..	1347
< teardown> (configuration/protocols/bgp/family/inet/unicast/prefix-limit)	1347
< teardown> (configuration/protocols/bgp/family/inet-vpn/any/prefix-limit)....	1348
< teardown> (configuration/protocols/bgp/family/inet-vpn/multicast/prefix-limit)	1348
< teardown> (configuration/protocols/bgp/family/inet-vpn/unicast/prefix-limit)	1349
< teardown> (configuration/protocols/bgp/family/inet6/any/prefix-limit).....	1349
< teardown> (configuration/protocols/bgp/family/inet6/labeled-unicast/prefix-limit)	1350
< teardown> (configuration/protocols/bgp/family/inet6/multicast/prefix-limit)	1350
< teardown> (configuration/protocols/bgp/family/inet6/unicast/prefix-limit) ...	1351
< teardown> (configuration/protocols/bgp/family/l2vpn/unicast/prefix-limit) ..	1351
< teardown> (configuration/protocols/bgp/group/family/inet/any/prefix-limit)	1352
< teardown> (configuration/protocols/bgp/group/family/inet/labeled-unicast/prefix-limit)	1352
< teardown> (configuration/protocols/bgp/group/family/inet/multicast/prefix-limit)	1353
< teardown> (configuration/protocols/bgp/group/family/inet/unicast/prefix-limit)	1354
< teardown> (configuration/protocols/bgp/group/family/inet-vpn/any/prefix-limit)	1354
< teardown> (configuration/protocols/bgp/group/family/inet-vpn/multicast/prefix-limit)	1355
< teardown> (configuration/protocols/bgp/group/family/inet-vpn/unicast/prefix-limit)	1356

< teardown> (configuration/protocols/bgp/group/family/inet6/any/prefix-limit).....	1356
< teardown> (configuration/protocols/bgp/group/family/inet6/labeled-unicast/prefix-limit)	1357
< teardown> (configuration/protocols/bgp/group/family/inet6/multicast/prefix-limit).....	1358
< teardown> (configuration/protocols/bgp/group/family/inet6/unicast/prefix-limit).....	1358
< teardown> (configuration/protocols/bgp/group/family/l2vpn/unicast/prefix-limit).....	1359
< teardown> (configuration/protocols/bgp/group/neighbor/family/inet/any/prefix-limit).....	1360
< teardown> (configuration/protocols/bgp/group/neighbor/family/inet/labeled-unicast/prefix-limit)	1361
< teardown> (configuration/protocols/bgp/group/neighbor/family/inet/multicast/prefix-limit)	1362
< teardown> (configuration/protocols/bgp/group/neighbor/family/inet/unicast/prefix-limit).....	1363
< teardown> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/any/prefix-limit).....	1364
< teardown> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/multicast/prefix-limit)	1365
< teardown> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/unicast/prefix-limit).....	1366
< teardown> (configuration/protocols/bgp/group/neighbor/family/inet6/any/prefix-limit).....	1367
< teardown> (configuration/protocols/bgp/group/neighbor/family/inet6/labeled-unicast/prefix-limit)	1368
< teardown> (configuration/protocols/bgp/group/neighbor/family/inet6/multicast/prefix-limit)	1369
< teardown> (configuration/protocols/bgp/group/neighbor/family/inet6/unicast/prefix-limit).....	1370
< teardown> (configuration/protocols/bgp/group/neighbor/family/l2vpn/unicast/prefix-limit).....	1371
< teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet/any/prefix-limit)	1372
< teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet/labeled-unicast/prefix-limit)	1373
< teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet/multicast/prefix-limit)	1374
< teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet/unicast/prefix-limit)	1375
< teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn/any/prefix-limit)	1376
< teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn/multicast/prefix-limit)	1377
< teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn/unicast/prefix-limit)	1378
< teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet6/any/prefix-limit)	1379
< teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet6/labeled-unicast/prefix-limit)	1380
< teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet6/multicast/prefix-limit)	1381
< teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet6/unicast/prefix-limit)	1382

< teardown> (configuration/routing-instances/instance/protocols/bgp/	1383
family/l2vpn/unicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1384
group/family/inet/any/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1385
group/family/inet/labeled-unicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1386
group/family/inet/multicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1387
group/family/inet/unicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1388
group/family/inet-vpn/any/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1389
group/family/inet-vpn/multicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1390
group/family/inet-vpn/unicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1391
group/family/inet6/any/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1392
group/family/inet6/labeled-unicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1393
group/family/inet6/multicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1394
group/family/inet6/unicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1395
group/family/l2vpn/unicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1396
group/neighbor/family/inet/any/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1397
group/neighbor/family/inet/labeled-unicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1398
group/neighbor/family/inet/multicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1399
group/neighbor/family/inet/unicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1400
group/neighbor/family/inet-vpn/any/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1401
group/neighbor/family/inet-vpn/multicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1402
group/neighbor/family/inet-vpn/unicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1403
group/neighbor/family/inet6/any/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1404
group/neighbor/family/inet6/labeled-unicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1405
group/neighbor/family/inet6/multicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1406
group/neighbor/family/inet6/unicast/prefix-limit).....	
< teardown> (configuration/routing-instances/instance/protocols/bgp/	1407
group/neighbor/family/l2vpn/unicast/prefix-limit).....	
< telnet> (configuration/system/services).....	1407
< term> (configuration/firewall/family/inet/filter).....	1408
< term> (configuration/firewall/family/inet6/filter).....	1408
< term> (configuration/policy-options/policy-statement).....	1409
< tftp> (configuration/forwarding-options/helpers).....	1409
< then> (configuration/firewall/family/inet/filter/policer).....	1410
< then> (configuration/firewall/family/inet/filter/term).....	1411

< then> (configuration/firewall/family/inet6/filter/policer)	1412
< then> (configuration/firewall/family/inet6/filter/term).....	1413
< then> (configuration/firewall/policer)	1414
< then> (configuration/policy-options/policy-statement).....	1415
< then> (configuration/policy-options/policy-statement/term)	1417
< to> (configuration/policy-options/policy-statement).....	1419
< to> (configuration/policy-options/policy-statement/term)	1421
< tracefilter> (configuration/routing-instances/instance/routing-options/ resolution)	1423
< tracefilter> (configuration/routing-options/resolution)	1423
< traceoptions> (configuration/access)	1423
< traceoptions> (configuration/forwarding-options/helpers)	1424
< traceoptions> (configuration/forwarding-options/sampling)	1424
< traceoptions> (configuration/interfaces).....	1425
< traceoptions> (configuration/interfaces/interface)	1425
< traceoptions> (configuration/protocols/bgp).....	1425
< traceoptions> (configuration/protocols/bgp/group)	1426
< traceoptions> (configuration/protocols/bgp/group/neighbor)	1426
< traceoptions> (configuration/protocols/dvmrp)	1427
< traceoptions> (configuration/protocols/igmp).....	1427
< traceoptions> (configuration/protocols/isis)	1427
< traceoptions> (configuration/protocols/l2circuit)	1428
< traceoptions> (configuration/protocols/ldp)	1428
< traceoptions> (configuration/protocols/link-management)	1429
< traceoptions> (configuration/protocols/mpls)	1429
< traceoptions> (configuration/protocols/msdp)	1429
< traceoptions> (configuration/protocols/msdp/group)	1430
< traceoptions> (configuration/protocols/msdp/group/peer)	1430
< traceoptions> (configuration/protocols/msdp/peer)	1431
< traceoptions> (configuration/protocols/ospf)	1431
< traceoptions> (configuration/protocols/pim).....	1431
< traceoptions> (configuration/protocols/rip).....	1432
< traceoptions> (configuration/protocols/ripng).....	1432
< traceoptions> (configuration/protocols/router-advertisement)	1433
< traceoptions> (configuration/protocols/router-discovery)	1433
< traceoptions> (configuration/protocols/rsvp)	1433
< traceoptions> (configuration/protocols/vrrp)	1434
< traceoptions> (configuration/routing-instances/instance/protocols/bgp)	1434
< traceoptions> (configuration/routing-instances/instance/protocols/bgp/ group).....	1435
< traceoptions> (configuration/routing-instances/instance/protocols/bgp/ group/neighbor).....	1435
< traceoptions> (configuration/routing-instances/instance/protocols/isis)	1436
< traceoptions> (configuration/routing-instances/instance/protocols/l2vpn)	1436
< traceoptions> (configuration/routing-instances/instance/protocols/ldp)	1437
< traceoptions> (configuration/routing-instances/instance/protocols/ospf)....	1437
< traceoptions> (configuration/routing-instances/instance/protocols/pim)	1438
< traceoptions> (configuration/routing-instances/instance/protocols/rip)	1438
< traceoptions> (configuration/routing-instances/instance/protocols/ router-discovery)	1439
< traceoptions> (configuration/routing-instances/instance/routing-options)....	1439
< traceoptions> (configuration/routing-instances/instance/routing-options/ auto-export).....	1440
< traceoptions> (configuration/routing-instances/instance/routing-options/ resolution)	1440
< traceoptions> (configuration/routing-options)	1441
< traceoptions> (configuration/routing-options/auto-export).....	1441

< traceoptions> (configuration/routing-options/resolution).....	1441
< traceoptions> (configuration/security).....	1442
< traceoptions> (configuration/snmp).....	1442
< track> (configuration/interfaces/interface/unit/family/inet/address/vrrp-group).....	1443
< traffic-class> (configuration/firewall/family/inet6/filter/term/from)	1443
< traffic-class-except> (configuration/firewall/family/inet6/filter/term/from)	1444
< traffic-engineering> (configuration/protocols/isis)	1445
< traffic-engineering> (configuration/protocols/ospf).....	1445
< traffic-engineering> (configuration/routing-instances/instance/protocols/isis).....	1446
< traffic-engineering> (configuration/routing-instances/instance/protocols/ospf)	1446
< traffic-statistics> (configuration/protocols/ldp)	1447
< traffic-statistics> (configuration/routing-instances/instance/protocols/ldp)....	1447
< transmit-bucket> (configuration/interfaces/interface).....	1448
< transmit-rate> (configuration/class-of-service/schedulers)	1448
< trap-group> (configuration/snmp).....	1449
< trap-options> (configuration/snmp).....	1449
< tunnel> (configuration/interfaces/interface/unit)	1450
< unicast> (configuration/protocols/bgp/family/inet)	1450
< unicast> (configuration/protocols/bgp/family/inet-vpn)	1451
< unicast> (configuration/protocols/bgp/family/inet6)	1451
< unicast> (configuration/protocols/bgp/family/l2vpn)	1452
< unicast> (configuration/protocols/bgp/group/family/inet)	1452
< unicast> (configuration/protocols/bgp/group/family/inet-vpn)	1453
< unicast> (configuration/protocols/bgp/group/family/inet6)	1453
< unicast> (configuration/protocols/bgp/group/family/l2vpn)	1454
< unicast> (configuration/protocols/bgp/group/neighbor/family/inet)	1454
< unicast> (configuration/protocols/bgp/group/neighbor/family/inet-vpn).....	1455
< unicast> (configuration/protocols/bgp/group/neighbor/family/inet6)	1455
< unicast> (configuration/protocols/bgp/group/neighbor/family/l2vpn).....	1456
< unicast> (configuration/routing-instances/instance/protocols/bgp/family/inet).....	1456
< unicast> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn)	1457
< unicast> (configuration/routing-instances/instance/protocols/bgp/family/inet6)	1457
< unicast> (configuration/routing-instances/instance/protocols/bgp/family/l2vpn)	1458
< unicast> (configuration/routing-instances/instance/protocols/bgp/group/family/inet)	1458
< unicast> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn)	1459
< unicast> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6)	1460
< unicast> (configuration/routing-instances/instance/protocols/bgp/group/family/l2vpn)	1460
< unicast> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet)	1461
< unicast> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn)	1462
< unicast> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6)	1463
< unicast> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/l2vpn)	1464

< unicast> (configuration/routing-instances/instance/routing-options/	
auto-export/family/inet)	1465
< unicast> (configuration/routing-options/auto-export/family/inet)	1465
< unit> (configuration/class-of-service/interfaces).....	1466
< unit> (configuration/interfaces/interface)	1467
< user> (configuration/snmp/access)	1469
< user> (configuration/snmp/access/group)	1470
< user> (configuration/system/login)	1470
< user> (configuration/system/syslog)	1471
< vbr> (configuration/interfaces/interface/unit/family/inet/address/	
multipoint-destination/shaping)	1471
< vbr> (configuration/interfaces/interface/unit/shaping)	1472
< view> (configuration/snmp)	1472
< virtual-address> (configuration/interfaces/interface/unit/family/inet/	
address/vrrp-group)	1473
< virtual-link> (configuration/protocols/ospf/area)	1473
< virtual-link> (configuration/routing-instances/instance/protocols/	
ospf/area)	1474
< vpi> (configuration/interfaces/interface/atm-options)	1475
< vpi> (configuration/interfaces/interface/atm-options/promiscuous-mode) ...	1475
< vrf-export> (configuration/routing-instances/instance)	1476
< vrf-import> (configuration/routing-instances/instance)	1476
< vrrp> (configuration/protocols).....	1476
< vrrp-group> (configuration/interfaces/interface/unit/family/inet/address)	1477
< xnm-clear-text> (configuration/system/services)	1478
< xnm-ssl> (configuration/system/services).....	1478

Part 2

JUNOScript Document Type Definitions

Chapter 6	DTD for Session Control Response Tags	1481
Chapter 7	DTD for Accounting Response Tags	1483
Chapter 8	DTD for Alarm Response Tags	1487
Chapter 9	DTD for Chassis Response Tags	1489
Chapter 10	DTD for Class of Service Response Tags	1495
Chapter 11	DTD for Firewall Filter Response Tags	1501

Chapter 12	DTD for Forwarding and Routing Table Response Tags	1503
Chapter 13	DTD for Interface Response Tags	1505
Chapter 14	DTD for IPSec Response Tags	1527
Chapter 15	DTD for IPv6 Neighbor Discovery Response Tags	1531
Chapter 16	DTD for Routing Protocols Response Tags	1533
Chapter 17	DTD for SNMP Response Tags	1569
Chapter 18	DTD for UDP Forwarding Helper Response Tags	1573

Part 3

Index

List of Tables

List of Tables

List of Tables

Table 1:	Juniper Networks Technical Documentation	lxvii
Table 2:	Mapping of JUNOScript Operational Tags to CLI Commands	17
Table 3:	Mapping of CLI Commands to JUNOScript Operational Tags	20

List of Tables



About This Manual

This chapter provides a high-level overview of the *JUNOScript API Reference*:

- Objectives on page lxiii
- Audience on page lxiv
- Document Organization on page lxiv
- General Document Conventions on page lxv
- Conventions for Tag Summaries on page lxvi
- List of Technical Publications on page lxvii
- Documentation Feedback on page lxviii
- How to Request Support on page lxviii

Objectives

This manual provides complete information about the tag elements in the JUNOScript application programming interface (API) that are used to configure or to request configuration and status information about a Juniper Networks router. The JUNOScript API is an Extensible Markup Language (XML) application that client applications use to exchange information with the JUNOScript server running on the router.

This manual documents all constructs in the JUNOScript API. To obtain additional information about the JUNOScript API—either corrections to information in this manual or information that might have been omitted from this manual—refer to the printed software release notes that accompany your router.

This manual is not provided in printed form or on the documentation CD-ROM. To obtain the most current version of this manual and the most current version of the software release notes, refer to the product documentation page on the Juniper Networks Web site, which is located at <http://www.juniper.net/>. To order printed copies of other Juniper Networks manuals or a documentation CD-ROM, please contact your sales representative.

Audience

This manual is designed for customers who want to write custom applications for router configuration or monitoring. It assumes that you are familiar with basic terminology and concepts of XML and of XML-parsing utilities such as the Document Object Model (DOM) or Simple API for XML (SAX).

Document Organization

This manual contains the following parts and chapters:

- Preface, “About This Manual” (this chapter), provides a brief description of the contents and organization of this manual and describes how to obtain customer support.
 - Part 1, “Session Control, Operational Request, and Configuration API Reference,” describes the JUNOScript tags used to configure or request information from the JUNOScript server and the tags that the JUNOScript server sends in response.
 - Chapter 1, “Summary of Session Control Tags,” describes the tags that client applications and the JUNOScript server use to begin, end, and control the flow of the JUNOScript session.
 - Chapter 2, “Mapping between Operational Tags and CLI Commands,” provides tables that map each operational request tag supported in the current version of the JUNOScript API to the response tag returned by the JUNOScript server and to the corresponding JUNOS command-line interface (CLI) command.
 - Chapter 3, “Summary of Operational Request Tags,” describes the tags used by a client application to request operational information from the JUNOScript server.
 - Chapter 4, “Summary of Operational Response Tags,” describes the tags returned by the JUNOScript server in response to a client application’s request for operational information.
 - Chapter 5, “Summary of Configuration Tags,” describes the tags that represent router configuration.
 - Part 2, “JUNOScript Document Type Definitions,” includes the document type definitions (DTDs) for tags that describe various router operations.
 - Chapter 6, “DTD for Session Control Response Tags,” contains the XML DTD called junos.dtd, which lists the session control tags returned by the JUNOScript server.
 - Chapter 7, “DTD for Accounting Response Tags,” contains the XML DTD called junos-accounting.dtd, which lists the tags returned by the JUNOScript server to describe accounting records.
 - Chapter 8, “DTD for Alarm Response Tags,” contains the XML DTD called junos-alarm.dtd, which lists the tags returned by the JUNOScript server to describe alarms.
 - Chapter 9, “DTD for Chassis Response Tags,” contains the XML DTD called junos-chassis.dtd, which lists the tags returned by the JUNOScript server to describe the router chassis.

- Chapter 10, “DTD for Class of Service Response Tags,” contains the XML DTD called `junos-cos.dtd`, which lists the tags returned by the JUNOScript server to describe class of service settings.
- Chapter 11, “DTD for Firewall Filter Response Tags,” contains the XML DTD called `junos-filter.dtd`, which lists the tags returned by the JUNOScript server to describe firewall filter information.
- Chapter 12, “DTD for Forwarding and Routing Table Response Tags,” contains the XML DTD called `junos-rtinfo.dtd`, which lists the tags returned by the JUNOScript server to describe forwarding table information.
- Chapter 13, “DTD for Interface Response Tags,” contains the XML DTD called `junos-interface.dtd`, which lists the tags returned by the JUNOScript server to describe router interfaces.
- Chapter 14, “DTD for IPSec Response Tags,” contains the XML DTD called `junos-ipsec.dtd`, which lists the tags returned by the JUNOScript server to describe IPSec information.
- Chapter 15, “DTD for IPv6 Neighbor Discovery Response Tags,” contains the XML DTD called `junos-ipv6-nd.dtd`, which lists the tags returned by the JUNOScript server to describe Internet Protocol Version 6 (IPv6) neighbor discovery.
- Chapter 16, “DTD for Routing Protocols Response Tags,” contains the XML DTD called `junos-routing.dtd`, which lists the tags returned by the JUNOScript server to describe routing protocols.
- Chapter 17, “DTD for SNMP Response Tags,” contains the XML DTD called `junos-snmp.dtd`, which lists the tags returned by the JUNOScript server to describe Simple Network Management Protocol (SNMP) settings.
- Chapter 18, “DTD for UDP Forwarding Helper Response Tags,” contains the XML DTD called `junos-helper.dtd`, which lists the tags returned by the JUNOScript server to describe output from the User Datagram Protocol (UDP) forwarding helper.

This manual also contains an index.

General Document Conventions

This document uses the following text conventions:

- Names of commands, files, and directories are shown in a sans serif font. The following example refers to the `ssh` command:

The client application invokes the `ssh` command.

- Examples of command output and the contents of files or XML DTDs are shown in a fixed-width font when it is important to preserve column alignment, or in sans serif font otherwise. The following example using sans serif font is from the `junos-chassis` DTD:

```
<!ELEMENT chassis-inventory (chassis?)>
```

- Options, which are variable terms for which you substitute appropriate values, are shown in italics. The following example refers to the variable called *identifier*:
- For *identifier*, substitute the name of this instance of the object.
- XML tags are shown in sans serif font and are surrounded by angle brackets, which is the standard XML notation for tags. The angle brackets do not indicate that an element is optional, as they do in syntax statements in the *JUNOS Internet Software Operational Mode Command Reference*. The following example refers to tags called <generation> and <local-index>:
- Notice that the JUNOScript server emits the <generation> tag before the <local-index> tag.
- If parts of a file or other example are omitted to highlight the remaining elements, the missing parts are represented by an ellipsis (...).

Conventions for Tag Summaries

The Usage section of the reference entries in this document uses the following text conventions:

- The tag described by the entry appears in bold font. Its parent and child tags appear in regular font. The string between the opening and closing parts of a tag element appears in italic font and describes the type of value represented by the tag.

The following sample for the <admin-groups> tag illustrates the fonts used in an entry:

```
<configuration>
  <protocols>
    <mpls>
      <admin-groups>
        <name>name</name>    <!-- identifier -->
        <group-value>group-value</group-value>
      </admin-groups>
    </mpls>
  </protocols>
</configuration>
```

- An ellipsis (...) between a child tag's opening and closing tags indicates that the tag is itself a container tag. An entry for the child tag appears in alphabetical order in the chapter and lists all of its children.

The following example indicates that there are separate entries for the <defaults> and <route> children of the <aggregate> tag:

```
<aggregate>
  <defaults>...</defaults>
  <route>...</route>
</aggregate>
```

- XML comments appear between the strings <!-- and -->, as in the following example:

```
<name>value</name>    <!--identifier-->
```

- Some tags can be the child of more than one parent. If the immediate parents all occur at the same hierarchy level, the parent tag names appear in a single tag, separated by pipes (|). For example, the following indicates that the tag being described can be a child of both the <physical-interface> and <logical-interface> tags:

```
<physical-interface | logical-interface>
```

If the tag's parents occur at different levels of the hierarchy, there is a separate entry for each instance of the tag. To distinguish them, each entry's header specifies the statement path in parentheses following the tag name.

- Optional attributes appear in square brackets ([]). For example, the following indicates that the hostname and release attributes are optional but that the version attribute is required:

```
<junoscript version="version" [hostname="hostname"] [release="release"]>
```

- If an attribute has multiple mutually exclusive values, they appear in a list enclosed in parentheses (()) and separated by pipes (|). For example, the following indicates that the action attribute can have one of the values merge, override, or replace:

```
action="( merge | override | replace )"
```

List of Technical Publications

Table 1 lists the software and hardware books for Juniper Networks routers and describes the contents of each book.

Table 1: Juniper Networks Technical Documentation

Book	Description
JUNOS Internet Software Configuration Guides	
<i>Getting Started</i>	Provides an overview of the JUNOS Internet software and describes how to install and upgrade the software. This manual also describes how to configure system management functions and how to configure the chassis, including user accounts, passwords, and redundancy.
<i>Interfaces and Class of Service</i>	Provides an overview of the interface and class-of-service functions of the JUNOS Internet software and describes how to configure the interfaces on the router.
<i>IPv6</i>	Provides an overview of IPv6 concepts such as addressing and packet header structure, and discusses the differences between IPv4 and IPv6. This manual also describes how to configure IPv6 on a router and discusses transition from IPv4 to IPv6.
<i>MPLS Applications</i>	Provides an overview of traffic engineering concepts and describes how to configure traffic engineering protocols.
<i>Multicast</i>	Provides an overview of multicast concepts and describes how to configure multicast routing protocols.
<i>Network Management</i>	Provides an overview of network management concepts and describes how to configure various network management features, such as SNMP, accounting options, and cflowd.
<i>Policy Framework</i>	Provides an overview of policy concepts and describes how to configure routing policy, firewall filters, and forwarding options.
<i>Routing and Routing Protocols</i>	Provides an overview of routing concepts and describes how to configure routing, routing instances, and unicast routing protocols.
<i>VPNs</i>	Provides an overview of Layer 2 and Layer 3 Virtual Private Networks (VPNs), describes how to configure VPNs, and provides configuration examples.

Book	Description
JUNOS Internet Software Reference	
<i>Operational Mode Command Reference</i>	Describes the JUNOS Internet software operational mode commands you use to monitor and troubleshoot Juniper Networks routers.
<i>System Log Messages Reference</i>	Describes how to access and interpret system log messages generated by JUNOS software modules and provides a reference page for each message.
JUNOScript API Documentation	
<i>JUNOScript API Guide</i>	Describes how to use the JUNOScript API to monitor and configure Juniper Networks routers.
<i>JUNOScript API Reference</i>	Provides a reference page for each tag in the JUNOScript API.
JUNOS Internet Software Comprehensive Index	
<i>Comprehensive Index</i>	Provides a complete index of all JUNOS Internet software books and the <i>JUNOScript API Guide</i> .
Hardware Documentation	
<i>Hardware Guide</i>	Describes how to install, maintain, and troubleshoot routers and router components. Each router platform (M5 and M10 routers, M20 router, M40 router, M40e router, M160 router, and T640 routing node) has its own hardware guide
<i>PIC Guide</i>	Describes the router Physical Interface Cards (PICs). Each router platform has its own PIC guide.

Documentation Feedback

We are always interested in hearing from our customers. Please let us know what you like and do not like about the Juniper Networks documentation, and let us know of any suggestions you have for improving the documentation. Also, let us know if you find any mistakes in the documentation. Send your feedback to tech-doc@juniper.net.

How to Request Support

For technical support, contact Juniper Networks at support@juniper.net, or at 1-888-314-JTAC (within the United States) or 408-745-2121 (from outside the United States).

Part 1

Session Control, Operational Request, and Configuration API Reference

- Summary of Session Control Tags on page 3
 - Mapping between Operational Tags and CLI Commands on page 17
 - Summary of Operational Request Tags on page 25
 - Summary of Operational Response Tags on page 67
 - Summary of Configuration Tags on page 301
- ⋮

Chapter 1

Summary of Session Control Tags

This chapter lists the tags that client applications and the JUNOScript server use to control the JUNOScript session. The tag names are in alphabetical order. For information about the notational conventions used in this chapter, see “Conventions for Tag Summaries” on page lxvi.

<abort/>

Usage

```
<rpc>
  <any-child-of-rpc>
    <abort/>
  </any-child-of-rpc>
</rpc>
```

Description Direct the JUNOScript server to stop processing the request that is currently outstanding. The server responds by returning the <abort-acknowledgment/> tag, but might already have sent tagged data in response to the request. The client application must discard those tags.

See Also <abort-acknowledgment/> on page 3, <rpc> on page 12

<abort-acknowledgment/>

Usage

```
<rpc-reply>
  <any-child-of-rpc-reply>
    <abort-acknowledgment/>
  </any-child-of-rpc-reply>
</rpc-reply>
```

Description Indicate that the JUNOScript server has received the <abort/> tag and has stopped processing the current request. If the client application receives any tags related to the request between sending the <abort/> tag and receiving this tag, it must discard them.

See Also <xnm:error> on page 13, <rpc-reply> on page 12

- | <command> | | |
|---|---|--|
| Usage | <rpc>
<command>CLI-command-string</command>
</rpc> | |
| Description | Request that the JUNOScript server run the indicated JUNOS command-line interface (CLI) command. Provide the same options to the CLI command as when issuing the command at the CLI prompt. | |
| Use this tag only if the JUNOScript application programming interface (API) does not define an operational request tag that corresponds to the CLI command. The output returned by the JUNOScript server in response to this tag might be less complete or accurate than the output returned for a supported operational request tag. For a list of the available operational request tags, see “Mapping between Operational Tags and CLI Commands” on page 17. | | |
| See Also | <rpc> on page 12, “Mapping between Operational Tags and CLI Commands” on page 17 | |
| <commit-configuration> | | |
| Usage | <rpc>
<commit-configuration/>

<commit-configuration>
<check/>
</commit-configuration>

<commit-configuration>
<confirmed/>
<confirm-timeout>rollback-delay</confirm-timeout>
</commit-configuration>
</rpc> | |
| Description | Request that the JUNOScript server perform one of the following actions, depending on the tag’s contents: | |
| | <ul style="list-style-type: none">■ Commit the current candidate configuration, making it the active configuration on the router. Emit the empty <commit-configuration/> tag.■ Verify the syntactic correctness of the current candidate configuration without actually committing it. Enclose the <check/> tag in <commit-configuration> tags.■ Commit the current candidate configuration but roll back to the previous configuration after a short time. Enclose the <confirmed/> tag in <commit-configuration> tags. By default, the rollback occurs after 10 minutes; to set a different rollback delay, also emit the optional <confirm-timeout> tag. | |
| | To delay the rollback again (past the original rollback deadline), emit the <confirmed/> tag (enclosed in <commit-configuration> tags) again before the deadline passes. Include the <confirm-timeout> tag to specify how long to delay the next rollback, or omit that tag to use the default of 10 minutes. The rollback can be delayed repeatedly in this way. | |

To commit the configuration immediately and permanently after emitting the `<confirmed/>` tag, emit the empty `<commit-configuration/>` tag before the rollback deadline passes. The JUNOScript server commits the current candidate configuration and cancels the rollback. If the candidate configuration is still the same as the current committed configuration, this effectively re-commits the current committed configuration.

Alternatively, emit the empty `<check/>` tag enclosed in `<commit-configuration>` tags. The JUNOScript server confirms the syntactic correctness of the candidate configuration and cancels the rollback. The currently committed configuration remains active.

- Contents** `check`—Verify that the configuration is syntactically correct, but do not actually commit it.
- `confirmed`—Commit the current candidate configuration but roll back to the previous configuration after a short time, 10 minutes by default. Use the `<confirm-timeout>` tag to specify a different amount of time.
- `confirm-timeout`—Specify the number of minutes for which the configuration remains active when the `<confirmed/>` tag is enclosed in the `<commit-configuration>` tags.

See Also `<rpc>` on page 12

<configuration>

```
Usage <!-- when emitted by a client application -->
<rpc>
    <load-configuration>
        <configuration>
            <!-- tags representing configuration objects to load -->
        </configuration>
    </load-configuration>
</rpc>

<!-- when emitted by the JUNOScript server -->
<rpc-reply>
    <configuration>
        <!-- tags representing objects in the current configuration -->
    </configuration>
</rpc-reply>
```

Description Enclose JUNOScript tags that represent one or more configuration objects.

See Also `<rpc>` on page 12, `<rpc-reply>` on page 12

- <configuration-text>

Usage <!-- when emitted by a client application -->
 <rpc>
 <load-configuration format="text">
 <configuration-text>
 <!-- ASCII text representing configuration objects to load -->
 </configuration-text>
 </load-configuration>
 </rpc>

<!-- when emitted by the JUNOScript server -->
 <rpc-reply>
 <configuration-text>
 <!-- ASCII text representing objects in the current configuration -->
 </configuration-text>
 </rpc-reply>

Description Enclose ASCII text that represents one or more configuration objects.

See Also <rpc> on page 12, <rpc-reply> on page 12

- <end-session/>

Usage <rpc-reply>
 <end-session/>
 </rpc-reply>

Description Indicate that the JUNOScript server is about to end the current session for a reason other than an error. Most often, the reason is that the client application has sent the <request-end-session/> tag.

See Also <request-end-session/> on page 11, <rpc-reply> on page 12

- <get-configuration>

Usage <rpc>
 <get-configuration [database="(candidate|committed)"] [format="(text|xml)"]/>

 <get-configuration [database="(candidate|committed)"] [format="(text|xml)"]>
 <!-- tags representing hierarchy level or object to display -->
 </get-configuration>
 </rpc>

Description Request configuration data from the JUNOScript server. The database and format attributes specify the source and formatting of the data to display. To display the entire hierarchy, emit the empty <get-configuration/> tag. To display one hierarchy level or a single configuration object, emit tags within <get-configuration> tags to represent all levels of the configuration hierarchy from the root (represented by the <configuration> tag) down to the level or object to display. To represent the requested level, emit it as an empty tag. To represent the requested object, emit its container tag and identifier tag only, not any tags that represent other characteristics.

Attributes database—Specifies the configuration hierarchy from which to display data. There are two acceptable values:

- candidate—The current candidate configuration
- committed—The configuration currently active (most recently committed) on the router

format—Specifies the format in which the JUNOScript server returns the configuration data. There are two acceptable values:

- text—Configuration statements are formatted as ASCII text, using the newline character, tabs and other white space, braces, and square brackets to indicate the hierarchical relationships between the statements. This is the format used in configuration files stored on the router and displayed by the JUNOS CLI show configuration command.
- xml—Configuration statements are represented by the corresponding JUNOScript tags. This is the default value if the format attribute is omitted.

See Also <rpc> on page 12

<get-xnm-information>

Usage <rpc>

```
<get-xnm-information>
  <type>xml-schema</type>
  <namespace>junos-configuration</namespace>
</get-xnm-information>
</rpc>
```

Description Request router configuration information represented as an Extensible Markup Language (XML) Schema. The JUNOScript server encloses the Schema in <xsd:schema> tags.

Contents namespace—Specifies the type of information for which to return an XML Schema. The only acceptable value is junos-configuration.

type—Specifies the format in which the JUNOScript server returns the configuration data. The only acceptable value is xml-schema.

See Also <rpc> on page 12

<junoscript>

Usage

```
<!-- when emitted by a client application -->
<junoscript version="version" [hostname="hostname"] [release="release"]>
  <rpc>
    <!-- all tags generated by a client application -->
  </rpc>
</junoscript>

<!-- when emitted by the JUNOScript server -->
<junoscript version="version" hostname="hostname" os="os" release="release">
  xmlns="namespace-URL" xmlns:xnm="namespace-URL"
  xmlns:junos="namespace-URL"
  <rpc-reply>
    <!-- all tags generated by the JUNOScript server -->
  </rpc-reply>
</junoscript>
```

Description Enclose all tags in a JUNOScript session (act as the root tag for the session). The client application and JUNOScript server each emit this tag, enclosing all other tags that they emit inside it.

Attributes `hostname`—The name of the machine on which the tag's originator is running.

`os`—The operating system of the machine named by the `hostname` attribute.

`release`—The identifier for the JUNOS release being run by the tag's originator. JUNOS modules always set this attribute, but client applications do not have to.

`version`—(Required) The version of the JUNOScript API used for the enclosed set of tags.

`xmlns`—Names the XML namespace for the tags enclosed by the `<junoscript>` tag that do not have a prefix on their names (that is, the default namespace for JUNOScript tags). The value is a URL of the form `http://xml.juniper.net/xnm/version-code/xnm`, where `version-code` is a string such as 1.1.

`xmlns:junos`—Names the XML namespace for the tags enclosed by the `<junoscript>` tag that have the `junos:` prefix on their names. The value is a URL of the form `http://xml.juniper.net/junos/release-code/junos`, where `release-code` is the standard string that represents a release of the JUNOS software, such as 5.4R1 for the initial release of version 5.4.

`xmlns:xnm`—Names the XML namespace for the JUNOScript tags enclosed by the `<junoscript>` tag that have the `xnm:` prefix on their names. The value is a URL of the form `http://xml.juniper.net/xnm/version-code/xnm`, where `version-code` is a string such as 1.1.

See Also `<rpc>` on page 12, `<rpc-reply>` on page 12

<load-configuration>

```
Usage   <rpc>
          <load-configuration rollback="index" />

          <load-configuration url="url" [action="(merge|override|replace)"] \
                             [format="(text|xml)"] />

          <load-configuration format="text" [action="(merge|override|replace)"]>
              <configuration-text>
                  <!-- formatted ASCII configuration statements to load -->
              </configuration-text>
          </load-configuration>

          <load-configuration [action="(merge|override|replace)"] [format="xml"]>
              <configuration>
                  <!-- tags representing configuration statements to load -->
              </configuration>
          </load-configuration>
      </rpc>
```

Description Request that the JUNOScript server load configuration data into the current candidate configuration. Provide the data to load in one of three ways:

- Set the empty <load-configuration> tag's rollback attribute to the numerical index of a previous configuration. The router stores a copy of the most recently committed configuration and up to nine previous configurations, so valid values for the index are 0 (zero, for the most recently committed configuration) through 9 (for the oldest possible stored configuration). The previous configuration completely replaces the current configuration.
- Set the empty <load-configuration> tag's url attribute to the pathname of a file that resides on the router and contains the configuration data to load. The data can be either formatted ASCII (in which case the format attribute must be set to the value text) or JUNOScript tags (in which case the format attribute is either omitted or set to the value xml).

In the following example, the url attribute identifies /tmp/add.conf as the file to load. (The omission of the format attribute indicates that the file contains JUNOScript tags.)

```
<load-configuration url="/tmp/add.conf"/>
```

- Enclose the configuration data within opening and closing <load-configuration> tags. If providing the configuration data as formatted ASCII, enclose it in <configuration-text> tags and set the format attribute to the value text. If providing configuration data as JUNOScript tags, enclose it in <configuration> tags and optionally set the format attribute to the value xml.

- **Attributes**
 - action—Specifies how to load the configuration data, particularly when the current candidate contains conflicting statements. There are three acceptable values:
 - merge—Combines the data in the loaded configuration with the current candidate configuration. If statements in the loaded configuration conflict with statements in the current candidate configuration, the loaded statements replace the current ones. This is the default behavior if the action attribute is omitted.
 - override—Discards the entire current candidate configuration and replaces it with the loaded configuration.
 - replace—Substitutes each hierarchy level or configuration object defined in the loaded configuration for the corresponding level or object in the current configuration.
 - If providing the configuration data as formatted ASCII (either in the file named by the url attribute or enclosed in <configuration-text> tags), also place the replace: statement on the line directly preceding the statements that represent the hierarchy level or object to replace. For more information, see the section about loading a configuration in the *JUNOS Internet Software Configuration Guide: Getting Started*.
 - If providing the configuration data as JUNOScript tags, also set the replace attribute to the value replace on the opening container tag that represents the hierarchy level or object to replace.
- format—Specifies the format used for the configuration data. There are two acceptable values:
 - text—Configuration statements are formatted as ASCII text, using the newline character, tabs and other white space, braces, and square brackets to indicate the hierarchical relationships between the statements. This is the format used in configuration files stored on the router and displayed by the JUNOS CLI show configuration command.
 - xml—Configuration statements are represented by the corresponding JUNOScript tags. This is the default value if the format attribute is omitted.
- rollback—Specifies the numerical index of the previous configuration to load. Valid values for the index are 0 (zero, for the most recently committed configuration) through 9 (for the oldest possible stored configuration).
- url—Specifies the full pathname of the file that contains the configuration data to load. The file must reside on the router's local disk.

See Also <configuration> on page 5, <configuration-text> on page 6, <rpc> on page 12

<lock-configuration>

Usage

```
<rpc>
  <lock-configuration/>

  <lock-configuration>
    <rollback>automatic</rollback>
  </lock-configuration>
</rpc>
```

Description Request that the JUNOScript server open and lock the current candidate configuration, enabling the client application both to read and change it, but preventing any other users or applications from changing it. The application must emit the <unlock-configuration/> tag to unlock the configuration.

To specify that any uncommitted changes are discarded from the candidate configuration if the JUNOScript session ends before the client application commits the configuration, set the value of the <rollback> tag to automatic and enclose the <rollback> tag in the <lock-configuration> tag.

See Also <rpc> on page 12, <unlock-configuration/> on page 13

<output>

Usage

```
<rpc-reply>
  <output>response</output>
</rpc-reply>
```

Description Contain a response to a client application request when the current version of the JUNOScript API does not define a specific tag for the response. The format of the contents is subject to change, so the client application must not rely on a particular format.

See Also <rpc-reply> on page 12

<request-end-session/>

Usage

```
<rpc>
  <request-end-session/>
</rpc>
```

Description Request that the JUNOScript server end the current session.

See Also <end-session/> on page 6, <rpc> on page 12

<rpc>

Usage <junoscript>
 <rpc>
 <!-- all other tags generated by a client application -->
 </rpc>
 </junoscript>

Description Enclose all tags generated by a client application.

See Also <junoscript> on page 8, <rpc-reply> on page 12

<rpc-reply>

Usage <junoscript>
 <rpc-reply xmlns:junos="*namespace-URL*">
 <!-- all tags generated by the JUNOScript server -->
 </rpc-reply>
 </junoscript>

Description Enclose all tags generated by the JUNOScript server. The immediate child tag is usually one of the following:

- The specific tag used to enclose data generated by the module in response to a client application's request.
- The <output> tag, if the JUNOScript API does not define a specific tag for the type of information in the response.

Attributes xmlns:junos—Names the XML namespace for the JUNOScript tags enclosed by the <rpc-reply> tag that have the junos: prefix on their names. The value is a URL of the form http://xml.juniper.net/junos/release-code/junos, where release-code is the standard string that represents a release of the JUNOS Internet software, such as 5.3R1 for the initial release of version 5.3.

See Also <junoscript> on page 8, <output> on page 11, <rpc> on page 12

<undocumented>

Usage <rpc-reply>
 <undocumented>
 <!-- tag representing unsupported configuration element -->
 </undocumented>
 </rpc-reply>

Description Enclose a tag representing a configuration element (hierarchy level or object) that is not documented in the JUNOS software configuration guides or officially supported by Juniper Networks. The reason that the element is undocumented is usually one of the following:

- It is used for debugging purposes only by Juniper Networks personnel.
- It is no longer supported or has been moved to another area of the configuration hierarchy, but appears in the current location for backward compatibility.

See Also <rpc-reply> on page 12

<unlock-configuration/>

Usage <rpc>
 <unlock-configuration/>
 </rpc>

Description Request that the JUNOScript server unlock and close the current candidate configuration. Until the application emits this tag, other users or applications can read the configuration but cannot change it.

See Also <lock-configuration> on page 11, <rpc> on page 12

<xnm:error>

Usage <junoscript>
 <any-child-of-junoscript>
 <xnm:error xmlns="namespace-URL" xmlns:xnm="namespace-URL">
 <parse/>
 <source-daemon>module-name</source-daemon>
 <filename>filename</filename>
 <line-number>line-number</line-number>
 <column>column-number</column>
 <token>input-token-id</token>
 <message>error-string</message>
 <edit-path>edit-path-name</edit-path>
 </xnm:error>
 </any-child-of-junoscript>
 </junoscript>

Description Indicate that the JUNOScript server has experienced an error while processing the client application's request. If the server has already emitted the response tag for the current request, the information enclosed in the response tag might be incomplete. The client application must include code that discards or retains the information as appropriate. The child tags described in the Contents section detail the nature of the error. The JUNOScript server does not necessarily emit all child tags; it omits tags not relevant to the current request.

Attributes xmlns—Names the XML namespace for the contents of the tag. The value is a URL of the form <http://xml.juniper.net/xnm/version/xnm>, where *version* is a string such as 1.1.

xmlns:xnm—Names the XML namespace for child tags that have the xnm: prefix on their names. The value is a URL of the form <http://xml.juniper.net/xnm/version/xnm>, where *version* is a string such as 1.1.

Contents	<column>—The position of the element that caused the error, expressed as the number of characters after the first character in one of the following:
	■ The JUNOS CLI command string enclosed in a <command> tag sent by the client application and currently being processed
	■ The line specified by the <line-number> tag in the configuration file that was being loaded (which is named in the <filename> tag)
	<edit-path>—The JUNOS CLI configuration-mode edit path in effect when the error occurred (provided only during loading of a configuration file)
	<filename>—The name of the configuration file that was being loaded
	<line-number>—The number of the line in which the error occurred, expressed as the number of lines from the top of the configuration file that was being loaded, which is named by the <filename> tag
	<message>—A description of the error in a natural-language text string
	<parse/>—Indicates that there was a syntactic error in the request submitted by the client application
	<source-daemon>—The name of the JUNOS module that was processing the request in which the error occurred
	<token>—The name of the element in the request that caused the error
See Also	<junoscript> on page 8, <xnm:warning> on page 14

<xnm:warning>

Usage

```
<junoscript>
  <any-child-of:junoscript>
    <xnm:warning xmlns="namespace-URL" xmlns:xnm="namespace-URL">
      <source-daemon>module-name</source-daemon>
      <filename>filename</filename>
      <line-number>line-number</line-number>
      <column>column-number</column>
      <token>input-token-id</token>
      <message>error-string</message>
    </xnm:warning>
  </any-child-of:junoscript>
</junoscript>
```

Description Indicate that the server has encountered a problem while processing the client application's request. The child tags described in the Contents section detail the nature of the warning.

Attributes xmlns—Names the XML namespace for the contents of the tag. The value is a URL of the form <http://xml.juniper.net/xnm/version/xnm>, where *version* is a string such as 1.1.

xmlns:xnm—Names the XML namespace for child tags that have the xnm: prefix on their names. The value is a URL of the form <http://xml.juniper.net/xnm/version/xnm>, where *version* is a string such as 1.1.

Contents <column>—The position of the element that caused the warning, expressed as the number of characters after the first character in one of the following:

- The JUNOS CLI command string enclosed in a <command> tag sent by the client application and currently being processed
- The line specified by the <line-number> tag in the configuration file that was being loaded (which is named in the <filename> tag)

<filename>—The name of the configuration file that was being loaded

<line-number>—The number of the line in which the warning occurred, expressed as the number of lines from the top of the configuration file that was being loaded, which is named by the <filename> tag

<message>—A description of the warning in a natural-language text string

<source-daemon>—The name of the JUNOS module that was processing the request in which the warning occurred

<token>—The name of the element in the request that caused the warning

See Also <xnm:error> on page 13, <junoscript> on page 8



Chapter 2

Mapping between Operational Tags and CLI Commands

Table 2 maps the operational request tags supported in the current version of the JUNOScript application programming interface (API) to the response tag returned by the JUNOScript server and to the corresponding JUNOS command-line interface (CLI) command.

For a list of mappings organized alphabetically by CLI command name, see Table 3, “Mapping of CLI Commands to JUNOScript Operational Tags” on page 20. For more information about each request tag, see “Summary of Operational Request Tags” on page 25. For more information about response tags, see “Summary of Operational Response Tags” on page 67. For more information about CLI commands, see the *JUNOS Internet Software Operational Mode Command Reference*.

Table 2: Mapping of JUNOScript Operational Tags to CLI Commands

Request Tag	Response Tag	CLI Command
<clear-helper-statistics-information>	NONE	clear helper statistics
<clear-ipv6-nd-information>	<ipv6-modify-nd>	clear ipv6 neighbors
<file-compare>	NONE	file compare
<file-copy>	NONE	file copy
<file-delete>	NONE	file delete
<file-list>	NONE	file list
<file-rename>	NONE	file rename
<file-show>	NONE	file show
<get-accounting-profile-information>	<accounting-profile-information>	show accounting
<get-accounting-record-information>	<accounting-record-information>	show accounting records
<get-alarm-information>	<alarm-information>	show chassis alarms
<get-bgp-group-information>	<bgp-group-information>	show bgp group
<get-bgp-neighbor-information>	<bgp-information>	show bgp neighbor
<get-bgp-summary-information>	<bgp-information>	show bgp summary
<get-chassis-inventory>	<chassis-inventory>	show chassis hardware
<get-cos-classifier-information>	<cos-classifier-information>	show class-of-service classifier
<get-cos-classifier-table-information>	<cos-classifier-table-information>	show class-of-service forwarding-table classifier
<get-cos-classifier-table-map-information>	<cos-classifier-table-map-information>	show class-of-service forwarding-table classifier mapping
<get-cos-code-point-map-information>	<cos-code-point-map-information>	show class-of-service code-point-aliases
<get-cos-drop-profile-information>	<cos-drop-profile-information>	show class-of-service drop-profile
<get-cos-forwarding-class-information>	<cos-forwarding-class-information>	show class-of-service forwarding-class
<get-cos-information>	<cos-information>	show class-of-service
<get-cos-interface-map-information>	<cos-interface-information>	show class-of-service interface

Table 2: Mapping of JUNOScript Operational Tags to CLI Commands

Request Tag	Response Tag	CLI Command
<get-cos-red-information>	<cos-red-information>	show class-of-service forwarding-table drop-profile
<get-cos-rewrite-information>	<cos-rewrite-information>	show class-of-service rewrite-rule
<get-cos-rewrite-table-information>	<cos-rewrite-table-information>	show class-of-service forwarding-table rewrite-rule
<get-cos-rewrite-table-map-information>	<cos-rewrite-table-map-information>	show class-of-service forwarding-table rewrite-rule mapping
<get-cos-scheduler-map-information>	<cos-scheduler-map-information>	show class-of-service scheduler-map
<get-cos-scheduler-map-table-information>	<cos-scheduler-map-table-information>	show class-of-service forwarding-table scheduler-map
<get-cos-table-information>	<cos-table-information>	show class-of-service forwarding-table
<get-destination-class-statistics>	<destination-class-statistics>	show interfaces destination-class
<get-environment-information>	<environment-information>	show chassis environment
<get-fabric-queue-information>	<fabric-queue-information>	show class-of-service fabric queue
<get-feb-information>	<scb-information>	show chassis feb
<get-firewall-information>	<firewall-information>	show firewall
<get-firewall-log-information>	<firewall-log-information>	show firewall log
<get-firmware-information>	<firmware-information>	show chassis firmware
<get-forwarding-table-information>	<forwarding-table-information>	show route forwarding-table
<get-fpc-information>	<fpc-information>	show chassis fpc
<get-helper-statistics-information>	<helper-statistics-information>	show helper statistics
<get-ike-security-associations-information>	<ike-security-associations-information>	show ike security-associations
<get-instance-information>	<instance-information>	show route instance detail
<get-instance-summary-information>	<instance-information>	show route instance
<get-interface-filter-information>	<interface-filter-information>	show interfaces filters
<get-interface-information>	<interface-information>	show interfaces
<get-interface-policer-information>	<interface-policer-information>	show interfaces policers
<get-interface-queue-information>	<interface-queue-information>	show interfaces queue
<get-ipv6-nd-information>	<ipv6-nd-information>	show ipv6 neighbors
<get-ipv6-ra-information>	<ipv6-ra-information>	show ipv6 router-advertisement
<get-isis-adjacency-information>	<isis-adjacency-information>	show isis adjacency
<get-isis-database-information>	<isis-database-information>	show isis database
<get-isis-hostname-information>	<isis-hostname-information>	show isis hostname
<get-isis-interface-information>	<isis-interface-information>	show isis interface
<get-isis-route-information>	<isis-route-information>	show isis route
<get-isis-spf-information>	<isis-spf-information>	show isis spf
<get-isis-statistics-information>	<isis-statistics-information>	show isis statistics
<get-l2ckt-connection-information>	<l2ckt-connection-information>	show l2circuit connections
<get-l2vpn-connection-information>	<l2vpn-connection-information>	show l2vpn connections
<get-ldp-database-information>	<ldp-database-information>	show ldp database
<get-ldp-interface-information>	<ldp-interface-information>	show ldp interface
<get-ldp-neighbor-information>	<ldp-neighbor-information>	show ldp neighbor
<get-ldp-path-information>	<ldp-path-information>	show ldp path
<get-ldp-route-information>	<ldp-route-information>	show ldp route
<get-ldp-session-information>	<ldp-session-information>	show ldp session
<get-ldp-statistics-information>	<ldp-statistics-information>	show ldp statistics

Table 2: Mapping of JUNOScript Operational Tags to CLI Commands

Request Tag	Response Tag	CLI Command
<get-ldp-traffic-statistics-information>	<ldp-traffic-statistics-information>	show ldp traffic-statistics
<get-lm-information>	<lm-information>	show link-management
<get-lm-peer-information>	<lm-peer-information>	show link-management peer
<get-lm-routing-information>	<lm-routing-information>	show link-management routing
<get-lm-routing-peer-information>	<lm-peer-information>	show link-management routing peer
<get-lm-routing-te-link-information>	<lm-te-link-information>	show link-management routing te-link
<get-lm-te-link-information>	<lm-te-link-information>	show link-management te-link
<get-mpls-admin-group-information>	<mpls-admin-group-information>	show mpls admin-groups
<get-mpls-cspf-information>	<mpls-cspf-information>	show mpls cspf
<get-mpls-interface-information>	<mpls-interface-information>	show mpls interface
<get-mpls-lsp-information>	<mpls-lsp-information>	show mpls lsp
<get-mpls-path-information>	<mpls-path-information>	show mpls path
<get-ospf-database-information>	<ospf-database-information>	show ospf database
<get-ospf-interface-information>	<ospf-interface-information>	show ospf interface
<get-ospf-io-statistics-information>	<ospf-io-statistics-information>	show ospf io-statistics
<get-ospf-log-information>	<ospf-log-information>	show ospf log
<get-ospf-neighbor-information>	<ospf-neighbor-information>	show ospf neighbor
<get-ospf-route-information>	<ospf-route-information>	show ospf route
<get-ospf-statistics-information>	<ospf-statistics-information>	show ospf statistics
<get-pic-information>	<fpc-information>	show chassis fpc pic-status
<get-rmon-alarm-information>	<rmon-alarm-information>	show snmp rmon alarms
<get-rmon-event-information>	<rmon-event-information>	show snmp rmon events
<get-rmon-information>	<rmon-information>	show snmp rmon
<get-route-engine-information>	<route-engine-information>	show chassis routing-engine
<get-route-information>	<route-information>	show route
<get-route-summary-information>	<route-summary-information>	show route summary
<get-rsvp-interface-information>	<rsvp-interface-information>	show rsvp interface
<get-rsvp-neighbor-information>	<rsvp-neighbor-information>	show rsvp neighbor
<get-rsvp-session-information>	<rsvp-session-information>	show rsvp session
<get-rsvp-statistics-information>	<rsvp-statistics-information>	show rsvp statistics
<get-rsvp-version-information>	<rsvp-version-information>	show rsvp version
<get-rtexport-instance-information>	<rtexport-instance-information>	show route export instance
<get-rtexport-table-information>	<rtexport-table-information>	show route export
<get-rtexport-target-information>	<rtexport-target-information>	show route export vrf-target
<get-scb-information>	<scb-information>	show chassis scb
<get-security-associations-information>	<security-associations-information>	show ipsec security-associations
<get-sfm-information>	<scb-information>	show chassis sfm
<get-snmp-information>	<snmp-statistics>	show snmp statistics
<get-source-class-statistics>	<source-class-statistics>	show interfaces source-class
<get-spmb-information>	<spmb-information>	show chassis spmb
<get-spmb-sib-information>	<spmb-sib-information>	show chassis spmb sibs
<get-ssb-information>	<scb-information>	show chassis ssb

Table 2: Mapping of JUNOScript Operational Tags to CLI Commands

Request Tag	Response Tag	CLI Command
<get-syslog-tag-information>	<syslog-tag-information>	help syslog
<get-ted-database-information>	<ted-database-information>	show ted database
<get-ted-link-information>	<ted-link-information>	show ted link
<get-ted-protocol-information>	<ted-protocol-information>	show ted protocol
<request-halt>	NONE	request system halt
<request-package-add>	NONE	request system software add
<request-package-delete>	NONE	request system software delete
<request-package-validate>	NONE	request system software validate
<request-reboot>	NONE	request system reboot

Table 3 maps JUNOS CLI commands to operational request and response tags.

Table 3: Mapping of CLI Commands to JUNOScript Operational Tags

CLI Command	Request Tag	Response Tag
clear helper statistics	<clear-helper-statistics>	NONE
clear ipv6 neighbors	<clear-ipv6-nd-information>	<ipv6-modify-nd>
file compare	<file-compare>	NONE
file copy	<file-copy>	NONE
file delete	<file-delete>	NONE
file list	<file-list>	NONE
file rename	<file-rename>	NONE
file show	<file-show>	NONE
help syslog	<get-syslog-tag-information>	<syslog-tag-information>
request system halt	<request-halt>	NONE
request system software add	<request-package-add>	NONE
request system software delete	<request-package-delete>	NONE
request system software validate	<request-package-validate>	NONE
request system halt	<request-halt>	NONE
request system reboot	<request-reboot>	NONE
show accounting	<get-accounting-profile-information>	<accounting-profile-information>
show accounting records	<get-accounting-record-information>	<accounting-record-information>
show bgp group	<get-bgp-group-information>	<bgp-group-information>
show bgp neighbor	<get-bgp-neighbor-information>	<bgp-information>
show bgp summary	<get-bgp-summary-information>	<bgp-information>
show chassis alarms	<get-alarm-information>	<alarm-information>
show chassis environment	<get-environment-information>	<environment-information>
show chassis feb	<get-feb-information>	<scb-information>
show chassis firmware	<get-firmware-information>	<firmware-information>
show chassis fpc	<get-fpc-information>	<fpc-information>
show chassis fpc pic-status	<get-pic-information>	<fpc-information>
show chassis hardware	<get-chassis-inventory>	<chassis-inventory>
show chassis routing-engine	<get-route-engine-information>	<route-engine-information>

Table 3: Mapping of CLI Commands to JUNOScript Operational Tags

CLI Command	Request Tag	Response Tag
show chassis scb	<get-scb-information>	<scb-information>
show chassis sfm	<get-sfm-information>	<scb-information>
show chassis spmb	<get-spmb-information>	<spmb-information>
show chassis spmb sibs	<get-spmb-sib-information>	<spmb-sib-information>
show chassis ssb	<get-ssb-information>	<scb-information>
show class-of-service	<get-cos-information>	<cos-information>
show class-of-service classifier	<get-cos-classifier-information>	<cos-classifier-information>
show class-of-service code-point-aliases	<get-cos-code-point-map-information>	<cos-code-point-map-information>
show class-of-service drop-profile	<get-cos-drop-profile-information>	<cos-drop-profile-information>
show class-of-service fabric queue	<get-fabric-queue-information>	<fabric-queue-information>
show class-of-service forwarding-class	<get-cos-forwarding-class-information>	<cos-forwarding-class-information>
show class-of-service forwarding-table	<get-cos-table-information>	<cos-table-information>
show class-of-service forwarding-table classifier	<get-cos-classifier-table-information>	<cos-classifier-table-information>
show class-of-service forwarding-table classifier mapping	<get-cos-classifier-table-map-information>	<cos-classifier-table-map-information>
show class-of-service forwarding-table drop-profile	<get-cos-red-information>	<cos-red-information>
show class-of-service forwarding-table rewrite-rule	<get-cos-rewrite-table-information>	<cos-rewrite-table-information>
show class-of-service forwarding-table rewrite-rule mapping	<get-cos-rewrite-table-map-information>	<cos-rewrite-table-map-information>
show class-of-service forwarding-table scheduler-map	<get-cos-scheduler-map-table-information>	<cos-scheduler-map-table-information>
show class-of-service interface	<get-cos-interface-map-information>	<cos-interface-information>
show class-of-service rewrite-rule	<get-cos-rewrite-information>	<cos-rewrite-information>
show class-of-service scheduler-map	<get-cos-scheduler-map-information>	<cos-scheduler-map-information>
show firewall	<get-firewall-information>	<firewall-information>
show firewall log	<get-firewall-log-information>	<firewall-log-information>
show helper statistics	<get-helper-statistics-information>	<helper-statistics-information>
show ike security-associations	<get-ike-security-associations-information>	<ike-security-associations-information>
show interfaces	<get-interface-information>	<interface-information>
show interfaces destination-class	<get-destination-class-statistics>	<destination-class-statistics>
show interfaces filters	<get-interface-filter-information>	<interface-filter-information>
show interfaces policers	<get-interface-policer-information>	<interface-policer-information>
show interfaces queue	<get-interface-queue-information>	<interface-queue-information>
show interfaces source-class	<get-source-class-statistics>	<source-class-statistics>
show ipsec security-associations	<get-security-associations-information>	<security-associations-information>
show ipv6 neighbors	<get-ipv6-nd-information>	<ipv6-nd-information>
show ipv6 router-advertisement	<get-ipv6-ra-information>	<ipv6-ra-information>
show isis adjacency	<get-isis-adjacency-information>	<isis-adjacency-information>
show isis database	<get-isis-database-information>	<isis-database-information>
show isis hostname	<get-isis-hostname-information>	<isis-hostname-information>
show isis interface	<get-isis-interface-information>	<isis-interface-information>
show isis route	<get-isis-route-information>	<isis-route-information>
show isis spf	<get-isis-spf-information>	<isis-spf-information>
show isis statistics	<get-isis-statistics-information>	<isis-statistics-information>
show l2circuit connections	<get-l2ckt-connection-information>	<l2ckt-connection-information>

Table 3: Mapping of CLI Commands to JUNOScript Operational Tags

CLI Command	Request Tag	Response Tag
show l2vpn connections	<get-l2vpn-connection-information>	<l2vpn-connection-information>
show ldp database	<get-ldp-database-information>	<ldp-database-information>
show ldp interface	<get-ldp-interface-information>	<ldp-interface-information>
show ldp neighbor	<get-ldp-neighbor-information>	<ldp-neighbor-information>
show ldp path	<get-ldp-path-information>	<ldp-path-information>
show ldp route	<get-ldp-route-information>	<ldp-route-information>
show ldp session	<get-ldp-session-information>	<ldp-session-information>
show ldp statistics	<get-ldp-statistics-information>	<ldp-statistics-information>
show ldp traffic-statistics	<get-ldp-traffic-statistics-information>	<ldp-traffic-statistics-information>
show link-management	<get-lm-information>	<lm-information>
show link-management peer	<get-lm-peer-information>	<lm-peer-information>
show link-management routing	<get-lm-routing-information>	<lm-routing-information>
show link-management routing peer	<get-lm-routing-peer-information>	<lm-peer-information>
show link-management routing te-link	<get-lm-routing-te-link-information>	<lm-te-link-information>
show link-management te-link	<get-lm-te-link-information>	<lm-te-link-information>
show mpls admin-groups	<get-mpls-admin-group-information>	<mpls-admin-group-information>
show mpls cspf	<get-mpls-cspf-information>	<mpls-cspf-information>
show mpls interface	<get-mpls-interface-information>	<mpls-interface-information>
show mpls lsp	<get-mpls-lsp-information>	<mpls-lsp-information>
show mpls path	<get-mpls-path-information>	<mpls-path-information>
show ospf database	<get-ospf-database-information>	<ospf-database-information>
show ospf interface	<get-ospf-interface-information>	<ospf-interface-information>
show ospf io-statistics	<get-ospf-io-statistics-information>	<ospf-io-statistics-information>
show ospf log	<get-ospf-log-information>	<ospf-log-information>
show ospf neighbor	<get-ospf-neighbor-information>	<ospf-neighbor-information>
show ospf route	<get-ospf-route-information>	<ospf-route-information>
show ospf statistics	<get-ospf-statistics-information>	<ospf-statistics-information>
show route	<get-route-information>	<route-information>
show route export	<get-rtexport-table-information>	<rtexport-table-information>
show route export instance	<get-rtexport-instance-information>	<rtexport-instance-information>
show route export vrf-target	<get-rtexport-target-information>	<rtexport-target-information>
show route forwarding-table	<get-forwarding-table-information>	<forwarding-table-information>
show route instance	<get-instance-summary-information>	<instance-information>
show route instance detail	<get-instance-information>	<instance-information>
show route summary	<get-route-summary-information>	<route-summary-information>
show rsvp interface	<get-rsvp-interface-information>	<rsvp-interface-information>
show rsvp neighbor	<get-rsvp-neighbor-information>	<rsvp-neighbor-information>
show rsvp session	<get-rsvp-session-information>	<rsvp-session-information>
show rsvp statistics	<get-rsvp-statistics-information>	<rsvp-statistics-information>
show rsvp version	<get-rsvp-version-information>	<rsvp-version-information>
show snmp rmon	<get-rmon-information>	<rmon-information>
show snmp rmon alarms	<get-rmon-alarm-information>	<rmon-alarm-information>

Table 3: Mapping of CLI Commands to JUNOScript Operational Tags

CLI Command	Request Tag	Response Tag
show snmp rmon events	<get-rmon-event-information>	<rmon-event-information>
show snmp statistics	<get-snmp-information>	<snmp-statistics>
show ted database	<get-ted-database-information>	<ted-database-information>
show ted link	<get-ted-link-information>	<ted-link-information>
show ted protocol	<get-ted-protocol-information>	<ted-protocol-information>



Chapter 3

Summary of Operational Request Tags

This chapter lists the tags used by a client application to request operational information from the JUNOScript server. The tag names are in alphabetical order. For information about the notation used in this chapter, see “Conventions for Tag Summaries” on page lxvi.

<clear-helper-statistics-information>

Usage <rpc>
 <clear-helper-statistics-information/>
 </rpc>

Description Clear helper statistics.

<clear-ipv6-nd-information>

Usage <rpc>
 <clear-ipv6-nd-information>
 <host>host</host>
 </clear-ipv6-nd-information>
 </rpc>

Description Clear IPv6 neighbor cache information.

Contents <host>—Individual neighbor to clear.

• **<file-compare>**

Usage <rpc>
 <file-compare>
 <context/>
 <unified/>
 <ignore-white-space/>
 <from-file>from-file</from-file>
 <to-file>to-file</to-file>
 </file-compare>
</rpc>

Description Compare files (local).

Contents <context>—Context style output format.

<ignore-white-space>—Ignore changes in amount of white space.

<unified>—Unified style output format.

• **<file-copy>**

Usage <rpc>
 <file-copy>
 <source>source</source>
 <destination>destination</destination>
 </file-copy>
</rpc>

Description Copy files (local or remote).

Contents <destination>—No documentation is available yet.

<source>—No documentation is available yet.

• **<file-delete>**

Usage <rpc>
 <file-delete>
 <path>path</path>
 </file-delete>
</rpc>

Description Delete files from the system (local).

Contents <path>—Path to list.

<file-list>

Usage <rpc>
 <file-list>
 <detail/>
 <recursive/>
 <path>path</path>
 </file-list>
 </rpc>

Description List file information (local).

Contents <detail>—Detail file information.

<path>—Path to list.

<recursive>—Recursive descent through directory hierarchy.

<file-rename>

Usage <rpc>
 <file-rename>
 <source>source</source>
 <destination>destination</destination>
 </file-rename>
 </rpc>

Description Rename files (local).

Contents <destination>—No documentation is available yet.

<source>—No documentation is available yet.

<file-show>

Usage <rpc>
 <file-show>
 <filename>filename</filename> <!-- mandatory -->
 </file-show>
 </rpc>

Description Display file contents (local).

Contents <filename>—Filename to display.

- <get-accounting-profile-information>

Usage <rpc>
 <get-accounting-profile-information>
 <profile>profile</profile>
 </get-accounting-profile-information>
</rpc>

Description Show accounting profiles and records.

Contents <profile>—Show accounting profile information.

- <get-accounting-record-information>

Usage <rpc>
 <get-accounting-record-information>
 <profile>profile</profile> <!-- mandatory -->
 <since>since</since>
 <utc-timestamp/>
 </get-accounting-record-information>
</rpc>

Description Show accounting records.

Contents <profile>—Profile name.

 <since>—Statistics since the specified time.

 <utc-timestamp>—Display timestamp in UTC format.

- <get-alarm-information>

Usage <rpc>
 <get-alarm-information/>
</rpc>

Description Show alarm status.

- <get-bgp-group-information>

Usage <rpc>
 <get-bgp-group-information>
 <group-name>group-name</group-name>
 </get-bgp-group-information>
</rpc>

Description Show the BGP group database.

Contents <group-name>—Show group information for a particular group.

<get-bgp-neighbor-information>

Usage <rpc>
 <get-bgp-neighbor-information>
 <neighbor-address>neighbor-address</neighbor-address>
 </get-bgp-neighbor-information>
 </rpc>

Description Show the BGP neighbor database.

Contents <neighbor-address>—Show neighbor database for a particular neighbor.

<get-bgp-summary-information>

Usage <rpc>
 <get-bgp-summary-information/>
 </rpc>

Description Show an overview of the BGP information.

<get-chassis-inventory>

Usage <rpc>
 <get-chassis-inventory>
 <detail/>
 <extensive/>
 </get-chassis-inventory>
 </rpc>

Description Show hardware inventory information.

Contents <detail>—Include RAM modules in output.

<extensive>—Display data from ID EEPROM for every item.

- <get-cos-classifier-information>
 - **Usage** <rpc>
 <get-cos-classifier-information>
 <name>name</name>
 <type>type-choice</type>
 </get-cos-classifier-information>
</rpc>
 - **Description** Mapping of code point to forwarding class/loss priority.
 - **Contents** <name>—Name of classifier.

<type>—Type of classifier.
 - dscp—Differentiated Service Code Point (DSCP).
 - exp—MPLS EXP code point.
 - ieee-802.1—IEEE-802.1 code point.
 - inet-precedence—IPv4 precedence code point.
- <get-cos-classifier-table-information>
 - **Usage** <rpc>
 <get-cos-classifier-table-information/>
</rpc>
 - **Description** Show classifier information.
- <get-cos-classifier-table-map-information>
 - **Usage** <rpc>
 <get-cos-classifier-table-map-information/>
</rpc>
 - **Description** Get table mapping.

<get-cos-code-point-map-information>

Usage <rpc>
 <get-cos-code-point-map-information>
 <dscp/>
 <exp/>
 <ieee-802.1/>
 <inet-precedence/>
 </get-cos-code-point-map-information>
</rpc>

- Description** Mapping of symbolic name to code point bit pattern.
- Contents** <dscp>—Differentiated Service Code Point (DSCP).
<exp>—MPLS EXP code point.
<ieee-802.1>—IEEE-802.1 code point.
<inet-precedence>—IPv4 precedence code point.

<get-cos-drop-profile-information>

Usage <rpc>
 <get-cos-drop-profile-information>
 <profile-name>*profile-name*</profile-name>
 </get-cos-drop-profile-information>
</rpc>

- Description** Interpolated data points of named drop profile.
- Contents** <profile-name>—Name of drop profile.

<get-cos-forwarding-class-information>

Usage <rpc>
 <get-cos-forwarding-class-information/>
</rpc>

- Description** Mapping of forwarding class names to queue numbers.

<get-cos-information>

Usage <rpc>
 <get-cos-information/>
</rpc>

- Description** Show information about class of service.

• <get-cos-interface-map-information>

Usage <rpc>
 <get-cos-interface-map-information>
 <interface-name>*interface-name*</interface-name>
 </get-cos-interface-map-information>
</rpc>

Description Mapping of class-of-service objects to interfaces.

Contents <interface-name>—Name of interface.

• <get-cos-red-information>

Usage <rpc>
 <get-cos-red-information/>
</rpc>

Description Show RED drop profile.

• <get-cos-rewrite-information>

Usage <rpc>
 <get-cos-rewrite-information>
 <name>*name*</name>
 <type>*type-choice*</type>
 </get-cos-rewrite-information>
</rpc>

Description Mapping of forwarding class/loss priority to code point.

Contents <name>—Name of rewrite rule.

<type>—Type of rewrite rule.

- dscp—Differentiated Service Code Point (DSCP).
- exp—MPLS EXP code point.
- ieee-802.1—IEEE-802.1 code point.
- inet-precedence—IPv4 precedence code point.

<get-cos-rewrite-table-information>

Usage <rpc>
 <get-cos-rewrite-table-information/>
 </rpc>

Description Show rewrite information.

<get-cos-rewrite-table-map-information>

Usage <rpc>
 <get-cos-rewrite-table-map-information/>
 </rpc>

Description Get table mapping.

<get-cos-scheduler-map-information>

Usage <rpc>
 <get-cos-scheduler-map-information>
 <name>name</name>
 </get-cos-scheduler-map-information>
 </rpc>

Description Mapping of forwarding classes to schedulers.

Contents <name>—Name of scheduler map.

<get-cos-scheduler-map-table-information>

Usage <rpc>
 <get-cos-scheduler-map-table-information/>
 </rpc>

Description Show scheduler map.

<get-cos-table-information>

Usage <rpc>
 <get-cos-table-information/>
 </rpc>

Description Show forwarding table information.

• <get-destination-class-statistics>

Usage <rpc>

<get-destination-class-statistics>

<class-name>*class-name*</class-name> <!-- mandatory -->

<interface-name>*interface-name*</interface-name> <!-- mandatory -->

</get-destination-class-statistics>

</rpc>

Description Display statistics for a specific destination class.

Contents <class-name>—No documentation is available yet.

<interface-name>—No documentation is available yet.

• <get-environment-information>

Usage <rpc>

<get-environment-information/>

</rpc>

Description Show environmental status.

• <get-fabric-queue-information>

Usage <rpc>

<get-fabric-queue-information>

<destination>*destination*</destination>

<source>*source*</source>

<summary/>

</get-fabric-queue-information>

</rpc>

Description Show fabric queue information.

Contents <destination>—Destination FPC for which to show details.

<source>—Source FPC for which to show details.

<summary>—Show summarized value.

• <get-feb-information>

Usage <rpc>

<get-feb-information/>

</rpc>

Description Show Forwarding Engine Board (FEB) status.

<get-firewall-information>

Usage <rpc>
 <get-firewall-information>
 <filter>*filter*</filter>
 </get-firewall-information>
</rpc>

Description Show firewall information.

Contents <filter>—Filter name.

<get-firewall-log-information>

Usage <rpc>
 <get-firewall-log-information>
 <detail/>
 <interface>*interface*</interface>
 </get-firewall-log-information>
</rpc>

Description Show log entries for firewall activity.

Contents <detail>—Show detail view.

<interface>—Interface name.

<get-firmware-information>

Usage <rpc>
 <get-firmware-information/>
</rpc>

Description Show firmware version information.

• <get-forwarding-table-information>

Usage <rpc>
<get-forwarding-table-information>
 <detail/>
 <extensive/>
 <multicast/>
 <family>family</family>
 <vpn>vpn</vpn>
 <summary/>
 <matching>matching</matching>
 <destination>destination</destination>
</get-forwarding-table-information>
</rpc>

Description Entries in all forwarding tables.

Contents <destination>—Show route used for destination prefix.

<detail>—Display all routes.

<extensive>—Show detailed information about routes.

<family>—Show route table entries this family.

<matching>—Show route table entries matching prefix/len.

<multicast>—Show multicast routes.

<summary>—Show the number of routes only.

<vpn>—Show route table entries for named VPN.

• <get-fpc-information>

Usage <rpc>
<get-fpc-information/>
</rpc>

Description Show Flexible PIC Concentrator (FPC) status.

• <get-helper-statistics-information>

Usage <rpc>
<get-helper-statistics-information/>
</rpc>

Description Show helper statistics.

<get-ike-security-associations-information>

Usage <rpc>
 <get-ike-security-associations-information>
 <brief/>
 <detail/>
 <peer-address>*peer-address*</peer-address>
 </get-ike-security-associations-information>
 </rpc>

Description Show IKE security association information.

Contents <brief>—Display brief information.

<detail>—Display detailed information.

<peer-address>—Name of security association.

<get-instance-information>

Usage <rpc>
 <get-instance-information>
 <name>*name*</name>
 </get-instance-information>
 </rpc>

Description Show detailed information about routing instances.

Contents <name>—Particular instance name.

<get-instance-summary-information>

Usage <rpc>
 <get-instance-summary-information/>
 </rpc>

Description Show information about routing instances.

<get-interface-filter-information>

Usage <rpc>
 <get-interface-filter-information>
 <interface-name>*interface-name*</interface-name>
 </get-interface-filter-information>
 </rpc>

Description Display interface filters information.

Contents <interface-name>—Physical or logical interface.

• <get-interface-information>

Usage <rpc>
 <get-interface-information>
 <extensive/>
 <statistics/>
 <media/>
 <detail/>
 <terse/>
 <brief/>
 <descriptions/>
 <snmp-index>*snmp-index*</snmp-index>
 <interface-name>*interface-name*</interface-name>
 </get-interface-information>
 </rpc>

Description Show interface information.

Contents <brief>—Display brief interface information.

<descriptions>—Show interface description strings.

<detail>—Display detailed information.

<extensive>—Display extensive information.

<interface-name>—Physical or logical interface.

<media>—Display media information.

<snmp-index>—Show interface with this SNMP index.

<statistics>—Display statistics and detailed information.

<terse>—Display summary information.

• <get-interface-policer-information>

Usage <rpc>
 <get-interface-policer-information>
 <interface-name>*interface-name*</interface-name>
 </get-interface-policer-information>
 </rpc>

Description Display interface polices information.

Contents <interface-name>—Physical or logical interface.

<get-interface-queue-information>

Usage <rpc>
 <get-interface-queue-information>
 <forwarding-class>*forwarding-class*</forwarding-class>
 <interface-name>*interface-name*</interface-name>
 </get-interface-queue-information>
 </rpc>

Description Show queue statistics for this interface.

Contents <forwarding-class>—Show queue statistics for this forwarding class.
 <interface-name>—Physical interface.

<get-ipv6-nd-information>

Usage <rpc>
 <get-ipv6-nd-information/>
 </rpc>

Description IPv6 neighbor cache information.

<get-ipv6-ra-information>

Usage <rpc>
 <get-ipv6-ra-information>
 <interface>*interface*</interface>
 <conflicts/>
 <prefix>*prefix*</prefix>
 </get-ipv6-ra-information>
 </rpc>

Description Show information about IPv6 router advertisement.

Contents <conflicts>—Show conflicting information.
 <interface>—Show router advertisement information for an interface.
 <prefix>—Show router advertisement information for a prefix.

- <get-isis-adjacency-information>

• **Usage** <rpc>
• <get-isis-adjacency-information>
• <brief/>
• <detail/>
• <extensive/>
• <instance>*instance*</instance>
• <system-id>*system-id*</system-id>
• </get-isis-adjacency-information>
• </rpc>

• **Description** Show the IS-IS adjacency database.

• **Contents** <brief>—Show brief status.

• <detail>—Show detailed status.

• <extensive>—Show extensive status.

• <instance>—Particular IS-IS instance.

• <system-id>—System ID.

- <get-isis-database-information>

• **Usage** <rpc>
• <get-isis-database-information>
• <brief/>
• <detail/>
• <extensive/>
• <instance>*instance*</instance>
• <system-id>*system-id*</system-id>
• </get-isis-database-information>
• </rpc>

• **Description** Show the IS-IS link-state database.

• **Contents** <brief>—Show brief status.

• <detail>—Show detailed status.

• <extensive>—Show extensive status.

• <instance>—Particular IS-IS instance.

• <system-id>—System ID.

- <get-isis-hostname-information>

• **Usage** <rpc>
• <get-isis-hostname-information/>
• </rpc>

• **Description** Show IS-IS hostname database.

<get-isis-interface-information>

Usage <rpc>
 <get-isis-interface-information>
 <brief/>
 <detail/>
 <extensive/>
 <instance>*instance*</instance>
 <interface-name>*interface-name*</interface-name>
 </get-isis-interface-information>
 </rpc>

Description Show IS-IS interface information.

Contents <brief>—Show brief status.

<detail>—Show detailed status.

<extensive>—Show extensive status.

<instance>—Particular IS-IS instance.

<interface-name>—Interface name.

<get-isis-route-information>

Usage <rpc>
 <get-isis-route-information>
 <instance>*instance*</instance>
 <topology>*topology-choice*</topology>
 </get-isis-route-information>
 </rpc>

Description Show the IS-IS routing table.

Contents <instance>—Particular IS-IS instance.

<topology>—Routes learnt from a specific topology.

- multicast—Multicast topology.

- unicast—Unicast topology.

<get-isis-spf-information>

Usage <rpc>
 <get-isis-spf-information/>
 </rpc>

Description Show information about IS-IS SPF calculations.

- <get-isis-statistics-information>

Usage <rpc>
 <get-isis-statistics-information>
 <instance>*instance*</instance>
 </get-isis-statistics-information>
</rpc>

Description Show IS-IS performance statistics.

Contents <instance>—Particular IS-IS instance.

- <get-l2ckt-connection-information>

Usage <rpc>
 <get-l2ckt-connection-information>
 <neighbor>*neighbor*</neighbor>
 <interface>*interface*</interface>
 <down/>
 <up/>
 <up-down/>
 <brief/>
 <extensive/>
 <history/>
 <status/>
 </get-l2ckt-connection-information>
</rpc>

Description Show the Layer 2 circuit connections.

Contents <brief>—Connection status (one line).

<down>—Connections that are not operational.

<extensive>—Connection status and history.

<history>—Connection history.

<interface>—Interface name.

<neighbor>—Neighbor's IP address.

<status>—Connection and interface status (default).

<up>—Connections that are operational.

<up-down>—Both operational and nonoperational connections.

<get-l2vpn-connection-information>

Usage <rpc>
 <get-l2vpn-connection-information>
 <instance>*instance*</instance>
 <local-site>*local-site*</local-site>
 <remote-site>*remote-site*</remote-site>
 <down/>
 <up/>
 <up-down/>
 <brief/>
 <extensive/>
 <history/>
 <status/>
 </get-l2vpn-connection-information>
</rpc>

Description Show the Layer 2 VPN connections.

Contents <brief>—Connection status (one line).

<down>—Connections that are not operational.

<extensive>—Connection status and history.

<history>—Connection history.

<instance>—Layer 2 VPN instance name.

<local-site>—Layer 2 VPN local-site name or ID.

<remote-site>—Layer 2 VPN local-site name or ID.

<status>—Connection and circuit status (default).

<up>—Connections that are operational.

<up-down>—Both operational and nonoperational connections.

- <get-ldp-database-information>
 - **Usage** <rpc>
 - <get-ldp-database-information>
 - <brief/>
 - <detail/>
 - <extensive/>
 - <instance>*instance*</instance>
 - </get-ldp-database-information>
 - </rpc>
- **Description** Show LDP label database.
- **Contents** <brief>—Show brief status.
 - <detail>—Show detailed status.
 - <extensive>—Show extensive status.
 - <instance>—Particular LDP instance.
- <get-ldp-interface-information>
 - **Usage** <rpc>
 - <get-ldp-interface-information>
 - <brief/>
 - <detail/>
 - <extensive/>
 - <instance>*instance*</instance>
 - </get-ldp-interface-information>
 - </rpc>
- **Description** Show LDP interface status.
- **Contents** <brief>—Show brief status.
 - <detail>—Show detailed status.
 - <extensive>—Show extensive status.
 - <instance>—Particular LDP instance.

<get-ldp-neighbor-information>

Usage <rpc>
<get-ldp-neighbor-information>
 <brief/>
 <detail/>
 <extensive/>
 <instance>*instance*</instance>
</get-ldp-neighbor-information>
</rpc>

Description Show LDP neighbor status.

Contents <brief>—Show brief status.
<detail>—Show detailed status.
<extensive>—Show extensive status.
<instance>—Particular LDP instance.

<get-ldp-path-information>

Usage <rpc>
<get-ldp-path-information>
 <brief/>
 <detail/>
 <extensive/>
 <instance>*instance*</instance>
</get-ldp-path-information>
</rpc>

Description Show LDP path table.

Contents <brief>—Show brief status.
<detail>—Show detailed status.
<extensive>—Show extensive status.
<instance>—Particular LDP instance.

- <get-ldp-route-information>
 - **Usage** <rpc>
 - <get-ldp-route-information>
 - <brief/>
 - <detail/>
 - <extensive/>
 - <instance>*instance*</instance>
 - </get-ldp-route-information>
 - </rpc>
- **Description** Show LDP route table.
- **Contents** <brief>—Show brief status.
 - <detail>—Show detailed status.
 - <extensive>—Show extensive status.
 - <instance>—Particular LDP instance.
- <get-ldp-session-information>
 - **Usage** <rpc>
 - <get-ldp-session-information>
 - <brief/>
 - <detail/>
 - <extensive/>
 - <instance>*instance*</instance>
 - </get-ldp-session-information>
 - </rpc>
- **Description** Show LDP session status.
- **Contents** <brief>—Show brief status.
 - <detail>—Show detailed status.
 - <extensive>—Show extensive status.
 - <instance>—Particular LDP instance.
- <get-ldp-statistics-information>
 - **Usage** <rpc>
 - <get-ldp-statistics-information>
 - <instance>*instance*</instance>
 - </get-ldp-statistics-information>
 - </rpc>
- **Description** Show LDP statistics.
- **Contents** <instance>—Particular LDP instance.

<get-ldp-traffic-statistics-information>

Usage <rpc>
 <get-ldp-traffic-statistics-information>
 <instance>*instance*</instance>
 </get-ldp-traffic-statistics-information>
 </rpc>

Description Packet statistics for LDP label-switched paths.

Contents <instance>—Particular LDP instance.

<get-lm-information>

Usage <rpc>
 <get-lm-information/>
 </rpc>

Description Show information about link management.

<get-lm-peer-information>

Usage <rpc>
 <get-lm-peer-information>
 <name>*name*</name>
 </get-lm-peer-information>
 </rpc>

Description Peers.

Contents <name>—Name of peer.

<get-lm-routing-information>

Usage <rpc>
 <get-lm-routing-information/>
 </rpc>

Description Show information about link management for routing.

<get-lm-routing-peer-information>

Usage <rpc>
 <get-lm-routing-peer-information>
 <name>*name*</name>
 </get-lm-routing-peer-information>
 </rpc>

Description Peers.

Contents <name>—Name of peer.

- <get-lm-routing-te-link-information>

Usage <rpc>
 <get-lm-routing-te-link-information>
 <name>name</name>
 </get-lm-routing-te-link-information>
</rpc>

Description Show traffic engineering links.

Contents <name>—Name of TE link.

- <get-lm-te-link-information>

Usage <rpc>
 <get-lm-te-link-information>
 <name>name</name>
 </get-lm-te-link-information>
</rpc>

Description Show traffic engineering links.

Contents <name>—Name of TE link.

- <get-mpls-admin-group-information>

Usage <rpc>
 <get-mpls-admin-group-information/>
</rpc>

Description Show MPLS administrative groups.

- <get-mpls-cspf-information>

Usage <rpc>
 <get-mpls-cspf-information/>
</rpc>

Description Show CSPF statistics.

- <get-mpls-interface-information>

Usage <rpc>
 <get-mpls-interface-information/>
</rpc>

Description Show MPLS interfaces.

<get-mpls-lsp-information>

Usage <rpc>

```
<get-mpls-lsp-information>
<ingress/>
<egress/>
<transit/>
<terse/>
<brief/>
<detail/>
<extensive/>
<up/>
<down/>
<unidirectional/>
<bidirectional/>
<statistics/>
<name>name</name>
</get-mpls-lsp-information>
</rpc>
```

Description Show configured label-switched paths.

Contents <bidirectional>—Label-switched paths that are bidirectional.

<brief>—Brief view.

<detail>—Detailed view.

<down>—Label-switched paths that are in down state.

<egress>—Label-switched paths that end at this router.

<extensive>—Extensive view.

<ingress>—Label-switched paths that originate from this router.

<name>—Show label-switched paths matching pattern.

<statistics>—Packet statistics for label-switched paths.

<terse>—Terse view.

<transit>—Label-switched paths that transit this router.

<unidirectional>—Label-switched paths that are unidirectional.

<up>—Label-switched paths that are in up state.

• <get-mpls-path-information>

Usage <rpc>
 <get-mpls-path-information>
 <path>path</path>
 </get-mpls-path-information>
 </rpc>

Description Show configured named paths.

Contents <path>—Name of a particular label-switched path.

• <get-ospf-database-information>

Usage <rpc>
 <get-ospf-database-information>
 <router/>
 <network/>
 <netsummary/>
 <asbrsummary/>
 <extern/>
 <nssa/>
 <link-local/>
 <brief/>
 <detail/>
 <extensive/>
 <summary/>
 <area>area</area>
 <lisa-id>lisa-id</lisa-id>
 <advertising-router>advertising-router</advertising-router>
 <instance>instance</instance>
 </get-ospf-database-information>
 </rpc>

Description Show the OSPF link-state database.

Contents <advertising-router>—Router ID of advertising router.

<area>—OSPF area ID.

<asbrsummary>—Show OSPF summary ASBR link-state database.

<brief>—Show brief view.

<detail>—Show detailed view.

<extensive>—Show extensive view.

<extern>—Show OSPF external link-state database.

<instance>—Particular OSPF instance.

<link-local>—Show OSPF link local link-state database.

<lisa-id>—LSA ID.

<netsummary>—Show OSPF summary network link-state database.

<network>—Show OSPF network link-state database.

<nssa>—Show OSPF NSSA link-state database.

<router>—Show OSPF router link-state database.

<summary>—Show summary view.

<get-ospf-interface-information>

Usage <rpc>
<get-ospf-interface-information>
 <brief/>
 <detail/>
 <extensive/>
 <interface-name>*interface-name*</interface-name>
 <instance>*instance*</instance>
</get-ospf-interface-information>
</rpc>

Description Show OSPF interface status.

Contents <brief>—Show brief status.
 <detail>—Show detailed status.
 <extensive>—Show extensive status.
 <instance>—Particular OSPF instance.
 <interface-name>—Logical interface name.

<get-ospf-io-statistics-information>

Usage <rpc>
<get-ospf-io-statistics-information/>
</rpc>

Description Show OSPF I/O statistics.

<get-ospf-log-information>

Usage <rpc>
<get-ospf-log-information>
 <instance>*instance*</instance>
</get-ospf-log-information>
</rpc>

Description Show OSPF SPF log.

Contents <instance>—Particular OSPF instance.

• <get-ospf-neighbor-information>

Usage <rpc>
 <get-ospf-neighbor-information>
 <brief/>
 <detail/>
 <extensive/>
 <neighbor>neighbor</neighbor>
 <instance>instance</instance>
 </get-ospf-neighbor-information>
</rpc>

Description Show OSPF neighbor status.

Contents <brief>—Show brief status.

<detail>—Show detailed status.

<extensive>—Show extensive status.

<instance>—Particular OSPF instance.

<neighbor>—Neighbor address or ID.

• <get-ospf-route-information>

Usage <rpc>
 <get-ospf-route-information>
 <detail/>
 <intra/>
 <inter/>
 <abr/>
 <asbr/>
 <extern/>
 <instance>instance</instance>
 </get-ospf-route-information>
</rpc>

Description Show the OSPF routing table.

Contents <abr>—Show OSPF routes to area border routers.

<asbr>—Show OSPF routes to AS border routers.

<detail>—Show detail view.

<extern>—Show external OSPF routes.

<instance>—Particular OSPF instance.

<inter>—Show inter-area OSPF routes.

<intra>—Show intra-area OSPF routes.

<get-ospf-statistics-information>

Usage <rpc>
 <get-ospf-statistics-information>
 <instance>*instance*</instance>
 </get-ospf-statistics-information>
 </rpc>

Description Show OSPF statistics.

Contents <instance>—Particular OSPF instance.

<get-pic-information>

Usage <rpc>
 <get-pic-information>
 <slot>*slot*</slot>
 </get-pic-information>
 </rpc>

Description Show Physical Interface Card (PIC) status.

Contents <slot>—Slot number of FPC for which to display PIC status.

<get-rmon-alarm-information>

Usage <rpc>
 <get-rmon-alarm-information>
 <brief/>
 <detail/>
 </get-rmon-alarm-information>
 </rpc>

Description Show RMON alarms.

Contents <brief>—Show brief alarms.

<detail>—Show detailed alarms.

<get-rmon-event-information>

Usage <rpc>
 <get-rmon-event-information>
 <brief/>
 <detail/>
 </get-rmon-event-information>
 </rpc>

Description Show RMON events.

Contents <brief>—Show brief events.

<detail>—Show detailed events.

- <get-rmon-information>
 - **Usage** <rpc>
 <get-rmon-information/>
 </rpc>
 - **Description** Show RMON information.
 - <get-route-engine-information>
 - **Usage** <rpc>
 <get-route-engine-information>
 <slot>slot</slot>
 </get-route-engine-information>
 </rpc>
 - **Description** Show Routing Engine status.
 - **Contents** <slot>—Slot number of Routing Engine for which to display status.

<get-route-information>

```

Usage   <rpc>
          <get-route-information>
              <terse/>
              <brief/>
              <detail/>
              <extensive/>
              <best/>
              <exact/>
              <range/>
              <table>table</table>
              <inactive/>
              <damping>damping-choice</damping>
              <next-hop>next-hop</next-hop>
              <source-gateway>source-gateway</source-gateway>
              <protocol>protocol-choice</protocol>
              <bgp/>
              <dvmrp/>
              <pim/>
              <ripng/>
              <rip/>
              <msdp/>
              <neighbor>neighbor</neighbor>
              <bgp/>
              <rip/>
              <ripng/>
              <dvmrp/>
              <pim/>
              <msdp/>
              <peer>peer</peer>
              <aspath-regex>aspath-regex</aspath-regex>
              <community>...</community>    <!-- multiple -->
              <no-community/>
              <community-name>community-name</community-name>
              <label-switched-path>label-switched-path</label-switched-path>
              <destination>destination</destination>
              <hidden/>
              <all/>
          </get-route-information>
      </rpc>

```

Description Show routing table information.

Contents <all>—All entries including hidden entries.

<aspath-regex>—Entries learned via a specific AS path.

<best>—Show longest match.

<brief>—Brief view.

<community>—Community to match (can include wildcards).

<community-name>—Name of configured community policy to match.

- **<damping>**—Entries that have been subjected to route damping.
 - **decayed**—Entries which are decayed but are not suppressed.
 - **history**—Entries which are withdrawn but have history.
 - **suppressed**—Entries suppressed due to route damping.
- **<destination>**—Destination prefix and prefix length information.
- **<detail>**—Detailed view.
- **<exact>**—Show exact match.
- **<extensive>**—Extensive view.
- **<hidden>**—Hidden entries.
- **<inactive>**—Inactive entries.
- **<label-switched-path>**—Entries associated with a particular LSP tunnel.
- **<next-hop>**—Entries pointing to a particular next hop.
- **<no-community>**—Entries without an associated community.
- **<protocol>**—Information learned from a particular routing protocol.
 - **aggregate**—Locally generated aggregate route.
 - **bgp**—Border Gateway Protocol.
 - **direct**—Directly connected routes.
 - **dvmrp**—DV Multicast Routing Protocol.
 - **isis**—IS-IS.
 - **l2circuit**—Layer 2 circuits.
 - **l2vpn**—Layer 2 MPLS VPNs.
 - **ldp**—Label Distribution Protocol.
 - **local**—Local system addresses.
 - **mpls**—Multiprotocol Label Switching.
 - **msdp**—Multicast Source Discovery.
 - **ospf**—Open Shortest Path First Protocol.
 - **pim**—Protocol Independent Multicast.
 - **rip**—Routing Information Protocol.
 - **ripng**—RIPng for IPv6.

- rsvp—Resource Reservation Protocol.

- static—Statically defined prefixes.

- vpn—Layer 3 MPLS VPNs.

<range>—Show entire prefix range.

<source-gateway>—Entries learned from a particular router.

<table>—Entries in a particular routing table.

<terse>—Terse view.

<get-route-summary-information>

Usage <rpc>
 <get-route-summary-information/>
 </rpc>

Description Show routing table statistics.

<get-rsvp-interface-information>

Usage <rpc>
 <get-rsvp-interface-information>
 <brief/>
 <detail/>
 <link-management/>
 </get-rsvp-interface-information>
 </rpc>

Description Show RSVP interfaces.

Contents <brief>—RSVP interfaces brief view.

<detail>—RSVP interfaces detail view.

<link-management>—RSVP interfaces created by LMP.

<get-rsvp-neighbor-information>

Usage <rpc>
 <get-rsvp-neighbor-information>
 <brief/>
 <detail/>
 </get-rsvp-neighbor-information>
 </rpc>

Description Show RSVP neighbors.

Contents <brief>—Show brief view.

<detail>—Show detail view.

- <get-rsvp-session-information>

•

• **Usage** <rpc>
 <get-rsvp-session-information>
 <ingress/>
 <egress/>
 <transit/>
 <lsp/>
 <nolsp/>
 <up/>
 <down/>
 <unidirectional/>
 <bidirectional/>
 <terse/>
 <brief/>
 <detail/>
 <name>*name*</name>
 <interface>*interface*</interface>
 <te-link>*te-link*</te-link>
 </get-rsvp-session-information>
</rpc>

• **Description** Show active RSVP sessions.

• **Contents** <bidirectional>—RSVP sessions that are bidirectional.

• <brief>—Brief view.

• <detail>—Detailed view.

• <down>—Label-switched paths that are in down state.

• <egress>—RSVP sessions that end at this router.

• <ingress>—RSVP sessions that originate from this router.

• <interface>—Show sessions on a particular interface.

• <lsp>—Show RSVP sessions used to set up LSPs.

• <name>—Show a particular RSVP session name.

• <nolsp>—Show RSVP sessions not used to set up LSPs.

• <te-link>—Show sessions on a particular TE link.

• <terse>—Terse view.

• <transit>—RSVP sessions that transit this router.

• <unidirectional>—RSVP sessions that are unidirectional.

• <up>—Label-switched paths that are in up state.

<get-rsvp-statistics-information>

Usage <rpc>
 <get-rsvp-statistics-information/>
 </rpc>

Description Show RSVP statistics.

<get-rsvp-version-information>

Usage <rpc>
 <get-rsvp-version-information/>
 </rpc>

Description Show RSVP version.

<get-rtexport-instance-information>

Usage <rpc>
 <get-rtexport-instance-information>
 <brief/>
 <detail/>
 <instance-name>*instance-name*</instance-name>
 </get-rtexport-instance-information>
 </rpc>

Description Display instance configuration and runtime information.

Contents <brief>—Show brief view.

<detail>—Show detail view.

<instance-name>—Instance name.

<get-rtexport-table-information>

Usage <rpc>
 <get-rtexport-table-information>
 <brief/>
 <detail/>
 <table-name>*table-name*</table-name>
 </get-rtexport-table-information>
 </rpc>

Description Show instance export information.

Contents <brief>—Show brief view.

<detail>—Show detail view.

<table-name>—Show a particular table.

• <get-rtexport-target-information>

Usage <rpc>
 <get-rtexport-target-information>
 <brief/>
 <detail/>
 <community>...</community> <!-- multiple -->
 </get-rtexport-target-information>
</rpc>

Description Display VRF route target export information.

Contents <brief>—Show brief view.

<community>—Community to match (can include wildcards).

<detail>—Show detail view.

• <get-scb-information>

Usage <rpc>
 <get-scb-information/>
</rpc>

Description Show System Control Board (SCB) status.

• <get-security-associations-information>

Usage <rpc>
 <get-security-associations-information>
 <brief/>
 <detail/>
 <sa-name>sa-name</sa-name>
 </get-security-associations-information>
</rpc>

Description Show IPSec security association information.

Contents <brief>—Display brief information.

<detail>—Display detailed information.

<sa-name>—Name of security association.

<get-sfm-information>

Usage <rpc>
 <get-sfm-information/>
 </rpc>

Description Show Switching and Forwarding Module (SFM) status.

<get-snmp-information>

Usage <rpc>
 <get-snmp-information/>
 </rpc>

Description Show SNMP statistics.

<get-source-class-statistics>

Usage <rpc>
 <get-source-class-statistics>
 <class-name>class-name</class-name> <!-- mandatory -->
 <interface-name>interface-name</interface-name> <!-- mandatory -->
 </get-source-class-statistics>
 </rpc>

Description Display statistics for a specific source class.

Contents <class-name>—No documentation is available yet.

<interface-name>—No documentation is available yet.

<get-spmb-information>

Usage <rpc>
 <get-spmb-information/>
 </rpc>

Description Show Switch Processor Mezzanine Board (SPMB) status.

<get-spmb-sib-information>

Usage <rpc>
 <get-spmb-sib-information/>
 </rpc>

Description Show Switch Interface Board (SIB) status.

- <get-ssb-information>

• **Usage** <rpc>
 <get-ssb-information>
 <slot>slot</slot>
 </get-ssb-information>
 </rpc>

• **Description** Show System Switch Board (SSB) status.

• **Contents** <slot>—Slot number of SSB for which to display status.

- <get-syslog-tag-information>

• **Usage** <rpc>
 <get-syslog-tag-information>
 <syslog-tag>syslog-tag</syslog-tag> <!-- mandatory -->
 </get-syslog-tag-information>
 </rpc>

• **Description** Syslog error messages.

• **Contents** <syslog-tag>—Syslog tag.

- <get-ted-database-information>

• **Usage** <rpc>
 <get-ted-database-information>
 <brief/>
 <detail/>
 <extensive/>
 <system-id>system-id</system-id>
 </get-ted-database-information>
 </rpc>

• **Description** Show current TED database.

• **Contents** <brief>—Show brief status.

• <detail>—Show detailed status.

• <extensive>—Show extensive status.

• <system-id>—SystemID or NodeID.

<get-ted-link-information>

Usage <rpc>
 <get-ted-link-information>
 <brief/>
 <detail/>
 </get-ted-link-information>
 </rpc>

Description Show current TED link.

Contents <brief>—Show brief view.

<detail>—Show detail view.

<get-ted-protocol-information>

Usage <rpc>
 <get-ted-protocol-information>
 <brief/>
 <detail/>
 </get-ted-protocol-information>
 </rpc>

Description Show current contributing protocols.

Contents <brief>—Show brief view.

<detail>—Show detail view.

<request-halt>

Usage <rpc>
 <request-halt>
 <at>at</at>
 <in>in</in>
 <message>message</message>
 <media>media-choice</media>
 </request-halt>
 </rpc>

Description Halt the system.

Contents <at>—Time at which to perform the operation.

<in>—Number of minutes to delay before operation.

<media>—Boot media for next boot.

- compact-flash—Standard boot off flash device.

- disk—Boot off hard disk.

<message>—Message to display to all users.

• <request-package-add>

Usage <rpc>
 <request-package-add>
 <force/>
 <reboot/>
 <delay-restart/>
 <no-copy/>
 <validate/>
 <package-name>package-name</package-name> <!-- mandatory -->
 </request-package-add>
 </rpc>

Description Add an extension/upgrade package.

Contents <delay-restart>—Do not restart daemons.

<force>—Force package to be added (ignore warnings).

<no-copy>—Do not save copies of package files.

<package-name>—URL or path of package.

<reboot>—After adding the package, reboot the system.

<validate>—Check compatibility with current configuration.

• <request-package-delete>

Usage <rpc>
 <request-package-delete>
 <force/>
 <package-name>package-name</package-name> <!-- mandatory -->
 </request-package-delete>
 </rpc>

Description Remove an extension/upgrade package.

Contents <force>—Force package to be removed (ignore warnings).

<package-name>—Package name.

• <request-package-validate>

Usage <rpc>
 <request-package-validate>
 <package-name>package-name</package-name> <!-- mandatory -->
 </request-package-validate>
 </rpc>

Description Verify that an extension/upgrade package is compatible with the configuration.

Contents <package-name>—URL or path of package.

<request-reboot>

Usage <rpc>
 <request-reboot>
 <at>at</at>
 <in>in</in>
 <message>message</message>
 <media>media-choice</media>
 </request-reboot>
</rpc>

Description Reboot the system.

Contents <at>—Time at which to perform the operation.

<in>—Number of minutes to delay before operation.

<media>—Boot media for next boot.

■ compact-flash—Standard boot off flash device.

■ disk—Boot off hard disk.

<message>—Message to display to all users.



Chapter 4

Summary of Operational Response Tags

This chapter lists the tags returned by the JUNOScript server in response to a client application's request for operational information. The tags are divided into the following sections and listed in alphabetical order within each section.

- Summary of Accounting Response Tags on page 68
- Summary of Alarm Response Tags on page 75
- Summary of Chassis Response Tags on page 76
- Summary of Class of Service Response Tags on page 92
- Summary of Firewall Filter Response Tags on page 112
- Summary of Forwarding and Routing Table Response Tags on page 114
- Summary of Interface Response Tags on page 117
- Summary of IPSec Response Tags on page 172
- Summary of IPv6 Neighbor Discovery Response Tags on page 177
- Summary of Routing Protocols Response Tags on page 179
- Summary of SNMP Response Tags on page 293
- Summary of UDP Forwarding Helper Response Tags on page 298

For information about the notation used in this chapter, see "Conventions for Tag Summaries" on page lxvi. To review the document type definitions (DTDs) for these tags, see "JUNOScript Document Type Definitions" on page 1479.

- Summary of Accounting Response Tags

This section lists the tags returned by the JUNOScript server to describe accounting records. The associated Extensible Markup Language (XML) namespace is <http://xml.juniper.net/junos/5.4R1/junos-accounting>. To review the DTD for the tags, see “DTD for Accounting Response Tags” on page 1483.

<accounting-profile-columns>

Usage <accounting-profile-information>
 <accounting-profile-columns>
 <column-label>*column-label*</column-label>
 </accounting-profile-columns>
 </accounting-profile-information>

Description No documentation is available yet.

Contents <column-label>—No documentation is available yet.

<accounting-profile-filter>

Usage <accounting-profile-information>
 <accounting-profile-filter>
 <filter-name>*filter-name*</filter-name>
 <next-scheduled-collection>*next-scheduled-collection*</next-scheduled-collection>
 </accounting-profile-filter>
 </accounting-profile-information>

Description No documentation is available yet.

Contents <filter-name>—No documentation is available yet.

 <next-scheduled-collection>—No documentation is available yet.

<accounting-profile-header>

Usage <accounting-profile-information>
 <accounting-profile-header>
 <profile-name>*profile-name*</profile-name>
 <profile-interval>*profile-interval*</profile-interval>
 <profile-use-count>*profile-use-count*</profile-use-count>
 <filename>*filename*</filename>
 <filesize>*filesize*</filesize>
 <filenumber>*filenumber*</filenumber>
 <bytes-written>*bytes-written*</bytes-written>
 <transfer-interval>*transfer-interval*</transfer-interval>
 <next-transfer-time>*next-transfer-time*</next-transfer-time>
 </accounting-profile-header>
 </accounting-profile-information>

Description No documentation is available yet.

Contents	<bytes-written>—No documentation is available yet. <filename>—No documentation is available yet. <filenumber>—No documentation is available yet. <filesize>—No documentation is available yet. <next-transfer-time>—No documentation is available yet. <profile-interval>—No documentation is available yet. <profile-name>—No documentation is available yet. <profile-use-count>—No documentation is available yet. <transfer-interval>—No documentation is available yet.
-----------------	--

< **accounting-profile-information**>

Usage	<rpc-reply> < accounting-profile-information > <accounting-profile-header>...</accounting-profile-header> <accounting-profile-columns>...</accounting-profile-columns> <accounting-profile-interfaces>...</accounting-profile-interfaces> <accounting-profile-filter>...</accounting-profile-filter> </ accounting-profile-information > </rpc-reply>
Description	No documentation is available yet.
Contents	<accounting-profile-columns>—No documentation is available yet. <accounting-profile-filter>—No documentation is available yet. <accounting-profile-header>—No documentation is available yet. <accounting-profile-interfaces>—No documentation is available yet.

< **accounting-profile-interfaces**>

Usage	<accounting-profile-information> < accounting-profile-interfaces > <interface-name> <i>interface-name</i> </interface-name> <next-scheduled-collection> <i>next-scheduled-collection</i> </next-scheduled-collection> </ accounting-profile-interfaces > </accounting-profile-information>
Description	No documentation is available yet.
Contents	<interface-name>—No documentation is available yet. <next-scheduled-collection>—No documentation is available yet.

• **< accounting-record-information >**

• **Usage** <rpc-reply>
 <accounting-record-information>
 <interface-accounting-statistics>...</interface-accounting-statistics>
 <routing-engine-accounting-statistics>...</routing-engine-accounting-statistics>
 <filter-accounting-statistics>...</filter-accounting-statistics>
 <cu-accounting-statistics>...</cu-accounting-statistics>
 </accounting-record-information>
</rpc-reply>

• **Description** No documentation is available yet.

• **Contents** <cu-accounting-statistics>—No documentation is available yet.

 <filter-accounting-statistics>—No documentation is available yet.

 <interface-accounting-statistics>—No documentation is available yet.

 <routing-engine-accounting-statistics>—No documentation is available yet.

• **< cu-accounting-record >**

• **Usage** <cu-accounting-statistics>
 <cu-accounting-record>
 <profile-layout>profile-layout</profile-layout>
 <epoch-timestamp>epoch-timestamp</epoch-timestamp>
 <utc-timestamp>utc-timestamp</utc-timestamp>
 <interface-name>interface-name</interface-name>
 <address-family>address-family</address-family>
 <destination-class-name>destination-class-name</destination-class-name>
 <source-class-name>source-class-name</source-class-name>
 <counter-name>counter-name</counter-name>
 <packet-count>packet-count</packet-count>
 <byte-count>byte-count</byte-count>
 </cu-accounting-record>
</cu-accounting-statistics>

• **Description** No documentation is available yet.

• **Contents** <address-family>—No documentation is available yet.

 <byte-count>—No documentation is available yet.

 <counter-name>—No documentation is available yet.

 <destination-class-name>—No documentation is available yet.

 <epoch-timestamp>—No documentation is available yet.

 <interface-name>—No documentation is available yet.

 <packet-count>—No documentation is available yet.

 <profile-layout>—No documentation is available yet.

<source-class-name>—No documentation is available yet.

<utc-timestamp>—No documentation is available yet.

< cu-accounting-statistics >

Usage <accounting-record-information>
 <cu-accounting-statistics>
 <cu-accounting-record>...</cu-accounting-record>
 </cu-accounting-statistics>
 </accounting-record-information>

Description No documentation is available yet.

Contents <cu-accounting-record>—No documentation is available yet.

< filter-accounting-record >

Usage <filter-accounting-statistics>
 <filter-accounting-record>
 <profile-layout>profile-layout</profile-layout>
 <epoch-timestamp>epoch-timestamp</epoch-timestamp>
 <utc-timestamp>utc-timestamp</utc-timestamp>
 <interfaces>interfaces</interfaces>
 <filter-name>filter-name</filter-name>
 <counter-name>counter-name</counter-name>
 <packet-count>packet-count</packet-count>
 <byte-count>byte-count</byte-count>
 </filter-accounting-record>
 </filter-accounting-statistics>

Description No documentation is available yet.

Contents <byte-count>—No documentation is available yet.

<counter-name>—No documentation is available yet.

<epoch-timestamp>—No documentation is available yet.

<filter-name>—No documentation is available yet.

<interfaces>—No documentation is available yet.

<packet-count>—No documentation is available yet.

<profile-layout>—No documentation is available yet.

<utc-timestamp>—No documentation is available yet.

• **<filter-accounting-statistics>**

Usage <accounting-record-information>
 <filter-accounting-statistics>
 <filter-accounting-record>...</filter-accounting-record>
 </filter-accounting-statistics>
</accounting-record-information>

Description No documentation is available yet.

Contents <filter-accounting-record>—No documentation is available yet.

• **<interface-accounting-record>**

Usage <interface-accounting-statistics>
 <interface-accounting-record>
 <profile-layout>profile-layout</profile-layout>
 <epoch-timestamp>epoch-timestamp</epoch-timestamp>
 <utc-timestamp>utc-timestamp</utc-timestamp>
 <interface-name>interface-name</interface-name>
 <snmp-index>snmp-index</snmp-index>
 <input-bytes>input-bytes</input-bytes>
 <output-bytes>output-bytes</output-bytes>
 <input-packets>input-packets</input-packets>
 <output-packets>output-packets</output-packets>
 <input-unicast>input-unicast</input-unicast>
 <output-unicast>output-unicast</output-unicast>
 <input-multicast>input-multicast</input-multicast>
 <output-multicast>output-multicast</output-multicast>
 <input-errors>input-errors</input-errors>
 <output-errors>output-errors</output-errors>
 <noproto>noproto</noproto>
 <rpf-check-bytes>rpf-check-bytes</rpf-check-bytes>
 <rpf-check-packets>rpf-check-packets</rpf-check-packets>
 <rpf-check6-bytes>rpf-check6-bytes</rpf-check6-bytes>
 <rpf-check6-packets>rpf-check6-packets</rpf-check6-packets>
 </interface-accounting-record>
</interface-accounting-statistics>

Description No documentation is available yet.

Contents <epoch-timestamp>—No documentation is available yet.

<input-bytes>—No documentation is available yet.

<input-errors>—No documentation is available yet.

<input-multicast>—No documentation is available yet.

<input-packets>—No documentation is available yet.

<input-unicast>—No documentation is available yet.

<interface-name>—No documentation is available yet.

<noproto>—No documentation is available yet.

<output-bytes>—No documentation is available yet.

<output-errors>—No documentation is available yet.

<output-multicast>—No documentation is available yet.

<output-packets>—No documentation is available yet.

<output-unicast>—No documentation is available yet.

<profile-layout>—No documentation is available yet.

<rpf-check-bytes>—No documentation is available yet.

<rpf-check-packets>—No documentation is available yet.

<rpf-check6-bytes>—No documentation is available yet.

<rpf-check6-packets>—No documentation is available yet.

<snmp-index>—No documentation is available yet.

<utc-timestamp>—No documentation is available yet.

< interface-accounting-statistics >

Usage	<accounting-record-information> <interface-accounting-statistics> <interface-accounting-record>...</interface-accounting-record> </interface-accounting-statistics> </accounting-record-information>
Description	No documentation is available yet.
Contents	<interface-accounting-record>—No documentation is available yet.

< routing-engine-accounting-record >

Usage	<routing-engine-accounting-statistics> <routing-engine-accounting-record> <profile-layout>profile-layout</profile-layout> <epoch-timestamp>epoch-timestamp</epoch-timestamp> <utc-timestamp>utc-timestamp</utc-timestamp> <hostname>hostname</hostname> <date-yyyymmdd>date-yyyymmdd</date-yyyymmdd> <timeofday-hhmmss>timeofday-hhmmss</timeofday-hhmmss> <uptime>uptime</uptime> <cpu1min>cpu1min</cpu1min> <cpu5min>cpu5min</cpu5min> <cpu15min>cpu15min</cpu15min> </routing-engine-accounting-record> </routing-engine-accounting-statistics>
Description	No documentation is available yet.

- | | |
|-----------------|---|
| Contents | <cpu15min>—No documentation is available yet. |
| | <cpu1min>—No documentation is available yet. |
| | <cpu5min>—No documentation is available yet. |
| | <date-yyyymmdd>—No documentation is available yet. |
| | <epoch-timestamp>—No documentation is available yet. |
| | <hostname>—No documentation is available yet. |
| | <profile-layout>—No documentation is available yet. |
| | <timeofday-hhmmss>—No documentation is available yet. |
| | <uptime>—No documentation is available yet. |
| | <utc-timestamp>—No documentation is available yet. |

< routing-engine-accounting-statistics >

- | | |
|--------------------|--|
| Usage | <accounting-record-information>
<routing-engine-accounting-statistics>
<routing-engine-accounting-record>...</routing-engine-accounting-record>
</routing-engine-accounting-statistics>
</accounting-record-information> |
| Description | No documentation is available yet. |
| Contents | <routing-engine-accounting-record>—No documentation is available yet. |

Summary of Alarm Response Tags

This section lists the tags returned by the JUNOScript server to describe alarms. The associated XML namespace is <http://xml.juniper.net/junos/5.4R1/junos-alarm>. To review the DTD for the tags, see “DTD for Alarm Response Tags” on page 1487.

< alarm-detail>

Usage	<pre><alarm-information> <alarm-detail> <alarm-time>alarm-time</alarm-time> <alarm-class>alarm-class</alarm-class> <alarm-description>alarm-description</alarm-description> </alarm-detail> </alarm-information></pre>
Description	Detail information about active alarms.
Contents	<p><alarm-class>—Class of the alarm.</p> <p><alarm-description>—Description of the alarm.</p> <p><alarm-time>—Time of the alarm.</p>

< alarm-information>

Usage	<pre><rpc-reply> <alarm-information> <alarm-summary>...</alarm-summary> <alarm-detail>...</alarm-detail> </alarm-information> </rpc-reply></pre>
Description	No documentation is available yet.
Contents	<p><alarm-detail>—Detail information about active alarms.</p> <p><alarm-summary>—Summary of active alarms.</p>

< alarm-summary>

Usage	<pre><alarm-information> <alarm-summary> <active-alarm-count>active-alarm-count</active-alarm-count> <no-active-alarms/> </alarm-summary> </alarm-information></pre>
Description	Summary of active alarms.
Contents	<p><active-alarm-count>—Number of active alarms.</p> <p><no-active-alarms>—No active alarms.</p>

- Summary of Chassis Response Tags

This section lists the tags returned by the JUNOScript server to describe the router chassis. The associated XML namespace is <http://xml.juniper.net/junos/5.4R1/junos-chassis>. To review the DTD for the tags, see “DTD for Chassis Response Tags” on page 1489.

- **< alarm-indicators >**

Usage <front-panel>
 <alarm-indicators>
 <red-led/>
 <yellow-led/>
 <major-alarm-relay/>
 <minor-alarm-relay/>
 </alarm-indicators>
 </front-panel>

Description Front panel alarm information.

Contents <major-alarm-relay>—Present if major alarm relay is active.

 <minor-alarm-relay>—Present if minor alarm relay is active.

 <red-led>—Present if the red LED is lit.

 <yellow-led>—Present if the yellow LED is lit.

- **< cb >**

Usage <cb-panel>
 <cb>
 <slot>slot</slot>
 <amber-led/>
 <green-led/>
 <blue-led/>
 </cb>
 </cb-panel>

Description No documentation is available yet.

Contents <amber-led>—Present if the amber LED is lit.

 <blue-led>—Present if the blue LED is lit.

 <green-led>—Present if the green LED is lit.

 <slot>—No documentation is available yet.

< cb-panel>

Usage <craft-information>
 <cb-panel>
 <cb>...</cb>
 </cb-panel>
 </craft-information>

Description Display information for the CB panel.

Contents <cb>—No documentation is available yet.

< chassis>

Usage <chassis-inventory | firmware-information>
 <chassis>
 <name>name</name>
 <version>version</version>
 <part-number>part-number</part-number>
 <serial-number>serial-number</serial-number>
 <description>description</description>
 <i2c-information>...</i2c-information>
 <chassis-module>...</chassis-module>
 </chassis>
 </chassis-inventory | firmware-information>

Description Hardware inventory of this chassis.

Contents <chassis-module>—No documentation is available yet.

<description>—No documentation is available yet.

<i2c-information>—No documentation is available yet.

<name>—Name of this component.

<part-number>—Part number of this component.

<serial-number>—Serial number of this component.

<version>—Version of this component.

< chassis-inventory>

Usage <rpc-reply>
 <chassis-inventory>
 <chassis>...</chassis>
 </chassis-inventory>
 </rpc-reply>

Description No documentation is available yet.

Contents <chassis>—Hardware inventory of this chassis.

• **< chassis-module >**

Usage <chassis>
 <chassis-module>
 <name>name</name>
 <version>version</version>
 <part-number>part-number</part-number>
 <serial-number>serial-number</serial-number>
 <description>description</description>
 <i2c-information>...</i2c-information>
 <firmware>...</firmware>
 <chassis-sub-module>...</chassis-sub-module>
 </chassis-module>
 </chassis>

Description No documentation is available yet.

Contents <chassis-sub-module>—No documentation is available yet.

 <description>—No documentation is available yet.

 <firmware>—No documentation is available yet.

 <i2c-information>—No documentation is available yet.

 <name>—Name of this component.

 <part-number>—Part number of this component.

 <serial-number>—Serial number of this component.

 <version>—Version of this component.

• **< chassis-sub-module >**

Usage <chassis-module>
 <chassis-sub-module>
 <name>name</name>
 <version>version</version>
 <part-number>part-number</part-number>
 <serial-number>serial-number</serial-number>
 <description>description</description>
 <i2c-information>...</i2c-information>
 <firmware>...</firmware>
 </chassis-sub-module>
 </chassis-module>

Description No documentation is available yet.

Contents <description>—No documentation is available yet.

 <firmware>—No documentation is available yet.

 <i2c-information>—No documentation is available yet.

 <name>—Name of this component.

<part-number>—Part number of this component.
 <serial-number>—Serial number of this component.
 <version>—Version of this component.

< **craft-information**>

Usage	<rpc-reply> <craft-information> <front-panel>...</front-panel> <mcs-panel>...</mcs-panel> <sfm-panel>...</sfm-panel> <pcg-panel>...</pcg-panel> <cb-panel>...</cb-panel> <sib-panel>...</sib-panel> <scg-panel>...</scg-panel> <output>output</output> </craft-information> </rpc-reply>
Description	Craft interface information.
Contents	<cb-panel>—Display information for the CB panel. <front-panel>—Display information for the front panel. <mcs-panel>—Display information for the CB panel. <output>—No documentation is available yet. <pcg-panel>—Display information for the PCG panel. <scg-panel>—Display information for the SCG panel. <sfm-panel>—Display information for the SFM panel. <sib-panel>—Display information for the SIB panel.

< **display-panel**>

Usage	<front-panel> <display-panel> <display-line>display-line</display-line> </display-panel> </front-panel>
Description	Front panel display contents.
Contents	<display-line>—A single line from the front panel display.

• **< environment-information >**

• **Usage** <rpc-reply>
 <environment-information>
 <environment-item>...</environment-item>
 </environment-information>
 </rpc-reply>

• **Description** No documentation is available yet.

• **Contents** <environment-item>—No documentation is available yet.

• **< environment-item >**

• **Usage** <environment-information>
 <environment-item>
 <class>class</class>
 <name>name</name>
 <status>status</status>
 <temperature>temperature</temperature>
 <comment>comment</comment>
 </environment-item>
 </environment-information>

• **Description** No documentation is available yet.

• **Contents** <class>—No documentation is available yet.

 <comment>—No documentation is available yet.

 <name>—Name of this component.

 <status>—No documentation is available yet.

 <temperature>—No documentation is available yet.

• **< firmware >**

• **Usage** <chassis-module | chassis-sub-module>
 <firmware>
 <type>type</type>
 <firmware-version>firmware-version</firmware-version>
 </firmware>
 </chassis-module | chassis-sub-module>

• **Description** No documentation is available yet.

• **Contents** <firmware-version>—Firmware version string for this component.

 <type>—Type of this component.

< **firmware-information**>

Usage <rpc-reply>
 <firmware-information>
 <chassis>...</chassis>
 </firmware-information>
 </rpc-reply>

Description Information about component firmware versions.

Contents <chassis>—Hardware inventory of this chassis.

< **fpc**>

Usage <fpc-information | fpc-panel>
 <**fpc**>
 <slot>slot</slot>
 <logical-slot>logical-slot</logical-slot>
 <state>state</state>
 <temperature>temperature</temperature>
 <cpu-total>cpu-total</cpu-total>
 <cpu-interrupt>cpu-interrupt</cpu-interrupt>
 <memory-dram-size>memory-dram-size</memory-dram-size>
 <memory-sram-size>memory-sram-size</memory-sram-size>
 <memory-sdram-size>memory-sdram-size</memory-sdram-size>
 <memory-notification-sdram-size>sdram-size</memory-notification-sdram-size>
 <memory-heap-utilization>memory-heap-utilization</memory-heap-utilization>
 <memory-buffer-utilization>memory-buffer-utilization</memory-buffer-utilization>
 <asic-information>asic-information</asic-information>
 <start-time>start-time</start-time>
 <up-time>up-time</up-time>
 <comment>comment</comment>
 <pic>...</pic>
 <pic-detail>...</pic-detail>
 <red-led/>
 <green-led/>
 </**fpc**>
 </fpc-information | fpc-panel>

Description No documentation is available yet.

Contents <asic-information>—No documentation is available yet.

<comment>—No documentation is available yet.

<cpu-interrupt>—Percentage of CPU utilized by interrupt processing.

<cpu-total>—Percentage utilization of CPU.

<green-led>—Present if the green LED is lit.

<logical-slot>—No documentation is available yet.

<memory-buffer-utilization>—Percentage utilization of buffer memory.

<memory-dram-size>—DRAM.

• <memory-heap-utilization>—Percentage utilization of heap memory.
• <memory-notification-sdram-size>—Notification SDRAM.
• <memory-sdram-size>—SDRAM.
• <memory-sram-size>—SRAM.
• <pic>—No documentation is available yet.
• <pic-detail>—No documentation is available yet.
• <red-led>—Present if the red LED is lit.
• <slot>—No documentation is available yet.
• <start-time>—Time this component was started.
• <state>—No documentation is available yet.
• <temperature>—No documentation is available yet.
• <up-time>—Length of time this component has been operational.

<**fpc-information**>

Usage <rpc-reply>
 <**fpc-information**>
 <fpc>...</fpc>
 </**fpc-information**>
 </rpc-reply>

Description No documentation is available yet.

Contents <fpc>—No documentation is available yet.

<**fpc-panel**>

Usage <front-panel>
 <**fpc-panel**>
 <fpc>...</fpc>
 </**fpc-panel**>
 </front-panel>

Description No documentation is available yet.

Contents <fpc>—No documentation is available yet.

< **front-panel**>

Usage	<craft-information> <front-panel> <display-panel>...</display-panel> <re-panel>...</re-panel> <alarm-indicators>...</alarm-indicators> <fpc-panel>...</fpc-panel> </front-panel> </craft-information>
Description	Display information for the front panel.
Contents	<p><alarm-indicators>—Front panel alarm information.</p> <p><display-panel>—Front panel display contents.</p> <p><fpc-panel>—No documentation is available yet.</p> <p><re-panel>—Front panel routing engine information.</p>

< **i2c-information**>

Usage	<chassis chassis-module chassis-sub-module> <i2c-information> <jedec-code>jedec-code</jedec-code> <eprom-version>eprom-version</eprom-version> <part-number>part-number</part-number> <serial-number>serial-number</serial-number> <assembly-identifier>assembly-identifier</assembly-identifier> <assembly-version>assembly-version</assembly-version> <manufacture-date>manufacture-date</manufacture-date> <assembly-flags>assembly-flags</assembly-flags> <i2c-version>i2c-version</i2c-version> <i2c-identifier>i2c-identifier</i2c-identifier> <i2c-data>i2c-data</i2c-data> <board-information-record>board-information-record</board-information-record> <rma-record>rma-record</rma-record> </i2c-information> </chassis chassis-module chassis-sub-module>
Description	No documentation is available yet.
Contents	<p><assembly-flags>—No documentation is available yet.</p> <p><assembly-identifier>—No documentation is available yet.</p> <p><assembly-version>—No documentation is available yet.</p> <p><board-information-record>—Hex dump of board information record.</p> <p><eprom-version>—No documentation is available yet.</p> <p><i2c-data>—Hex dump of I2C data.</p> <p><i2c-identifier>—No documentation is available yet.</p>

- <i2c-version>—No documentation is available yet.
- <jedec-code>—No documentation is available yet.
- <manufacture-date>—Date this component was manufactured.
- <part-number>—Part number of this component.
- <rma-record>—Hex dump of RMA record.
- <serial-number>—Serial number of this component.

< mcs >

Usage <mcs-panel>
 <mcs>
 <slot>slot</slot>
 <amber-led/>
 <green-led/>
 <blue-led/>
 </mcs>
 </mcs-panel>

Description No documentation is available yet.

Contents <amber-led>—Present if the amber LED is lit.

 <blue-led>—Present if the blue LED is lit.

 <green-led>—Present if the green LED is lit.

 <slot>—No documentation is available yet.

< mcs-panel >

Usage <craft-information>
 <mcs-panel>
 <mcs>...</mcs>
 </mcs-panel>
 </craft-information>

Description Display information for the CB panel.

Contents <mcs>—No documentation is available yet.

<pcg>

Usage	<pcg-panel> <pcg> <slot>slot</slot> <amber-led/> <green-led/> <blue-led/> </pcg> </pcg-panel>
Description	No documentation is available yet.
Contents	<amber-led>—Present if the amber LED is lit. <blue-led>—Present if the blue LED is lit. <green-led>—Present if the green LED is lit. <slot>—No documentation is available yet.

<pcg-panel>

Usage	<craft-information> <pcg-panel> <pcg>...</pcg> </pcg-panel> </craft-information>
Description	Display information for the PCG panel.
Contents	<pcg>—No documentation is available yet.

<pic>

Usage	<fpc> <pic> <pic-slot>pic-slot</pic-slot> <pic-type>pic-type</pic-type> <comment>comment</comment> </pic> </fpc>
Description	No documentation is available yet.
Contents	<comment>—No documentation is available yet. <pic-slot>—No documentation is available yet. <pic-type>—No documentation is available yet.

- <***pic-detail***>

Usage <fpc>
 <pic-detail>
 <slot>slot</slot>
 <pic-slot>pic-slot</pic-slot>
 <pic-type>pic-type</pic-type>
 <pic-asic-type>pic-asic-type</pic-asic-type>
 <comment>comment</comment>
 <pic-version>pic-version</pic-version>
 <state>state</state>
 <cpu-total>cpu-total</cpu-total>
 <cpu-interrupt>cpu-interrupt</cpu-interrupt>
 <memory-buffer-utilization>memory-buffer-utilization</memory-buffer-utilization>
 <memory-heap-utilization>memory-heap-utilization</memory-heap-utilization>
 <memory-dram-size>memory-dram-size</memory-dram-size>
 <pic-cpu-sw-version>pic-cpu-sw-version</pic-cpu-sw-version>
 <pic-cpu-rom-version>pic-cpu-rom-version</pic-cpu-rom-version>
 <up-time>up-time</up-time>
 </pic-detail>
 </fpc>

Description No documentation is available yet.

Contents <comment>—No documentation is available yet.
 <cpu-interrupt>—Percentage of CPU utilized by interrupt processing.
 <cpu-total>—Percentage utilization of CPU.
 <memory-buffer-utilization>—Percentage utilization of buffer memory.
 <memory-dram-size>—DRAM.
 <memory-heap-utilization>—Percentage utilization of heap memory.
 <pic-asic-type>—Type of ASIC on the PIC.
 <pic-cpu-rom-version>—PIC ROM version.
 <pic-cpu-sw-version>—Version of O/S running on the PIC.
 <pic-slot>—No documentation is available yet.
 <pic-type>—No documentation is available yet.
 <pic-version>—PIC Hardware version.
 <slot>—No documentation is available yet.
 <state>—No documentation is available yet.
 <up-time>—Length of time this component has been operational.

< re >

Usage <re-panel>
 <re>
 <slot>slot</slot>
 <ok-led/>
 <fail-led/>
 <master-led/>
 </re>
 </re-panel>

Description No documentation is available yet.

Contents <fail-led>—Present if the Fail LED is lit.
 <master-led>—Present if the Master LED is lit.
 <ok-led>—Present if the OK LED is lit.
 <slot>—No documentation is available yet.

< re-panel >

Usage <front-panel>
 <re-panel>
 <re>...</re>
 </re-panel>
 </front-panel>

Description Front panel routing engine information.

Contents <re>—No documentation is available yet.

- **< route-engine>**

Usage <route-engine-information>
 <route-engine>
 <description>*description*</description>
 <slot>*slot*</slot>
 <mastership-state>*mastership-state*</mastership-state>
 <mastership-priority>*mastership-priority*</mastership-priority>
 <temperature>*temperature*</temperature>
 <memory-dram-size>*memory-dram-size*</memory-dram-size>
 <cpu-user>*cpu-user*</cpu-user>
 <cpu-background>*cpu-background*</cpu-background>
 <cpu-system>*cpu-system*</cpu-system>
 <cpu-interrupt>*cpu-interrupt*</cpu-interrupt>
 <cpu-idle>*cpu-idle*</cpu-idle>
 <model>*model*</model>
 <serial-number>*serial-number*</serial-number>
 <start-time>*start-time*</start-time>
 <up-time>*up-time*</up-time>
 <load-average-one>*load-average-one*</load-average-one>
 <load-average-five>*load-average-five*</load-average-five>
 <load-average-fifteen>*load-average-fifteen*</load-average-fifteen>
 <bios-version>*bios-version*</bios-version>
 </route-engine>
 </route-engine-information>

Description No documentation is available yet.

Contents <bios-version>—Routing engine BIOS version.

<cpu-background>—Percentage utilization of CPU by background processes.

<cpu-idle>—Percentage of CPU idle time.

<cpu-interrupt>—Percentage of CPU utilized by interrupt processing.

<cpu-system>—Percentage utilization of CPU by the kernel.

<cpu-user>—Percentage utilization of CPU by user processes.

<description>—No documentation is available yet.

<load-average-fifteen>—No documentation is available yet.

<load-average-five>—No documentation is available yet.

<load-average-one>—No documentation is available yet.

<mastership-priority>—Configured priority for mastership on this Routing Engine.

<mastership-state>—Current state of mastership on this Routing Engine.

<memory-dram-size>—DRAM.

<model>—No documentation is available yet.

<serial-number>—Serial number of this component.

<slot>—No documentation is available yet.

<start-time>—Time this component was started.

<temperature>—No documentation is available yet.

<up-time>—Length of time this component has been operational.

< route-engine-information >

Usage	<rpc-reply> <route-engine-information> <route-engine>...</route-engine> </route-engine-information> </rpc-reply>
Description	No documentation is available yet.
Contents	<route-engine>—No documentation is available yet.

< scb >

Usage	<scb-information> <scb> <slot>slot</slot> <state>state</state> <failover-count>failover-count</failover-count> <reset-count>reset-count</reset-count> <activate-count>activate-count</activate-count> <temperature>temperature</temperature> <spp-temperature>spp-temperature</spp-temperature> <spr-temperature>spr-temperature</spr-temperature> <cpu-total>cpu-total</cpu-total> <cpu-interrupt>cpu-interrupt</cpu-interrupt> <memory-dram-size>memory-dram-size</memory-dram-size> <memory-sram-size>memory-sram-size</memory-sram-size> <memory-heap-utilization>memory-heap-utilization</memory-heap-utilization> <memory-buffer-utilization>memory-buffer-utilization</memory-buffer-utilization> <asic-name>asic-name</asic-name> <asic-information>asic-information</asic-information> <start-time>start-time</start-time> <up-time>up-time</up-time> <comment>comment</comment> </scb> </scb-information>
Description	No documentation is available yet.
Contents	<activate-count>—No documentation is available yet. <asic-information>—No documentation is available yet. <asic-name>—No documentation is available yet. <comment>—No documentation is available yet.

- `<cpu-interrupt>`—Percentage of CPU utilized by interrupt processing.
- `<cpu-total>`—Percentage utilization of CPU.
- `<failover-count>`—No documentation is available yet.
- `<memory-buffer-utilization>`—Percentage utilization of buffer memory.
- `<memory-dram-size>`—DRAM.
- `<memory-heap-utilization>`—Percentage utilization of heap memory.
- `<memory-sram-size>`—SRAM.
- `<reset-count>`—No documentation is available yet.
- `<slot>`—No documentation is available yet.
- `<spp-temperature>`—No documentation is available yet.
- `<spr-temperature>`—No documentation is available yet.
- `<start-time>`—Time this component was started.
- `<state>`—No documentation is available yet.
- `<temperature>`—No documentation is available yet.
- `<up-time>`—Length of time this component has been operational.

<scb-information>

Usage `<rpc-reply>`
 `<scb-information>`
 `<scb-type>scb-type</scb-type>`
 `<scb>...</scb>`
 `</scb-information>`
 `</rpc-reply>`

Description No documentation is available yet.

Contents `<scb>`—No documentation is available yet.

`<scb-type>`—No documentation is available yet.

< scg >

Usage	<scg-panel> <scg> <slot>slot</slot> <amber-led/> <green-led/> <blue-led/> </scg> </scg-panel>
Description	No documentation is available yet.
Contents	<amber-led>—Present if the amber LED is lit. <blue-led>—Present if the blue LED is lit. <green-led>—Present if the green LED is lit. <slot>—No documentation is available yet.

< scg-panel >

Usage	<craft-information> <scg-panel> <scg>...</scg> </scg-panel> </craft-information>
Description	Display information for the SCG panel.
Contents	<scg>—No documentation is available yet.

< sfm >

Usage	<sfm-panel> <sfm> <slot>slot</slot> <amber-led/> <green-led/> <blue-led/> </sfm> </sfm-panel>
Description	No documentation is available yet.
Contents	<amber-led>—Present if the amber LED is lit. <blue-led>—Present if the blue LED is lit. <green-led>—Present if the green LED is lit. <slot>—No documentation is available yet.

• **<sfm-panel>**

• **Usage** <craft-information>
 <sfm-panel>
 <sfm>...</sfm>
 </sfm-panel>
</craft-information>

• **Description** Display information for the SFM panel.

• **Contents** <sfm>—No documentation is available yet.

• **<sib-panel>**

• **Usage** <craft-information>
 <sib-panel/>
</craft-information>

• **Description** Display information for the SIB panel.

Summary of Class of Service Response Tags

This section lists the tags returned by the JUNOScript server to describe class of service settings. The associated XML namespace is <http://xml.juniper.net/junos/5.4R1/junos-cos>. To review the DTD for the tags, see “DTD for Class of Service Response Tags” on page 1495.

• **<alias-map>**

• **Usage** <code-point-map>
 <alias-map>
 <alias-map-item>...</alias-map-item>
 </alias-map>
</code-point-map>

• **Description** No documentation is available yet.

• **Contents** <alias-map-item>—No documentation is available yet.

• **<alias-map-item>**

• **Usage** <alias-map>
 <alias-map-item>
 <code-point-bits>code-point-bits</code-point-bits>
 <code-point-alias>code-point-alias</code-point-alias>
 </alias-map-item>
</alias-map>

• **Description** No documentation is available yet.

• **Contents** <code-point-alias>—Class-of-service code point alias name.
 <code-point-bits>—Class-of-service code point bit sequence.

< classifier >

Usage	<cos-classifier-information> <classifier> <classifier-name>classifier-name</classifier-name> <code-point-type>code-point-type</code-point-type> <table-index>table-index</table-index> <classifier-map>...</classifier-map> </classifier> </cos-classifier-information>
Description	Class-of-service code point classifier.
Contents	<p><classifier-map>—No documentation is available yet.</p> <p><classifier-name>—Class-of-service classifier name.</p> <p><code-point-type>—Class-of-service code point type.</p> <p><table-index>—Table index.</p>

< classifier-map >

Usage	<classifier> <classifier-map> <classifier-map-item>...</classifier-map-item> </classifier-map> </classifier>
Description	No documentation is available yet.
Contents	<classifier-map-item>—No documentation is available yet.

< classifier-map-item >

Usage	<classifier-map> <classifier-map-item> <code-point>code-point</code-point> <fc-name>fc-name</fc-name> <loss-priority>loss-priority</loss-priority> </classifier-map-item> </classifier-map>
Description	No documentation is available yet.
Contents	<p><code-point>—Class-of-service code point alias name or bits.</p> <p><fc-name>—Class-of-service forwarding class name.</p> <p><loss-priority>—Class-of-service loss priority.</p>

• **< classifier-table >**

Usage <cos-classifier-table-information>
 <classifier-table>
 <table-index>*table-index*</table-index>
 <number-of-entries>*number-of-entries*</number-of-entries>
 <table-type>*table-type*</table-type>
 <classifier-table-entry>...</classifier-table-entry>
 </classifier-table>
 </cos-classifier-table-information>

Description No documentation is available yet.

Contents <classifier-table-entry>—No documentation is available yet.

 <number-of-entries>—Number of entries in an output list.

 <table-index>—Table index.

 <table-type>—Table type.

• **< classifier-table-entry >**

Usage <classifier-table>
 <classifier-table-entry>
 <table-index>*table-index*</table-index>
 <code-point>*code-point*</code-point>
 <fc-queue-number>*fc-queue-number*</fc-queue-number>
 <loss-priority>*loss-priority*</loss-priority>
 </classifier-table-entry>
 </classifier-table>

Description No documentation is available yet.

Contents <code-point>—Class-of-service code point alias name or bits.

 <fc-queue-number>—Class-of-service forwarding class queue number.

 <loss-priority>—Class-of-service loss priority.

 <table-index>—Table index.

< classifier-table-map >

Usage <cos-classifier-table-map-information>
 <classifier-table-map>
 <table-index>table-index</table-index>
 <table-type>table-type</table-type>
 <logical-interface>logical-interface</logical-interface>
 <logical-interface-index>logical-interface-index</logical-interface-index>
 </classifier-table-map>
 </cos-classifier-table-map-information>

Description No documentation is available yet.

Contents <logical-interface>—Logical interface name.
 <logical-interface-index>—Logical interface index.
 <table-index>—Table index.
 <table-type>—Table type.

< code-point-map >

Usage <cos-code-point-map-information>
 <code-point-map>
 <code-point-type>code-point-type</code-point-type>
 <alias-map>...</alias-map>
 </code-point-map>
 </cos-code-point-map-information>

Description Class-of-service code point alias map.

Contents <alias-map>—No documentation is available yet.
 <code-point-type>—Class-of-service code point type.

< cos-classifier-information >

Usage <cos-information>
 <cos-classifier-information>
 <classifier>...</classifier>
 </cos-classifier-information>
 </cos-information>

Description No documentation is available yet.

Contents <classifier>—Class-of-service code point classifier.

• **< cos-classifier-table-information >**

Usage <cos-table-information>
 <cos-classifier-table-information>
 <classifier-table>...</classifier-table>
 </cos-classifier-table-information>
 </cos-table-information>

Description No documentation is available yet.

Contents <classifier-table>—No documentation is available yet.

• **< cos-classifier-table-map-information >**

Usage <cos-table-information>
 <cos-classifier-table-map-information>
 <classifier-table-map>...</classifier-table-map>
 </cos-classifier-table-map-information>
 </cos-table-information>

Description No documentation is available yet.

Contents <classifier-table-map>—No documentation is available yet.

• **< cos-code-point-map-information >**

Usage <cos-information>
 <cos-code-point-map-information>
 <code-point-map>...</code-point-map>
 </cos-code-point-map-information>
 </cos-information>

Description No documentation is available yet.

Contents <code-point-map>—Class-of-service code point alias map.

• **< cos-drop-profile-information >**

Usage <cos-information>
 <cos-drop-profile-information>
 <drop-profile>...</drop-profile>
 </cos-drop-profile-information>
 </cos-information>

Description No documentation is available yet.

Contents <drop-profile>—Class-of-service drop profile.

< cos-forwarding-class-information >

Usage

```
<cos-information>
  <cos-forwarding-class-information>
    <fc-map>...</fc-map>
  </cos-forwarding-class-information>
</cos-information>
```

Description No documentation is available yet.

Contents <fc-map>—Class-of-service forwarding class to queue mapping.

< cos-information >

Usage

```
<rpc-reply>
  <cos-information>
    <cos-forwarding-class-information>...</cos-forwarding-class-information>
    <cos-classifier-information>...</cos-classifier-information>
    <cos-drop-profile-information>...</cos-drop-profile-information>
    <cos-rewrite-information>...</cos-rewrite-information>
    <cos-code-point-map-information>...</cos-code-point-map-information>
  </cos-information>
</rpc-reply>
```

Description No documentation is available yet.

Contents <cos-classifier-information>—No documentation is available yet.

<cos-code-point-map-information>—No documentation is available yet.

<cos-drop-profile-information>—No documentation is available yet.

<cos-forwarding-class-information>—No documentation is available yet.

<cos-rewrite-information>—No documentation is available yet.

< cos-interface-information >

Usage

```
<rpc-reply>
  <cos-interface-information>
    <interface-map>...</interface-map>
  </cos-interface-information>
</rpc-reply>
```

Description No documentation is available yet.

Contents <interface-map>—Class-of-service interface mappings.

• **< cos-red-information >**

Usage <cos-table-information>
 <cos-red-information>
 <red>...</red>
 </cos-red-information>
 </cos-table-information>

Description No documentation is available yet.

Contents <red>—No documentation is available yet.

• **< cos-rewrite-information >**

Usage <cos-information>
 <cos-rewrite-information>
 <rewrite>...</rewrite>
 </cos-rewrite-information>
 </cos-information>

Description No documentation is available yet.

Contents <rewrite>—Class-of-service drop profile.

• **< cos-rewrite-table-information >**

Usage <cos-table-information>
 <cos-rewrite-table-information>
 <rewrite-table>...</rewrite-table>
 </cos-rewrite-table-information>
 </cos-table-information>

Description No documentation is available yet.

Contents <rewrite-table>—No documentation is available yet.

• **< cos-rewrite-table-map-information >**

Usage <cos-table-information>
 <cos-rewrite-table-map-information>
 <rewrite-table-map>...</rewrite-table-map>
 </cos-rewrite-table-map-information>
 </cos-table-information>

Description No documentation is available yet.

Contents <rewrite-table-map>—No documentation is available yet.

<cos-scheduler-map-information>

Usage <rpc-reply>
 <cos-scheduler-map-information>
 <scheduler-map>...</scheduler-map>
 </cos-scheduler-map-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <scheduler-map>—Class-of-service scheduler map.

<cos-scheduler-map-table-information>

Usage <cos-table-information>
 <cos-scheduler-map-table-information>
 <policy>...</policy>
 </cos-scheduler-map-table-information>
 </cos-table-information>

Description No documentation is available yet.

Contents <policy>—No documentation is available yet.

<cos-table-information>

Usage <rpc-reply>
 <cos-table-information>
 <cos-classifier-table-information>...</cos-classifier-table-information>
 <cos-classifier-table-map-information>...</cos-classifier-table-map-information>
 <cos-scheduler-map-table-information>...</cos-scheduler-map-table-information>
 <cos-red-information>...</cos-red-information>
 <cos-rewrite-table-information>...</cos-rewrite-table-information>
 <cos-rewrite-table-map-information>...</cos-rewrite-table-map-information>
 </cos-table-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <cos-classifier-table-information>—No documentation is available yet.

<cos-classifier-table-map-information>—No documentation is available yet.

<cos-red-information>—No documentation is available yet.

<cos-rewrite-table-information>—No documentation is available yet.

<cos-rewrite-table-map-information>—No documentation is available yet.

<cos-scheduler-map-table-information>—No documentation is available yet.

• **< drop-profile >**

• **Usage** <cos-drop-profile-information>
 <drop-profile>
 <profile-name>profile-name</profile-name>
 <profile-type>profile-type</profile-type>
 <table-index>table-index</table-index>
 <profile-map>...</profile-map>
 </drop-profile>
 </cos-drop-profile-information>

• **Description** Class-of-service drop profile.

• **Contents** <profile-map>—No documentation is available yet.
 <profile-name>—Class-of-service drop profile name.
 <profile-type>—Class-of-service drop profile type.
 <table-index>—Table index.

• **< fabric-queue-information >**

• **Usage** <rpc-reply>
 <fabric-queue-information>
 <fpc-queue-information>...</fpc-queue-information>
 </fabric-queue-information>
 </rpc-reply>

• **Description** No documentation is available yet.

• **Contents** <fpc-queue-information>—Show fabric queuing information for an FPC.

• **< fc-map >**

• **Usage** <cos-forwarding-class-information>
 <fc-map>
 <fc-map-item>...</fc-map-item>
 </fc-map>
 </cos-forwarding-class-information>

• **Description** Class-of-service forwarding class to queue mapping.

• **Contents** <fc-map-item>—No documentation is available yet.

<fc-map-item>

Usage	<pre><fc-map> <fc-map-item> <fc-name>fc-name</fc-name> <fc-queue-number>fc-queue-number</fc-queue-number> <fc-priority>fc-priority</fc-priority> </fc-map-item> </fc-map></pre>
Description	No documentation is available yet.
Contents	<p><fc-name>—Class-of-service forwarding class name.</p> <p><fc-priority>—Class-of-service forwarding class queue priority.</p> <p><fc-queue-number>—Class-of-service forwarding class queue number.</p>

<fpc-queue-information>

Usage	<pre><fabric-queue-information> <fpc-queue-information> <dest-fpc-index>dest-fpc-index</dest-fpc-index> <src-fpc-index>src-fpc-index</src-fpc-index> <queue-information>...</queue-information> </fpc-queue-information> </fabric-queue-information></pre>
Description	Show fabric queuing information for an FPC.
Contents	<p><dest-fpc-index>—Destination FPC index.</p> <p><queue-information>—No documentation is available yet.</p> <p><src-fpc-index>—Source FPC index.</p>

<i-logical-map>

Usage	<pre><interface-map> <i-logical-map> <i-logical-name>i-logical-name</i-logical-name> <i-logical-index>i-logical-index</i-logical-index> <i-logical-objects>...</i-logical-objects> </i-logical-map> </interface-map></pre>
Description	No documentation is available yet.
Contents	<p><i-logical-index>—Class-of-service logical interface index.</p> <p><i-logical-name>—Class-of-service logical interface name.</p> <p><i-logical-objects>—Class-of-service logical interface mappings.</p>

- **< i-logical-objects >**

Usage <i-logical-map>
 <i-logical-objects>
 <i-logical-object-type>*i-logical-object-type*</i-logical-object-type>
 <i-logical-object-name>*i-logical-object-name*</i-logical-object-name>
 <i-logical-object-subtype>*i-logical-object-subtype*</i-logical-object-subtype>
 <i-logical-object-index>*i-logical-object-index*</i-logical-object-index>
 </i-logical-objects>
 </i-logical-map>

Description Class-of-service logical interface mappings.

Contents <i-logical-object-index>—Class-of-service logical interface object index.
 <i-logical-object-name>—Class-of-service logical interface object name.
 <i-logical-object-subtype>—Class-of-service logical interface object subtype.
 <i-logical-object-type>—Class-of-service logical interface object type.

- **< interface-map >**

Usage <cos-interface-information>
 <interface-map>
 <interface-name>*interface-name*</interface-name>
 <interface-index>*interface-index*</interface-index>
 <scheduler-map-name>*scheduler-map-name*</scheduler-map-name>
 <scheduler-map-index>*scheduler-map-index*</scheduler-map-index>
 <i-logical-map>...</i-logical-map>
 </interface-map>
 </cos-interface-information>

Description Class-of-service interface mappings.

Contents <i-logical-map>—No documentation is available yet.
 <interface-index>—Class-of-service interface index.
 <interface-name>—Class-of-service interface name.
 <scheduler-map-index>—Class-of-service scheduler map index.
 <scheduler-map-name>—Class-of-service scheduler map name.

<policy>

Usage	<cos-scheduler-map-table-information> <policy> <physical-interface> <i>physical-interface</i> </physical-interface> <physical-interface-index> <i>physical-interface-index</i> </physical-interface-index> <policy-index> <i>policy-index</i> </policy-index> <policy-number-of-queues> <i>policy-number-of-queues</i> </policy-number-of-queues> <policy-entry>...</policy-entry> </policy> </cos-scheduler-map-table-information>
Description	No documentation is available yet.
Contents	<p><physical-interface>—Physical interface name.</p> <p><physical-interface-index>—Physical interface index.</p> <p><policy-entry>—No documentation is available yet.</p> <p><policy-index>—No documentation is available yet.</p> <p><policy-number-of-queues>—Number of queues in this policy.</p>

<policy-entry>

Usage	<policy> <policy-entry> <table-index> <i>table-index</i> </table-index> <policy-entry-identifier> <i>policy-entry-identifier</i> </policy-entry-identifier> <fc-queue-number> <i>fc-queue-number</i> </fc-queue-number> <policy-transmit-rate> <i>policy-transmit-rate</i> </policy-transmit-rate> <policy-transmit-rate-percentage> <i>percentage</i> </policy-transmit-rate-percentage> <policy-transmit-rate-remainder> <i>remainder</i> </policy-transmit-rate-remainder> <policy-buffer-size-percentage> <i>percentage</i> </policy-buffer-size-percentage> <policy-buffer-size-remainder> <i>remainder</i> </policy-buffer-size-remainder> <policy-high-priority> <i>policy-high-priority</i> </policy-high-priority> <policy-packet-loss-profile>...</policy-packet-loss-profile> <policy-exact> <i>policy-exact</i> </policy-exact> </policy-entry> </policy>
Description	No documentation is available yet.
Contents	<p><fc-queue-number>—Class-of-service forwarding class queue number.</p> <p><policy-buffer-size-percentage>—Buffer size percentage.</p> <p><policy-buffer-size-remainder>—Buffer size is remainder.</p> <p><policy-entry-identifier>—Policy entry ID number.</p> <p><policy-exact>—Policy is exact Boolean.</p> <p><policy-high-priority>—High-priority Boolean.</p>

- <policy-packet-loss-profile>—No documentation is available yet.
- <policy-transmit-rate>—Transmit rate.
- <policy-transmit-rate-percentage>—Transmit rate percentage.
- <policy-transmit-rate-remainder>—Transmit rate is remainder.
- <table-index>—Table index.

< **policy-packet-loss-profile** >

Usage <policy-entry>
 <**policy-packet-loss-profile**>
 <high-drop-profile-identifier>high-drop-profile-identifier</high-drop-profile-identifier>
 <low-drop-profile-identifier>low-drop-profile-identifier</low-drop-profile-identifier>
 <tcp-high-drop-profile-identifier>profile-identifier</tcp-high-drop-profile-identifier>
 <tcp-low-drop-profile-identifier>profile-identifier</tcp-low-drop-profile-identifier>
 </**policy-packet-loss-profile**>
 </policy-entry>

Description No documentation is available yet.

Contents <high-drop-profile-identifier>—PLP high drop profile ID.
 <low-drop-profile-identifier>—PLP low drop profile ID.
 <tcp-high-drop-profile-identifier>—TCP PLP high drop profile ID.
 <tcp-low-drop-profile-identifier>—TCP PLP low drop profile ID.

< **profile-map** >

Usage <drop-profile>
 <**profile-map**>
 <profile-map-item>...</profile-map-item>
 </**profile-map**>
 </drop-profile>

Description No documentation is available yet.

Contents <profile-map-item>—No documentation is available yet.

<**profile-map-item**>

Usage	<profile-map> <profile-map-item> <fill-level>fill-level</fill-level> <probability>probability</probability> </profile-map-item> </profile-map>
Description	No documentation is available yet.
Contents	<fill-level>—Class-of-service drop profile fill level value. <probability>—Class-of-service drop profile probability value.

<**queue-information**>

Usage	<fpc-queue-information> <queue-information> <queue-information-item>...</queue-information-item> </queue-information> </fpc-queue-information>
Description	No documentation is available yet.
Contents	<queue-information-item>—No documentation is available yet.

- **<queue-information-item>**

```

Usage   <queue-information>
          <queue-information-item>
              <total-pkts-high>total-pkts-high</total-pkts-high>
              <total-bytes-high>total-bytes-high</total-bytes-high>
              <total-pkts-low>total-pkts-low</total-pkts-low>
              <total-bytes-low>total-bytes-low</total-bytes-low>
              <total-pps-high>total-pps-high</total-pps-high>
              <total-bps-high>total-bps-high</total-bps-high>
              <total-pps-low>total-pps-low</total-pps-low>
              <total-bps-low>total-bps-low</total-bps-low>
              <tx-pkts-high>tx-pkts-high</tx-pkts-high>
              <tx-bytes-high>tx-bytes-high</tx-bytes-high>
              <tx-pkts-low>tx-pkts-low</tx-pkts-low>
              <tx-bytes-low>tx-bytes-low</tx-bytes-low>
              <tx-pps-high>tx-pps-high</tx-pps-high>
              <tx-bps-high>tx-bps-high</tx-bps-high>
              <tx-pps-low>tx-pps-low</tx-pps-low>
              <tx-bps-low>tx-bps-low</tx-bps-low>
              <drop-pkts-high>drop-pkts-high</drop-pkts-high>
              <drop-bytes-high>drop-bytes-high</drop-bytes-high>
              <drop-pkts-low>drop-pkts-low</drop-pkts-low>
              <drop-bytes-low>drop-bytes-low</drop-bytes-low>
              <drop-pps-high>drop-pps-high</drop-pps-high>
              <drop-bps-high>drop-bps-high</drop-bps-high>
              <drop-pps-low>drop-pps-low</drop-pps-low>
              <drop-bps-low>drop-bps-low</drop-bps-low>
          </queue-information-item>
      </queue-information>
  
```

Description No documentation is available yet.

Contents

- <drop-bps-high>—Dropped bytes per second count for high priority queue.
- <drop-bps-low>—Dropped bytes per second count for low priority queue.
- <drop-bytes-high>—Dropped byte count for high priority queue.
- <drop-bytes-low>—Dropped byte count for low priority queue.
- <drop-pkts-high>—Dropped packet count for high priority queue.
- <drop-pkts-low>—Dropped packet count for low priority queue.
- <drop-pps-high>—Dropped packets per second count for high priority queue.
- <drop-pps-low>—Dropped packets per second count for low priority queue.
- <total-bps-high>—Total bytes per second count for high priority queue.
- <total-bps-low>—Total bytes per second count for low priority queue.
- <total-bytes-high>—Total byte count for high priority queue.
- <total-bytes-low>—Total byte count for low priority queue.

<total-pkts-high>—Total packet count for high priority queue.
 <total-pkts-low>—Total packet count for low priority queue.
 <total-pps-high>—Total packets per second count for high priority queue.
 <total-pps-low>—Total packets per second count for low priority queue.
 <tx-bps-high>—Transmitted bytes per second count for high priority queue.
 <tx-bps-low>—Transmitted bytes per second count for low priority queue.
 <tx-bytes-high>—Transmitted byte count for high priority queue.
 <tx-bytes-low>—Transmitted byte count for low priority queue.
 <tx-pkts-high>—Transmitted packet count for high priority queue.
 <tx-pkts-low>—Transmitted packet count for low priority queue.
 <tx-pps-high>—Transmitted packets per second count for high priority queue.
 <tx-pps-low>—Transmitted packets per second count for low priority queue.

< red>

Usage	<cos-red-information> <red> <red-drop-profile-identifier> <i>red-drop-profile-identifier</i> </red-drop-profile-identifier> <number-of-entries> <i>number-of-entries</i> </number-of-entries> <red-entry>...</red-entry> </red> </cos-red-information>
Description	No documentation is available yet.
Contents	<number-of-entries>—Number of entries in an output list. <red-drop-profile-identifier>—No documentation is available yet. <red-entry>—No documentation is available yet.

• **< red-entry >**

Usage <red>
 <red-entry>
 <red-entry-index>red-entry-index</red-entry-index>
 <red-fullness>red-fullness</red-fullness>
 <red-drop-probability>red-drop-probability</red-drop-probability>
 </red-entry>
 </red>

Description No documentation is available yet.

Contents <red-drop-probability>—No documentation is available yet.
<red-entry-index>—No documentation is available yet.
<red-fullness>—No documentation is available yet.

• **< rewrite >**

Usage <cos-rewrite-information>
 <rewrite>
 <rewrite-name>rewrite-name</rewrite-name>
 <code-point-type>code-point-type</code-point-type>
 <table-index>table-index</table-index>
 <rewrite-map>...</rewrite-map>
 </rewrite>
 </cos-rewrite-information>

Description Class-of-service drop profile.

Contents <code-point-type>—Class-of-service code point type.
<rewrite-map>—No documentation is available yet.
<rewrite-name>—Class-of-service rewrite rule name.
<table-index>—Table index.

• **< rewrite-map >**

Usage <rewrite>
 <rewrite-map>
 <rewrite-map-item>...</rewrite-map-item>
 </rewrite-map>
 </rewrite>

Description No documentation is available yet.

Contents <rewrite-map-item>—No documentation is available yet.

< rewrite-map-item >

Usage	<pre><rewrite-map> <rewrite-map-item> <code-point>code-point</code-point> <fc-name>fc-name</fc-name> <loss-priority>loss-priority</loss-priority> </rewrite-map-item> </rewrite-map></pre>
Description	No documentation is available yet.
Contents	<p><code-point>—Class-of-service code point alias name or bits.</p> <p><fc-name>—Class-of-service forwarding class name.</p> <p><loss-priority>—Class-of-service loss priority.</p>

< rewrite-table >

Usage	<pre><cos-rewrite-table-information> <rewrite-table> <table-index>table-index</table-index> <number-of-entries>number-of-entries</number-of-entries> <table-type>table-type</table-type> <rewrite-table-entry>...</rewrite-table-entry> </rewrite-table> </cos-rewrite-table-information></pre>
Description	No documentation is available yet.
Contents	<p><number-of-entries>—Number of entries in an output list.</p> <p><rewrite-table-entry>—No documentation is available yet.</p> <p><table-index>—Table index.</p> <p><table-type>—Table type.</p>

< rewrite-table-entry >

Usage	<pre><rewrite-table> <rewrite-table-entry> <fc-queue-number>fc-queue-number</fc-queue-number> <rewrite-low-codepoint>rewrite-low-codepoint</rewrite-low-codepoint> <rewrite-low-enable-state>rewrite-low-enable-state</rewrite-low-enable-state> <rewrite-high-codepoint>rewrite-high-codepoint</rewrite-high-codepoint> <rewrite-high-enable-state>rewrite-high-enable-state</rewrite-high-enable-state> </rewrite-table-entry> </rewrite-table></pre>
Description	No documentation is available yet.

- **Contents** <fc-queue-number>—Class-of-service forwarding class queue number.
- <rewrite-high-codepoint>—Binary version of code point.
- <rewrite-high-enable-state>—Enable state.
- <rewrite-low-codepoint>—Binary version of code point.
- <rewrite-low-enable-state>—Enable state.

< rewrite-table-map >

Usage <cos-rewrite-table-map-information>
 <rewrite-table-map>
 <table-index>*table-index*</table-index>
 <table-type>*table-type*</table-type>
 <logical-interface>*logical-Interface*</logical-interface>
 <logical-interface-index>*logical-interface-index*</logical-interface-index>
 </rewrite-table-map>
</cos-rewrite-table-map-information>

Description No documentation is available yet.

Contents <logical-interface>—Logical interface name.
 <logical-interface-index>—Logical interface index.
 <table-index>—Table index.
 <table-type>—Table type.

< scheduler >

Usage <scheduler-map>
 <scheduler>
 <fc-name>*fc-name*</fc-name>
 <scheduler-name>*scheduler-name*</scheduler-name>
 <scheduler-index>*scheduler-index*</scheduler-index>
 <scheduler-tx-rate>*scheduler-tx-rate*</scheduler-tx-rate>
 <scheduler-tx-limit>*scheduler-tx-limit*</scheduler-tx-limit>
 <scheduler-buffer-size>*scheduler-buffer-size*</scheduler-buffer-size>
 <scheduler-priority>*scheduler-priority*</scheduler-priority>
 <scheduler-drop-profile-ln-index>*profile-ln-index*</scheduler-drop-profile-ln-index>
 <scheduler-drop-profile-ln>*scheduler-drop-profile-ln*</scheduler-drop-profile-ln>
 <scheduler-drop-profile-lt-index>*profile-lt-index*</scheduler-drop-profile-lt-index>
 <scheduler-drop-profile-lt>*scheduler-drop-profile-lt*</scheduler-drop-profile-lt>
 <scheduler-drop-profile-hn-index>*sprofile-hn-index*</scheduler-drop-profile-hn-index>
 <scheduler-drop-profile-hn>*scheduler-drop-profile-hn*</scheduler-drop-profile-hn>
 <scheduler-drop-profile-ht-index>*profile-ht-index*</scheduler-drop-profile-ht-index>
 <scheduler-drop-profile-ht>*scheduler-drop-profile-ht*</scheduler-drop-profile-ht>
 </scheduler>
</scheduler-map>

Description No documentation is available yet.

Contents	<fc-name>—Class-of-service forwarding class name.	•
	<scheduler-buffer-size>—Class-of-service scheduler buffer size.	•
	<scheduler-drop-profile-hn>—Class-of-service scheduler drop profile high, non-TCP.	•
	<scheduler-drop-profile-hn-index>—Class-of-service scheduler drop profile index high, non-TCP.	•
	<scheduler-drop-profile-ht>—Class-of-service scheduler drop profile high, TCP.	•
	<scheduler-drop-profile-ht-index>—Class-of-service scheduler drop profile index high, TCP.	•
	<scheduler-drop-profile-ln>—Class-of-service scheduler drop profile low, non-TCP.	•
	<scheduler-drop-profile-ln-index>—Class-of-service scheduler drop profile index low, non-TCP.	•
	<scheduler-drop-profile-lt>—Class-of-service scheduler drop profile low, TCP.	•
	<scheduler-drop-profile-lt-index>—Class-of-service scheduler drop profile index low, TCP.	•
	<scheduler-index>—Class of service scheduler index.	•
	<scheduler-name>—Class-of-service scheduler name.	•
	<scheduler-priority>—Class-of-service scheduler priority.	•
	<scheduler-tx-limit>—Class-of-service scheduler transmit limit.	•
	<scheduler-tx-rate>—Class-of-service scheduler transmit rate.	•

< **scheduler-map** >

Usage <cos-scheduler-map-information>
 <scheduler-map>
 <scheduler-map-name>scheduler-map-name</scheduler-map-name>
 <scheduler-map-index>scheduler-map-index</scheduler-map-index>
 <scheduler>...</scheduler>
 </scheduler-map>
 </cos-scheduler-map-information>

Description Class-of-service scheduler map.

Contents	<scheduler>—No documentation is available yet.	•
	<scheduler-map-index>—Class-of-service scheduler map index.	•
	<scheduler-map-name>—Class-of-service scheduler map name.	•

- Summary of Firewall Filter Response Tags

This section lists the tags returned by the JUNOScript server to describe firewall filter information. The associated XML namespace is <http://xml.juniper.net/junos/5.4R1/junos-filter>. To review the DTD for the tags, see “DTD for Firewall Filter Response Tags” on page 1501.

< counter >

Usage <filter-information>
<counter>
 <counter-name>*counter-name*</counter-name>
 <byte-count>*byte-count*</byte-count>
 <packet-count>*packet-count*</packet-count>
 </counter>
 </filter-information>

Description Counter information.

Contents <byte-count>—Bytes counted.
 <counter-name>—Counter name.
 <packet-count>—Packets counted.

< filter-information >

Usage <firewall-information>
<filter-information>
 <filter-name>*filter-name*</filter-name>
 <counter>...</counter>
 <policer>...</policer>
 </filter-information>
</firewall-information>

Description Details of a firewall filter.

Contents <counter>—Counter information.
 <filter-name>—Name of filter.
 <policer>—Policer information.

< firewall-information >

Usage <rpc-reply>
<firewall-information>
 <filter-information>...</filter-information>
 </firewall-information>
</rpc-reply>

Description No documentation is available yet.

Contents <filter-information>—Details of a firewall filter.

<firewall-log-information>

Usage <rpc-reply>
 <firewall-log-information>
 <log-information>...</log-information>
 </firewall-log-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <log-information>—Details of a single firewall log entry.

<log-information>

Usage <firewall-log-information>
 <log-information>
 <time>time</time>
 <filter-name>filter-name</filter-name>
 <action-name>action-name</action-name>
 <interface-name>interface-name</interface-name>
 <protocol-name>protocol-name</protocol-name>
 <source-address>source-address</source-address>
 <destination-address>destination-address</destination-address>
 <packet-length>packet-length</packet-length>
 <icmp-type>icmp-type</icmp-type>
 <icmp-code>icmp-code</icmp-code>
 </log-information>
 </firewall-log-information>

Description Details of a single firewall log entry.

Contents <action-name>—Filter action.

<destination-address>—Destination address.

<filter-name>—Name of filter.

<icmp-code>—ICMP code.

<icmp-type>—ICMP type.

<interface-name>—Name of interface.

<packet-length>—Packet length.

<protocol-name>—Name of protocol.

<source-address>—Source address.

<time>—Time of log.

- **< policer >**

Usage <filter-information>
 <policer>
 <policer-name>policer-name</policer-name>
 <packet-count>packet-count</packet-count>
 </policer>
 </filter-information>

Description Policer information.

Contents <packet-count>—Packets counted.
 <policer-name>—Name of this policer.

Summary of Forwarding and Routing Table Response Tags

This section lists the tags returned by the JUNOScript server to describe forwarding and routing table information. The associated XML namespace is <http://xml.juniper.net/junos/5.4R1/junos-rtinfo>. To review the DTD for the tags, see “DTD for Forwarding and Routing Table Response Tags” on page 1503.

- **< forwarding-table-information >**

Usage <rpc-reply>
 <forwarding-table-information>
 <routing-table>...</routing-table>
 </forwarding-table-information>
 </rpc-reply>

Description Information about forwarding-table routing entries.

Contents <routing-table>—Denotes a routing table.

< **nexthop**>

Usage	<pre><routing-table-entry> <nexthop> <nexthop-address>nexthop-address</nexthop-address> <nexthop-type>nexthop-type</nexthop-type> <nexthop-index>nexthop-index</nexthop-index> <nexthop-reference-count>nexthop-reference-count</nexthop-reference-count> <interface-name>interface-name</interface-name> </nexthop> </routing-table-entry></pre>
Description	Next hop for this routing table entry.
Contents	<p><interface-name>—Network interface name.</p> <p><nexthop-address>—Next-hop address for this entry.</p> <p><nexthop-index>—Index in next-hop table.</p> <p><nexthop-reference-count>—Next-hop reference count.</p> <p><nexthop-type>—Next-hop type.</p>

< **routing-table**>

Usage	<pre><forwarding-table-information> <routing-table> <routing-table-name>routing-table-name</routing-table-name> <routing-table-deleted/> <address-family>address-family</address-family> <address-family-number>address-family-number</address-family-number> <routing-table-entry>...</routing-table-entry> <routing-table-summary>...</routing-table-summary> </routing-table> </forwarding-table-information></pre>
Description	Denotes a routing table.
Contents	<p><address-family>—Address family for this routing table.</p> <p><address-family-number>—If the address family name is unknown, print the number.</p> <p><routing-table-deleted>—Whether this routing table has been deleted.</p> <p><routing-table-entry>—Routing table entry for a destination.</p> <p><routing-table-name>—Name of this routing table.</p> <p><routing-table-summary>—Routing table summary.</p>

• **< routing-table-entry >**

Usage <routing-table>
 <routing-table-entry>
 <destination>destination</destination>
 <destination-type>destination-type</destination-type>
 <route-reference-count>route-reference-count</route-reference-count>
 <route-flags>route-flags</route-flags>
 <nexthop>...</nexthop>
 <rpf-information>...</rpf-information>
 </routing-table-entry>
 </routing-table>

Description Routing table entry for a destination.

Contents <destination>—Destination address.

 <destination-type>—Destination type for this entry.

 <nexthop>—Next hop for this routing table entry.

 <route-flags>—Flags associated with this route entry.

 <route-reference-count>—Reference count for this destination entry.

 <rpf-information>—Reverse path forwarding check for this route.

• **< routing-table-summary >**

Usage <routing-table>
 <routing-table-summary>
 <routing-table-type>routing-table-type</routing-table-type>
 <route-count>route-count</route-count>
 </routing-table-summary>
 </routing-table>

Description Routing table summary.

Contents <route-count>—Number of routes in this routing table.

 <routing-table-type>—Type for this routing table.

• **< rpf-information >**

Usage <routing-table-entry>
 <rpf-information>
 <interface-name>interface-name</interface-name>
 </rpf-information>
 </routing-table-entry>

Description Reverse path forwarding check for this route.

Contents <interface-name>—Network interface name.

Summary of Interface Response Tags

This section lists the tags returned by the JUNOScript server to describe router interfaces. The associated XML namespace is <http://xml.juniper.net/junos/5.4R1/junos-interface>. To review the DTD for the tags, see “DTD for Interface Response Tags” on page 1505.

< active-alarms >

Usage

```
<physical-interface>
  <active-alarms>
    <type>type</type>
    <interface-alarms>...</interface-alarms>
  </active-alarms>
</physical-interface>
```

Description Media-specific defects that can render the interface unable to pass packets. When a defect persists for a certain amount of time, it is promoted to an alarm. Based on the router configuration, an alarm can ring the red or yellow alarm bell on the router or the red or yellow alarm LED on the craft interface.

Contents

- <interface-alarms>—Container tag for interface alarms.
- <type>—Media type for associated interface alarms.

< active-defects >

Usage

```
<physical-interface>
  <active-defects>
    <type>type</type>
    <interface-alarms>...</interface-alarms>
  </active-defects>
</physical-interface>
```

Description Media-specific defects that can render the interface unable to pass packets. When a defect persists for a certain amount of time, it is promoted to an alarm. Based on the router configuration, an alarm can ring the red or yellow alarm bell on the router or the red or yellow alarm LED on the craft interface.

Contents

- <interface-alarms>—Container tag for interface alarms.
- <type>—Media type for associated interface alarms.

- <**address-family**>

Usage

```
<logical-interface>
  <address-family>
    <address-family-name>address-family-name</address-family-name>
    <multilink-bundle-name>multilink-bundle-name</multilink-bundle-name>
    <as-bundle-name>as-bundle-name</as-bundle-name>
    <ae-bundle-name>ae-bundle-name</ae-bundle-name>
    <es-sa-name>es-sa-name</es-sa-name>
    <es-sa-fail-count>es-sa-fail-count</es-sa-fail-count>
    <es-sa-xmt-seq-num>es-sa-xmt-seq-num</es-sa-xmt-seq-num>
    <es-sa-recv-seq-num>es-sa-recv-seq-num</es-sa-recv-seq-num>
    <mtu>mtu</mtu>
    <address-family-flags>...</address-family-flags>
    <generation>generation</generation>
    <route-table>route-table</route-table>
    <filter-information>...</filter-information>
    <policer-information>...</policer-information>
    <interface-address>...</interface-address>
    <route-rpf-statistics>...</route-rpf-statistics>
    <destination-class-statistics>...</destination-class-statistics>
    <source-class-statistics>...</source-class-statistics>
  </address-family>
</logical-interface>
```

Description No documentation is available yet.

Contents <address-family-flags>—No documentation is available yet.

<address-family-name>—No documentation is available yet.

<ae-bundle-name>—Name of the aggregated Ethernet bundle.

<as-bundle-name>—Name of the aggregated SONET bundle for this address family.

<destination-class-statistics>—Destination class usage (DCU) statistics.

<es-sa-fail-count>—Number of failure for IPSec security association for this family.

<es-sa-name>—Name of the IPSec security association for this address family.

<es-sa-recv-seq-num>—Receive sequence number of IPSec security association family.

<es-sa-xmt-seq-num>—Transmit sequence number of IPSec security association family.

<filter-information>—No documentation is available yet.

<generation>—Generation number used to distinguish between successive instances of this interface.

<interface-address>—No documentation is available yet.

<mtu>—MTU size on this interface.

<multilink-bundle-name>—Name of the multilink bundle for this address family.

<policer-information>—Interface policer information.

<route-rpf-statistics>—Unicast Reverse path forwarding (RPF) statistics.

<route-table>—No documentation is available yet.

<source-class-statistics>—Source class usage (SCU) statistics.

< address-family-flags >

Usage

```
<address-family>
  <address-family-flags>
    <ifff-none/>
    <ifff-primary/>
    <ifff-redirects/>
    <ifff-no-redirects/>
    <ifff-hard-down/>
    <ifff-down/>
    <ifff-up/>
    <ifff-func1/>
    <ifff-func2/>
    <ifff-is-primary/>
    <ifff-transit-options-ttl-exceeded/>
    <ifff-dst-class-usage/>
    <ifff-src-class-input/>
    <ifff-src-class-output/>
    <ifff-rpf-check/>
    <generic-value>generic-value</generic-value>
  </address-family-flags>
</address-family>
```

Description No documentation is available yet.

Contents <generic-value>—Hexadecimal value of unknown flag bits.

<ifff-down>—Protocol is inactive.

<ifff-dst-class-usage>—The interface family is configured for DCU.

<ifff-func1>—No documentation is available yet.

<ifff-func2>—No documentation is available yet.

<ifff-hard-down>—Protocol failed to negotiate correctly.

<ifff-is-primary>—The interface is the primary one for the protocol.

<ifff-no-redirects>—Protocol redirects are disabled.

<ifff-none>—No documentation is available yet.

<ifff-primary>—Interface can be considered for selection as the primary family address.

<ifff-redirects>—No documentation is available yet.

<ifff-rpf-check>—The interface family is configured for unicast RPF.

<ifff-src-class-input>—The interface family is configured for SCU input.

- <ffff-src-class-output>—The interface family is configured for SCU output.
- <ffff-transit-options-ttl-exceeded>—Transit non-local TTL-exceeded and options packets.
- <ffff-up>—Protocol is configured and operational.

< atm-defects >

Usage <atm-information>
 <atm-defects>
 <media-alarm>...</media-alarm>
 </atm-defects>
</atm-information>

Description No documentation is available yet.

Contents <media-alarm>—No documentation is available yet.

< atm-information >

Usage <physical-interface>
 <atm-information>
 <plcp-defects>...</plcp-defects>
 <atm-defects>...</atm-defects>
 <plcp-statistics>...</plcp-statistics>
 <atm-hcs-state>atm-hcs-state</atm-hcs-state>
 <atm-loss-of-cell>atm-loss-of-cell</atm-loss-of-cell>
 <atm-statistics>...</atm-statistics>
 </atm-information>
</physical-interface>

Description Operational information and statistics for ATM interfaces.

Contents <atm-defects>—No documentation is available yet.

<atm-hcs-state>—No documentation is available yet.

<atm-loss-of-cell>—No documentation is available yet.

<atm-statistics>—No documentation is available yet.

<plcp-defects>—No documentation is available yet.

<plcp-statistics>—No documentation is available yet.

< atm-statistics >

Usage	<atm-information virtual-circuit-information> <atm-statistics> <uncorrectable-hcs-errors>uncorrectable-hcs-errors</uncorrectable-hcs-errors> <correctable-hcs-errors>correctable-hcs-errors</correctable-hcs-errors> <tx-cell-fifo-overruns>tx-cell-fifo-overruns</tx-cell-fifo-overruns> <rx-cell-fifo-overruns>rx-cell-fifo-overruns</rx-cell-fifo-overruns> <rx-cell-fifo-underruns>rx-cell-fifo-underruns</rx-cell-fifo-underruns> <rx-cell-count>rx-cell-count</rx-cell-count> <tx-cell-count>tx-cell-count</tx-cell-count> <tx-idle-cell-count>tx-idle-cell-count</tx-idle-cell-count> <vc-queue-drops>vc-queue-drops</vc-queue-drops> <no-buffers>no-buffers</no-buffers> <length-errors>length-errors</length-errors> <timeouts>timeouts</timeouts> <rx-invalid-vcs>rx-invalid-vcs</rx-invalid-vcs> <bad-crcs>bad-crcs</bad-crcs> <oam-cell-no-buffers>oam-cell-no-buffers</oam-cell-no-buffers> </atm-statistics> </atm-information virtual-circuit-information>
Description	No documentation is available yet.
Contents	<bad-crcs>—No documentation is available yet. <correctable-hcs-errors>—No documentation is available yet. <length-errors>—No documentation is available yet. <no-buffers>—No documentation is available yet. <oam-cell-no-buffers>—No documentation is available yet. <rx-cell-count>—No documentation is available yet. <rx-cell-fifo-overruns>—No documentation is available yet. <rx-cell-fifo-underruns>—No documentation is available yet. <rx-invalid-vcs>—No documentation is available yet. <timeouts>—No documentation is available yet. <tx-cell-count>—No documentation is available yet. <tx-cell-fifo-overruns>—No documentation is available yet. <tx-idle-cell-count>—No documentation is available yet. <uncorrectable-hcs-errors>—No documentation is available yet. <vc-queue-drops>—No documentation is available yet.

• **<bundle>**

• **Usage** <multilink-traffic-statistics>
 <bundle>
 <fragments>...</fragments>
 <packets>...</packets>
 </bundle>
</multilink-traffic-statistics>

• **Description** No documentation is available yet.

• **Contents** <fragments>—No documentation is available yet.

 <packets>—No documentation is available yet.

• **<cds1-information>**

• **Usage** <physical-interface>
 <cds1-information>
 <interface-tx-queue>...</interface-tx-queue>
 </cds1-information>
</physical-interface>

• **Description** No documentation is available yet.

• **Contents** <interface-tx-queue>—No documentation is available yet.

• **<coc12-information>**

• **Usage** <physical-interface>
 <coc12-information>
 <interface-tx-queue>...</interface-tx-queue>
 </coc12-information>
</physical-interface>

• **Description** No documentation is available yet.

• **Contents** <interface-tx-queue>—No documentation is available yet.

• **<cos-information>**

• **Usage** <physical-interface>
 <cos-information>
 <cos-queue-config>...</cos-queue-config>
 </cos-information>
</physical-interface>

• **Description** Information about class of service configuration.

• **Contents** <cos-queue-config>—No documentation is available yet.

< cos-queue-config >

Usage <cos-information>
 <cos-queue-config>
 <cos-queue-number>cos-queue-number</cos-queue-number>
 <cos-queue-forwarding-class>cos-queue-forwarding-class</cos-queue-forwarding-class>
 <cos-queue-bandwidth>cos-queue-bandwidth</cos-queue-bandwidth>
 <cos-queue-bandwidth-bps>cos-queue-bandwidth-bps</cos-queue-bandwidth-bps>
 <cos-queue-buffer>cos-queue-buffer</cos-queue-buffer>
 <cos-queue-buffer-bytes>cos-queue-buffer-bytes</cos-queue-buffer-bytes>
 <cos-queue-priority>cos-queue-priority</cos-queue-priority>
 <cos-queue-limit>cos-queue-limit</cos-queue-limit>
 </cos-queue-config>
 </cos-information>

Description No documentation is available yet.

Contents <cos-queue-bandwidth>—No documentation is available yet.
 <cos-queue-bandwidth-bps>—No documentation is available yet.
 <cos-queue-buffer>—No documentation is available yet.
 <cos-queue-buffer-bytes>—No documentation is available yet.
 <cos-queue-forwarding-class>—No documentation is available yet.
 <cos-queue-limit>—No documentation is available yet.
 <cos-queue-number>—No documentation is available yet.
 <cos-queue-priority>—No documentation is available yet.

< ct3-information >

Usage <physical-interface>
 <ct3-information>
 <interface-tx-queue>...</interface-tx-queue>
 </ct3-information>
 </physical-interface>

Description No documentation is available yet.

Contents <interface-tx-queue>—No documentation is available yet.

• **< destination-class-statistics>**

Usage <address-family>
 <destination-class-statistics>
 <dcu-class-name>dcu-class-name</dcu-class-name>
 <dcu-class-packets>dcu-class-packets</dcu-class-packets>
 <dcu-class-bytes>dcu-class-bytes</dcu-class-bytes>
 </destination-class-statistics>
 </address-family>

Description Destination class usage (DCU) statistics.

Contents <dcu-class-bytes>—Number of bytes counted by DCU for this class.
 <dcu-class-name>—Name of DCU class.
 <dcu-class-packets>—Number of packets counted by DCU for this class.

• **< ds1-bert-information>**

Usage <physical-interface>
 <ds1-bert-information>
 <ds1-bert-period>ds1-bert-period</ds1-bert-period>
 <ds1-bert-elapsed>ds1-bert-elapsed</ds1-bert-elapsed>
 <ds1-bert-status>ds1-bert-status</ds1-bert-status>
 <ds1-bert-algorithm>ds1-bert-algorithm</ds1-bert-algorithm>
 <ds1-bert-error-rate>ds1-bert-error-rate</ds1-bert-error-rate>
 <ds1-bert-induced-error-rate>ds1-bert-induced-error-rate</ds1-bert-induced-error-rate>
 <ds1-bert-bit-count>ds1-bert-bit-count</ds1-bert-bit-count>
 <ds1-bert-error-bit-count>ds1-bert-error-bit-count</ds1-bert-error-bit-count>
 <ds1-bert-los-status>ds1-bert-los-status</ds1-bert-los-status>
 <ds1-bert-los-seconds>ds1-bert-los-seconds</ds1-bert-los-seconds>
 </ds1-bert-information>
 </physical-interface>

Description DS-1 BERT configuration and statistics.

Contents <ds1-bert-algorithm>—No documentation is available yet.
 <ds1-bert-bit-count>—No documentation is available yet.
 <ds1-bert-elapsed>—No documentation is available yet.
 <ds1-bert-error-bit-count>—No documentation is available yet.
 <ds1-bert-error-rate>—No documentation is available yet.
 <ds1-bert-induced-error-rate>—No documentation is available yet.
 <ds1-bert-los-seconds>—No documentation is available yet.
 <ds1-bert-los-status>—No documentation is available yet.
 <ds1-bert-period>—No documentation is available yet.
 <ds1-bert-status>—No documentation is available yet.

< ds3-bert-information>

Usage <physical-interface>
 <ds3-bert-information>
 <ds3-bert-period>ds3-bert-period</ds3-bert-period>
 <ds3-bert-elapsed>ds3-bert-elapsed</ds3-bert-elapsed>
 <ds3-bert-status>ds3-bert-status</ds3-bert-status>
 <ds3-bert-algorithm>ds3-bert-algorithm</ds3-bert-algorithm>
 <ds3-bert-error-rate>ds3-bert-error-rate</ds3-bert-error-rate>
 <ds3-bert-induced-error-rate>ds3-bert-induced-error-rate</ds3-bert-induced-error-rate>
 <ds3-bert-bit-count>ds3-bert-bit-count</ds3-bert-bit-count>
 <ds3-bert-bit-count-overflow>ds3-bert-bit-count-overflow</ds3-bert-bit-count-overflow>
 <ds3-bert-error-bit-count>ds3-bert-error-bit-count</ds3-bert-error-bit-count>
 <ds3-bert-error-bit-count-overflow>bit-count-overflow</ds3-bert-error-bit-count-overflow>
 <ds3-bert-los-status>ds3-bert-los-status</ds3-bert-los-status>
 <ds3-bert-los-count>ds3-bert-los-count</ds3-bert-los-count>
 <ds3-bert-los-seconds>ds3-bert-los-seconds</ds3-bert-los-seconds>
 </ds3-bert-information>
</physical-interface>

Description DS-3 BERT configuration and statistics.

Contents <ds3-bert-algorithm>—No documentation is available yet.
<ds3-bert-bit-count>—No documentation is available yet.
<ds3-bert-bit-count-overflow>—No documentation is available yet.
<ds3-bert-elapsed>—No documentation is available yet.
<ds3-bert-error-bit-count>—No documentation is available yet.
<ds3-bert-error-bit-count-overflow>—No documentation is available yet.
<ds3-bert-error-rate>—No documentation is available yet.
<ds3-bert-induced-error-rate>—No documentation is available yet.
<ds3-bert-los-count>—No documentation is available yet.
<ds3-bert-los-seconds>—No documentation is available yet.
<ds3-bert-los-status>—No documentation is available yet.
<ds3-bert-period>—No documentation is available yet.
<ds3-bert-status>—No documentation is available yet.

<dsu-information>

Usage <physical-interface>
<dsu-information>
 <dsu-compatibility-mode>dsu-compatibility-mode</dsu-compatibility-mode>
 <dsu-scrambler>dsu-scrambler</dsu-scrambler>
 <dsu-subrate>dsu-subrate</dsu-subrate>
 <feac-loopback>feac-loopback</feac-loopback>
 <feac-response>feac-response</feac-response>
 <feac-count>feac-count</feac-count>
</dsu-information>
</physical-interface>

Description DSU configuration and statistics.

Contents <dsu-compatibility-mode>—No documentation is available yet.

<dsu-scrambler>—No documentation is available yet.

<dsu-subrate>—No documentation is available yet.

<feac-count>—No documentation is available yet.

<feac-loopback>—No documentation is available yet.

<feac-response>—No documentation is available yet.

<e3-bert-information>

Usage <physical-interface>
<e3-bert-information>
 <e3-bert-period>e3-bert-period</e3-bert-period>
 <e3-bert-elapsed>e3-bert-elapsed</e3-bert-elapsed>
 <e3-bert-status>e3-bert-status</e3-bert-status>
 <e3-bert-algorithm>e3-bert-algorithm</e3-bert-algorithm>
 <e3-bert-error-rate>e3-bert-error-rate</e3-bert-error-rate>
 <e3-bert-induced-error-rate>e3-bert-induced-error-rate</e3-bert-induced-error-rate>
 <e3-bert-bit-count>e3-bert-bit-count</e3-bert-bit-count>
 <e3-bert-bit-count-overflow>e3-bert-bit-count-overflow</e3-bert-bit-count-overflow>
 <e3-bert-error-bit-count>e3-bert-error-bit-count</e3-bert-error-bit-count>
 <e3-bert-error-bit-count-overflow>bit-count-overflow</e3-bert-error-bit-count-overflow>
 <e3-bert-los-status>e3-bert-los-status</e3-bert-los-status>
 <e3-bert-los-count>e3-bert-los-count</e3-bert-los-count>
 <e3-bert-los-seconds>e3-bert-los-seconds</e3-bert-los-seconds>
</e3-bert-information>
</physical-interface>

Description E3 BERT configuration and statistics.

Contents <e3-bert-algorithm>—No documentation is available yet.

<e3-bert-bit-count>—No documentation is available yet.

<e3-bert-bit-count-overflow>—No documentation is available yet.

<e3-bert-elapsed>—No documentation is available yet.

<e3-bert-error-bit-count>—No documentation is available yet.

<e3-bert-error-bit-count-overflow>—No documentation is available yet.

<e3-bert-error-rate>—No documentation is available yet.

<e3-bert-induced-error-rate>—No documentation is available yet.

<e3-bert-los-count>—No documentation is available yet.

<e3-bert-los-seconds>—No documentation is available yet.

<e3-bert-los-status>—No documentation is available yet.

<e3-bert-period>—No documentation is available yet.

<e3-bert-status>—No documentation is available yet.

< es-ifd-stats >

Usage	<physical-interface> <es-ifd-stats> <total-anti-replay-count> <i>total-anti-replay-count</i> </total-anti-replay-count> <total-authentication-failure-count> <i>failure-count</i> </total-authentication-failure-count> </es-ifd-stats> </physical-interface>
Description	Encryption Services PIC statistics.
Contents	<total-anti-replay-count>—Number of anti-replay failures. <total-authentication-failure-count>—Number of authentication failures.

< ethernet-autonegotiation >

Usage	<physical-interface> <ethernet-autonegotiation> <autonegotiation-status> <i>autonegotiation-status</i> </autonegotiation-status> <link-partner-status> <i>link-partner-status</i> </link-partner-status> <link-partner-reason> <i>link-partner-reason</i> </link-partner-reason> <link-partner-duplexity> <i>link-partner-duplexity</i> </link-partner-duplexity> <link-partner-speed> <i>link-partner-speed</i> </link-partner-speed> <flow-control> <i>flow-control</i> </flow-control> </ethernet-autonegotiation> </physical-interface>
Description	Ethernet autonegotiation information.
Contents	<autonegotiation-status>—No documentation is available yet. <flow-control>—No documentation is available yet. <link-partner-duplexity>—No documentation is available yet.

- <link-partner-reason>—Reason link partner is down.
- <link-partner-speed>—Link partner speed.
- <link-partner-status>—No documentation is available yet.

< **ethernet-filter-statistics**>

Usage <physical-interface>
 <ethernet-filter-statistics>
 <input-packets>*input-packets*</input-packets>
 <input-reject-count>*input-reject-count*</input-reject-count>
 <input-reject-destination-address-count>*count*</input-reject-destination-address-count>
 <input-reject-source-address-count>*count*</input-reject-source-address-count>
 <output-packets>*output-packets*</output-packets>
 <output-packet-pad-count>*output-packet-pad-count*</output-packet-pad-count>
 <output-packet-error-count>*output-packet-error-count*</output-packet-error-count>
 <cam-destination-filter-count>*count*</cam-destination-filter-count>
 <cam-source-filter-count>*cam-source-filter-count*</cam-source-filter-count>
 </ethernet-filter-statistics>
 </physical-interface>

Description Ethernet filter statistics.

Contents <cam-destination-filter-count>—No documentation is available yet.

 <cam-source-filter-count>—No documentation is available yet.

 <input-packets>—No documentation is available yet.

 <input-reject-count>—No documentation is available yet.

 <input-reject-destination-address-count>—No documentation is available yet.

 <input-reject-source-address-count>—No documentation is available yet.

 <output-packet-error-count>—No documentation is available yet.

 <output-packet-pad-count>—No documentation is available yet.

 <output-packets>—No documentation is available yet.

< **ethernet-mac-statistics**>

Usage <physical-interface>
 <ethernet-mac-statistics>
 <input-bytes>input-bytes</input-bytes>
 <input-packets>input-packets</input-packets>
 <input-unicasts>input-unicasts</input-unicasts>
 <input-broadcasts>input-broadcasts</input-broadcasts>
 <input-multicasts>input-multicasts</input-multicasts>
 <input-crc-errors>input-crc-errors</input-crc-errors>
 <input-fifo-errors>input-fifo-errors</input-fifo-errors>
 <input-mac-control-frames>input-mac-control-frames</input-mac-control-frames>
 <input-mac-pause-frames>input-mac-pause-frames</input-mac-pause-frames>
 <input-oversized-frames>input-oversized-frames</input-oversized-frames>
 <input-jabber-frames>input-jabber-frames</input-jabber-frames>
 <input-fragment-frames>input-fragment-frames</input-fragment-frames>
 <input-vlan-tagged-frames>input-vlan-tagged-frames</input-vlan-tagged-frames>
 <input-code-violations>input-code-violations</input-code-violations>
 <output-bytes>output-bytes</output-bytes>
 <output-packets>output-packets</output-packets>
 <output-unicasts>output-unicasts</output-unicasts>
 <output-broadcasts>output-broadcasts</output-broadcasts>
 <output-multicasts>output-multicasts</output-multicasts>
 <output-crc-errors>output-crc-errors</output-crc-errors>
 <output-fifo-errors>output-fifo-errors</output-fifo-errors>
 <output-mac-control-frames>output-mac-control-frames</output-mac-control-frames>
 <output-mac-pause-frames>output-mac-pause-frames</output-mac-pause-frames>
 </ethernet-mac-statistics>
 </physical-interface>

Description Ethernet MAC statistics.

Contents <input-broadcasts>—No documentation is available yet.

<input-bytes>—No documentation is available yet.

<input-code-violations>—No documentation is available yet.

<input-crc-errors>—No documentation is available yet.

<input-fifo-errors>—Number of FIFO errors in the receive direction as reported by the ASIC on the PIC. If this value is ever nonzero, the PIC is probably broken.

<input-fragment-frames>—No documentation is available yet.

<input-jabber-frames>—No documentation is available yet.

<input-mac-control-frames>—No documentation is available yet.

<input-mac-pause-frames>—No documentation is available yet.

<input-multicasts>—No documentation is available yet.

<input-oversized-frames>—No documentation is available yet.

<input-packets>—No documentation is available yet.

- `<input-unicasts>`—No documentation is available yet.
- `<input-vlan-tagged-frames>`—No documentation is available yet.
- `<output-broadcasts>`—No documentation is available yet.
- `<output-bytes>`—No documentation is available yet.
- `<output-crc-errors>`—No documentation is available yet.
- `<output-fifo-errors>`—No documentation is available yet.
- `<output-mac-control-frames>`—No documentation is available yet.
- `<output-mac-pause-frames>`—No documentation is available yet.
- `<output-multicasts>`—No documentation is available yet.
- `<output-packets>`—No documentation is available yet.
- `<output-unicasts>`—No documentation is available yet.

<filter-information>

Usage `<logical-interface | address-family>`
 `<filter-information>`
 `<filter-family>filter-family</filter-family>`
 `<filter-input>filter-input</filter-input>`
 `<filter-output>filter-output</filter-output>`
 `</filter-information>`
 `</logical-interface | address-family>`

Description No documentation is available yet.

Contents `<filter-family>`—Protocol family of the filter.

`<filter-input>`—Name of the input filter.

`<filter-output>`—Name of the output filter.

<fragments>

Usage	<pre><bundle> <fragments> <input-frames>input-frames</input-frames> <input-fps>input-fps</input-fps> <input-bytes>input-bytes</input-bytes> <input-bps>input-bps</input-bps> <output-frames>output-frames</output-frames> <output-fps>output-fps</output-fps> <output-bytes>output-bytes</output-bytes> <output-bps>output-bps</output-bps> </fragments> </bundle></pre>
Description	No documentation is available yet.
Contents	<p><input-bps>—No documentation is available yet.</p> <p><input-bytes>—No documentation is available yet.</p> <p><input-fps>—No documentation is available yet.</p> <p><input-frames>—No documentation is available yet.</p> <p><output-bps>—No documentation is available yet.</p> <p><output-bytes>—No documentation is available yet.</p> <p><output-fps>—No documentation is available yet.</p> <p><output-frames>—No documentation is available yet.</p>

<hdlc-information>

Usage	<pre><physical-interface> <hdlc-information> <hdlc-rx-bucket-state>hdlc-rx-bucket-state</hdlc-rx-bucket-state> <hdlc-rx-bit-rate>hdlc-rx-bit-rate</hdlc-rx-bit-rate> <hdlc-rx-threshold>hdlc-rx-threshold</hdlc-rx-threshold> <hdlc-tx-bit-rate>hdlc-tx-bit-rate</hdlc-tx-bit-rate> <hdlc-tx-bucket-state>hdlc-tx-bucket-state</hdlc-tx-bucket-state> <hdlc-tx-threshold>hdlc-tx-threshold</hdlc-tx-threshold> <hdlc-giant-threshold>hdlc-giant-threshold</hdlc-giant-threshold> <hdlc-runt-threshold>hdlc-runt-threshold</hdlc-runt-threshold> </hdlc-information> </physical-interface></pre>
Description	No documentation is available yet.
Contents	<p><hdlc-giant-threshold>—No documentation is available yet.</p> <p><hdlc-runt-threshold>—No documentation is available yet.</p> <p><hdlc-rx-bit-rate>—No documentation is available yet.</p>

- <hdlc-rx-bucket-state>—No documentation is available yet.

<hdlc-rx-threshold>—No documentation is available yet.

<hdlc-tx-bit-rate>—No documentation is available yet.

<hdlc-tx-bucket-state>—No documentation is available yet.

<hdlc-tx-threshold>—No documentation is available yet.

< if-config-flags >

Usage	<physical-interface logical-interface> <if-config-flags> <iff-none/> <iff-hardware-down/> <iff-down/> <iff-up/> <iff-admin-down/> <iff-admin-up/> <iff-link-down/> <iff-device-down/> <iff-point-to-point/> <iff-point-to-multipoint/> <iff-multiaccess/> <iff-change/> <iff-inverse-arp/> <iff-no-multicast/> <iff-multicast/> <iff-promiscuous/> <iff-all-multicast/> <iff-snmp-traps/> <iff-rx-passive/> <iff-tx-passive/> <iff-cccdown/> </if-config-flags> </physical-interface logical-interface>
Description	No documentation is available yet.
Contents	<iff-admin-down>—Interface is in test mode, which means that some sanity checking, such as loop detection, is disabled. <iff-admin-up>—No documentation is available yet. <iff-all-multicast>—No multicast filtering (multicast promiscuous). <iff-cccdown>—CCC/TCC endpoint is down. <iff-change>—No documentation is available yet. <iff-device-down>—No documentation is available yet. <iff-down>—No documentation is available yet. <iff-hardware-down>—Interface is nonfunctional or incorrectly connected.

<iff-inverse-arp>—No documentation is available yet.

<iff-link-down>—Interface keepalives have indicated that the link is incomplete.

<iff-multiaccess>—No documentation is available yet.

<iff-multicast>—No documentation is available yet.

<iff-no-multicast>—Interface does not support multicast traffic.

<iff-none>—No documentation is available yet.

<iff-point-to-multipoint>—No documentation is available yet.

<iff-point-to-point>—Interface is point to point.

<iff-promiscuous>—Interface is in promiscuous mode and will see frames addressed to all physical addresses.

<iff-rx-passive>—Receive is disabled.

<iff-snmp-traps>—SNMP traps are enabled.

<iff-tx-passive>—Transmit is disabled.

<iff-up>—Interface is enabled and operational.

< if-device-flags >

Usage

```
<physical-interface>
  <if-device-flags>
    <ifdf-none/>
    <ifdf-present/>
    <ifdf-running/>
    <ifdf-duplex/>
    <ifdf-down/>
    <ifdf-no-carrier/>
    <ifdf-error1/>
    <ifdf-error2/>
    <ifdf-no-multicast/>
    <ifdf-loopback/>
    <ifdf-quench/>
    <ifdf-recv-all-multicasts/>
    <ifdf-promiscuous/>
    <ifdf-link-layer-down/>
    <ifdf-loop-detected/>
    <ifdf-pfe-gone/>
  </if-device-flags>
</physical-interface>
```

Description No documentation is available yet.

Contents <ifdf-down>—Device has been administratively disabled.

<ifdf-duplex>—Device will hear its own transmissions.

- <ifdf-error1>—No documentation is available yet.
- <ifdf-error2>—No documentation is available yet.
- <ifdf-link-layer-down>—The link-layer protocol failed to connect successfully with the remote end point.
- <ifdf-loop-detected>—The link layer has received frames that it sent and suspects a physical loopback.
- <ifdf-loopback>—Device is in physical loopback.
- <ifdf-no-carrier>—Where the media supports carrier recognition, this indicates that no carrier is currently seen.
- <ifdf-no-multicast>—Device does not support multicast traffic.
- <ifdf-none>—No documentation is available yet.
- <ifdf-pfe-gone>—No documentation is available yet.
- <ifdf-present>—Device is physically present and recognized.
- <ifdf-promiscuous>—Device is in promiscuous mode and will see frames addressed to all physical addresses on the media.
- <ifdf-quench>—Device is quenched because it overran its output buffer.
- <ifdf-recv-all-multicasts>—No multicast filtering (multicast promiscuous).
- <ifdf-running>—Device is active and enabled.

< if-media-flags >

Usage <physical-interface>
 <if-media-flags>
 <ifmf-none/>
 <ifmf-autoselect/>
 <ifmf-keepalives/>
 <ifmf-no-keepalives/>
 <ifmf-give-up/>
 <ifmf-loose-lcp/>
 <ifmf-loose-ncp/>
 <ifmf-loose-lmi/>
 <ifmf-dce/>
 <ifmf-dte/>
 </if-media-flags>
 </physical-interface>

Description No documentation is available yet.

Contents <ifmf-autoselect>—No documentation is available yet.

 <ifmf-dce>—No documentation is available yet.

 <ifmf-dte>—No documentation is available yet.

<ifmf-give-up>—Link protocol will not continue to retry to connect after repeated failures.

<ifmf-keepalives>—Link protocol keepalives are enabled.

<ifmf-loose-lcp>—PPP will not use LCP to indicate whether the link protocol is up.

<ifmf-loose-lmi>—Frame Relay will not use LMI to indicate whether the link protocol is up.

<ifmf-loose-ncp>—PPP will not use NCP to indicate whether the device is up.

<ifmf-no-keepalives>—Link protocol keepalives are disabled.

<ifmf-none>—No documentation is available yet.

<**ifa-flags**>

Usage	<interface-address> < ifa-flags > <ifaf-none/> <ifaf-primary/> <ifaf-preferred/> <ifaf-down/> <ifaf-current-default/> <ifaf-current-preferred/> <ifaf-current-primary/> <generic-value>generic-value</generic-value> </ ifa-flags > </interface-address>
Description	No documentation is available yet.
Contents	<generic-value>—Hexadecimal value of unknown flag bits.
	<ifaf-current-default>—This address is the default address of the router. That is, it is the address sourced by SNMP, ping, traceroute, and other network utilities.
	<ifaf-current-preferred>—This address is the default local address used for packets sourced by the local router to destinations on the subnet.
	<ifaf-current-primary>—This address is used by default as the local address for broadcast and multicast packets sourced locally and sent out the interface.
	<ifaf-down>—The software noticed that the link was down and changed the interface routes to be nonforwarding.
	<ifaf-none>—No documentation is available yet.
	<ifaf-preferred>—This address is a candidate to become the preferred address.
	<ifaf-primary>—This address is a candidate to become the primary address.

• **< ifvc-flags >**

Usage <virtual-circuit-information>
 <ifvc-flags>
 <ifvc-down/>
 <ifvc-none/>
 <ifvc-active/>
 <ifvc-closed/>
 <ifvc-inverse-arp/>
 <ifvc-ilmi/>
 <ifvc-oam/>
 <ifvc-shaping/>
 <ifvc-passiveoam/>
 <ifvc-multicast/>
 <ifvc-ccc-down/>
 </ifvc-flags>
 </virtual-circuit-information>

Description No documentation is available yet.

Contents <ifvc-active>—No documentation is available yet.

 <ifvc-ccc-down>—No documentation is available yet.

 <ifvc-closed>—No documentation is available yet.

 <ifvc-down>—No documentation is available yet.

 <ifvc-ilmi>—No documentation is available yet.

 <ifvc-inverse-arp>—No documentation is available yet.

 <ifvc-multicast>—No documentation is available yet.

 <ifvc-none>—No documentation is available yet.

 <ifvc-oam>—No documentation is available yet.

 <ifvc-passiveoam>—No documentation is available yet.

 <ifvc-shaping>—No documentation is available yet.

• **< ifvc-multipoint-destination >**

Usage <virtual-circuit-information>
 <ifvc-multipoint-destination>
 <multipoint-address>multipoint-address</multipoint-address>
 </ifvc-multipoint-destination>
 </virtual-circuit-information>

Description No documentation is available yet.

Contents <multipoint-address>—Protocol address of the remote side of this connection.

<**in-arp-statistics**>

Usage	<pre><logical-interface> <in-arp-statistics> <received-count>received-count</received-count> <transmitted-count>transmitted-count</transmitted-count> <denied-count>denied-count</denied-count> <operation-not-supported-count>count</operation-not-supported-count> <bad-packet-length-count>bad-packet-length-count</bad-packet-length-count> <bad-protocol-count>bad-protocol-count</bad-protocol-count> <bad-protocol-length-count>bad-protocol-length-count</bad-protocol-length-count> <bad-hardware-length-count>bad-hardware-length-count</bad-hardware-length-count> <dropped-count>dropped-count</dropped-count> <last-received>last-received</last-received> <last-transmitted>last-transmitted</last-transmitted> </in-arp-statistics> </logical-interface></pre>
Description	Container tag for ARP statistics.
Contents	<p><bad-hardware-length-count>—Number of ARPs with bad hardware length.</p> <p><bad-packet-length-count>—Number of ARPs with bad packet length.</p> <p><bad-protocol-count>—Number of ARPs with bad protocol.</p> <p><bad-protocol-length-count>—Number of ARPs with bad protocol length.</p> <p><denied-count>—Number of ARPs denied.</p> <p><dropped-count>—Number of ARPs dropped.</p> <p><last-received>—Time an ARP was last received.</p> <p><last-transmitted>—Time an ARP was last sent.</p> <p><operation-not-supported-count>—Number of ARPs with operation not supported.</p> <p><received-count>—Number of ARPs received.</p> <p><transmitted-count>—Number of ARPs sent.</p>

- **<input-error-list>**

Usage	<pre><physical-interface> <input-error-list> <input-errors>input-errors</input-errors> <input-drops>input-drops</input-drops> <invalid-vcs>invalid-vcs</invalid-vcs> <framing-errors>framing-errors</framing-errors> <input-runts>input-runts</input-runts> <input-giants>input-giants</input-giants> <input-bucket-drops>input-bucket-drops</input-bucket-drops> <input-discards>input-discards</input-discards> <input-l3-incompletes>input-l3-incompletes</input-l3-incompletes> <input-l2-channel-errors>input-l2-channel-errors</input-l2-channel-errors> <input-l2-mismatch-timeouts>timeouts</input-l2-mismatch-timeouts> <input-fifo-errors>input-fifo-errors</input-fifo-errors> <hs-link-crc-errors>hs-link-crc-errors</hs-link-crc-errors> <hs-link-fifo-overflows>hs-link-fifo-overflows</hs-link-fifo-overflows> <sram-errors>sram-errors</sram-errors> </input-error-list> </physical-interface></pre>
Description	Input errors on this interface.
Contents	<p><framing-errors>—No documentation is available yet.</p> <p><hs-link-crc-errors>—Count of errors on the high-speed links between the ASICs responsible for handling the router interfaces.</p> <p><hs-link-fifo-overflows>—Count of errors on the high-speed links between the ASICs responsible for handling the router interfaces.</p> <p><input-bucket-drops>—No documentation is available yet.</p> <p><input-discards>—Frames that the incoming packet match code discarded because they were not recognized or of interest. Usually, this field reports protocols that the JUNOS software does not handle, such as CDP.</p> <p><input-drops>—No documentation is available yet.</p> <p><input-errors>—Sum of the incoming frame aborts and FCS errors.</p> <p><input-fifo-errors>—Number of FIFO errors in the receive direction as reported by the ASIC on the PIC. If this value is ever nonzero, the PIC is probably broken.</p> <p><input-giants>—No documentation is available yet.</p> <p><input-l2-channel-errors>—This counter increments when the software cannot find a valid logical interface (for example, s0-6/0/3.0) for an incoming frame.</p> <p><input-l2-mismatch-timeouts>—Count of malformed or short packets that cause the incoming packet handler to discard the frame as unreadable.</p> <p><input-l3-incompletes>—This counter is incremented when the incoming packet fails Layer 3 (usually IPv4) sanity checks of the header. So, for example, a frame with less than 20 bytes of available IP header would be discarded and this counter would be incremented.</p>

<input-runts>—No documentation is available yet.

<invalid-vcs>—No documentation is available yet.

<sram-errors>—No documentation is available yet.

<**interface-address**>

Usage <address-family>
 <interface-address>
 <ifa-flags>...</ifa-flags>
 <generation>generation</generation>
 <ifa-destination>ifa-destination</ifa-destination>
 <ifa-local>ifa-local</ifa-local>
 <ifa-broadcast>ifa-broadcast</ifa-broadcast>
 </interface-address>
 </address-family>

Description No documentation is available yet.

Contents <generation>—Generation number used to distinguish between successive instances of this interface.

<ifa-broadcast>—Network broadcast address.

<ifa-destination>—Protocol address of the remote side of this connection.

<ifa-flags>—No documentation is available yet.

<ifa-local>—Protocol address on this interface.

- **< interface-alarms >**

```

Usage   <active-alarms | active-defects>
      <interface-alarms>
          <alarm-not-present/>
          <sonet-alarm-lol/>
          <sonet-alarm-pll/>
          <sonet-alarm-lof/>
          <sonet-alarm-los/>
          <sonet-alarm-sef/>
          <sonet-alarm-lais/>
          <sonet-alarm-pais/>
          <sonet-alarm-lop/>
          <sonet-alarm-berr-sd/>
          <sonet-alarm-berr-sf/>
          <sonet-alarm-lrdi/>
          <sonet-alarm-prdi/>
          <sonet-alarm-rei/>
          <sonet-alarm-uneq/>
          <sonet-alarm-pmis/>
          <sonet-alarm-loc/>
          <sdh-alarm-lol/>
          <sdh-alarm-pll/>
          <sdh-alarm-lof/>
          <sdh-alarm-los/>
          <sdh-alarm-oof/>
          <sdh-alarm-msais/>
          <sdh-alarm-hpais/>
          <sdh-alarm-lop/>
          <sdh-alarm-berr-sd/>
          <sdh-alarm-berr-sf/>
          <sdh-alarm-msferf/>
          <sdh-alarm-hpferf/>
          <sdh-alarm-hpfebe/>
          <sdh-alarm-hpuneq/>
          <sdh-alarm-hpplm/>
          <sdh-alarm-loc/>
          <ds3-alarm-pll/>
          <ds3-alarm-ais/>
          <ds3-alarm-lof/>
          <ds3-alarm-los/>
          <ds3-alarm-lcv/>
          <ds3-alarm-exz/>
          <ds3-alarm-ferf/>
          <ds3-alarm-ylw/>
          <ds3-alarm-idle/>
          <ds1-alarm-ais/>
          <ds1-alarm-lof/>
          <ds1-alarm-los/>
          <ds1-alarm-ylw/>
          <ethernet-alarm-link-down/>
          <generic-value>generic-value</generic-value>
      </interface-alarms>
  </active-alarms | active-defects>

```

Description Container tag for interface alarms.

Contents	<alarm-not-present>—No alarm indicated.
	<ds1-alarm-ais>—AIS alarm.
	<ds1-alarm-lof>—Loss of frame alarm.
	<ds1-alarm-los>—Loss of signal alarm.
	<ds1-alarm-ylw>—Yellow alarm.
	<ds3-alarm-ais>—AIS alarm.
	<ds3-alarm-exz>—Excessive zeros alarm.
	<ds3-alarm-f erf>—Far-end receive failure alarm.
	<ds3-alarm-idle>—Idle alarm.
	<ds3-alarm-lcv>—Line code violation alarm.
	<ds3-alarm-lof>—Loss of frame alarm.
	<ds3-alarm-los>—Loss of signal alarm.
	<ds3-alarm-pll>—PLL lock alarm.
	<ds3-alarm-ylw>—Yellow alarm.
	<ethernet-alarm-link-down>—Link alive failure.
	<generic-value>—Hexadecimal value of unknown flag bits.
	<sdh-alarm-berr-sd>—Bit error rate alarm, defect.
	<sdh-alarm-berr-sf>—Bit error rate alarm, fault.
	<sdh-alarm-hpais>—High order path AIS alarm.
	<sdh-alarm-hpfebe>—High order path far-end block error alarm.
	<sdh-alarm-hpferf>—High order path far-end remote failure alarm.
	<sdh-alarm-hpplm>—High order path payload level mismatch alarm.
	<sdh-alarm-hpuneq>—High order path unequipped alarm.
	<sdh-alarm-loc>—Loss of cell delineation alarm.
	<sdh-alarm-lof>—Loss of frame alarm.
	<sdh-alarm-lol>—Loss of light alarm.
	<sdh-alarm-lop>—Loss of pointer alarm.
	<sdh-alarm-los>—Loss of signal alarm.
	<sdh-alarm-msais>—Multiplex section AIS alarm.

- `<sdh-alarm-msferf>`—Multiplex section far-end remote failure alarm.
- `<sdh-alarm-oof>`—Out of frame alarm.
- `<sdh-alarm-pll>`—PLL lock alarm.
- `<sonet-alarm-berr-sd>`—Bit error rate alarm, defect.
- `<sonet-alarm-berr-sf>`—Bit error rate alarm, fault.
- `<sonet-alarm-lais>`—Line AIS alarm.
- `<sonet-alarm-loc>`—Loss of cell delineation alarm.
- `<sonet-alarm-lof>`—Loss of frame alarm.
- `<sonet-alarm-lol>`—Loss of light alarm.
- `<sonet-alarm-lop>`—Loss of pointer alarm.
- `<sonet-alarm-los>`—Loss of signal alarm.
- `<sonet-alarm-lrdi>`—Line remote defect indicator alarm.
- `<sonet-alarm-pais>`—Path AIS alarm.
- `<sonet-alarm-pll>`—PLL lock alarm.
- `<sonet-alarm-pmis>`—Path payload level mismatch alarm.
- `<sonet-alarm-prdi>`—Path remote defect indicator alarm.
- `<sonet-alarm-rei>`—Path remote error indicator alarm.
- `<sonet-alarm-sef>`—Severely errored frame alarm.
- `<sonet-alarm-uneq>`—Unequipped alarm.

< interface-filter-information >

Usage `<rpc-reply>`
 `<interface-filter-information>`
 `<physical-interface>...</physical-interface>`
 `<logical-interface>...</logical-interface>`
 `</interface-filter-information>`
 `</rpc-reply>`

Description No documentation is available yet.

Contents `<logical-interface>`—Information about a single logical interface.
 `<physical-interface>`—Information about a single physical interface.

< interface-information >

Usage	<rpc-reply> <interface-information> <physical-interface>...</physical-interface> <logical-interface>...</logical-interface> </interface-information> </rpc-reply>
Description	No documentation is available yet.
Contents	<logical-interface>—Information about a single logical interface. <physical-interface>—Information about a single physical interface.

< interface-policer-information >

Usage	<rpc-reply> <interface-policer-information> <physical-interface>...</physical-interface> <logical-interface>...</logical-interface> </interface-policer-information> </rpc-reply>
Description	No documentation is available yet.
Contents	<logical-interface>—Information about a single logical interface. <physical-interface>—Information about a single physical interface.

< interface-tx-queue >

Usage	<ct3-information coc12-information cds1-information nxds0-information> <interface-tx-queue> <name>name</name> <bandwidth>bandwidth</bandwidth> <wrr>wrr</wrr> <output-packets>output-packets</output-packets> <output-bytes>output-bytes</output-bytes> <output-drops>output-drops</output-drops> <output-drops-bytes>output-drops-bytes</output-drops-bytes> <output-errors>output-errors</output-errors> </interface-tx-queue> </ct3-information coc12-information cds1-information nxds0-information>
Description	No documentation is available yet.
Contents	<bandwidth>—No documentation is available yet. <name>—Name of this item. <output-bytes>—No documentation is available yet.

- `<output-drops>`—Number of packets dropped by the output queue of the I/O Manager ASIC.
If the interface is saturated, this number increments once for every packet that is dropped by the ASIC's RED mechanism.
- `<output-drops-bytes>`—No documentation is available yet.
- `<output-errors>`—Sum of the outgoing frame aborts and FCS errors.
- `<output-packets>`—No documentation is available yet.
- `<wrr>`—No documentation is available yet.

<keepalive-config>

Usage `<physical-interface>`
 `<keepalive-config>`
 `<keepalive-interval>keepalive-interval</keepalive-interval>`
 `<keepalive-up-count>keepalive-up-count</keepalive-up-count>`
 `<keepalive-down-count>keepalive-down-count</keepalive-down-count>`
 `</keepalive-config>`
 `</physical-interface>`

Description Configured keepalive settings on this interface.

Contents `<keepalive-down-count>`—No documentation is available yet.

 `<keepalive-interval>`—No documentation is available yet.

 `<keepalive-up-count>`—No documentation is available yet.

<keepalive-statistics>

Usage `<physical-interface>`
 `<keepalive-statistics>`
 `<keepalive-lmi-descriptor>keepalive-lmi-descriptor</keepalive-lmi-descriptor>`
 `<keepalive-input-count>keepalive-input-count</keepalive-input-count>`
 `<keepalive-input-time>keepalive-input-time</keepalive-input-time>`
 `<keepalive-output-count>keepalive-output-count</keepalive-output-count>`
 `<keepalive-output-time>keepalive-output-time</keepalive-output-time>`
 `</keepalive-statistics>`
 `</physical-interface>`

Description Keepalive statistics for this interface.

Contents `<keepalive-input-count>`—No documentation is available yet.

 `<keepalive-input-time>`—No documentation is available yet.

 `<keepalive-lmi-descriptor>`—No documentation is available yet.

 `<keepalive-output-count>`—No documentation is available yet.

 `<keepalive-output-time>`—No documentation is available yet.

<**lag-bundle**>

Usage	<pre><lag-traffic-statistics> <lag-bundle> <input-packets>input-packets</input-packets> <input-pps>input-pps</input-pps> <input-bytes>input-bytes</input-bytes> <input-bps>input-bps</input-bps> <output-packets>output-packets</output-packets> <output-pps>output-pps</output-pps> <output-bytes>output-bytes</output-bytes> <output-bps>output-bps</output-bps> </lag-bundle> </lag-traffic-statistics></pre>
Description	No documentation is available yet.
Contents	<p><input-bps>—No documentation is available yet.</p> <p><input-bytes>—No documentation is available yet.</p> <p><input-packets>—No documentation is available yet.</p> <p><input-pps>—No documentation is available yet.</p> <p><output-bps>—No documentation is available yet.</p> <p><output-bytes>—No documentation is available yet.</p> <p><output-packets>—No documentation is available yet.</p> <p><output-pps>—No documentation is available yet.</p>

<**lag-link**>

Usage	<pre><lag-traffic-statistics> <lag-link> <name>name</name> <down/> <input-packets>input-packets</input-packets> <input-pps>input-pps</input-pps> <input-bytes>input-bytes</input-bytes> <input-bps>input-bps</input-bps> <output-packets>output-packets</output-packets> <output-pps>output-pps</output-pps> <output-bytes>output-bytes</output-bytes> <output-bps>output-bps</output-bps> </lag-link> </lag-traffic-statistics></pre>
Description	No documentation is available yet.
Contents	<p><down>—Link is down.</p> <p><input-bps>—No documentation is available yet.</p>

- `<input-bytes>`—No documentation is available yet.
- `<input-packets>`—No documentation is available yet.
- `<input-pps>`—No documentation is available yet.
- `<name>`—Name of this item.
- `<output-bps>`—No documentation is available yet.
- `<output-bytes>`—No documentation is available yet.
- `<output-packets>`—No documentation is available yet.
- `<output-pps>`—No documentation is available yet.

<lag-marker>

Usage `<lag-traffic-statistics>`
 `<lag-marker>`
 `<name>name</name>`
 `<marker-rx-packets>marker-rx-packets</marker-rx-packets>`
 `<marker-response-tx-packets>packets</marker-response-tx-packets>`
 `<unknown-rx-packets>unknown-rx-packets</unknown-rx-packets>`
 `<illegal-rx-packets>illegal-rx-packets</illegal-rx-packets>`
 `</lag-marker>`
 `</lag-traffic-statistics>`

Description No documentation is available yet.

Contents `<illegal-rx-packets>`—No documentation is available yet.

 `<marker-response-tx-packets>`—No documentation is available yet.

 `<marker-rx-packets>`—No documentation is available yet.

 `<name>`—Name of this item.

 `<unknown-rx-packets>`—No documentation is available yet.

<lag-traffic-statistics>

Usage `<logical-interface>`
 `<lag-traffic-statistics>`
 `<lag-bundle>...</lag-bundle>`
 `<lag-link>...</lag-link>`
 `<lag-marker>...</lag-marker>`
 `</lag-traffic-statistics>`
 `</logical-interface>`

Description No documentation is available yet.

Contents <lag-bundle>—No documentation is available yet.

<lag-link>—No documentation is available yet.

<lag-marker>—No documentation is available yet.

<link>

Usage <multilink-traffic-statistics>
 <link>
 <name>name</name>
 <down/>
 <input-frames>input-frames</input-frames>
 <input-fps>input-fps</input-fps>
 <input-bytes>input-bytes</input-bytes>
 <input-bps>input-bps</input-bps>
 <output-frames>output-frames</output-frames>
 <output-fps>output-fps</output-fps>
 <output-bytes>output-bytes</output-bytes>
 <output-bps>output-bps</output-bps>
 </link>
 </multilink-traffic-statistics>

Description No documentation is available yet.

Contents <down>—Link is down.

<input-bps>—No documentation is available yet.

<input-bytes>—No documentation is available yet.

<input-fps>—No documentation is available yet.

<input-frames>—No documentation is available yet.

<name>—Name of this item.

<output-bps>—No documentation is available yet.

<output-bytes>—No documentation is available yet.

<output-fps>—No documentation is available yet.

<output-frames>—No documentation is available yet.

- **< lmi-dce-config >**

Usage <physical-interface>
 <lmi-dce-config>
 <lmi-type>lmi-type</lmi-type>
 <lmi-n392dce>lmi-n392dce</lmi-n392dce>
 <lmi-n393dce>lmi-n393dce</lmi-n393dce>
 <lmi-t392dce>lmi-t392dce</lmi-t392dce>
 </lmi-dce-config>
 </physical-interface>

Description Configured LMI DCE setting on this interface.

Contents <lmi-n392dce>—No documentation is available yet.

 <lmi-n393dce>—No documentation is available yet.

 <lmi-t392dce>—No documentation is available yet.

 <lmi-type>—No documentation is available yet.

- **< lmi-dte-config >**

Usage <physical-interface>
 <lmi-dte-config>
 <lmi-type>lmi-type</lmi-type>
 <lmi-n391dte>lmi-n391dte</lmi-n391dte>
 <lmi-n392dte>lmi-n392dte</lmi-n392dte>
 <lmi-n393dte>lmi-n393dte</lmi-n393dte>
 <lmi-t391dte>lmi-t391dte</lmi-t391dte>
 </lmi-dte-config>
 </physical-interface>

Description Configured LMI DTE setting on this interface.

Contents <lmi-n391dte>—No documentation is available yet.

 <lmi-n392dte>—No documentation is available yet.

 <lmi-n393dte>—No documentation is available yet.

 <lmi-t391dte>—No documentation is available yet.

 <lmi-type>—No documentation is available yet.

< local-traffic-statistics >

Usage	<pre><logical-interface> <local-traffic-statistics> <input-bytes>input-bytes</input-bytes> <output-bytes>output-bytes</output-bytes> <input-bps>input-bps</input-bps> <output-bps>output-bps</output-bps> <input-packets>input-packets</input-packets> <output-packets>output-packets</output-packets> <input-pps>input-pps</input-pps> <output-pps>output-pps</output-pps> </local-traffic-statistics> </logical-interface></pre>
Description	Statistics for traffic received from and transmitted to the Routing Engine. When a burst of traffic is received, the value in the output packet rate field might briefly exceed the peak cell rate. It takes a while (generally, less than 1 second) for this counter to stabilize.
Contents	<p><input-bps>—No documentation is available yet.</p> <p><input-bytes>—No documentation is available yet.</p> <p><input-packets>—No documentation is available yet.</p> <p><input-pps>—No documentation is available yet.</p> <p><output-bps>—No documentation is available yet.</p> <p><output-bytes>—No documentation is available yet.</p> <p><output-packets>—No documentation is available yet.</p> <p><output-pps>—No documentation is available yet.</p>

•	< logical-interface >
•	<p>Usage <physical-interface interface-information interface-filter-information interface-policer-information></p> <pre><logical-interface> <name>name</name> <admin-status>admin-status</admin-status> <oper-status>oper-status</oper-status> <local-index>local-index</local-index> <snmp-index>snmp-index</snmp-index> <generation>generation</generation> <description>description</description> <if-config-flags>...</if-config-flags> <link-address>link-address</link-address> <encapsulation>encapsulation</encapsulation> <logical-interface-bandwidth>logical-interface-bandwidth</logical-interface-bandwidth> <multilink-bundle-options>...</multilink-bundle-options> <multilink-bundle-errors>...</multilink-bundle-errors> <multilink-traffic-statistics>...</multilink-traffic-statistics> <traffic-statistics>...</traffic-statistics> <local-traffic-statistics>...</local-traffic-statistics> <transit-traffic-statistics>...</transit-traffic-statistics> <virtual-circuit-information>...</virtual-circuit-information> <filter-information>...</filter-information> <policer-information>...</policer-information> <address-family>...</address-family> <in-arp-statistics>...</in-arp-statistics> <lag-traffic-statistics>...</lag-traffic-statistics> </logical-interface> </physical-interface interface-information interface-filter-information interface-policer-information></pre>
•	<p>Description Information about a single logical interface.</p>
•	<p>Contents <address-family>—No documentation is available yet.</p>
•	<p> <admin-status>—The desired state of the interface.</p>
•	<p> <description>—Description of this interface.</p>
•	<p> <encapsulation>—Encapsulation on the logical interface.</p>
•	<p> <filter-information>—No documentation is available yet.</p>
•	<p> <generation>—Generation number used to distinguish between successive instances of this interface.</p>
•	<p> <if-config-flags>—No documentation is available yet.</p>
•	<p> <in-arp-statistics>—Container tag for ARP statistics.</p>
•	<p> <lag-traffic-statistics>—No documentation is available yet.</p>
•	<p> <link-address>—Link address on this logical interface.</p>
•	<p> <local-index>—Local kernel index for this interface.</p>

<local-traffic-statistics>—Statistics for traffic received from and transmitted to the Routing Engine. When a burst of traffic is received, the value in the output packet rate field might briefly exceed the peak cell rate. It takes a while (generally, less than 1 second) for this counter to stabilize.

<logical-interface-bandwidth>—Bandwidth of this logical interface.

<multilink-bundle-errors>—No documentation is available yet.

<multilink-bundle-options>—No documentation is available yet.

<multilink-traffic-statistics>—No documentation is available yet.

<name>—Name of this item.

<oper-status>—The current operational state of the interface.

<policer-information>—Interface policer information.

<snmp-index>—SNMP ifIndex for this interface.

<traffic-statistics>—Number and rate of bytes and packets received and transmitted on the physical interface.

<transit-traffic-statistics>—Statistics for traffic passing through the router. When a burst of traffic is received, the value in the output packet rate field might briefly exceed the peak cell rate. The counter usually stabilizes in 1 second or less.

<virtual-circuit-information>—Operational information and statistics for a virtual circuit.

< **media-alarm**>

Usage	<sonet-errors sonet-physical-information sonet-section-information sonet-line-information sonet-path-information sonet-vt-information media-information plcp-defects atm-defects> <media-alarm> <media-alarm-name> <i>media-alarm-name</i> </media-alarm-name> <media-alarm-seconds> <i>media-alarm-seconds</i> </media-alarm-seconds> <media-alarm-count> <i>media-alarm-count</i> </media-alarm-count> <media-alarm-state> <i>media-alarm-state</i> </media-alarm-state> </media-alarm> </sonet-errors sonet-physical-information sonet-section-information sonet-line-information sonet-path-information sonet-vt-information media-information plcp-defects atm-defects>
Description	No documentation is available yet.
Contents	<media-alarm-count>—No documentation is available yet. <media-alarm-name>—No documentation is available yet. <media-alarm-seconds>—No documentation is available yet. <media-alarm-state>—No documentation is available yet.

< media-information >

Usage <physical-interface>
 <media-information>
 <media-alarm>...</media-alarm>
 <ds1-timeslots>ds1-timeslots</ds1-timeslots>
 <ds1-line-encoding>ds1-line-encoding</ds1-line-encoding>
 <ds1-byte-encoding>ds1-byte-encoding</ds1-byte-encoding>
 <ds1-data-inversion>ds1-data-inversion</ds1-data-inversion>
 <ds1-buildout>ds1-buildout</ds1-buildout>
 <media-type>media-type</media-type>
 </media-information>
 </physical-interface>

Description Information about media alarms.

Contents <ds1-buildout>—Number of feet.

<ds1-byte-encoding>—No documentation is available yet.

<ds1-data-inversion>—No documentation is available yet.

<ds1-line-encoding>—No documentation is available yet.

<ds1-timeslots>—No documentation is available yet.

<media-alarm>—No documentation is available yet.

<media-type>—The type of media this information is for.

< multilink-bundle-errors >

Usage <logical-interface>
 <multilink-bundle-errors>
 <packet-drops>packet-drops</packet-drops>
 <packet-drop-bytes>packet-drop-bytes</packet-drop-bytes>
 <fragment-drops>fragment-drops</fragment-drops>
 <fragment-drop-bytes>fragment-drop-bytes</fragment-drop-bytes>
 <mrru-exceeded>mrru-exceeded</mrru-exceeded>
 <processing-errors>processing-errors</processing-errors>
 </multilink-bundle-errors>
 </logical-interface>

Description No documentation is available yet.

Contents <fragment-drop-bytes>—Number of bytes in dropped fragments.

<fragment-drops>—Number of fragments dropped.

<mrru-exceeded>—Number of assembled packets that exceeded MRRU.

<packet-drop-bytes>—Number of bytes in dropped packets.

<packet-drops>—Number of packets dropped.

<processing-errors>—Number of errors encountered in assembling packets.

< multilink-bundle-options >

Usage	<pre><logical-interface> <multilink-bundle-options> <mrru>mrru</mrru> <drop-timeout>drop-timeout</drop-timeout> <sequence-number-format>sequence-number-format</sequence-number-format> <fragment-threshold>fragment-threshold</fragment-threshold> <minimum-links>minimum-links</minimum-links> </multilink-bundle-options> </logical-interface></pre>
Description	No documentation is available yet.
Contents	<p><drop-timeout>—No documentation is available yet.</p> <p><fragment-threshold>—No documentation is available yet.</p> <p><minimum-links>—No documentation is available yet.</p> <p><mrru>—No documentation is available yet.</p> <p><sequence-number-format>—No documentation is available yet.</p>

< multilink-interface-errors >

Usage	<pre><physical-interface> <multilink-interface-errors> <oversized-frames>oversized-frames</oversized-frames> <input-error-frames>input-error-frames</input-error-frames> <input-disabled-bundle>input-disabled-bundle</input-disabled-bundle> <output-disabled-bundle>output-disabled-bundle</output-disabled-bundle> <queuing-drops>queuing-drops</queuing-drops> <packet-buffer-overflow>packet-buffer-overflow</packet-buffer-overflow> <fragment-buffer-overflow>fragment-buffer-overflow</fragment-buffer-overflow> <fragment-timeout>fragment-timeout</fragment-timeout> <sequence-number-missing>sequence-number-missing</sequence-number-missing> <out-of-order-sequence-number>number</out-of-order-sequence-number> <out-of-range-sequence-number>number</out-of-range-sequence-number> <data-memory-error>data-memory-error</data-memory-error> <control-memory-error>control-memory-error</control-memory-error> </multilink-interface-errors> </physical-interface></pre>
Description	No documentation is available yet.
Contents	<p><control-memory-error>—Errors detected in control memory.</p> <p><data-memory-error>—Errors detected in data memory.</p> <p><fragment-buffer-overflow>—Number of times the fragment data buffer overflowed.</p> <p><fragment-timeout>—Fragments timed out during assembly.</p> <p><input-disabled-bundle>—Count of packets received on a disabled link/bundle.</p>

- `<input-error-frames>`—Number of frames for which an error occurred on input.
- `<out-of-order-sequence-number>`—Fragments with an out-of-order sequence number.
- `<out-of-range-sequence-number>`—Fragments with an out-of-range sequence number.
- `<output-disabled-bundle>`—Count of packets transmitted on a disabled link/bundle.
- `<oversized-frames>`—Number of oversized frames detected.
- `<packet-buffer-overflow>`—Number of times the packet data buffer overflowed.
- `<queuing-drops>`—Count of packets dropped by the output queue of the I/O Manager ASIC.
- `<sequence-number-missing>`—Gap detected in sequence numbers.

< multilink-traffic-statistics >

Usage `<logical-interface>
 <multilink-traffic-statistics>
 <bundle>...</bundle>
 <link>...</link>
 </multilink-traffic-statistics>
</logical-interface>`

Description No documentation is available yet.

Contents `<bundle>`—No documentation is available yet.
`<link>`—No documentation is available yet.

< ncp-information >

Usage `<physical-interface>
 <ncp-information>
 <ncp-protocol>ncp-protocol</ncp-protocol>
 <ncp-state>ncp-state</ncp-state>
 </ncp-information>
</physical-interface>`

Description Network Control Protocol information.

Contents `<ncp-protocol>`—Network protocol for this NCP instance.
`<ncp-state>`—State of this NCP instance.

< **nxds0-information**>

Usage	<physical-interface> <nxds0-information> <interface-tx-queue>...</interface-tx-queue> </nxds0-information> </physical-interface>
Description	No documentation is available yet.
Contents	<interface-tx-queue>—No documentation is available yet.

< **oam-parameters**>

Usage	<virtual-circuit-information> <oam-parameters> <period>period</period> <up-count>up-count</up-count> <down-count>down-count</down-count> </oam-parameters> </virtual-circuit-information>
Description	No documentation is available yet.
Contents	<down-count>—No documentation is available yet. <period>—No documentation is available yet. <up-count>—No documentation is available yet.

< **oam-statistics**>

Usage	<virtual-circuit-information> <oam-statistics> <oam-loopback-received-count>count</oam-loopback-received-count> <oam-loopback-received-last>received-last</oam-loopback-received-last> <oam-loopback-transmitted-count>count</oam-loopback-transmitted-count> <oam-loopback-transmitted-last>transmitted-last</oam-loopback-transmitted-last> <oam-rdi-received-count>oam-rdi-received-count</oam-rdi-received-count> <oam-rdi-received-last>oam-rdi-received-last</oam-rdi-received-last> <oam-rdi-transmitted-count>oam-rdi-transmitted-count</oam-rdi-transmitted-count> <oam-rdi-transmitted-last>oam-rdi-transmitted-last</oam-rdi-transmitted-last> <oam-ais-received-count>oam-ais-received-count</oam-ais-received-count> <oam-ais-received-last>oam-ais-received-last</oam-ais-received-last> <oam-total-transmitted-count>count</oam-total-transmitted-count> <oam-total-received-count>oam-total-received-count</oam-total-received-count> </oam-statistics> </virtual-circuit-information>
Description	Container tag for OAM statistics.
Contents	<oam-ais-received-count>—No documentation is available yet. <oam-ais-received-last>—No documentation is available yet.

- <oam-loopback-received-count>—No documentation is available yet.
- <oam-loopback-received-last>—No documentation is available yet.
- <oam-loopback-transmitted-count>—No documentation is available yet.
- <oam-loopback-transmitted-last>—No documentation is available yet.
- <oam-rdi-received-count>—No documentation is available yet.
- <oam-rdi-received-last>—No documentation is available yet.
- <oam-rdi-transmitted-count>—No documentation is available yet.
- <oam-rdi-transmitted-last>—No documentation is available yet.
- <oam-total-received-count>—No documentation is available yet.
- <oam-total-transmitted-count>—No documentation is available yet.

<output-error-list>

Usage

```
<physical-interface>
  <output-error-list>
    <carrier-transitions>carrier-transitions</carrier-transitions>
    <output-errors>output-errors</output-errors>
    <output-drops>output-drops</output-drops>
    <output-collisions>output-collisions</output-collisions>
    <output-hs-link-fifo-overflows>overflows</output-hs-link-fifo-overflows>
    <aged-packets>aged-packets</aged-packets>
    <output-fifo-errors>output-fifo-errors</output-fifo-errors>
    <hs-link-fifo-underflows>hs-link-fifo-underflows</hs-link-fifo-underflows>
    <hs-link-crc-errors>hs-link-crc-errors</hs-link-crc-errors>
  </output-error-list>
</physical-interface>
```

Description Output errors on this interface.

Contents <aged-packets>—Number of packets that remained in shared packet SDRAM for so long that the system automatically purged them. The value in this field should never increment. If it does, it is most likely a software bug or possible broken hardware.

<carrier-transitions>—Number of times the interface has gone from down to up. This number should not increment quickly, increasing, for example, only when the cable is unplugged or the far end system is powered down and up. If it does increment quickly (perhaps, 1 every 10 seconds), then something is broken, either the cable, the far end system, or the PIC.

<hs-link-crc-errors>—Count of errors on the high-speed links between the ASICs responsible for handling the router interfaces.

<hs-link-fifo-underflows>—Numbers of errors on the high-speed links between the ASICs responsible for handling the router interfaces. The value in this field should always be 0. If it increments, either the FPC or the PIC is broken.

<output-collisions>—Number of Ethernet collisions. The Gigabit Ethernet PIC and Fast Ethernet PIC support only full-duplex operation, so this number should always remain 0. If it is ever nonzero, there is a software bug.

<output-drops>—Number of packets dropped by the output queue of the I/O Manager ASIC. If the interface is saturated, this number increments once for every packet that is dropped by the ASIC's RED mechanism.

<output-errors>—Sum of the outgoing frame aborts and FCS errors.

<output-fifo-errors>—No documentation is available yet.

<output-hs-link-fifo-overflows>—No documentation is available yet.

<**packets**>

Usage	<pre><bundle> <packets> <input-frames>input-frames</input-frames> <input-fps>input-fps</input-fps> <input-bytes>input-bytes</input-bytes> <input-bps>input-bps</input-bps> <output-frames>output-frames</output-frames> <output-fps>output-fps</output-fps> <output-bytes>output-bytes</output-bytes> <output-bps>output-bps</output-bps> </packets> </bundle></pre>
Description	No documentation is available yet.
Contents	<p><input-bps>—No documentation is available yet.</p> <p><input-bytes>—No documentation is available yet.</p> <p><input-fps>—No documentation is available yet.</p> <p><input-frames>—No documentation is available yet.</p> <p><output-bps>—No documentation is available yet.</p> <p><output-bytes>—No documentation is available yet.</p> <p><output-fps>—No documentation is available yet.</p> <p><output-frames>—No documentation is available yet.</p>

- **< pfe-information >**

```
Usage <physical-interface>
      <pfe-information>
        <destination-slot>destination-slot</destination-slot>
        <destination-mask>destination-mask</destination-mask>
        <stream-number>stream-number</stream-number>
        <stream-mask>stream-mask</stream-mask>
        <plp-byte>plp-byte</plp-byte>
        <plp-byte-count>plp-byte-count</plp-byte-count>
      </pfe-information>
    </physical-interface>
```

Description Information about Packet Forwarding Engine configuration.

Contents <destination-mask>—No documentation is available yet.

<destination-slot>—No documentation is available yet.

<plp-byte>—No documentation is available yet.

<plp-byte-count>—No documentation is available

<stream-mask>—No documentation is available yet.

<stream-number>—No documentation is available w

< physical-interface >

Usage <interface-information | interface-filter-information | interface-policer-information>

```

<physical-interface>
    <name>name</name>
    <admin-status>admin-status</admin-status>
    <oper-status>oper-status</oper-status>
    <local-index>local-index</local-index>
    <snmp-index>snmp-index</snmp-index>
    <generation>generation</generation>
    <description>description</description>
    <if-type>if-type</if-type>
    <link-level-type>link-level-type</link-level-type>
    <mtu>mtu</mtu>
    <speed>speed</speed>
    <clocking>clocking</clocking>
    <sonet-mode>sonet-mode</sonet-mode>
    <loopback>loopback</loopback>
    <atm-line-build-out>atm-line-build-out</atm-line-build-out>
    <atm-encapsulation>atm-encapsulation</atm-encapsulation>
    <atm-e3-framing>atm-e3-framing</atm-e3-framing>
    <sonet-loopback>sonet-loopback</sonet-loopback>
    <crc>crc</crc>
    <payload-scrambler>payload-scrambler</payload-scrambler>
    <ingress-rate-limit>ingress-rate-limit</ingress-rate-limit>
    <source-filtering>source-filtering</source-filtering>
    <if-flow-control>if-flow-control</if-flow-control>
    <minimum-links-in-aggregate>minimum-links</minimum-links-in-aggregate>
    <if-device-flags>...</if-device-flags>
    <if-config-flags>...</if-config-flags>
    <link-type>link-type</link-type>
    <if-media-flags>...</if-media-flags>
    <keepalive-config>...</keepalive-config>
    <lmi-dce-config>...</lmi-dce-config>
    <lmi-dte-config>...</lmi-dte-config>
    <queue-counters>...</queue-counters>
    <keepalive-statistics>...</keepalive-statistics>
    <lcp-state>lcp-state</lcp-state>
    <ncp-information>...</ncp-information>
    <chap-state>chap-state</chap-state>
    <physical-information>physical-information</physical-information>
    <es-ifd-stats>...</es-ifd-stats>
    <up-hold-time>up-hold-time</up-hold-time>
    <down-hold-time>down-hold-time</down-hold-time>
    <current-physical-address>current-physical-address</current-physical-address>
    <hardware-physical-address>hardware-physical-address</hardware-physical-address>
    <alternate-physical-address>alternate-physical-address</alternate-physical-address>
    <interface-flapped>interface-flapped</interface-flapped>
    <statistics-cleared>statistics-cleared</statistics-cleared>
    <traffic-statistics>...</traffic-statistics>
    <multilink-interface-errors>...</multilink-interface-errors>
    <input-error-list>...</input-error-list>
    <input-error-count>input-error-count</input-error-count>
    <output-error-list>...</output-error-list>
    <output-error-count>output-error-count</output-error-count>
    <active-alarms>...</active-alarms>
    <active-defects>...</active-defects>

```

```

• <sonet-errors>...</sonet-errors>
• <sonet-physical-information>...</sonet-physical-information>
• <sonet-section-information>...</sonet-section-information>
• <sonet-line-information>...</sonet-line-information>
• <sonet-path-information>...</sonet-path-information>
• <sonet-vt-information>...</sonet-vt-information>
• <sonet-rx-overhead>sonet-rx-overhead</sonet-rx-overhead>
• <sonet-tx-overhead>sonet-tx-overhead</sonet-tx-overhead>
• <sonet-rx-path-trace>sonet-rx-path-trace</sonet-rx-path-trace>
• <sonet-tx-path-trace>sonet-tx-path-trace</sonet-tx-path-trace>
• <media-information>...</media-information>
• <ethernet-mac-statistics>...</ethernet-mac-statistics>
• <ethernet-filter-statistics>...</ethernet-filter-statistics>
• <ethernet-autonegotiation>...</ethernet-autonegotiation>
• <atm-information>...</atm-information>
• <ct3-information>...</ct3-information>
• <coc12-information>...</coc12-information>
• <cds1-information>...</cds1-information>
• <nxds0-information>...</nxds0-information>
• <ds3-mode>ds3-mode</ds3-mode>
• <e3-framing>e3-framing</e3-framing>
• <ds1-framing>ds1-framing</ds1-framing>
• <dsu-information>...</dsu-information>
• <ds3-bert-information>...</ds3-bert-information>
• <e3-bert-information>...</e3-bert-information>
• <ds1-bert-information>...</ds1-bert-information>
• <hdlc-information>...</hdlc-information>
• <pfe-information>...</pfe-information>
• <logical-interface>...</logical-interface>
• <cos-information>...</cos-information>
• </physical-interface>
• </interface-information | interface-filter-information | interface-policer-information>

```

Description Information about a single physical interface.

Contents <active-alarms>—Media-specific defects that can render the interface unable to pass packets. When a defect persists for a certain amount of time, it is promoted to an alarm. Based on the router configuration, an alarm can ring the red or yellow alarm bell on the router or the red or yellow alarm LED on the craft interface.

<active-defects>—Media-specific defects that can render the interface unable to pass packets. When a defect persists for a certain amount of time, it is promoted to an alarm. Based on the router configuration, an alarm can ring the red or yellow alarm bell on the router or the red or yellow alarm LED on the craft interface.

<admin-status>—The desired state of the interface.

<alternate-physical-address>—Alternate physical address for this interface.

<atm-e3-framing>—Type of framing.

<atm-encapsulation>—Type of ATM encapsulation.

<atm-information>—Operational information and statistics for ATM interfaces.

<atm-line-build-out>—Line buildout.

<cds1-information>—No documentation is available yet.

<chap-state>—State of the CHAP protocol.

<clocking>—Reference clock source.

<coc12-information>—No documentation is available yet.

<cos-information>—Information about class of service configuration.

<crc>—Frame checksum on the interface (either 16 or 32).

<ct3-information>—No documentation is available yet.

<current-physical-address>—Configured physical address for this interface.

<description>—Description of this interface.

<down-hold-time>—Down hold-time for this interface (ms).

<ds1-bert-information>—DS-1 BERT configuration and statistics.

<ds1-framing>—No documentation is available yet.

<ds3-bert-information>—DS-3 BERT configuration and statistics.

<ds3-mode>—No documentation is available yet.

<dsu-information>—DSU configuration and statistics.

<e3-bert-information>—E3 BERT configuration and statistics.

<e3-framing>—No documentation is available yet.

<es-ifd-stats>—Encryption Services PIC statistics.

<ethernet-autonegotiation>—Ethernet autonegotiation information.

<ethernet-filter-statistics>—Ethernet filter statistics.

<ethernet-mac-statistics>—Ethernet MAC statistics.

<generation>—Generation number used to distinguish between successive instances of this interface.

<hardware-physical-address>—Hardware physical address for this interface.

<hdlc-information>—No documentation is available yet.

<if-config-flags>—No documentation is available yet.

<if-device-flags>—No documentation is available yet.

<if-flow-control>—No documentation is available yet.

<if-media-flags>—No documentation is available yet.

- `<if-type>`—No documentation is available yet.
- `<ingress-rate-limit>`—Layer 2 rate limit on ingress traffic for the port.
- `<input-error-count>`—Sum of all input errors on this interface.
- `<input-error-list>`—Input errors on this interface.
- `<interface-flapped>`—Time interface last flapped.
- `<keepalive-config>`—Configured keepalive settings on this interface.
- `<keepalive-statistics>`—Keepalive statistics for this interface.
- `<lcp-state>`—State of the Line Control Protocol.
- `<link-level-type>`—Encapsulation being used on the physical interface.
- `<link-type>`—No documentation is available yet.
- `<lmi-dce-config>`—Configured LMI DCE setting on this interface.
- `<lmi-dte-config>`—Configured LMI DTE setting on this interface.
- `<local-index>`—Local kernel index for this interface.
- `<logical-interface>`—Information about a single logical interface.
- `<loopback>`—Whether loopback is enabled and the type of loopback.
- `<media-information>`—Information about media alarms.
- `<minimum-links-in-aggregate>`—Minimum number of links needed for the bundle to be up.
- `<mtu>`—MTU size on this interface.
- `<multilink-interface-errors>`—No documentation is available yet.
- `<name>`—Name of this item.
- `<ncp-information>`—Network Control Protocol information.
- `<nxds0-information>`—No documentation is available yet.
- `<oper-status>`—The current operational state of the interface.
- `<output-error-count>`—Sum of all output errors on this interface.
- `<output-error-list>`—Output errors on this interface.
- `<payload-scrambler>`—Whether payload scrambling is enabled.
- `<pfe-information>`—Information about Packet Forwarding Engine configuration.
- `<physical-information>`—No documentation is available yet.
- `<queue-counters>`—Queue counter statistics.

<snmp-index>—SNMP ifIndex for this interface.

<sonet-errors>—No documentation is available yet.

<sonet-line-information>—No documentation is available yet.

<sonet-loopback>—SONET loopback setting on channelized OC-12 interface.

<sonet-mode>—Indicates if interface is in SDH or SONET mode.

<sonet-path-information>—No documentation is available yet.

<sonet-physical-information>—No documentation is available yet.

<sonet-rx-overhead>—No documentation is available yet.

<sonet-rx-path-trace>—Received SONET path trace.

<sonet-section-information>—No documentation is available yet.

<sonet-tx-overhead>—No documentation is available yet.

<sonet-tx-path-trace>—Transmitted SONET path trace.

<sonet-vt-information>—No documentation is available yet.

<source-filtering>—Whether source filtering is enabled or disabled.

<speed>—Speed at which the interface is running.

<statistics-cleared>—Time when statistics were last cleared.

<traffic-statistics>—Number and rate of bytes and packets received and transmitted on the physical interface.

<up-hold-time>—Up hold-time for this interface (ms).

<plcp-defects>

Usage	<atm-information> <plcp-defects> <media-alarm>...</media-alarm> </plcp-defects> </atm-information>
Description	No documentation is available yet.
Contents	<media-alarm>—No documentation is available yet.

- **<plcp-statistics>**

Usage <atm-information>
 <plcp-statistics>
 <ferr-count>*ferr-count*</ferr-count>
 <ferr-seconds>*ferr-seconds*</ferr-seconds>
 <bipe-count>*bipe-count*</bipe-count>
 <bipe-seconds>*bipe-seconds*</bipe-seconds>
 <febe-count>*febe-count*</febe-count>
 <febe-seconds>*febe-seconds*</febe-seconds>
 </plcp-statistics>
 </atm-information>

Description No documentation is available yet.

Contents <bipe-count>—No documentation is available yet.

 <bipe-seconds>—No documentation is available yet.

 <febe-count>—No documentation is available yet.

 <febe-seconds>—No documentation is available yet.

 <ferr-count>—No documentation is available yet.

 <ferr-seconds>—No documentation is available yet.

- **<policer-information>**

Usage <logical-interface | address-family>
 <policer-information>
 <policer-family>*policer-family*</policer-family>
 <policer-input>*policer-input*</policer-input>
 <policer-output>*policer-output*</policer-output>
 </policer-information>
 </logical-interface | address-family>

Description Interface policer information.

Contents <policer-family>—Protocol family of the policer.

 <policer-input>—Name of the input policer.

 <policer-output>—Name of the output policer.

<queue>

Usage <queue-counters>
 <queue>
 <queue-number>queue-number</queue-number>
 <forwarding-class-name>forwarding-class-name</forwarding-class-name>
 <queue-counters-queued-packets>queued-packets</queue-counters-queued-packets>
 <queue-counters-queued-bytes>queued-bytes</queue-counters-queued-bytes>
 <queue-counters-queued-packets-rate>rate</queue-counters-queued-packets-rate>
 <queue-counters-queued-bytes-rate>rate</queue-counters-queued-bytes-rate>
 <queue-counters-trans-packets>trans-packets</queue-counters-trans-packets>
 <queue-counters-trans-bytes>trans-bytes</queue-counters-trans-bytes>
 <queue-counters-trans-packets-rate>rate</queue-counters-trans-packets-rate>
 <queue-counters-trans-bytes-rate>rate</queue-counters-trans-bytes-rate>
 <queue-counters-tail-drop-packets>drop-packets</queue-counters-tail-drop-packets>
 <queue-counters-tail-drop-packets-rate>rate</queue-counters-tail-drop-packets-rate>
 <queue-counters-red-packets>red-packets</queue-counters-red-packets>
 <queue-counters-red-bytes>queue-counters-red-bytes</queue-counters-red-bytes>
 <queue-counters-red-packets-rate>red-packets-rate</queue-counters-red-packets-rate>
 <queue-counters-red-bytes-rate>red-bytes-rate</queue-counters-red-bytes-rate>
 <queue-counters-red-packets-ln>red-packets-ln</queue-counters-red-packets-ln>
 <queue-counters-red-bytes-ln>red-bytes-ln</queue-counters-red-bytes-ln>
 <queue-counters-red-packets-rate-ln>rate-ln</queue-counters-red-packets-rate-ln>
 <queue-counters-red-bytes-rate-ln>bytes-rate-ln</queue-counters-red-bytes-rate-ln>
 <queue-counters-red-packets-lt>red-packets-lt</queue-counters-red-packets-lt>
 <queue-counters-red-bytes-lt>red-bytes-lt</queue-counters-red-bytes-lt>
 <queue-counters-red-packets-rate-lt>rate-lt</queue-counters-red-packets-rate-lt>
 <queue-counters-red-bytes-rate-lt>red-bytes-rate-lt</queue-counters-red-bytes-rate-lt>
 <queue-counters-red-packets-ht>red-packets-ht</queue-counters-red-packets-ht>
 <queue-counters-red-bytes-ht>red-bytes-ht</queue-counters-red-bytes-ht>
 <queue-counters-red-packets-rate-ht>rate-ht</queue-counters-red-packets-rate-ht>
 <queue-counters-red-bytes-rate-ht>red-bytes-rate-ht</queue-counters-red-bytes-rate-ht>
 <queue-counters-red-packets-hn>red-packets-hn</queue-counters-red-packets-hn>
 <queue-counters-red-bytes-hn>red-bytes-hn</queue-counters-red-bytes-hn>
 <queue-counters-red-packets-rate-hn>rate-hn</queue-counters-red-packets-rate-hn>
 <queue-counters-red-bytes-rate-hn>rate-hn</queue-counters-red-bytes-rate-hn>
 </queue>
 </queue-counters>

Description Counters for a single queue.

Contents <forwarding-class-name>—Forwarding class name associated with queue.
 <queue-counters-queued-bytes>—Queued bytes count.
 <queue-counters-queued-bytes-rate>—Rate at which bytes are queued.
 <queue-counters-queued-packets>—Queued packet count.
 <queue-counters-queued-packets-rate>—Rate at which packets are queued.
 <queue-counters-red-bytes>—Number of bytes dropped due to RED.
 <queue-counters-red-bytes-hn>—Number of RED dropped high-loss, non-TCP bytes.
 <queue-counters-red-bytes-ht>—Number of RED dropped high-loss, TCP bytes.

- `<queue-counters-red-bytes-ln>`—Number of RED dropped low-loss, non-TCP bytes.
- `<queue-counters-red-bytes-lt>`—Number of RED dropped low-loss, TCP bytes.
- `<queue-counters-red-bytes-rate>`—Rate at which bytes are dropped due to RED.
- `<queue-counters-red-bytes-rate-hn>`—RED drop rate for high-loss, non-TCP bytes.
- `<queue-counters-red-bytes-rate-ht>`—RED drop rate for high-loss, TCP bytes.
- `<queue-counters-red-bytes-rate-ln>`—RED drop rate for low-loss, not-TCP bytes.
- `<queue-counters-red-bytes-rate-lt>`—RED drop rate for low-loss, TCP bytes.
- `<queue-counters-red-packets>`—Number of packets dropped due to RED.
- `<queue-counters-red-packets-hn>`—Number of RED dropped high-loss, non-TCP packets.
- `<queue-counters-red-packets-ht>`—Number of RED dropped high-loss, TCP packets.
- `<queue-counters-red-packets-ln>`—Number of RED dropped low-loss, non-TCP packets.
- `<queue-counters-red-packets-lt>`—Number of RED dropped of low-loss, TCP packets.
- `<queue-counters-red-packets-rate>`—Rate at which packets are dropped due to RED.
- `<queue-counters-red-packets-rate-hn>`—RED drop rate for high-loss, non-TCP packets.
- `<queue-counters-red-packets-rate-ht>`—RED drop rate for high-loss, TCP packets.
- `<queue-counters-red-packets-rate-ln>`—RED drop rate for low-loss, non-TCP packets.
- `<queue-counters-red-packets-rate-lt>`—RED drop rate for low-loss, TCP packets.
- `<queue-counters-tail-drop-packets>`—Number of packets dropped at the tail of the queue.
- `<queue-counters-tail-drop-packets-rate>`—Rate at which packets are dropped at the tail of the queue.
- `<queue-counters-trans-bytes>`—Total number of transmitted bytes.
- `<queue-counters-trans-bytes-rate>`—Rate at which bytes are transmitted.
- `<queue-counters-trans-packets>`—Total number of transmitted packets.
- `<queue-counters-trans-packets-rate>`—Rate at which packets are transmitted.
- `<queue-number>`—Queue number.

< queue-counters >

Usage	<pre><physical-interface> <queue-counters> <queue-counters-error-message>error-message</queue-counters-error-message> <queue>...</queue> </queue-counters> </physical-interface></pre>
Description	Queue counter statistics.
Contents	<p><queue>—Counters for a single queue.</p> <p><queue-counters-error-message>—Queue statistics not available for this interface.</p>

< route-rpf-statistics >

Usage	<pre><address-family> <route-rpf-statistics> <route-rpf-packets>route-rpf-packets</route-rpf-packets> <route-rpf-bytes>route-rpf-bytes</route-rpf-bytes> </route-rpf-statistics> </address-family></pre>
Description	Unicast reverse path forwarding (RPF) statistics.
Contents	<p><route-rpf-bytes>—Number of bytes that have failed the RPF check.</p> <p><route-rpf-packets>—Number of packets that have failed the RPF check.</p>

< sonet-errors >

Usage	<pre><physical-interface> <sonet-errors> <media-alarm>...</media-alarm> </sonet-errors> </physical-interface></pre>
Description	No documentation is available yet.
Contents	<media-alarm>—No documentation is available yet.

< sonet-line-information >

Usage	<pre><physical-interface> <sonet-line-information> <media-alarm>...</media-alarm> </sonet-line-information> </physical-interface></pre>
Description	No documentation is available yet.
Contents	<media-alarm>—No documentation is available yet.

• **<sonet-path-information>**

Usage <physical-interface>
 <sonet-path-information>
 <media-alarm>...</media-alarm>
 </sonet-path-information>
</physical-interface>

Description No documentation is available yet.

Contents <media-alarm>—No documentation is available yet.

• **<sonet-physical-information>**

Usage <physical-interface>
 <sonet-physical-information>
 <media-alarm>...</media-alarm>
 </sonet-physical-information>
</physical-interface>

Description No documentation is available yet.

Contents <media-alarm>—No documentation is available yet.

• **<sonet-section-information>**

Usage <physical-interface>
 <sonet-section-information>
 <media-alarm>...</media-alarm>
 </sonet-section-information>
</physical-interface>

Description No documentation is available yet.

Contents <media-alarm>—No documentation is available yet.

• **<sonet-vt-information>**

Usage <physical-interface>
 <sonet-vt-information>
 <media-alarm>...</media-alarm>
 </sonet-vt-information>
</physical-interface>

Description No documentation is available yet.

Contents <media-alarm>—No documentation is available yet.

< source-class-statistics >

Usage	<address-family> <source-class-statistics> <scu-class-name>scu-class-name</scu-class-name> <scu-class-packets>scu-class-packets</scu-class-packets> <scu-class-bytes>scu-class-bytes</scu-class-bytes> </source-class-statistics> </address-family>
Description	Source class usage (SCU) statistics.
Contents	<scu-class-bytes>—Number of bytes counted by SCU for this class. <scu-class-name>—Name of SCU class. <scu-class-packets>—Number of packets counted by SCU for this class.

< traffic-statistics >

Usage	<physical-interface logical-interface virtual-circuit-information> <traffic-statistics> <input-bytes>input-bytes</input-bytes> <output-bytes>output-bytes</output-bytes> <input-bps>input-bps</input-bps> <output-bps>output-bps</output-bps> <input-packets>input-packets</input-packets> <output-packets>output-packets</output-packets> <input-pps>input-pps</input-pps> <output-pps>output-pps</output-pps> </traffic-statistics> </physical-interface logical-interface virtual-circuit-information>
Description	Number and rate of bytes and packets received and transmitted on the physical interface.
Contents	<input-bps>—No documentation is available yet. <input-bytes>—No documentation is available yet. <input-packets>—No documentation is available yet. <input-pps>—No documentation is available yet. <output-bps>—No documentation is available yet. <output-bytes>—No documentation is available yet. <output-packets>—No documentation is available yet. <output-pps>—No documentation is available yet.

• **<transit-traffic-statistics>**

• **Usage** <logical-interface>
 <transit-traffic-statistics>
 <input-bytes>*input-bytes*</input-bytes>
 <output-bytes>*output-bytes*</output-bytes>
 <input-bps>*input-bps*</input-bps>
 <output-bps>*output-bps*</output-bps>
 <input-packets>*input-packets*</input-packets>
 <output-packets>*output-packets*</output-packets>
 <input-pps>*input-pps*</input-pps>
 <output-pps>*output-pps*</output-pps>
 </transit-traffic-statistics>
</logical-interface>

• **Description** Statistics for traffic passing through the router. When a burst of traffic is received, the value in the output packet rate field might briefly exceed the peak cell rate. The counter usually stabilizes in 1 second or less.

• **Contents** <input-bps>—No documentation is available yet.

 <input-bytes>—No documentation is available yet.

 <input-packets>—No documentation is available yet.

 <input-pps>—No documentation is available yet.

 <output-bps>—No documentation is available yet.

 <output-bytes>—No documentation is available yet.

 <output-packets>—No documentation is available yet.

 <output-pps>—No documentation is available yet.

< virtual-circuit-information >

Usage	<pre><logical-interface> <virtual-circuit-information> <vpi>vpi</vpi> <vci>vci</vci> <dlci>dlci</dlci> <ifvc-flags>...</ifvc-flags> <ifvc-multipoint-destination>...</ifvc-multipoint-destination> <atm-tm-cbr/> <atm-tm-vbr/> <peak>peak</peak> <sustained>sustained</sustained> <burst>burst</burst> <queue-limit>queue-limit</queue-limit> <down-time>down-time</down-time> <last-down-time>last-down-time</last-down-time> <oam-parameters>...</oam-parameters> <oam-statistics>...</oam-statistics> <traffic-statistics>...</traffic-statistics> <atm-statistics>...</atm-statistics> </virtual-circuit-information> </logical-interface></pre>
Description	Operational information and statistics for a virtual circuit.
Contents	<p><atm-statistics>—No documentation is available yet.</p> <p><atm-tm-cbr>—No documentation is available yet.</p> <p><atm-tm-vbr>—No documentation is available yet.</p> <p><burst>—No documentation is available yet.</p> <p><dlci>—No documentation is available yet.</p> <p><down-time>—Total down time for this circuit.</p> <p><ifvc-flags>—No documentation is available yet.</p> <p><ifvc-multipoint-destination>—No documentation is available yet.</p> <p><last-down-time>—Time elapsed since circuit last went down.</p> <p><oam-parameters>—No documentation is available yet.</p> <p><oam-statistics>—Container tag for OAM statistics.</p> <p><peak>—No documentation is available yet.</p> <p><queue-limit>—No documentation is available yet.</p> <p><sustained>—No documentation is available yet.</p> <p><traffic-statistics>—Number and rate of bytes and packets received and transmitted on the physical interface.</p>

- <vci>—Virtual circuit identifier.
- <vpi>—Virtual path identifier.

Summary of IPSec Response Tags

This section lists the tags returned by the JUNOScript server to describe information about IPSec. The associated XML namespace is <http://xml.juniper.net/junos/5.4R1/junos-ipsec>. To review the DTD for the tags, see “DTD for IPSec Response Tags” on page 1527.

< ike-sa-algorithms >

Usage <ike-security-associations>
 <ike-sa-algorithms>
 <ike-sa-authentication-algorithm>*algorithm*</ike-sa-authentication-algorithm>
 <ike-sa-encryption-algorithm>*ike-sa-encryption-algorithm*</ike-sa-encryption-algorithm>
 <ike-sa-prf-algorithm>*ike-sa-prf-algorithm*</ike-sa-prf-algorithm>
 </ike-sa-algorithms>
 </ike-security-associations>

Description Algorithms used with the SA information.

Contents <ike-sa-authentication-algorithm>—Authentication algorithm.
 <ike-sa-encryption-algorithm>—Encryption algorithm.
 <ike-sa-prf-algorithm>—PRF algorithm.

< ike-sa-misc >

Usage <ike-security-associations>
 <ike-sa-misc>
 <ike-sa-flags>*ike-sa-flags*</ike-sa-flags>
 <ike-sa-num-ipsec-sas-created>*sas-created*</ike-sa-num-ipsec-sas-created>
 <ike-sa-num-ipsec-sas-deleted>*sas-deleted*</ike-sa-num-ipsec-sas-deleted>
 <ike-sa-num-phase2-negotiations>*negotiations*</ike-sa-num-phase2-negotiations>
 </ike-sa-misc>
 </ike-security-associations>

Description Miscellaneous IKE SA information.

Contents <ike-sa-flags>—IKE SA flags.
 <ike-sa-num-ipsec-sas-created>—Number of IPSec SAs created using this SA.
 <ike-sa-num-ipsec-sas-deleted>—Number of IPSec SAs deleted using this SA.
 <ike-sa-num-phase2-negotiations>—Number of negotiations in progress on this SA.

< ike-sa-phase2-information>

Usage	<ike-security-associations ike-security-associations-information> <ike-sa-phase2-information> <ike-sa-phase2-type>ike-sa-phase2-type</ike-sa-phase2-type> <ike-sa-role>ike-sa-role</ike-sa-role> <ike-sa-msg-id>ike-sa-msg-id</ike-sa-msg-id> <ike-sa-local-address>ike-sa-local-address</ike-sa-local-address> <ike-sa-local-port>ike-sa-local-port</ike-sa-local-port> <ike-sa-remote-address>ike-sa-remote-address</ike-sa-remote-address> <ike-sa-remote-port>ike-sa-remote-port</ike-sa-remote-port> <ike-sa-local-id>ike-sa-local-id</ike-sa-local-id> <ike-sa-remote-id>ike-sa-remote-id</ike-sa-remote-id> <ike-sa-flags>ike-sa-flags</ike-sa-flags> </ike-sa-phase2-information> </ike-security-associations ike-security-associations-information>
Description	Information about phase 2 negotiation.
Contents	<ike-sa-flags>—IKE SA flags. <ike-sa-local-address>—Local address. <ike-sa-local-id>—Local end identity in phase 2. <ike-sa-local-port>—Local port. <ike-sa-msg-id>—Message ID of the Quick Mode negotiation. <ike-sa-phase2-type>—Type of the phase 2 negotiation. <ike-sa-remote-address>—Remote address. <ike-sa-remote-id>—Remote end identity in phase 2. <ike-sa-remote-port>—Remote port. <ike-sa-role>—Role of our end.

< ike-sa-traffic-statistics>

Usage	<ike-security-associations> <ike-sa-traffic-statistics> <ike-sa-input-packets>ike-sa-input-packets</ike-sa-input-packets> <ike-sa-output-packets>ike-sa-output-packets</ike-sa-output-packets> <ike-sa-input-bytes>ike-sa-input-bytes</ike-sa-input-bytes> <ike-sa-output-bytes>ike-sa-output-bytes</ike-sa-output-bytes> </ike-sa-traffic-statistics> </ike-security-associations>
Description	Number of packets and bytes received and transmitted on the SA.
Contents	<ike-sa-input-bytes>—Input bytes, including retransmissions. <ike-sa-input-packets>—Input packets, including retransmissions.

- <ike-sa-output-bytes>—Output bytes, including retransmissions.
 - <ike-sa-output-packets>—Output packets, including retransmissions.

< ike-security-associations >

```
Usage <ike-security-associations-information | ike-security-associations-block>
<ike-security-associations>
  <ike-sa-role>iKE-SA-ROLE</ike-sa-role>
  <ike-sa-state>iKE-SA-STATE</ike-sa-state>
  <ike-sa-initiator-cookie>iKE-SA-INITIATOR-COOKIE</ike-sa-initiator-cookie>
  <ike-sa-responder-cookie>iKE-SA-RESPONDER-COOKIE</ike-sa-responder-cookie>
  <ike-sa-exchange-type>iKE-SA-EXCHANGE-TYPE</ike-sa-exchange-type>
  <ike-sa-authentication-method>AUTHENTICATION-METHOD</ike-sa-authentication-method>
  <ike-sa-local-address>iKE-SA-LOCAL-ADDRESS</ike-sa-local-address>
  <ike-sa-local-port>iKE-SA-LOCAL-PORT</ike-sa-local-port>
  <ike-sa-remote-address>iKE-SA-REMOTE-ADDRESS</ike-sa-remote-address>
  <ike-sa-remote-port>iKE-SA-REMOTE-PORT</ike-sa-remote-port>
  <ike-sa-lifetime>iKE-SA-LIFETIME</ike-sa-lifetime>
  <ike-sa-algorithms>...</ike-sa-algorithms>
  <ike-sa-traffic-statistics>...</ike-sa-traffic-statistics>
  <ike-sa-misc>...</ike-sa-misc>
  <ike-sa-phase2-information>...</ike-sa-phase2-information>
</ike-security-associations>
</ike-security-associations-information | ike-security-associations-block>
```

Description Information about a single security association.

Contents <ike-sa-algorithms>—Algorithms used with the SA information.

<ike-sa-authentication-method>—No documentation is available yet.

<ike-sa-exchange-type>—Exchange type.

<ike-sa-initiator-cookie>—IKE SA initiator cookie.

<ike-sa-lifetime>—Remaining lifetime in seconds/kilobytes before expiration.

<ike-sa-local-address>—Local address.

<ike-sa-local-port>—Local port.

<ike-sa-misc>—Miscellaneous IKE SA information.

<ike-sa-phase2-information>—Information about phase 2 negotiation.

<ike-sa-remote-address>—Remote address.

<ike-sa-remote-port>—Remote port.

<ike-sa-responder-cookie>—IKE SA responder cookie

<ike-sa-role>—Role of our end

<ike-sa-state>—Status of the SA.

<ike-sa-traffic-statistics>—Number of packets and bytes received and transmitted on the SA.

< ike-security-associations-block >

Usage <ike-security-associations-information>
 <iKE-Security-Associations-Block>
 <ike-sa-remote-address>ike-sa-remote-address</ike-sa-remote-address>
 <ike-security-associations>...</ike-security-associations>
 </iKE-Security-Associations-Block>
 </ike-security-associations-information>

Description Information about a single security association block.

Contents <ike-sa-remote-address>—Remote address.

<ike-security-associations>—Information about a single security association.

< ike-security-associations-information >

Usage <rpc-reply>
 <iKE-Security-Associations-Information>
 <ike-security-associations>...</ike-security-associations>
 <ike-sa-phase2-information>...</ike-sa-phase2-information>
 <ike-security-associations-block>...</ike-security-associations-block>
 </iKE-Security-Associations-Information>
 </rpc-reply>

Description No documentation is available yet.

Contents <ike-sa-phase2-information>—Information about phase 2 negotiation.

<ike-security-associations>—Information about a single security association.

<ike-security-associations-block>—Information about a single security association block.

< kmd-memory-usage >

Usage <kmd-memory-usage-information>
 <kMD-Memory-Usage>
 <memory-block-type>memory-block-type</memory-block-type>
 <memory-in-use>memory-in-use</memory-in-use>
 </kMD-Memory-Usage>
 </kmd-memory-usage-information>

Description Information about key management daemon memory usage.

Contents <memory-block-type>—Memory block type.

<memory-in-use>—Memory in use.

• **< kmd-memory-usage-information >**

Usage <rpc-reply>
 <kmd-memory-usage-information>
 <kmd-memory-usage>...</kmd-memory-usage>
 </kmd-memory-usage-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <kmd-memory-usage>—Information about key management daemon memory usage.

• **< security-associations >**

Usage <security-associations-block | security-associations-information>
 <security-associations>
 <sa-direction>sa-direction</sa-direction>
 <sa-spi>sa-spi</sa-spi>
 <sa-state>sa-state</sa-state>
 <sa-mode>sa-mode</sa-mode>
 <sa-type>sa-type</sa-type>
 <sa-protocol>sa-protocol</sa-protocol>
 <sa-authentication-algorithm>authentication-algorithm</sa-authentication-algorithm>
 <sa-encryption-algorithm>sa-encryption-algorithm</sa-encryption-algorithm>
 <sa-soft-lifetime>sa-soft-lifetime</sa-soft-lifetime>
 <sa-hard-lifetime>sa-hard-lifetime</sa-hard-lifetime>
 <sa-anti-replay-service>sa-anti-replay-service</sa-anti-replay-service>
 <sa-replay-window-size>sa-replay-window-size</sa-replay-window-size>
 </security-associations>
 </security-associations-block | security-associations-information>

Description Information about a single security association.

Contents <sa-anti-replay-service>—Anti-replay service.

 <sa-authentication-algorithm>—Authentication algorithm.

 <sa-direction>—Direction of the security association.

 <sa-encryption-algorithm>—Encryption algorithm.

 <sa-hard-lifetime>—Remaining lifetime in seconds/kilobytes before hard lifetime expires.

 <sa-mode>—Mode of the security association.

 <sa-protocol>—IPSec security protocol.

 <sa-replay-window-size>—Replay window size.

 <sa-soft-lifetime>—Remaining lifetime in seconds/kilobytes before soft lifetime expires.

 <sa-spi>—Security Parameter Index.

 <sa-state>—Status of the SA.

 <sa-type>—No documentation is available yet.

< **security-associations-block**>

Usage	<pre><security-associations-information> <security-associations-block> <sa-no-information/> <sa-name>sa-name</sa-name> <sa-block-state>sa-block-state</sa-block-state> <security-associations>...</security-associations> </security-associations-block> </security-associations-information></pre>
Description	Information about a single security association block.
Contents	<p><sa-block-state>—Status of the SA configuration block.</p> <p><sa-name>—Name of the security association.</p> <p><sa-no-information>—Output string when there are no security associations present.</p> <p><security-associations>—Information about a single security association.</p>

< **security-associations-information**>

Usage	<pre><rpc-reply> <security-associations-information> <security-associations-block>...</security-associations-block> <security-associations>...</security-associations> </security-associations-information> </rpc-reply></pre>
Description	No documentation is available yet.
Contents	<p><security-associations>—Information about a single security association.</p> <p><security-associations-block>—Information about a single security association block.</p>

Summary of IPv6 Neighbor Discovery Response Tags

This section lists the tags returned by the JUNOScript server to describe information about Internet Protocol Version 6 (IPv6) neighbor discovery. The associated XML namespace is <http://xml.juniper.net/junos/5.4R1/junos-ipv6-nd>. To review the DTD for the tags, see “DTD for IPv6 Neighbor Discovery Response Tags” on page 1531.

< **ipv6-modify-nd**>

Usage	<pre><rpc-reply> <ipv6-modify-nd> <ipv6-modify-nd-entry>...</ipv6-modify-nd-entry> </ipv6-modify-nd> </rpc-reply></pre>
Description	No documentation is available yet.
Contents	<ipv6-modify-nd-entry>—No documentation is available yet.

• **< ipv6-modify-nd-entry >**

Usage <ipv6-modify-nd>
 <ipv6-modify-nd-entry>
 <ipv6-nd-neighbor-address>ipv6-nd-neighbor-address</ipv6-nd-neighbor-address>
 <ipv6-nd-neighbor-l2-address>address</ipv6-nd-neighbor-l2-address>
 <ipv6-nd-change>ipv6-nd-change</ipv6-nd-change>
 </ipv6-modify-nd-entry>
 </ipv6-modify-nd>

Description No documentation is available yet.

Contents <ipv6-nd-change>—No documentation is available yet.

 <ipv6-nd-neighbor-address>—The address of the neighbor.

 <ipv6-nd-neighbor-l2-address>—The L2 address of the neighbor.

• **< ipv6-nd-entry >**

Usage <ipv6-nd-information>
 <ipv6-nd-entry>
 <ipv6-nd-neighbor-address>ipv6-nd-neighbor-address</ipv6-nd-neighbor-address>
 <ipv6-nd-neighbor-l2-address>iaddress</ipv6-nd-neighbor-l2-address>
 <ipv6-nd-state>ipv6-nd-state</ipv6-nd-state>
 <ipv6-nd-expire>ipv6-nd-expire</ipv6-nd-expire>
 <ipv6-nd-isrouter>ipv6-nd-isrouter</ipv6-nd-isrouter>
 <ipv6-nd-interface-name>ipv6-nd-interface-name</ipv6-nd-interface-name>
 </ipv6-nd-entry>
 </ipv6-nd-information>

Description No documentation is available yet.

Contents <ipv6-nd-expire>—No documentation is available yet.

 <ipv6-nd-interface-name>—The name of the interface.

 <ipv6-nd-isrouter>—No documentation is available yet.

 <ipv6-nd-neighbor-address>—The address of the neighbor.

 <ipv6-nd-neighbor-l2-address>—The L2 address of the neighbor.

 <ipv6-nd-state>—No documentation is available yet.

<**ipv6-nd-information**>

Usage <rpc-reply>
 <ipv6-nd-information>
 <ipv6-nd-entry>...</ipv6-nd-entry>
 </ipv6-nd-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <ipv6-nd-entry>—No documentation is available yet.

Summary of Routing Protocols Response Tags

This section lists the tags returned by the JUNOScript server to describe routing protocol settings. The associated XML namespace is <http://xml.juniper.net/junos/5.4R1/junos-routing>. To review the DTD for the tags, see “DTD for Routing Protocols Response Tags” on page 1533.

<**admin-groups**>

Usage <isis-reachability-subtlv | mpls-lsp | mpls-lsp-path | ted-link>
 <admin-groups>
 <color>color</color>
 <no-group-flag/>
 <admin-group-name>admin-group-name</admin-group-name>
 <admin-group-number>admin-group-number</admin-group-number>
 </admin-groups>
 </isis-reachability-subtlv | mpls-lsp | mpls-lsp-path | ted-link>

Description No documentation is available yet.

Contents <admin-group-name>—Name of the admin group.

<admin-group-number>—Number of the admin group.

<color>—No documentation is available yet.

<no-group-flag>—No documentation is available yet.

• **< aggregate>**

Usage <rt-entry>
 <aggregate>
 <aggregate-flags>aggregate-flags</aggregate-flags>
 <aggregate-depth>aggregate-depth</aggregate-depth>
 <aggregate-active/>
 <aggregate-as-path>...</aggregate-as-path>
 <contributing-route-count>contributing-route-count</contributing-route-count>
 <aggregated-route>...</aggregated-route>
 </aggregate>
 </rt-entry>

Description No documentation is available yet.

Contents <aggregate-active>—Present if this aggregate is active.

 <aggregate-as-path>—No documentation is available yet.

 <aggregate-depth>—Depth of this aggregate.

 <aggregate-flags>—Flags on this aggregate route entry.

 <aggregated-route>—No documentation is available yet.

 <contributing-route-count>—Number of contributing routes in this aggregate.

• **< aggregate-as-path>**

Usage <aggregate>
 <aggregate-as-path>
 <as-path>as-path</as-path>
 <reference-count>reference-count</reference-count>
 </aggregate-as-path>
 </aggregate>

Description No documentation is available yet.

Contents <as-path>—AS path of this route.

 <reference-count>—No documentation is available yet.

< aggregated-route >

Usage <aggregate>
 <aggregated-route>
 <destination-prefix>destination-prefix</destination-prefix>
 <protocol-name>protocol-name</protocol-name>
 </aggregated-route>
 </aggregate>

Description No documentation is available yet.

Contents <destination-prefix>—Destination prefix and mask.
 <protocol-name>—No documentation is available yet.

< area-address-tlv >

Usage <isis-tlv>
 <area-address-tlv>
 <address>address</address>
 <tlv-length>tlv-length</tlv-length>
 </area-address-tlv>
 </isis-tlv>

Description No documentation is available yet.

Contents <address>—No documentation is available yet.
 <tlv-length>—No documentation is available yet.

< authentication-tlv >

Usage <isis-tlv>
 <authentication-tlv>
 <tlv-length>tlv-length</tlv-length>
 </authentication-tlv>
 </isis-tlv>

Description No documentation is available yet.

Contents <tlv-length>—No documentation is available yet.

<bgp-error>

Usage <bgp-peer>
<bgp-error>
 <name>name</name>
 <send-count>send-count</send-count>
 <receive-count>receive-count</receive-count>
</bgp-error>
</bgp-peer>

Description No documentation is available yet.

Contents <name>—No documentation is available yet.

<receive-count>—No documentation is available yet.

<send-count>—No documentation is available yet.

<bgp-group>

Usage <bgp-group-information>
<bgp-group>
 <type>type</type>
 <peer-as>peer-as</peer-as>
 <local-as>local-as</local-as>
 <group-state>group-state</group-state>
 <name>name</name>
 <bgp-options>bgp-options</bgp-options>
 <peer-count>peer-count</peer-count>
 <established-count>established-count</established-count>
 <peer-address>peer-address</peer-address>
 <unconfigured-peers>...</unconfigured-peers>
 <igp-protocol>igp-protocol</igp-protocol>
 <route-queue>...</route-queue>
 <bgp-peer>...</bgp-peer>
 <bgp-option-information>...</bgp-option-information>
 <tracing-information>...</tracing-information>
</bgp-group>
</bgp-group-information>

Description Operational and configuration information for a BGP group.

Contents <bgp-option-information>—Configured BGP options.

<bgp-options>—No documentation is available yet.

<bgp-peer>—Operational and configuration information for a BGP peer.

<established-count>—Number of peers within the group that are in the established state.

<group-state>—No documentation is available yet.

<igp-protocol>—No documentation is available yet.

<local-as>—Local AS number

<name>—No documentation is available yet.

<peer-address>—Address of the BGP peer. The address is followed by the peer's port number.

<peer-as>—Peer AS number.

<peer-count>—Total number of peers.

<route-queue>—No documentation is available yet.

<tracing-information>—No documentation is available yet.

<type>—No documentation is available yet.

<unconfigured-peers>—The set of address prefixes this group will allow peering from.

< **bgp-group-information**>

Usage <rpc-reply>
 <bpg-group-information>
 <bpg-group>...</bpg-group>
 </bpg-group-information>
 </rpc-reply>

Description Operational and configuration information for BGP groups.

Contents <bpg-group>—Operational and configuration information for a BGP group.

< **bgp-information**>

Usage <rpc-reply>
 <bpg-information>
 <group-count>group-count</group-count>
 <peer-count>peer-count</peer-count>
 <down-peer-count>down-peer-count</down-peer-count>
 <unconfigured-peer-count>unconfigured-peer-count</unconfigured-peer-count>
 <half-open-peer-count>half-open-peer-count</half-open-peer-count>
 <igp-converging/>
 <bpg-rib>...</bpg-rib>
 <bpg-peer>...</bpg-peer>
 </bpg-information>
 </rpc-reply>

Description Operational and configuration information for BGP.

Contents <bpg-peer>—Operational and configuration information for a BGP peer.

<bpg-rib>—No documentation is available yet.

<down-peer-count>—No documentation is available yet.

<group-count>—No documentation is available yet.

<half-open-peer-count>—No documentation is available yet.

- <igp-converging>—This tag is present if BGP is quenched because the IGP is still converging.
<peer-count>—Total number of peers.
<unconfigured-peer-count>—No documentation is available yet.

<bgp-option-information>

```
Usage <bgp-peer | bgp-group>
<bpg-option-information>
<export-policy>export-policy</export-policy>
<import-policy>import-policy</import-policy>
<bgp-options>bgp-options</bgp-options>
<authentication-key>authentication-key</authentication-key>
<authentication-configured/>
<address-families>address-families</address-families>
<local-address>local-address</local-address>
<holdtime>holdtime</holdtime>
<metric-out>metric-out</metric-out>
<preference>preference</preference>
<local-preference>local-preference</local-preference>
<prefix-limit>...</prefix-limit>
<local-as>local-as</local-as>
<local-as-private/>
<local-system-as>local-system-as</local-system-as>
<receive-buffer-size>receive-buffer-size</receive-buffer-size>
<send-buffer-size>send-buffer-size</send-buffer-size>
<outbound-timer>outbound-timer</outbound-timer>
<med-action>med-action</med-action>
<ipsec-sa>ipsec-sa</ipsec-sa>
</bpg-option-information>
</bgp-peer | bgp-group>
```

Description Configured BGP options.

Contents <address-families>—No documentation is available yet.

<authentication-configured>—No documentation is available yet.

<authentication-key>—No documentation is available yet.

<bgp-options>—No documentation is available yet.

<export-policy>—No documentation is available yet.

<holdtime>—Hold time configured with the hold-time

<import-policy>—No documentation is available yet.

<import-policy>—No documentation is available yet.

<ipsec-sa>—No documentation is available yet.

<local-address>—No documentation is available yet.

<local-as>—Local AS number.

<local-as-private>—No documentation is available yet.

<local-preference>—No documentation is available yet.

<local-system-as>—No documentation is available yet.

<med-action>—No documentation is available yet.

<metric-out>—No documentation is available yet.

<outbound-timer>—No documentation is available yet.

<preference>—Preference value configured with the preference statement. The default preference value is 170.

<prefix-limit>—No documentation is available yet.

<receive-buffer-size>—No documentation is available yet.

<send-buffer-size>—No documentation is available yet.

<bgp-output-queue>

Usage <bgp-peer>
 <bgp-output-queue>
 <number>number</number>
 <count>count</count>
 </bgp-output-queue>
 </bgp-peer>

Description Number of BGP packets that are queued to be transmitted to a particular neighbor for a particular routing table.

Contents <count>—No documentation is available yet.
 <number>—No documentation is available yet.

- < **bgp-peer**>

Usage <bgp-information | bgp-group>

```

<bgp-peer>
  <peer-address>peer-address</peer-address>
  <peer-as>peer-as</peer-as>
  <local-address>local-address</local-address>
  <local-as>local-as</local-as>
  <description>description</description>
  <peer-type>peer-type</peer-type>
  <route-reflector-client/>
  <peer-state>peer-state</peer-state>
  <peer-flags>peer-flags</peer-flags>
  <last-state>last-state</last-state>
  <last-event>last-event</last-event>
  <last-error>last-error</last-error>
  <bgp-option-information>...</bgp-option-information>
  <flap-count>flap-count</flap-count>
  <peer-id>peer-id</peer-id>
  <local-id>local-id</local-id>
  <active-holdtime>active-holdtime</active-holdtime>
  <keepalive-interval>keepalive-interval</keepalive-interval>
  <local-interface-name>local-interface-name</local-interface-name>
  <local-interface-index>local-interface-index</local-interface-index>
  <nlri-type-peer>nlri-type-peer</nlri-type-peer>
  <nlri-type-session>nlri-type-session</nlri-type-session>
  <peer-no-refresh/>
  <peer-refresh-capability>peer-refresh-capability</peer-refresh-capability>
  <peer-restart-nlri-configured>peer-restart-nlri-configured</peer-restart-nlri-configured>
  <peer-restart-time-configured>time-configured</peer-restart-time-configured>
  <peer-stale-route-time-configured>time-configured</peer-stale-route-time-configured>
  <peer-restart-time-received>peer-restart-time-received</peer-restart-time-received>
  <peer-restart-flags-received>peer-restart-flags-received</peer-restart-flags-received>
  <peer-restart-nlri-received>peer-restart-nlri-received</peer-restart-nlri-received>
  <peer-restart-nlri-state-saved>state-saved</peer-restart-nlri-state-saved>
  <peer-no-restart/>
  <peer-restart-nlri-negotiated>peer-restart-nlri-negotiated</peer-restart-nlri-negotiated>
  <peer-end-of-rib-received>peer-end-of-rib-received</peer-end-of-rib-received>
  <peer-end-of-rib-sent>peer-end-of-rib-sent</peer-end-of-rib-sent>
  <peer-end-of-rib-scheduled>peer-end-of-rib-scheduled</peer-end-of-rib-scheduled>
  <last-received>last-received</last-received>
  <last-sent>last-sent</last-sent>
  <last-checked>last-checked</last-checked>
  <input-messages>input-messages</input-messages>
  <input-updates>input-updates</input-updates>
  <input-refreshes>input-refreshes</input-refreshes>
  <input-octets>input-octets</input-octets>
  <output-messages>output-messages</output-messages>
  <output-updates>output-updates</output-updates>
  <output-refreshes>output-refreshes</output-refreshes>
  <output-octets>output-octets</output-octets>
  <buffered-octets-rx>buffered-octets-rx</buffered-octets-rx>
  <buffered-octets-tx>buffered-octets-tx</buffered-octets-tx>
  <bgp-output-queue>...</bgp-output-queue>
  <route-queue-count>route-queue-count</route-queue-count>
  <bgp-rib>...</bgp-rib>
  <elapsed-time>elapsed-time</elapsed-time>

```

	<extended-information> <i>extended-information</i> </extended-information>	•
	<bgp-error>...</bgp-error>	•
	<route-queue>...</route-queue>	•
	<tracing-information>...</tracing-information>	•
	</bgp-peer>	•
	</bgp-information bgp-group>	•
Description	Operational and configuration information for a BGP peer.	•
Contents	<p><active-holdtime>—Hold time the local router negotiated with the peer.</p> <p><bgp-error>—No documentation is available yet.</p> <p><bgp-option-information>—Configured BGP options.</p> <p><bgp-output-queue>—Number of BGP packets that are queued to be transmitted to a particular neighbor for a particular routing table.</p> <p><bgp-rib>—No documentation is available yet.</p> <p><buffered-octets-rx>—Number of octets that have been received and are still buffered.</p> <p><buffered-octets-tx>—Number of octets in the transmit buffer.</p> <p><description>—No documentation is available yet.</p> <p><elapsed-time>—Time this adjacency or session has been up or down.</p> <p><extended-information>—No documentation is available yet.</p> <p><flap-count>—Number of times the BGP session has gone down and then come back up.</p> <p><input-messages>—Total number of messages received from the receive socket buffer.</p> <p><input-octets>—Number of octets received from the receive socket buffer.</p> <p><input-refreshes>—Number of refresh messages received from the receive socket buffer.</p> <p><input-updates>—Number of update messages received from the receive socket buffer.</p> <p><keepalive-interval>—No documentation is available yet.</p> <p><last-checked>—No documentation is available yet.</p> <p><last-error>—Last error that occurred in the BGP session.</p> <p><last-event>—Last activity that occurred in the BGP session.</p> <p><last-received>—No documentation is available yet.</p> <p><last-sent>—No documentation is available yet.</p> <p><last-state>—Previous state of the BGP session.</p> <p><local-address>—No documentation is available yet.</p> <p><local-as>—Local AS number.</p>	•

- `<local-id>`—Router identifier of the local router.
- `<local-interface-index>`—SNMP ifIndex of local interface.
- `<local-interface-name>`—Logical interface name.
- `<nlri-type-peer>`—Types of NLRIIs supported by the peer. It can be unicast or multicast.
- `<nlri-type-session>`—Types of NLRIIs being used for this session.
- `<output-messages>`—Total number of messages written to the receive socket buffer.
- `<output-octets>`—Number of octets written to the receive socket buffer.
- `<output-refreshes>`—Number of refresh messages written to the receive socket buffer.
- `<output-updates>`—Number of update messages written to the receive socket buffer.
- `<peer-address>`—Address of the BGP peer. The address is followed by the peer's port number.
- `<peer-as>`—Peer AS number.
- `<peer-end-of-rib-received>`—Types of NLRIIs for which peer received an end-of-rib.
- `<peer-end-of-rib-scheduled>`—Types of NLRIIs for which peer scheduled an end-of-rib.
- `<peer-end-of-rib-sent>`—Types of NLRIIs for which peer sent an end-of-rib marker.
- `<peer-flags>`—Internal BGP flags.
- `<peer-id>`—Router identifier of the peer.
- `<peer-no-refresh>`—Present if this peer does not support refresh.
- `<peer-no-restart>`—Present if this peer does not support graceful restart.
- `<peer-refresh-capability>`—Version of refresh capability supported by this peer.
- `<peer-restart-flags-received>`—Flags received from this peer in its restart capability.
- `<peer-restart-nlri-configured>`—Types of NLRIIs that restart is locally configured for.
- `<peer-restart-nlri-negotiated>`—Types of NLRIIs for which restart negotiated with peer.
- `<peer-restart-nlri-received>`—Types of NLRIIs for which restart was advertised by peer.
- `<peer-restart-nlri-state-saved>`—Types of NLRIIs for which peer saved all forwarding state.
- `<peer-restart-time-configured>`—Restart time configured locally for this peer.
- `<peer-restart-time-received>`—Restart time requested by peer in its restart capability.
- `<peer-stale-route-time-configured>`—Maximum time for which stale routes from peer are kept.
- `<peer-state>`—Current state of the BGP session.

<peer-type>—No documentation is available yet.

<route-queue>—No documentation is available yet.

<route-queue-count>—Total number of routes queued for output to this peer.

<route-reflector-client>—No documentation is available yet.

<tracing-information>—No documentation is available yet.

< bgp-rib >

Usage	<bgp-information bgp-peer> <bgp-rib> <name>name</name> <rib-bit>rib-bit</rib-bit> <rib-state>rib-state</rib-state> <send-state>send-state</send-state> <total-prefix-count>total-prefix-count</total-prefix-count> <active-prefix-count>active-prefix-count</active-prefix-count> <received-prefix-count>received-prefix-count</received-prefix-count> <damped-prefix-count>damped-prefix-count</damped-prefix-count> <suppressed-prefix-count>suppressed-prefix-count</suppressed-prefix-count> <history-prefix-count>history-prefix-count</history-prefix-count> <pending-prefix-count>pending-prefix-count</pending-prefix-count> </bgp-rib> </bgp-information bgp-peer>
Description	No documentation is available yet.
Contents	<active-prefix-count>—Number of active prefixes. <damped-prefix-count>—Number of prefixes in any damped state. <history-prefix-count>—Number of prefixes with damping history maintained. <name>—No documentation is available yet. <pending-prefix-count>—Number of prefixes with pending changes. <received-prefix-count>—For a peer RIB, number of prefixes received from this peer. <rib-bit>—Number that represents the entry in the routing table for this peer. <rib-state>—State of the RIB. Indicates if it graceful restart in progress. <send-state>—State of the BGP group. It can be in sync, not in sync, or not advertising. <suppressed-prefix-count>—Number of prefixes suppressed due to damping. <total-prefix-count>—Total number of prefixes in this RIB.

< connection >

```
Usage <reference-site | l2circuit-neighbor>
<connection>
  <connection-id>connection-id</connection-id>
  <connection-type>connection-type</connection-type>
  <connection-status>connection-status</connection-status>
  <last-change>last-change</last-change>
  <up-transitions>up-transitions</up-transitions>
  <local-interface>...</local-interface>
  <remote-interface>...</remote-interface>
  <remote-pe>remote-pe</remote-pe>
  <inbound-label>inbound-label</inbound-label>
  <outbound-label>outbound-label</outbound-label>
  <history>...</history>
</connection>
</reference-site | l2circuit-neighbor>
```

Description No documentation is available yet.

Contents <connection-id>—No documentation is available yet.

<connection-status>—No documentation is available yet.

<connection-type>—No documentation is available yet.

<history>—No documentation is available yet.

<inbound-label>—No documentation is available.

<last-change>—No documentation is available yet.

<local-interface>—No documentation is available yet

<outbound-label>—No documentation is available yet

<remote-interface>—No documentation is available yet.

<remote-pe>—No documentation is available yet

<up-transitions>—No documentation is available

< **cspf-paths**>

Usage	<pre><mpls-cspf> <cspf-paths> <total-paths>total-paths</total-paths> <successful>successful</successful> <no-route>no-route</no-route> <sys-error>sys-error</sys-error> <cspfs>cspfs</cspfs> </cspf-paths> </mpls-cspf></pre>
Description	CSPF path computations statistics.
Contents	<p><cspfs>—No documentation is available yet.</p> <p><no-route>—No documentation is available yet.</p> <p><successful>—No documentation is available yet.</p> <p><sys-error>—No documentation is available yet.</p> <p><total-paths>—No documentation is available yet.</p>

< **cspf-queue**>

Usage	<pre><mpls-cspf> <cspf-queue> <current>current</current> <maximum>maximum</maximum> <dequeued>dequeued</dequeued> </cspf-queue> </mpls-cspf></pre>
Description	CSPF queue statistics.
Contents	<p><current>—No documentation is available yet.</p> <p><dequeued>—No documentation is available yet.</p> <p><maximum>—No documentation is available yet.</p>

- **< cspf-timing>**

• **Usage** <mpls-cspf>
 <cspf-timing>
 <total-time>*total-time*</total-time>
 <cspf-time>*cspf-time*</cspf-time>
 <average-time>*average-time*</average-time>
 <rpd-time>*rpd-time*</rpd-time>
 </cspf-timing>
</mpls-cspf>

• **Description** CSPF timing statistics.

• **Contents** <average-time>—No documentation is available yet.

• <cspf-time>—No documentation is available yet.

• <rpd-time>—No documentation is available yet.

• <total-time>—No documentation is available yet.

- **< detour>**

• **Usage** <rsvp-session>
 <detour>
 <lsp-state>*lsp-state*</lsp-state>
 <packet-information>...</packet-information>
 <explicit-route>...</explicit-route>
 <record-route>...</record-route>
 </detour>
</rsvp-session>

• **Description** Detour that originated at this LSR.

• **Contents** <explicit-route>—Explicit Route Object (ERO).

• <lsp-state>—State of an LSP.

• <packet-information>—RSVP packets sent or received per session.

• <record-route>—Record Route Object (RRO).

< **detour-bandwidth**>

Usage	<rsvp-telink rsvp-interface> <detour-bandwidth> <bandwidth-priority> <i>bandwidth-priority</i> </bandwidth-priority> <total-reserved-bandwidth> <i>total-reserved-bandwidth</i> </total-reserved-bandwidth> <interface-address> <i>interface-address</i> </interface-address> </detour-bandwidth> </rsvp-telink rsvp-interface>
Description	Bandwidth reserved on detour at different priority levels.
Contents	<bandwidth-priority>—No documentation is available yet. <interface-address>—No documentation is available yet. <total-reserved-bandwidth>—Total amount of bandwidth currently reserved.

< **detour-branch**>

Usage	<rsvp-session> <detour-branch> <source-address> <i>source-address</i> </source-address> <skip-address> <i>skip-address</i> </skip-address> <lsp-state> <i>lsp-state</i> </lsp-state> <explicit-route>...</explicit-route> <record-route>...</record-route> <packet-information>...</packet-information> </detour-branch> </rsvp-session>
Description	Detour that originated at some other LSR.
Contents	<explicit-route>—Explicit Route Object (ERO). <lsp-state>—State of an LSP. <packet-information>—RSVP packets sent or received per session. <record-route>—Record Route Object (RRO). <skip-address>—Address of node or link to be skipped. <source-address>—No documentation is available yet.

• **< explicit-route >**

• **Usage** <rsvp-neighbor | rsvp-session | detour | detour-branch | mpls-lsp-path>
 <explicit-route>
 <address>*address*</address>
 <explicit-route-type>*explicit-route-type*</explicit-route-type>
 </explicit-route>
 </rsvp-neighbor | rsvp-session | detour | detour-branch | mpls-lsp-path>

• **Description** Explicit Route Object (ERO).

• **Contents** <address>—No documentation is available yet.
 <explicit-route-type>—No documentation is available yet.

• **< history >**

• **Usage** <connection>
 <history>
 <log-time-stamp>*log-time-stamp*</log-time-stamp>
 <log-event>*log-event*</log-event>
 <changed-entity>*changed-entity*</changed-entity>
 </history>
 </connection>

• **Description** No documentation is available yet.

• **Contents** <changed-entity>—No documentation is available yet.
 <log-event>—No documentation is available yet.
 <log-time-stamp>—No documentation is available yet.

• **< hostname-tlv >**

• **Usage** <isis-tlv>
 <hostname-tlv>
 <hostname>*hostname*</hostname>
 </hostname-tlv>
 </isis-tlv>

• **Description** No documentation is available yet.

• **Contents** <hostname>—No documentation is available yet.

<***idrp-tlv***>

Usage <isis-tlv>
 <***idrp-tlv***>
 <tlv-length>*tlv-length*</tlv-length>
 </***idrp-tlv***>
 </isis-tlv>

Description No documentation is available yet.

Contents <tlv-length>—No documentation is available yet.

<***instance***>

Usage <l2vpn-connection-information>
 <***instance***>
 <instance-name>*instance-name*</instance-name>
 <instance-display-error>*instance-display-error*</instance-display-error>
 <reference-site>...</reference-site>
 </***instance***>
 </l2vpn-connection-information>

Description No documentation is available yet.

Contents <instance-display-error>—No documentation is available yet.

<instance-name>—No documentation is available yet.

<reference-site>—No documentation is available yet.

<***instance-core***>

Usage <instance-information>
 <***instance-core***>
 <instance-name>*instance-name*</instance-name>
 <instance-description>*instance-description*</instance-description>
 <instance-type>*instance-type*</instance-type>
 <instance-state>*instance-state*</instance-state>
 <instance-restart-state>*instance-restart-state*</instance-restart-state>
 <instance-pathsel-timeout>*instance-pathsel-timeout*</instance-pathsel-timeout>
 <prib-name>*prib-name*</prib-name>
 <prib-route-count>*prib-route-count*</prib-route-count>
 <prib-active-count>*prib-active-count*</prib-active-count>
 <prib-holddown-count>*prib-holddown-count*</prib-holddown-count>
 <prib-hidden-count>*prib-hidden-count*</prib-hidden-count>
 <instance-interface>...</instance-interface>
 <instance-vrf>...</instance-vrf>
 <instance-rib>...</instance-rib>
 </***instance-core***>
 </instance-information>

Description No documentation is available yet.

- | | |
|-----------------|---|
| Contents | <instance-description>—No documentation is available yet.

<instance-interface>—No documentation is available yet.

<instance-name>—No documentation is available yet.

<instance-pathsel-timeout>—Maximum time to defer path selection in instance.

<instance-restart-state>—If all tables in instance are done with restart.

<instance-rib>—No documentation is available yet.

<instance-state>—No documentation is available yet.

<instance-type>—No documentation is available yet.

<instance-vrf>—No documentation is available yet.

<prib-active-count>—No documentation is available yet.

<prib-hidden-count>—No documentation is available yet.

<prib-holddown-count>—No documentation is available yet.

<prib-name>—No documentation is available yet.

<prib-route-count>—No documentation is available yet. |
|-----------------|---|

<instance-information>

- | | |
|--------------------|--|
| Usage | <rpc-reply>
<instance-information>
<instance-core>...</instance-core>
</instance-information>
</rpc-reply> |
| Description | Operational and configuration information for routing instances. |
| Contents | <instance-core>—No documentation is available yet. |

<instance-interface>

- | | |
|--------------------|--|
| Usage | <instance-core>
<instance-interface>
<interface-name> <i>interface-name</i> </interface-name>
</instance-interface>
</instance-core> |
| Description | No documentation is available yet. |
| Contents | <interface-name>—No documentation is available yet. |

< instance-rib >

Usage	<pre><instance-core> <instance-rib> <irib-name>irib-name</irib-name> <irib-route-count>irib-route-count</irib-route-count> <irib-active-count>irib-active-count</irib-active-count> <irib-holddown-count>irib-holddown-count</irib-holddown-count> <irib-hidden-count>irib-hidden-count</irib-hidden-count> </instance-rib> </instance-core></pre>
Description	No documentation is available yet.
Contents	<p><irib-active-count>—No documentation is available yet.</p> <p><irib-hidden-count>—No documentation is available yet.</p> <p><irib-holddown-count>—No documentation is available yet.</p> <p><irib-name>—No documentation is available yet.</p> <p><irib-route-count>—No documentation is available yet.</p>

< instance-vrf >

Usage	<pre><instance-core> <instance-vrf> <route-distinguisher>route-distinguisher</route-distinguisher> <vrf-import>vrf-import</vrf-import> <vrf-export>vrf-export</vrf-export> </instance-vrf> </instance-core></pre>
Description	No documentation is available yet.
Contents	<p><route-distinguisher>—No documentation is available yet.</p> <p><vrf-export>—No documentation is available yet.</p> <p><vrf-import>—No documentation is available yet.</p>

<interface>

Usage <reference-site>
 <interface>
 <interface-name>interface-name</interface-name>
 <interface-id>interface-id</interface-id>
 <interface-description>interface-description</interface-description>
 </interface>
 </reference-site>

Description No documentation is available yet.

Contents <interface-description>—No documentation is available yet.
 <interface-id>—No documentation is available yet.
 <interface-name>—No documentation is available yet.

<interface-level-data>

Usage <isis-interface>
 <interface-level-data>
 <level>level</level>
 <adjacency-count>adjacency-count</adjacency-count>
 <interface-priority>interface-priority</interface-priority>
 <metric>metric</metric>
 <te-metric>te-metric</te-metric>
 <passive>passive</passive>
 <hello-time>hello-time</hello-time>
 <holdtime>holdtime</holdtime>
 <dr-id-one>dr-id-one</dr-id-one>
 <dr-id-two>dr-id-two</dr-id-two>
 <dr-flag>dr-flag</dr-flag>
 </interface-level-data>
 </isis-interface>

Description No documentation is available yet.

Contents <adjacency-count>—No documentation is available yet.
 <dr-flag>—No documentation is available yet.
 <dr-id-one>—No documentation is available yet.
 <dr-id-two>—No documentation is available yet.
 <hello-time>—No documentation is available yet.
 <holdtime>—Hold time configured with the hold-time statement. The default hold time is 90 seconds. The hold time is three times the interval at which keepalive messages are sent.
 <interface-priority>—No documentation is available yet.
 <level>—No documentation is available yet.
 <metric>—No documentation is available yet.

<passive>—No documentation is available yet.

<te-metric>—No documentation is available yet.

< ip-prefix-tlv >

Usage

```
<isis-tlv>
  <ip-prefix-tlv>
    <isis-topology-id>isis-topology-id</isis-topology-id>
    <address-prefix>address-prefix</address-prefix>
    <metric>metric</metric>
    <prefix-status>prefix-status</prefix-status>
    <subtlv-size>subtlv-size</subtlv-size>
  </ip-prefix-tlv>
</isis-tlv>
```

Description No documentation is available yet.

Contents

- <address-prefix>—No documentation is available yet.
- <isis-topology-id>—No documentation is available yet.
- <metric>—No documentation is available yet.
- <prefix-status>—No documentation is available yet.
- <subtlv-size>—No documentation is available yet.

< ipaddress-tlv >

Usage

```
<isis-tlv>
  <ipaddress-tlv>
    <address>address</address>
  </ipaddress-tlv>
</isis-tlv>
```

Description No documentation is available yet.

Contents <address>—No documentation is available yet.

< ipv6-ra-advertisement >

Usage <ipv6-ra-interface>
 <ipv6-ra-advertisement>
 <ipv6-source-address>ip6-source-address</ip6-source-address>
 <ip6-ra-time-since>ip6-ra-time-since</ip6-ra-time-since>
 <ip6-ra-managed-flag>ip6-ra-managed-flag</ip6-ra-managed-flag>
 <ip6-ra-managed-flag-conflict>flag-conflict</ip6-ra-managed-flag-conflict>
 <ip6-ra-other-config-flag>ip6-ra-other-config-flag</ip6-ra-other-config-flag>
 <ip6-ra-other-config-flag-conflict>flag-conflict</ip6-ra-other-config-flag-conflict>
 <ip6-ra-link-mtu>ip6-ra-link-mtu</ip6-ra-link-mtu>
 <ip6-ra-link-mtu-conflict>ip6-ra-link-mtu-conflict</ip6-ra-link-mtu-conflict>
 <ip6-ra-reachable-time>ip6-ra-reachable-time</ip6-ra-reachable-time>
 <ip6-ra-reachable-time-conflict>time-conflict</ip6-ra-reachable-time-conflict>
 <ip6-ra-default-lifetime>ip6-ra-default-lifetime</ip6-ra-default-lifetime>
 <ip6-ra-default-lifetime-conflict>lifetime-conflict</ip6-ra-default-lifetime-conflict>
 <ip6-ra-retransmit-timer>ip6-ra-retransmit-timer</ip6-ra-retransmit-timer>
 <ip6-ra-retransmit-timer-conflict>timer-conflict</ip6-ra-retransmit-timer-conflict>
 <ip6-ra-current-hop-limit>ip6-ra-current-hop-limit</ip6-ra-current-hop-limit>
 <ip6-ra-current-hop-limit-conflict>limit-conflict</ip6-ra-current-hop-limit-conflict>
 <ip6-ra-prefix>...</ip6-ra-prefix>
 </ip6-ra-advertisement>
 </ip6-ra-interface>

Description No documentation is available yet.

Contents <ip6-ra-current-hop-limit>—The advertised current hop limit flag.
 <ip6-ra-current-hop-limit-conflict>—A conflict with the advertised current hop limit flag.
 <ip6-ra-default-lifetime>—The advertised default lifetime flag.
 <ip6-ra-default-lifetime-conflict>—A conflict with the advertised default lifetime flag.
 <ip6-ra-link-mtu>—The advertised link MTU.
 <ip6-ra-link-mtu-conflict>—A conflict with the advertised link MTU.
 <ip6-ra-managed-flag>—The advertised managed flag.
 <ip6-ra-managed-flag-conflict>—A conflict with the advertised managed flag.
 <ip6-ra-other-config-flag>—The advertised other configuration flag.
 <ip6-ra-other-config-flag-conflict>—A conflict with the advertised other configuration flag.
 <ip6-ra-prefix>—No documentation is available yet.
 <ip6-ra-reachable-time>—The advertised reachable time.
 <ip6-ra-reachable-time-conflict>—A conflict with the advertised reachable time.
 <ip6-ra-retransmit-timer>—The advertised retransmit timer flag.
 <ip6-ra-retransmit-timer-conflict>—A conflict with the advertised retransmit timer flag.

<ipv6-ra-time-since>—How long since the advertisement was received.

<ipv6-source-address>—The sender of the advertisement.

< ipv6-ra-information >

Usage <rpc-reply>
 <ipv6-ra-information>
 <ipv6-ra-interface>...</ipv6-ra-interface>
 </ipv6-ra-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <ipv6-ra-interface>—No documentation is available yet.

< ipv6-ra-interface >

Usage <ipv6-ra-information>
 <ipv6-ra-interface>
 <interface-name>*interface-name*</interface-name>
 <ipv6-ra-advertisements-sent>*advertisements-sent*</ipv6-ra-advertisements-sent>
 <ipv6-ra-advertisement-sent-time>*sent-time*</ipv6-ra-advertisement-sent-time>
 <ipv6-ra-solicits-received>*ipv6-ra-solicits-received*</ipv6-ra-solicits-received>
 <ipv6-ra-solicit-receive-time>*ipv6-ra-solicit-receive-time*</ipv6-ra-solicit-receive-time>
 <ipv6-ra-advertisements-received>*received*</ipv6-ra-advertisements-received>
 <ipv6-ra-advertisement>...</ipv6-ra-advertisement>
 </ipv6-ra-interface>
 </ipv6-ra-information>

Description No documentation is available yet.

Contents <interface-name>—No documentation is available yet.

<ipv6-ra-advertisement>—No documentation is available yet.

<ipv6-ra-advertisement-sent-time>—How long since the last router advertisement was sent.

<ipv6-ra-advertisements-received>—The number of router advertisements received.

<ipv6-ra-advertisements-sent>—The number of router advertisements sent.

<ipv6-ra-solicit-receive-time>—How long since the last router solicit was sent.

<ipv6-ra-solicits-received>—The number of router solicitations received.

< ipv6-ra-prefix >

Usage <ipv6-ra-advertisement>
 <ipv6-ra-prefix>
 <ipv6-ra-prefix-address>*ipv6-ra-prefix-address*</ipv6-ra-prefix-address>
 <ipv6-ra-prefix-valid-lifetime>*ipv6-ra-prefix-valid-lifetime*</ipv6-ra-prefix-valid-lifetime>
 <ipv6-ra-prefix-valid-lifetime-conflict>*conflict*</ipv6-ra-prefix-valid-lifetime-conflict>
 <ipv6-ra-prefix-preferred-lifetime>*lifetime*</ipv6-ra-prefix-preferred-lifetime>
 <ipv6-ra-prefix-preferred-lifetime-conflict>*ipv6-ra-prefix-preferred-lifetime-conflict*</ipv6-ra-prefix-preferred-lifetime-conflict>
 <ipv6-ra-prefix-on-link>*ipv6-ra-prefix-on-link*</ipv6-ra-prefix-on-link>
 <ipv6-ra-prefix-on-link-conflict>*conflict*</ipv6-ra-prefix-on-link-conflict>
 <ipv6-ra-prefix-autonomous>*ipv6-ra-prefix-autonomous*</ipv6-ra-prefix-autonomous>
 <ipv6-ra-prefix-autonomous-conflict>*conflict*</ipv6-ra-prefix-autonomous-conflict>
 </ipv6-ra-prefix>
 </ipv6-ra-advertisement>

Description No documentation is available yet.

Contents <ipv6-ra-prefix-address>—An advertised prefix.

 <ipv6-ra-prefix-autonomous>—The advertised autonomous flag of the prefix.

 <ipv6-ra-prefix-autonomous-conflict>—A conflict with the advertised autonomous flag of the prefix.

 <ipv6-ra-prefix-on-link>—The advertised on link flag of the prefix.

 <ipv6-ra-prefix-on-link-conflict>—A conflict with the advertised on link flag of the prefix.

 <ipv6-ra-prefix-preferred-lifetime>—The advertised preferred lifetime of the prefix.

 <ipv6-ra-prefix-preferred-lifetime-conflict>—A conflict with the advertised preferred lifetime of the prefix.

 <ipv6-ra-prefix-valid-lifetime>—The advertised valid lifetime of the prefix.

 <ipv6-ra-prefix-valid-lifetime-conflict>—A conflict with the advertised valid lifetime of the prefix.

< ipv6-reachability-tlv >

Usage <isis-tlv>
 <ipv6-reachability-tlv>
 <ipv6-address>*ipv6-address*</ipv6-address>
 <metric>*metric*</metric>
 <prefix-flags>*prefix-flags*</prefix-flags>
 <prefix-extern/>
 <prefix-downflag/>
 <subtlv-present/>
 <subtlv-size>*subtlv-size*</subtlv-size>
 </ipv6-reachability-tlv>
 </isis-tlv>

Description No documentation is available yet.

Contents	<ipv6-address>—No documentation is available yet.
	<metric>—No documentation is available yet.
	<prefix-downflag>—No documentation is available yet.
	<prefix-extern>—No documentation is available yet.
	<prefix-flags>—No documentation is available yet.
	<subtlv-present>—No documentation is available yet.
	<subtlv-size>—No documentation is available yet.

<**ipv6address-tlv**>

Usage	<isis-tlv>
	< ipv6address-tlv >
	<address>address</address>
	</ ipv6address-tlv >
	</isis-tlv>

Description No documentation is available yet.

Contents <address>—No documentation is available yet.

<**isis-adjacency**>

Usage	<isis-adjacency-information>
	< isis-adjacency >
	<interface-name>interface-name</interface-name>
	<system-name>system-name</system-name>
	<not-remote-address/>
	<level>level</level>
	<adjacency-state>adjacency-state</adjacency-state>
	<holdtime>holdtime</holdtime>
	<interface-priority>interface-priority</interface-priority>
	<transition-count>transition-count</transition-count>
	<last-transition-time>last-transition-time</last-transition-time>
	<circuit-type>circuit-type</circuit-type>
	<adjacency-restart-capable>adjacency-restart-capable</adjacency-restart-capable>
	<adjacency-flag>adjacency-flag</adjacency-flag>
	<adjacency-topologies>adjacency-topologies</adjacency-topologies>
	<mac-address>mac-address</mac-address>
	<lan-id>lan-id</lan-id>
	<ip-address>ip-address</ip-address>
	<ipv6-address>ipv6-address</ipv6-address>
	<snpa>snpa</snpa>
	<isis-adjacency-log>...</isis-adjacency-log>
	</ isis-adjacency >
	</isis-adjacency-information>

Description No documentation is available yet.

- **Contents** <adjacency-flag>—No documentation is available yet.
-
- <adjacency-restart-capable>—Restart capability of the adjacency.
- <adjacency-state>—State of the adjacency.
- <adjacency-topologies>—No documentation is available yet.
- <circuit-type>—No documentation is available yet.
- <holdtime>—Hold time configured with the hold-time statement. The default hold time is 90 seconds. The hold time is three times the interval at which keepalive messages are sent.
- <interface-name>—No documentation is available yet.
- <interface-priority>—No documentation is available yet.
- <ip-address>—No documentation is available yet.
- <ipv6-address>—No documentation is available yet.
- <isis-adjacency-log>—Entry describing adjacency transition.
- <lan-id>—No documentation is available yet.
- <last-transition-time>—No documentation is available yet.
- <level>—No documentation is available yet.
- <mac-address>—No documentation is available yet.
- <not-remote-address>—No documentation is available yet.
- <snpa>—No documentation is available yet.
- <system-name>—The hostname for a system.
- <transition-count>—No documentation is available yet.

<**isis-adjacency-information**>

- **Usage** <rpc-reply>
 <**isis-adjacency-information**>
 <isis-adjacency>...</isis-adjacency>
 </**isis-adjacency-information**>
</rpc-reply>
- **Description** No documentation is available yet.
- **Contents** <isis-adjacency>—No documentation is available yet.

< **isis-adjacency-log**>

Usage	<pre><isis-adjacency> <isis-adjacency-log> <adjacency-when>adjacency-when</adjacency-when> <adjacency-state>adjacency-state</adjacency-state> <adjacency-event>adjacency-event</adjacency-event> </isis-adjacency-log> </isis-adjacency></pre>
Description	Entry describing adjacency transition.
Contents	<p><adjacency-event>—Event which triggered the transition.</p> <p><adjacency-state>—State of the adjacency.</p> <p><adjacency-when>—Time at which the transition occurred.</p>

< **isis-database**>

Usage	<pre><isis-database-information> <isis-database> <level>level</level> <isis-database-entry>...</isis-database-entry> <lsp-count>lsp-count</lsp-count> </isis-database> </isis-database-information></pre>
Description	No documentation is available yet.
Contents	<p><isis-database-entry>—No documentation is available yet.</p> <p><level>—No documentation is available yet.</p> <p><lsp-count>—No documentation is available yet.</p>

- <**isis-database-entry**>

Usage <isis-database>
 <isis-database-entry>
 <lsp-id>lsp-id</lsp-id>
 <sequence-number>sequence-number</sequence-number>
 <checksum>checksum</checksum>
 <remaining-lifetime>remaining-lifetime</remaining-lifetime>
 <lsp-attributes>lsp-attributes</lsp-attributes>
 <isis-neighbor>...</isis-neighbor>
 <isis-prefix>...</isis-prefix>
 <isis-header>...</isis-header>
 <isis-packet>...</isis-packet>
 <lsp-stub/>
 <isis-tlv>...</isis-tlv>
 <transmission-status>...</transmission-status>
 </isis-database-entry>
 </isis-database>

Description No documentation is available yet.

Contents <checksum>—No documentation is available yet.
 <isis-header>—No documentation is available yet.
 <isis-neighbor>—No documentation is available yet.
 <isis-packet>—No documentation is available yet.
 <isis-prefix>—No documentation is available yet.
 <isis-tlv>—No documentation is available yet.
 <lsp-attributes>—No documentation is available yet.
 <lsp-id>—LSP ID or source port for some sender. It is unique to every sender or LSP.
 <lsp-stub>—No documentation is available yet.
 <remaining-lifetime>—No documentation is available yet.
 <sequence-number>—No documentation is available yet.
 <transmission-status>—No documentation is available yet.

- <**isis-database-information**>

Usage <rpc-reply>
 <isis-database-information>
 <isis-database>...</isis-database>
 </isis-database-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <isis-database>—No documentation is available yet.

< **isis-header**>

Usage	<pre><isis-database-entry> <isis-header> <lsp-id>Lsp-id</lsp-id> <pdu-length>pdu-length</pdu-length> <allocated-length>allocated-length</allocated-length> <router-id>router-id</router-id> <remaining-lifetime>remaining-lifetime</remaining-lifetime> <level>level</level> <interface-index>interface-index</interface-index> <estimated-free-bytes>estimated-free-bytes</estimated-free-bytes> <actual-free-bytes>actual-free-bytes</actual-free-bytes> <lsdb-timer-type>lsdb-timer-type</lsdb-timer-type> <lsdb-expiration-time>lsdb-expiration-time</lsdb-expiration-time> <needs-rebuild/> <protocol>protocol</protocol> </isis-header> </isis-database-entry></pre>
Description	No documentation is available yet.
Contents	<p><actual-free-bytes>—No documentation is available yet.</p> <p><allocated-length>—No documentation is available yet.</p> <p><estimated-free-bytes>—No documentation is available yet.</p> <p><interface-index>—No documentation is available yet.</p> <p><level>—No documentation is available yet.</p> <p><lsdb-expiration-time>—No documentation is available yet.</p> <p><lsdb-timer-type>—No documentation is available yet.</p> <p><lsp-id>—LSP ID or source port for some sender. It is unique to every sender or LSP.</p> <p><needs-rebuild>—No documentation is available yet.</p> <p><pdu-length>—No documentation is available yet.</p> <p><protocol>—No documentation is available yet.</p> <p><remaining-lifetime>—No documentation is available yet.</p> <p><router-id>—No documentation is available yet.</p>

< **isis-hostname**>

Usage <isis-hostname-information>
<isis-hostname>
 <system-id>system-id</system-id>
 <system-name>system-name</system-name>
 <isis-hostname-type>isis-hostname-type</isis-hostname-type>
</isis-hostname>
</isis-hostname-information>

Description An entry in the system-ID-to-hostname mapping table.

Contents <isis-hostname-type>—Type of system-ID-to-hostname mapping.

<system-id>—The six-octet ISO system ID for a system.

<system-name>—The hostname for a system.

< **isis-hostname-information**>

Usage <rpc-reply>
<isis-hostname-information>
 <isis-hostname>...</isis-hostname>
</isis-hostname-information>
</rpc-reply>

Description The system-ID-to-hostname mapping table.

Contents <isis-hostname>—An entry in the system-ID-to-hostname mapping table.

< **isis-interface**>

Usage <isis-interface-information>
<isis-interface>
 <interface-name>interface-name</interface-name>
 <circuit-type>circuit-type</circuit-type>
 <circuit-id>circuit-id</circuit-id>
 <isis-interface-state-one>isis-interface-state-one</isis-interface-state-one>
 <isis-interface-state-two>isis-interface-state-two</isis-interface-state-two>
 <interface-disabled-flag/>
 <dr-id-one>dr-id-one</dr-id-one>
 <dr-id-two>dr-id-two</dr-id-two>
 <metric-one>metric-one</metric-one>
 <metric-two>metric-two</metric-two>
 <interface-index>interface-index</interface-index>
 <interface-state-value>interface-state-value</interface-state-value>
 <lsp-interval>lsp-interval</lsp-interval>
 <csnp-interval>csnp-interval</csnp-interval>
 <system-name>system-name</system-name>
 <mesh-group>mesh-group</mesh-group>
 <interface-level-data>...</interface-level-data>
</isis-interface>
</isis-interface-information>

Description No documentation is available yet.

Contents	<circuit-id>—No documentation is available yet.	•
	<circuit-type>—No documentation is available yet.	•
	<csnp-interval>—No documentation is available yet.	•
	<dr-id-one>—No documentation is available yet.	•
	<dr-id-two>—No documentation is available yet.	•
	<interface-disabled-flag>—No documentation is available yet.	•
	<interface-index>—No documentation is available yet.	•
	<interface-level-data>—No documentation is available yet.	•
	<interface-name>—No documentation is available yet.	•
	<interface-state-value>—No documentation is available yet.	•
	<isis-interface-state-one>—No documentation is available yet.	•
	<isis-interface-state-two>—No documentation is available yet.	•
	<lsp-interval>—No documentation is available yet.	•
	<mesh-group>—No documentation is available yet.	•
	<metric-one>—No documentation is available yet.	•
	<metric-two>—No documentation is available yet.	•
	<system-name>—The hostname for a system.	•

< **isis-interface-information** >

Usage	<rpc-reply> <isis-interface-information> <isis-interface>...</isis-interface> </isis-interface-information> </rpc-reply>	•
Description	No documentation is available yet.	•
Contents	<isis-interface>—No documentation is available yet.	•

< **isis-neighbor**>

Usage <isis-database-entry>
 <isis-neighbor>
 <isis-topology-id>*isis-topology-id*</isis-topology-id>
 <is-neighbor-id>*is-neighbor-id*</is-neighbor-id>
 <metric>*metric*</metric>
 <reachability-delay/>
 <reachability-expense/>
 <reachability-error/>
 </isis-neighbor>
 </isis-database-entry>

Description No documentation is available yet.

Contents <is-neighbor-id>—No documentation is available yet.
 <isis-topology-id>—No documentation is available yet.
 <metric>—No documentation is available yet.
 <reachability-delay>—No documentation is available yet.
 <reachability-error>—No documentation is available yet.
 <reachability-expense>—No documentation is available yet.

< **isis-packet**>

Usage <isis-database-entry>
 <isis-packet>
 <lsp-id>*lsp-id*</lsp-id>
 <pdu-length>*pdu-length*</pdu-length>
 <pdu-lifetime>*pdu-lifetime*</pdu-lifetime>
 <checksum>*checksum*</checksum>
 <sequence-number>*sequence-number*</sequence-number>
 <lsp-attributes>*lsp-attributes*</lsp-attributes>
 <nlp-id>*nlp-id*</nlp-id>
 <mtid>*mtid*</mtid>
 <lsp-length>*lsp-length*</lsp-length>
 <pdu-version>*pdu-version*</pdu-version>
 <system-id-length>*system-id-length*</system-id-length>
 <isis-packet-type>*isis-packet-type*</isis-packet-type>
 <packet-version>*packet-version*</packet-version>
 <maximum-area>*maximum-area*</maximum-area>
 </isis-packet>
 </isis-database-entry>

Description No documentation is available yet.

Contents <checksum>—No documentation is available yet.
 <isis-packet-type>—No documentation is available yet.
 <lsp-attributes>—No documentation is available yet.

<lsp-id>—LSP ID or source port for some sender. It is unique to every sender or LSP.

<lsp-length>—No documentation is available yet.

<maximum-area>—No documentation is available yet.

<mtid>—No documentation is available yet.

<nlp-id>—No documentation is available yet.

<packet-version>—No documentation is available yet.

<pdu-length>—No documentation is available yet.

<pdu-lifetime>—No documentation is available yet.

<pdu-version>—No documentation is available yet.

<sequence-number>—No documentation is available yet.

<system-id-length>—No documentation is available yet.

< isis-prefix >

Usage <isis-database-entry>
 <isis-prefix>
 <protocol-name>protocol-name</protocol-name>
 <isis-topology-id>isis-topology-id</isis-topology-id>
 <address-prefix>address-prefix</address-prefix>
 <metric>metric</metric>
 <prefix-flag>prefix-flag</prefix-flag>
 <reachability-delay/>
 <reachability-expense/>
 <reachability-error/>
 </isis-prefix>
 </isis-database-entry>

Description No documentation is available yet.

Contents <address-prefix>—No documentation is available yet.
 <isis-topology-id>—No documentation is available yet.
 <metric>—No documentation is available yet.
 <prefix-flag>—No documentation is available yet.
 <protocol-name>—No documentation is available yet.
 <reachability-delay>—No documentation is available yet.
 <reachability-error>—No documentation is available yet.
 <reachability-expense>—No documentation is available yet.

<isis-reachability-subtlv>

Usage <isis-tlv>
 <isis-reachability-subtlv>
 <isis-subtlv-type>isis-subtlv-type</isis-subtlv-type>
 <subtlv-length>subtlv-length</subtlv-length>
 <max-bandwidth>max-bandwidth</max-bandwidth>
 <max-reserve-bandwidth>max-reserve-bandwidth</max-reserve-bandwidth>
 <current-bandwidth-header/>
 <current-reserve-bandwidth>current-reserve-bandwidth</current-reserve-bandwidth>
 <admin-groups>...</admin-groups>
 <bandwidth-priority>bandwidth-priority</bandwidth-priority>
 <address>address</address>
 <neighbor-prefix>neighbor-prefix</neighbor-prefix>
 <address-prefix>address-prefix</address-prefix>
 <prefix-err-message/>
 <te-metric>te-metric</te-metric>
 </isis-reachability-subtlv>
</isis-tlv>

Description No documentation is available yet.

Contents <address>—No documentation is available yet.

<address-prefix>—No documentation is available yet.

<admin-groups>—No documentation is available yet.

<bandwidth-priority>—No documentation is available yet.

<current-bandwidth-header>—No documentation is available yet.

<current-reserve-bandwidth>—No documentation is available yet.

<isis-subtlv-type>—No documentation is available yet.

<max-bandwidth>—No documentation is available yet.

<max-reserve-bandwidth>—No documentation is available yet.

<neighbor-prefix>—No documentation is available yet.

<prefix-err-message>—No documentation is available yet.

<subtlv-length>—No documentation is available yet.

<te-metric>—No documentation is available yet.

< **isis-route**>

Usage	<pre><isis-routing-table> <isis-route> <address-prefix>address-prefix</address-prefix> <level>level</level> <route-version>route-version</route-version> <metric>metric</metric> <metric-type>metric-type</metric-type> <interface-name>interface-name</interface-name> <isis-next-hop>isis-next-hop</isis-next-hop> </isis-route> </isis-routing-table></pre>
Description	No documentation is available yet.
Contents	<p><address-prefix>—No documentation is available yet.</p> <p><interface-name>—No documentation is available yet.</p> <p><isis-next-hop>—No documentation is available yet.</p> <p><level>—No documentation is available yet.</p> <p><metric>—No documentation is available yet.</p> <p><metric-type>—No documentation is available yet.</p> <p><route-version>—No documentation is available yet.</p>

< **isis-route-information**>

Usage	<pre><rpc-reply> <isis-route-information> <isis-routing-table>...</isis-routing-table> </isis-route-information> </rpc-reply></pre>
Description	No documentation is available yet.
Contents	<isis-routing-table>—No documentation is available yet.

< **isis-routing-table**>

Usage	<pre><isis-route-information> <isis-routing-table> <isis-topology-id>isis-topology-id</isis-topology-id> <level-one-version>level-one-version</level-one-version> <level-two-version>level-two-version</level-two-version> <isis-route>...</isis-route> </isis-routing-table> </isis-route-information></pre>
Description	No documentation is available yet.

- | | |
|-----------------|--|
| Contents | <isis-route>—No documentation is available yet. |
| | <isis-topology-id>—No documentation is available yet. |
| | <level-one-version>—No documentation is available yet. |
| | <level-two-version>—No documentation is available yet. |

<isis-spf>

- | | |
|--------------------|---|
| Usage | <isis-spf-information>
<isis-spf>
<isis-spf-results-header>...</isis-spf-results-header>
<isis-spf-result>...</isis-spf-result>
<node-count>node-count</node-count>
<isis-spf-log-header>...</isis-spf-log-header>
<isis-spf-log>...</isis-spf-log>
</isis-spf>
</isis-spf-information> |
| Description | No documentation is available yet. |
| Contents | <isis-spf-log>—No documentation is available yet.

<isis-spf-log-header>—No documentation is available yet.

<isis-spf-result>—No documentation is available yet.

<isis-spf-results-header>—No documentation is available yet.

<node-count>—No documentation is available yet. |

<isis-spf-information>

- | | |
|--------------------|---|
| Usage | <pre><rpc-reply> <isis-spf-information> <isis-spf>...</isis-spf> </isis-spf-information> </rpc-reply></pre> |
| Description | No documentation is available yet. |
| Contents | <isis-spf>—No documentation is available yet. |

< **isis-spf-log**>

Usage <isis-spf>
 <isis-spf-log>
 <start-time>*start-time*</start-time>
 <elapsed-time>*elapsed-time*</elapsed-time>
 <spf-trigger-count>*spf-trigger-count*</spf-trigger-count>
 <logging-reason>*logging-reason*</logging-reason>
 <lsp-name>*lsp-name*</lsp-name>
 <system-name>*system-name*</system-name>
 <interface-name>*interface-name*</interface-name>
 </isis-spf-log>
 </isis-spf>

Description No documentation is available yet.

Contents <elapsed-time>—Time this adjacency or session has been up or down.
 <interface-name>—No documentation is available yet.
 <logging-reason>—No documentation is available yet.
 <lsp-name>—Tunneled into an RSVP LSP.
 <spf-trigger-count>—No documentation is available yet.
 <start-time>—No documentation is available yet.
 <system-name>—The hostname for a system.

< **isis-spf-log-header**>

Usage <isis-spf>
 <isis-spf-log-header>
 <level>*level*</level>
 <isis-topology-id>*isis-topology-id*</isis-topology-id>
 </isis-spf-log-header>
 </isis-spf>

Description No documentation is available yet.

Contents <isis-topology-id>—No documentation is available yet.
 <level>—No documentation is available yet.

• **< isis-spf-result>**

Usage <isis-spf>
 <isis-spf-result>
 <node-id>node-id</node-id>
 <disconnected/>
 <metric>metric</metric>
 <no-first-fragment/>
 <next-hop-element>...</next-hop-element>
 <prefix-element>...</prefix-element>
 </isis-spf-result>
 </isis-spf>

Description No documentation is available yet.

Contents <disconnected>—No documentation is available yet.
 <metric>—No documentation is available yet.
 <next-hop-element>—No documentation is available yet.
 <no-first-fragment>—No documentation is available yet.
 <node-id>—No documentation is available yet.
 <prefix-element>—No documentation is available yet.

• **< isis-spf-results-header>**

Usage <isis-spf>
 <isis-spf-results-header>
 <level>level</level>
 <isis-topology-id>isis-topology-id</isis-topology-id>
 </isis-spf-results-header>
 </isis-spf>

Description No documentation is available yet.

Contents <isis-topology-id>—No documentation is available yet.
 <level>—No documentation is available yet.

< **isis-statistics**>

Usage	<pre><isis-statistics-information> <isis-statistics> <system-name>system-name</system-name> <isis-pdu-type>isis-pdu-type</isis-pdu-type> <packets-received>packets-received</packets-received> <packets-processed>packets-processed</packets-processed> <packets-dropped>packets-dropped</packets-dropped> <packets-sent>packets-sent</packets-sent> <packets-retransmitted>packets-retransmitted</packets-retransmitted> <totals-information>...</totals-information> <snp-queue-length>snp-queue-length</snp-queue-length> <snp-queue-drops>snp-queue-drops</snp-queue-drops> <lsp-queue-length>lsp-queue-length</lsp-queue-length> <lsp-queue-drops>lsp-queue-drops</lsp-queue-drops> <spf-runs>spf-runs</spf-runs> <fragments-rebuilt>fragments-rebuilt</fragments-rebuilt> <lsps-regenerated>lsps-regenerated</lsps-regenerated> <purges-initiated>purges-initiated</purges-initiated> </isis-statistics> </isis-statistics-information></pre>
Description	No documentation is available yet.
Contents	<p><fragments-rebuilt>—No documentation is available yet.</p> <p><isis-pdu-type>—No documentation is available yet.</p> <p><lsp-queue-drops>—No documentation is available yet.</p> <p><lsp-queue-length>—No documentation is available yet.</p> <p><lsps-regenerated>—No documentation is available yet.</p> <p><packets-dropped>—No documentation is available yet.</p> <p><packets-processed>—No documentation is available yet.</p> <p><packets-received>—No documentation is available yet.</p> <p><packets-retransmitted>—No documentation is available yet.</p> <p><packets-sent>—No documentation is available yet.</p> <p><purges-initiated>—No documentation is available yet.</p> <p><snp-queue-drops>—No documentation is available yet.</p> <p><snp-queue-length>—No documentation is available yet.</p> <p><spf-runs>—No documentation is available yet.</p> <p><system-name>—The hostname for a system.</p> <p><totals-information>—No documentation is available yet.</p>

• **< isis-statistics-information>**

• **Usage** <rpc-reply>
 <isis-statistics-information>
 <isis-statistics>...</isis-statistics>
 </isis-statistics-information>
</rpc-reply>

• **Description** No documentation is available yet.

• **Contents** <isis-statistics>—No documentation is available yet.

• **< isis-tlv>**

• **Usage** <isis-database-entry>
 <isis-tlv>
 <isis-tlv-overhead>...</isis-tlv-overhead>
 <area-address-tlv>...</area-address-tlv>
 <protocols-tlv>...</protocols-tlv>
 <mt-tlv>...</mt-tlv>
 <hostname-tlv>...</hostname-tlv>
 <ipaddress-tlv>...</ipaddress-tlv>
 <ipv6address-tlv>...</ipv6address-tlv>
 <router-id-tlv>...</router-id-tlv>
 <reachability-tlv>...</reachability-tlv>
 <ipv6-reachability-tlv>...</ipv6-reachability-tlv>
 <isis-reachability-subtlv>...</isis-reachability-subtlv>
 <authentication-tlv>...</authentication-tlv>
 <idrp-tlv>...</idrp-tlv>
 <ip-prefix-tlv>...</ip-prefix-tlv>
 <unknown-tlv>...</unknown-tlv>
 <tlv-stragglers>...</tlv-stragglers>
 </isis-tlv>
</isis-database-entry>

• **Description** No documentation is available yet.

• **Contents** <area-address-tlv>—No documentation is available yet.

• <authentication-tlv>—No documentation is available yet.

• <hostname-tlv>—No documentation is available yet.

• <idrp-tlv>—No documentation is available yet.

• <ip-prefix-tlv>—No documentation is available yet.

• <ipaddress-tlv>—No documentation is available yet.

• <ipv6-reachability-tlv>—No documentation is available yet.

• <ipv6address-tlv>—No documentation is available yet.

• <isis-reachability-subtlv>—No documentation is available yet.

• <isis-tlv-overhead>—No documentation is available yet.

<mt-tlv>—No documentation is available yet.

<protocols-tlv>—No documentation is available yet.

<reachability-tlv>—No documentation is available yet.

<router-id-tlv>—No documentation is available yet.

<tlv-stragglers>—No documentation is available yet.

<unknown-tlv>—No documentation is available yet.

< isis-tlv-overhead >

Usage	<isis-tlv> <isis-tlv-overhead> <isis-tlv-type>isis-tlv-type</isis-tlv-type> <tlv-length>tlv-length</tlv-length> <bytes-left>bytes-left</bytes-left> </isis-tlv-overhead> </isis-tlv>
Description	No documentation is available yet.
Contents	<bytes-left>—No documentation is available yet. <isis-tlv-type>—No documentation is available yet. <tlv-length>—No documentation is available yet.

< l2circuit-connection-information >

Usage	<rpc-reply> <l2circuit-connection-information> <l2circuit-neighbor>...</l2circuit-neighbor> </l2circuit-connection-information> </rpc-reply>
Description	No documentation is available yet.
Contents	<l2circuit-neighbor>—No documentation is available yet.

< l2circuit-neighbor >

Usage <l2circuit-connection-information>
 <l2circuit-neighbor>
 <neighbor-address>neighbor-address</neighbor-address>
 <neighbor-display-error>neighbor-display-error</neighbor-display-error>
 <connection>...</connection>
 </l2circuit-neighbor>
 </l2circuit-connection-information>

Description No documentation is available yet.

Contents <connection>—No documentation is available yet.

 <neighbor-address>—IP address of this neighbor.

 <neighbor-display-error>—No documentation is available yet.

< l2vpn-connection-information >

Usage <rpc-reply>
 <l2vpn-connection-information>
 <instance>...</instance>
 </l2vpn-connection-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <instance>—No documentation is available yet.

< label-block >

Usage <reference-site>
 <label-block>
 <label-block-offset>label-block-offset</label-block-offset>
 <label-block-range>label-block-range</label-block-range>
 <label-block-base>label-block-base</label-block-base>
 <label-block-status-vector>label-block-status-vector</label-block-status-vector>
 </label-block>
 </reference-site>

Description No documentation is available yet.

Contents <label-block-base>—No documentation is available yet.

 <label-block-offset>—No documentation is available yet.

 <label-block-range>—No documentation is available yet.

 <label-block-status-vector>—No documentation is available yet.

< **ldp-binding**>

Usage	<pre><ldp-database> <ldp-binding> <ldp-label>ldp-label</ldp-label> <ldp-prefix>ldp-prefix</ldp-prefix> <ldp-binding-filtered/> <ldp-binding-state>ldp-binding-state</ldp-binding-state> <ldp-binding-queued/> </ldp-binding> </ldp-database></pre>
Description	No documentation is available yet.
Contents	<p><ldp-binding-filtered>—No documentation is available yet.</p> <p><ldp-binding-queued>—No documentation is available yet.</p> <p><ldp-binding-state>—No documentation is available yet.</p> <p><ldp-label>—No documentation is available yet.</p> <p><ldp-prefix>—No documentation is available yet.</p>

< **ldp-database**>

Usage	<pre><ldp-database-information> <ldp-database> <ldp-database-type>ldp-database-type</ldp-database-type> <ldp-session-id>ldp-session-id</ldp-session-id> <ldp-binding>...</ldp-binding> </ldp-database> </ldp-database-information></pre>
Description	No documentation is available yet.
Contents	<p><ldp-binding>—No documentation is available yet.</p> <p><ldp-database-type>—No documentation is available yet.</p> <p><ldp-session-id>—No documentation is available yet.</p>

< **ldp-database-information**>

Usage	<pre><rpc-reply> <ldp-database-information> <ldp-database>...</ldp-database> </ldp-database-information> </rpc-reply></pre>
Description	No documentation is available yet.
Contents	<ldp-database>—No documentation is available yet.

<ldp-event-statistics>

Usage <ldp-statistics>
 <ldp-event-statistics>
 <ldp-event-type>*ldp-event-type*</ldp-event-type>
 <ldp-event-count>*ldp-event-count*</ldp-event-count>
 <ldp-event-count-5seconds>*ldp-event-count-5seconds*</ldp-event-count-5seconds>
 </ldp-event-statistics>
 </ldp-statistics>

Description No documentation is available yet.

Contents <ldp-event-count>—No documentation is available yet.
 <ldp-event-count-5seconds>—No documentation is available yet.
 <ldp-event-type>—No documentation is available yet.

<ldp-interface>

Usage <ldp-interface-information>
 <ldp-interface>
 <interface-name>*interface-name*</interface-name>
 <ldp-label-space-id>*ldp-label-space-id*</ldp-label-space-id>
 <ldp-neighbor-count>*ldp-neighbor-count*</ldp-neighbor-count>
 <ldp-next-hello>*ldp-next-hello*</ldp-next-hello>
 <ldp-hello-interval>*ldp-hello-interval*</ldp-hello-interval>
 <ldp-holdtime>*ldp-holdtime*</ldp-holdtime>
 <ldp-transport-address>*ldp-transport-address*</ldp-transport-address>
 <ldp-interface-index>*ldp-interface-index*</ldp-interface-index>
 <ldp-block-time>*ldp-block-time*</ldp-block-time>
 </ldp-interface>
 </ldp-interface-information>

Description No documentation is available yet.

Contents <interface-name>—No documentation is available yet.
 <ldp-block-time>—No documentation is available yet.
 <ldp-hello-interval>—No documentation is available yet.
 <ldp-holdtime>—No documentation is available yet.
 <ldp-interface-index>—No documentation is available yet.
 <ldp-label-space-id>—No documentation is available yet.
 <ldp-neighbor-count>—No documentation is available yet.
 <ldp-next-hello>—No documentation is available yet.
 <ldp-transport-address>—No documentation is available yet.

< **ldp-interface-information**>

Usage <rpc-reply>
 <ldp-interface-information>
 <ldp-interface>...</ldp-interface>
 </ldp-interface-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <ldp-interface>—No documentation is available yet.

< **ldp-message-statistics**>

Usage <ldp-statistics>
 <ldp-message-statistics>
 <ldp-message-type>ldp-message-type</ldp-message-type>
 <ldp-messages-sent>ldp-messages-sent</ldp-messages-sent>
 <ldp-messages-received>ldp-messages-received</ldp-messages-received>
 <ldp-messages-sent-5seconds>ldp-messages-sent</ldp-messages-sent-5seconds>
 <ldp-messages-received-5seconds>received</ldp-messages-received-5seconds>
 </ldp-message-statistics>
 </ldp-statistics>

Description No documentation is available yet.

Contents <ldp-message-type>—No documentation is available yet.

<ldp-messages-received>—No documentation is available yet.

<ldp-messages-received-5seconds>—No documentation is available yet.

<ldp-messages-sent>—No documentation is available yet.

<ldp-messages-sent-5seconds>—No documentation is available yet.

< **ldp-neighbor**>

Usage <ldp-neighbor-information>
 <ldp-neighbor>
 <ldp-neighbor-address>ldp-neighbor-address</ldp-neighbor-address>
 <interface-name>interface-name</interface-name>
 <ldp-label-space-id>ldp-label-space-id</ldp-label-space-id>
 <ldp-remaining-time>ldp-remaining-time</ldp-remaining-time>
 <ldp-transport-address>ldp-transport-address</ldp-transport-address>
 <ldp-config-sequence>ldp-config-sequence</ldp-config-sequence>
 <ldp-up-time>ldp-up-time</ldp-up-time>
 <ldp-reference-count>ldp-reference-count</ldp-reference-count>
 <ldp-holdtime>ldp-holdtime</ldp-holdtime>
 </ldp-neighbor>
 </ldp-neighbor-information>

Description No documentation is available yet.

- | | |
|-----------------|--|
| Contents | <interface-name>—No documentation is available yet. |
| | <ldp-config-sequence>—No documentation is available yet. |
| | <ldp-holddate>—No documentation is available yet. |
| | <ldp-label-space-id>—No documentation is available yet. |
| | <ldp-neighbor-address>—No documentation is available yet. |
| | <ldp-reference-count>—No documentation is available yet. |
| | <ldp-remaining-time>—No documentation is available yet. |
| | <ldp-transport-address>—No documentation is available yet. |
| | <ldp-up-time>—No documentation is available yet. |

<ldp-neighbor-information>

- | | |
|--------------------|--|
| Usage | <rpc-reply>
<ldp-neighbor-information>
<ldp-neighbor>...</ldp-neighbor>
</ldp-neighbor-information>
</rpc-reply> |
| Description | No documentation is available yet. |
| Contents | <ldp-neighbor>—No documentation is available yet. |

<ldp-nexthop>

- | | |
|--------------------|---|
| Usage | <ldp-route>
<ldp-nexthop>
<interface-name> <i>interface-name</i> </interface-name>
<lsp-name> <i>lsp-name</i> </lsp-name>
<interface-address> <i>interface-address</i> </interface-address>
<ldp-session-id> <i>ldp-session-id</i> </ldp-session-id>
</ldp-nexthop>
</ldp-route> |
| Description | No documentation is available yet. |
| Contents | <interface-address>—No documentation is available yet.

<interface-name>—No documentation is available yet.

<ldp-session-id>—No documentation is available yet.

<lsp-name>—Tunneled into an RSVP LSP. |

<**ldp-path**>

Usage	<pre><ldp-path-information> <ldp-path> <ldp-outlib-session>ldp-outlib-session</ldp-outlib-session> <ldp-outlib-label>ldp-outlib-label</ldp-outlib-label> <ldp-ingress-label/> <ldp-inlib-session>ldp-inlib-session</ldp-inlib-session> <ldp-inlib-label>ldp-inlib-label</ldp-inlib-label> <ldp-egress-label/> <ldp-path-route>...</ldp-path-route> <ldp-reference-count>ldp-reference-count</ldp-reference-count> <ldp-route-transit/> <ldp-global-label>ldp-global-label</ldp-global-label> </ldp-path> </ldp-path-information></pre>
Description	No documentation is available yet.
Contents	<p><ldp-egress-label>—No documentation is available yet.</p> <p><ldp-global-label>—No documentation is available yet.</p> <p><ldp-ingress-label>—No documentation is available yet.</p> <p><ldp-inlib-label>—No documentation is available yet.</p> <p><ldp-inlib-session>—No documentation is available yet.</p> <p><ldp-outlib-label>—No documentation is available yet.</p> <p><ldp-outlib-session>—No documentation is available yet.</p> <p><ldp-path-route>—No documentation is available yet.</p> <p><ldp-reference-count>—No documentation is available yet.</p> <p><ldp-route-transit>—No documentation is available yet.</p>

<**ldp-path-information**>

Usage	<pre><rpc-reply> <ldp-path-information> <ldp-path>...</ldp-path> </ldp-path-information> </rpc-reply></pre>
Description	No documentation is available yet.
Contents	<ldp-path>—No documentation is available yet.

• **<ldp-path-route>**

Usage <ldp-path>
 <ldp-path-route>
 <ldp-prefix>ldp-prefix</ldp-prefix>
 <ldp-route-ingress/>
 </ldp-path-route>
 </ldp-path>

Description No documentation is available yet.

Contents <ldp-prefix>—No documentation is available yet.

 <ldp-route-ingress>—No documentation is available yet.

• **<ldp-route>**

Usage <ldp-route-information>
 <ldp-route>
 <ldp-prefix>ldp-prefix</ldp-prefix>
 <ldp-nexthop>...</ldp-nexthop>
 <ldp-label>ldp-label</ldp-label>
 <ldp-no-label/>
 <ldp-topology-entry>ldp-topology-entry</ldp-topology-entry>
 </ldp-route>
 </ldp-route-information>

Description No documentation is available yet.

Contents <ldp-label>—No documentation is available yet.

 <ldp-nexthop>—No documentation is available yet.

 <ldp-no-label>—No documentation is available yet.

 <ldp-prefix>—No documentation is available yet.

 <ldp-topology-entry>—No documentation is available yet.

• **<ldp-route-information>**

Usage <rpc-reply>
 <ldp-route-information>
 <ldp-route>...</ldp-route>
 </ldp-route-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <ldp-route>—No documentation is available yet.

<**ldp-session**>

Usage <ldp-session-information>

```

<ldp-session>
    <ldp-neighbor-address>ldp-neighbor-address</ldp-neighbor-address>
    <ldp-session-state>ldp-session-state</ldp-session-state>
    <ldp-connection-state>ldp-connection-state</ldp-connection-state>
    <ldp-remaining-time>ldp-remaining-time</ldp-remaining-time>
    <ldp-session-id>ldp-session-id</ldp-session-id>
    <ldp-retry-time>ldp-retry-time</ldp-retry-time>
    <ldp-keepalive-time>ldp-keepalive-time</ldp-keepalive-time>
    <ldp-session-role>ldp-session-role</ldp-session-role>
    <ldp-session-max-pdu>ldp-session-max-pdu</ldp-session-max-pdu>
    <ldp-holdtime>ldp-holdtime</ldp-holdtime>
    <ldp-neighbor-count>ldp-neighbor-count</ldp-neighbor-count>
    <ldp-keepalive-interval>ldp-keepalive-interval</ldp-keepalive-interval>
    <ldp-retry-interval>ldp-retry-interval</ldp-retry-interval>
    <ldp-local-address>ldp-local-address</ldp-local-address>
    <ldp-remote-address>ldp-remote-address</ldp-remote-address>
    <ldp-up-time>ldp-up-time</ldp-up-time>
    <ldp-session-address>....</ldp-session-address>
    <ldp-session-deleted/>
    <ldp-session-connect-pending/>
    <ldp-session-close-pending/>
    <ldp-session-queue-depth>ldp-session-queue-depth</ldp-session-queue-depth>
    <ldp-session-read-pending/>
    <ldp-session-write-pending/>
    <ldp-session-receive-buffer-bytes>bytes</ldp-session-receive-buffer-bytes>
    <ldp-session-transmit-buffer-bytes>bytes</ldp-session-transmit-buffer-bytes>
    <ldp-session-no-connection/>
</ldp-session>
</ldp-session-information>

```

Description No documentation is available yet.

Contents <ldp-connection-state>—No documentation is available yet.

<ldp-holdtime>—No documentation is available yet.

<ldp-keepalive-interval>—No documentation is available yet.

<ldp-keepalive-time>—No documentation is available yet.

<ldp-local-address>—No documentation is available yet.

• `<ldp-neighbor-address>`—No documentation is available yet.
• `<ldp-neighbor-count>`—No documentation is available yet.
• `<ldp-remaining-time>`—No documentation is available yet.
• `<ldp-remote-address>`—No documentation is available yet.
• `<ldp-retry-interval>`—No documentation is available yet.
• `<ldp-retry-time>`—No documentation is available yet.
• `<ldp-session-address>`—No documentation is available yet.
• `<ldp-session-close-pending>`—No documentation is available yet.
• `<ldp-session-connect-pending>`—No documentation is available yet.
• `<ldp-session-deleted>`—No documentation is available yet.
• `<ldp-session-id>`—No documentation is available yet.
• `<ldp-session-max-pdu>`—No documentation is available yet.
• `<ldp-session-no-connection>`—No documentation is available yet.
• `<ldp-session-queue-depth>`—No documentation is available yet.
• `<ldp-session-read-pending>`—No documentation is available yet.
• `<ldp-session-receive-buffer-bytes>`—No documentation is available yet.
• `<ldp-session-role>`—No documentation is available yet.
• `<ldp-session-state>`—No documentation is available yet.
• `<ldp-session-transmit-buffer-bytes>`—No documentation is available yet.
• `<ldp-session-write-pending>`—No documentation is available yet.
• `<ldp-up-time>`—No documentation is available yet.

< ldp-session-address >

Usage `<ldp-session>
 <ldp-session-address>
 <interface-address>interface-address</interface-address>
 <interface-name>interface-name</interface-name>
 </ldp-session-address>
</ldp-session>`

Description No documentation is available yet.

Contents `<interface-address>`—No documentation is available yet.
`<interface-name>`—No documentation is available yet.

< **ldp-session-information**>

Usage <rpc-reply>
 <ldp-session-information>
 <ldp-session>...</ldp-session>
 </ldp-session-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <ldp-session>—No documentation is available yet.

< **ldp-statistics**>

Usage <ldp-statistics-information>
 ldp-statistics
 <ldp-message-statistics>...</ldp-message-statistics>
 <ldp-event-statistics>...</ldp-event-statistics>
 ldp-statistics
 </ldp-statistics-information>

Description No documentation is available yet.

Contents <ldp-event-statistics>—No documentation is available yet.

<ldp-message-statistics>—No documentation is available yet.

< **ldp-statistics-information**>

Usage <rpc-reply>
 <ldp-statistics-information>
 <ldp-statistics>...</ldp-statistics>
 </ldp-statistics-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <ldp-statistics>—No documentation is available yet.

< **ldp-traffic-statistics**>

Usage <ldp-traffic-statistics-information>
 <ldp-traffic-statistics>
 <ldp-prefix>ldp-prefix</ldp-prefix>
 <ldp-traffic-type>ldp-traffic-type</ldp-traffic-type>
 <ldp-traffic-error>ldp-traffic-error</ldp-traffic-error>
 <ldp-traffic-statistics-packet-count>packet-count</ldp-traffic-statistics-packet-count>
 <ldp-traffic-statistics-byte-count>byte-count</ldp-traffic-statistics-byte-count>
 <ldp-traffic-multiple-fec>ldp-traffic-multiple-fec</ldp-traffic-multiple-fec>
 </ldp-traffic-statistics>
 </ldp-traffic-statistics-information>

Description No documentation is available yet.

Contents <ldp-prefix>—No documentation is available yet.
 <ldp-traffic-error>—The error encountered when querying the statistics.
 <ldp-traffic-multiple-fec>—Multiple FECs sharing the same label.
 <ldp-traffic-statistics-byte-count>—Number of bytes switched for this FEC.
 <ldp-traffic-statistics-packet-count>—Number of packets switched for this FEC.
 <ldp-traffic-type>—Type of traffic, ingress or transit.

< **ldp-traffic-statistics-error**>

Usage <ldp-traffic-statistics-information>
 <ldp-traffic-statistics-error>
 <ldp-traffic-error>ldp-traffic-error</ldp-traffic-error>
 </ldp-traffic-statistics-error>
 </ldp-traffic-statistics-information>

Description No documentation is available yet.

Contents <ldp-traffic-error>—The error encountered when querying the statistics.

< **ldp-traffic-statistics-information**>

Usage <rpc-reply>
 <ldp-traffic-statistics-information>
 <ldp-traffic-statistics>...</ldp-traffic-statistics>
 <ldp-traffic-statistics-error>...</ldp-traffic-statistics-error>
 </ldp-traffic-statistics-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <ldp-traffic-statistics>—No documentation is available yet.
 <ldp-traffic-statistics-error>—No documentation is available yet.

<link-subtlv>

Usage	<pre><ospf-opaque-area-lsa> <link-subtlv> <tlv-type-name>tlv-type-name</tlv-type-name> <tlv-type-value>tlv-type-value</tlv-type-value> <tlv-length>tlv-length</tlv-length> <bytes-left>bytes-left</bytes-left> <formatted-tlv-data>formatted-tlv-data</formatted-tlv-data> </link-subtlv> </ospf-opaque-area-lsa></pre>
Description	No documentation is available yet.
Contents	<p><bytes-left>—No documentation is available yet.</p> <p><formatted-tlv-data>—No documentation is available yet.</p> <p><tlv-length>—No documentation is available yet.</p> <p><tlv-type-name>—No documentation is available yet.</p> <p><tlv-type-value>—No documentation is available yet.</p>

<lm-information>

Usage	<pre><rpc-reply> <lm-information> <lm-peer-root-information>...</lm-peer-root-information> <lm-te-link-root-information>...</lm-te-link-root-information> </lm-information> </rpc-reply></pre>
Description	No documentation is available yet.
Contents	<p><lm-peer-root-information>—No documentation is available yet.</p> <p><lm-te-link-root-information>—No documentation is available yet.</p>

• **<lm-peer-information>**

Usage <lm-peer-root-information>
 <lm-peer-information>
 <lm-source>/lm-source</lm-source>
 <lm-sys-id>/lm-sys-id</lm-sys-id>
 <lm-peer-name>/lm-peer-name</lm-peer-name>
 <lm-state>/lm-state</lm-state>
 <lm-peer-control-address>/lm-peer-control-address</lm-peer-control-address>
 <lm-peer-control-channel>/lm-peer-control-channel</lm-peer-control-channel>
 <lm-peer-keepalive>/lm-peer-keepalive</lm-peer-keepalive>
 <lm-peer-te-links>...</lm-peer-te-links>
 </lm-peer-information>
 </lm-peer-root-information>

Description No documentation is available yet.

Contents <lm-peer-control-address>—Peer control address.

 <lm-peer-control-channel>—Peer active control interface.

 <lm-peer-keepalive>—Peer uses LMP keepalives.

 <lm-peer-name>—Name of object.

 <lm-peer-te-links>—Link management peer TE links.

 <lm-source>—Source of information.

 <lm-state>—State of object.

 <lm-sys-id>—System identifier of object.

• **<lm-peer-root-information>**

Usage <lm-information>
 <lm-peer-root-information>
 <lm-peer-information>...</lm-peer-information>
 </lm-peer-root-information>
 </lm-information>

Description No documentation is available yet.

Contents <lm-peer-information>—No documentation is available yet.

<**lm-peer-te-links**>

- Usage** <lm-peer-information>
 <lm-peer-te-links>
 <lm-peer-te-link>lm-peer-te-link</lm-peer-te-link>
 </lm-peer-te-links>
</lm-peer-information>
- Description** Link management peer TE links.
- Contents** <lm-peer-te-link>—TE link name contained in peer.

<**lm-te-link-information**>

- Usage** <lm-te-link-root-information>
 <lm-te-link-information>
 <lm-te-link-name>lm-te-link-name</lm-te-link-name>
 <lm-local-id>lm-local-id</lm-local-id>
 <lm-remote-id>lm-remote-id</lm-remote-id>
 <lm-state>lm-state</lm-state>
 <lm-local-address>lm-local-address</lm-local-address>
 <lm-remote-address>lm-remote-address</lm-remote-address>
 <lm-encoding>lm-encoding</lm-encoding>
 <lm-min-bandwidth>lm-min-bandwidth</lm-min-bandwidth>
 <lm-max-bandwidth>lm-max-bandwidth</lm-max-bandwidth>
 <lm-total-bandwidth>lm-total-bandwidth</lm-total-bandwidth>
 <lm-avail-bandwidth>lm-avail-bandwidth</lm-avail-bandwidth>
 <lm-te-link-resources>...</lm-te-link-resources>
 </lm-te-link-information>
</lm-te-link-root-information>
- Description** No documentation is available yet.
- Contents** <lm-avail-bandwidth>—Unallocated bandwidth on this TE link.
<lm-encoding>—TE Link encoding type.
<lm-local-address>—Local address of object.
<lm-local-id>—Local identifier of object.
<lm-max-bandwidth>—Maximum reservable bandwidth per allocation.
<lm-min-bandwidth>—Minimum reservable bandwidth per allocation.
<lm-remote-address>—Remote address of object.
<lm-remote-id>—Remote identifier of object.
<lm-state>—State of object.
<lm-te-link-name>—Name of object.
<lm-te-link-resources>—No documentation is available yet.
<lm-total-bandwidth>—Total bandwidth available on this TE link.

• **<lm-te-link-resources>**

Usage <lm-te-link-information>
 <lm-te-link-resources>
 <lm-res-name>lm-res-name</lm-res-name>
 <lm-res-local-id>lm-res-local-id</lm-res-local-id>
 <lm-res-remote-id>lm-res-remote-id</lm-res-remote-id>
 <lm-res-local-addr>lm-res-local-addr</lm-res-local-addr>
 <lm-res-remote-addr>lm-res-remote-addr</lm-res-remote-addr>
 <lm-res-bandwidth>lm-res-bandwidth</lm-res-bandwidth>
 <lm-res-in-use>lm-res-in-use</lm-res-in-use>
 </lm-te-link-resources>
 </lm-te-link-information>

Description No documentation is available yet.

Contents <lm-res-bandwidth>—Resource bandwidth.

 <lm-res-in-use>—Resource allocation status.

 <lm-res-local-addr>—Resource local address.

 <lm-res-local-id>—Resource local identifier.

 <lm-res-name>—Resource name or name of physical interface.

 <lm-res-remote-addr>—Resource remote address.

 <lm-res-remote-id>—Resource remote identifier.

• **<lm-te-link-root-information>**

Usage <lm-information>
 <lm-te-link-root-information>
 <lm-te-link-information>...</lm-te-link-information>
 </lm-te-link-root-information>
 </lm-information>

Description No documentation is available yet.

Contents <lm-te-link-information>—No documentation is available yet.

< local-interface >

Usage	<connection> <local-interface> <interface-name> <i>interface-name</i> </interface-name> <interface-status> <i>interface-status</i> </interface-status> <interface-encapsulation> <i>interface-encapsulation</i> </interface-encapsulation> </local-interface> </connection>
Description	No documentation is available yet.
Contents	<interface-encapsulation>—No documentation is available yet. <interface-name>—No documentation is available yet. <interface-status>—No documentation is available yet.

< log-element >

Usage	<ospf-log-instance ospf-log-maximum-length ospf-log-events> <log-element> <timestamp> <i>timestamp</i> </timestamp> <ospf-log-type> <i>ospf-log-type</i> </ospf-log-type> <elapsed-time> <i>elapsed-time</i> </elapsed-time> </log-element> </ospf-log-instance ospf-log-maximum-length ospf-log-events>
Description	No documentation is available yet.
Contents	<elapsed-time>—Time this adjacency or session has been up or down. <ospf-log-type>—No documentation is available yet. <timestamp>—Time when something occurs.

< message-statistics >

Usage	<rsvp-statistics-information rsvp-interface> <message-statistics> <rsvp-message> <i>rsvp-message</i> </rsvp-message> <messages-sent> <i>messages-sent</i> </messages-sent> <messages-received> <i>messages-received</i> </messages-received> <messages-sent-5seconds> <i>messages-sent-5seconds</i> </messages-sent-5seconds> <messages-received-5seconds> <i>messages-received</i> </messages-received-5seconds> </message-statistics> </rsvp-statistics-information rsvp-interface>
Description	Statistics per RSVP message type.
Contents	<messages-received>—Total number of messages received. <messages-received-5seconds>—Number of messages received in last 5 seconds. <messages-sent>—Total number of messages sent.

- `<messages-sent-5seconds>`—Number of messages sent in last 5 seconds.
- `<rsvp-message>`—No documentation is available yet.

< mpls-admin-group>

Usage `<mpls-admin-group-information>`
 `<mpls-admin-group>`
 `<admin-group-name>`*admin-group-name*`</admin-group-name>`
 `<index>`*index*`</index>`
 `</mpls-admin-group>`
`</mpls-admin-group-information>`

Description No documentation is available yet.

Contents `<admin-group-name>`—Name of the admin group.

`<index>`—No documentation is available yet.

< mpls-admin-group-information>

Usage `<rpc-reply>`
 `<mpls-admin-group-information>`
 `<mpls-admin-group>...``</mpls-admin-group>`
 `</mpls-admin-group-information>`
`</rpc-reply>`

Description No documentation is available yet.

Contents `<mpls-admin-group>`—No documentation is available yet.

< mpls-cspf>

Usage `<mpls-cspf-information>`
 `<mpls-cspf>`
 `<cspf-queue>...``</cspf-queue>`
 `<cspf-paths>...``</cspf-paths>`
 `<cspf-timing>...``</cspf-timing>`
 `</mpls-cspf>`
`</mpls-cspf-information>`

Description No documentation is available yet.

Contents `<cspf-paths>`—CSPF path computations statistics.

`<cspf-queue>`—CSPF queue statistics.

`<cspf-timing>`—CSPF timing statistics.

< **mpls-cspf-information**>

Usage <rpc-reply>
 <mpls-cspf-information>
 <mpls-cspf>...</mpls-cspf>
 </mpls-cspf-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <mpls-cspf>—No documentation is available yet.

< **mpls-error**>

Usage <rpc-reply>
 <mpls-error>
 <mpls-error-msg>mpls-error-msg</mpls-error-msg>
 </mpls-error>
 </rpc-reply>

Description No documentation is available yet.

Contents <mpls-error-msg>—MPLS error message.

< **mpls-interface**>

Usage <mpls-interface-information>
 <mpls-interface>
 <interface-name>interface-name</interface-name>
 <mpls-interface-state>mpls-interface-state</mpls-interface-state>
 <no-group-flag/>
 <admin-group-name>admin-group-name</admin-group-name>
 <admin-group-number>admin-group-number</admin-group-number>
 </mpls-interface>
 </mpls-interface-information>

Description No documentation is available yet.

Contents <admin-group-name>—Name of the admin group.

<admin-group-number>—Number of the admin group.

<interface-name>—No documentation is available yet.

<mpls-interface-state>—No documentation is available yet.

<no-group-flag>—No documentation is available yet.

< mpls-interface-information>

Usage <rpc-reply>
 <mpls-interface-information>
 <mpls-interface>...</mpls-interface>
 </mpls-interface-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <mpls-interface>—No documentation is available yet.

< mpls-lsp>

Usage <rsvp-session>
 <mpls-lsp>
 <destination-address>*destination-address*</destination-address>
 <source-address>*source-address*</source-address>
 <lsp-state>*lsp-state*</lsp-state>
 <route-count>*route-count*</route-count>
 <active-path>*active-path*</active-path>
 <is-primary/>
 <name>*name*</name>
 <bidirectional/>
 <lsp-description>*lsp-description*</lsp-description>
 <lsp-pktbytes>*lsp-pktbytes*</lsp-pktbytes>
 <no-statistics/>
 <is-fastreroute/>
 <load-balance>*load-balance*</load-balance>
 <metric>*metric*</metric>
 <admin-groups>...</admin-groups>
 <lsp-creation-time>*lsp-creation-time*</lsp-creation-time>
 <retry-timer>*retry-timer*</retry-timer>
 <retry-limit>*retry-limit*</retry-limit>
 <mpls-lsp-autobandwidth>...</mpls-lsp-autobandwidth>
 <mpls-lsp-path>...</mpls-lsp-path>
 <mpls-lsp-attributes>...</mpls-lsp-attributes>
 </mpls-lsp>
 </rsvp-session>

Description MPLS Label Switched Path (LSP).

Contents <active-path>—Path that the LSP is currently using.

<admin-groups>—No documentation is available yet.

<bidirectional>—LSP is bidirectional.

<destination-address>—Session destination address.

<is-fastreroute>—Indicates that detours will be established for an LSP so that if a node or link in the LSP fails, the traffic on the LSP can be rerouted with minimal packet loss.

<is-primary>—This is a primary path.

<load-balance>—Load balancing algorithm chosen.

<lsp-creation-time>—Time when LSP was created.

<lsp-description>—LSP description string (up to 80 characters).

<lsp-pktbytes>—No documentation is available yet.

<lsp-state>—State of an LSP.

<metric>—No documentation is available yet.

<mpls-lsp-attributes>—No documentation is available yet.

<mpls-lsp-autobandwidth>—No documentation is available yet.

<mpls-lsp-path>—Primary or secondary LSP path.

<name>—No documentation is available yet.

<no-statistics>—Indicates that no statistics are available for this session.

<retry-limit>—Maximum number of times the ingress tries to establish the primary path. It is reset each time primary path is created successfully.

<retry-timer>—Amount of time the ingress router waits between attempts to establish primary path.

<route-count>—Number of active routes.

<source-address>—No documentation is available yet.

< mpls-lsp-attributes >

Usage <mpls-lsp>
 <mpls-lsp-attributes>
 <signal-type>signal-type</signal-type>
 <encoding-type>encoding-type</encoding-type>
 <switching-type>switching-type</switching-type>
 <gpid>gpid</gpid>
 <protection-type>protection-type</protection-type>
 </mpls-lsp-attributes>
 </mpls-lsp>

Description No documentation is available yet.

Contents <encoding-type>—LSP encoding type.

 <gpid>—LSP generalized PID.

 <protection-type>—LSP protection desired.

 <signal-type>—No documentation is available yet.

 <switching-type>—LSP switching capability.

< mpls-lsp-autobandwidth>

Usage <mpls-lsp>
<mpls-lsp-autobandwidth>
<monitor-lsp-bandwidth/>
<minimum-bandwidth> *minimum-bandwidth* **</minimum-bandwidth>**
<maximum-bandwidth> *maximum-bandwidth* **</maximum-bandwidth>**
<adjust-timer> *adjust-timer* **</adjust-timer>**
<bandwidth> *bandwidth* **</bandwidth>**
<time-to-adjust> *time-to-adjust* **</time-to-adjust>**
<adjust-threshold> *adjust-threshold* **</adjust-threshold>**
</mpls-lsp-autobandwidth>
</mpls-lsp>

Description No documentation is available yet.

Contents <adjust-threshold>—Percentage change in average LSP utilization to trigger auto-adjustment.

<adjust-timer>—Configured LSP adjust timer.

<bandwidth>—No documentation is available yet.

<maximum-bandwidth>—Configured LSP maximum bandwidth.

<minimum-bandwidth>—Configured LSP minimum bandwidth.

<monitor-lsp-bandwidth>—If we do not want the LSP to adjust bandwidth automatically, but continue to passively monitor the maximum average bandwidth usage of the LSP, use this mode.

<time-to-adjust>—Time in which LSP will auto-adjust its bandwidth.

< mpls-lsp-information>

Usage <rpc-reply>
<mpls-lsp-information>
<rsvp-session-data>...</rsvp-session-data>
</mpls-lsp-information>
</rpc-reply>

Description No documentation is available yet.

Contents <rsvp-session-data>—No documentation is available yet.

< **mpls-lsp-path**>

Usage

```
<mpls-lsp>
  <mpls-lsp-path>
    <path-active/>
    <title>title</title>
    <name>name</name>
    <path-state>path-state</path-state>
    <cos>cos</cos>
    <no-decrement-ttl/>
    <preference>preference</preference>
    <setup-priority>setup-priority</setup-priority>
    <hold-priority>hold-priority</hold-priority>
    <bandwidth>bandwidth</bandwidth>
    <path-adaptive/>
    <path-no-recordroute/>
    <hoplimit>hoplimit</hoplimit>
    <optimize-timer>optimize-timer</optimize-timer>
    <admin-groups>...</admin-groups>
    <retry-timer>retry-timer</retry-timer>
    <retry-limit>retry-limit</retry-limit>
    <cspf-status>cspf-status</cspf-status>
    <explicit-route>...</explicit-route>
    <received-rro>received-rro</received-rro>
    <path-history>...</path-history>
  </mpls-lsp-path>
</mpls-lsp>
```

Description Primary or secondary LSP path.

Contents <admin-groups>—No documentation is available yet.

<bandwidth>—No documentation is available yet.

<cos>—COS value.

<cspf-status>—Status returned by CSPF computation.

<explicit-route>—Explicit Route Object (ERO).

<hold-priority>—Hold priority determines whether a session can be preempted by another session. Range is 0 to 7.

<hoplimit>—Maximum number of hops that can be traversed.

<name>—No documentation is available yet.

<no-decrement-ttl>—TTL.

<optimize-timer>—Indicates the frequency with which reoptimization of an LSP that is already set up is carried out. It is useful only when CSPF is enabled.

<path-active>—Whether the path is active or not.

<path-adaptive>—Indicates that during reroute, the bandwidth on links shared by the old and new paths is not double-counted. SE style reservation is used to assist in smooth transition during rerouting.

- `<path-history>`—Log over time of LSP path-related events.
- `<path-no-recordroute>`—Indicates that an LSP does not actively record routes in the path.
- `<path-state>`—State of the MPLS path.
- `<preference>`—Preference value configured with the preference statement. The default preference value is 170.
- `<received-rro>`—RRO returned by the signaling protocol.
- `<retry-limit>`—Maximum number of times the ingress tries to establish the primary path. It is reset each time primary path is created successfully.
- `<retry-timer>`—Amount of time the ingress router waits between attempts to establish primary path.
- `<setup-priority>`—Setup priority determines the ability of a session to preempt existing session. Range is 0 to 7.
- `<title>`—No documentation is available yet.

<mpls-path>

Usage `<mpls-path-information>`
 `<mpls-path>`
 `<name>name</name>`
 `<address>address</address>`
 `<path-type>path-type</path-type>`
 `</mpls-path>`
 `</mpls-path-information>`

Description No documentation is available yet.

Contents `<address>`—No documentation is available yet.

`<name>`—No documentation is available yet.

`<path-type>`—No documentation is available yet.

<mpls-path-information>

Usage `<rpc-reply>`
 `<mpls-path-information>`
 `<mpls-path>...</mpls-path>`
 `</mpls-path-information>`
 `</rpc-reply>`

Description No documentation is available yet.

Contents `<mpls-path>`—No documentation is available yet.

< mt-tlv>

Usage <isis-tlv>
 <mt-tlv>
 <mtid>mtid</mtid>
 </mt-tlv>
 </isis-tlv>

Description No documentation is available yet.

Contents <mtid>—No documentation is available yet.

< next-hop-address>

Usage <ospf-route>
 <next-hop-address>
 <interface-address>interface-address</interface-address>
 <lsp-name>lsp-name</lsp-name>
 </next-hop-address>
 </ospf-route>

Description No documentation is available yet.

Contents <interface-address>—No documentation is available yet.

<lsp-name>—Tunneled into an RSVP LSP.

< next-hop-element>

Usage <isis-spf-result>
 <next-hop-element>
 <interface-name>interface-name</interface-name>
 <isis-next-hop>isis-next-hop</isis-next-hop>
 <snpa>snpa</snpa>
 </next-hop-element>
 </isis-spf-result>

Description No documentation is available yet.

Contents <interface-name>—No documentation is available yet.

<isis-next-hop>—No documentation is available yet.

<snpa>—No documentation is available yet.

- **< next-hop-name >**

Usage <ospf-route>
 <next-hop-name>
 <interface-name>*interface-name*</interface-name>
 <interface-link-name>*interface-link-name*</interface-link-name>
 </next-hop-name>
 </ospf-route>

Description No documentation is available yet.

Contents <interface-link-name>—No documentation is available yet.

 <interface-name>—No documentation is available yet.

- **< nh >**

Usage <rt-entry | protocol-nh>
 <nh>
 <selected-next-hop/>
 <weight>*weight*</weight>
 <via>*via*</via>
 <nh-local-interface>*nh-local-interface*</nh-local-interface>
 <nh-table>*nh-table*</nh-table>
 <to>*to*</to>
 <lsp-name>*lsp-name*</lsp-name>
 <mpls-label>*mpls-label*</mpls-label>
 </nh>
 </rt-entry | protocol-nh>

Description Next-hop gateway information.

Contents <lsp-name>—Tunneled into an RSVP LSP.

 <mpls-label>—Tunneled by MPLS label.

 <nh-local-interface>—Destination is a local interface.

 <nh-table>—Indirect pointing to another table.

 <selected-next-hop>—Present if this next hop is selected.

 <to>—Neighbor address to send to (next hop address).

 <via>—Reachable via a local interface.

 <weight>—Next-hop weight.

< ospf-area-header>

Usage	<ospf-database-information> <ospf-area-header> <ospf-area>ospf-area</ospf-area> </ospf-area-header> </ospf-database-information>
Description	No documentation is available yet.
Contents	<ospf-area>—No documentation is available yet.

< ospf-database>

Usage	<ospf-database-information> <ospf-database> <lsa-type>lsa-type</lsa-type> <our-entry/> <lsa-id>lsa-id</lsa-id> <advertising-router>advertising-router</advertising-router> <sequence-number>sequence-number</sequence-number> <age>age</age> <options>options</options> <checksum>checksum</checksum> <lsa-length>lsa-length</lsa-length> <ospf-router-lsa>...</ospf-router-lsa> <ospf-network-lsa>...</ospf-network-lsa> <ospf-opaque-area-lsa>...</ospf-opaque-area-lsa> <ospf-opaque-link-local-lsa>...</ospf-opaque-link-local-lsa> <ospf-summary-lsa>...</ospf-summary-lsa> <ospf-external-lsa>...</ospf-external-lsa> <ospf-database-extensive>...</ospf-database-extensive> </ospf-database> </ospf-database-information>
Description	No documentation is available yet.
Contents	<advertising-router>—No documentation is available yet. <age>—No documentation is available yet. <checksum>—No documentation is available yet. <lsa-id>—No documentation is available yet. <lsa-length>—No documentation is available yet. <lsa-type>—No documentation is available yet. <options>—No documentation is available yet. <ospf-database-extensive>—No documentation is available yet. <ospf-external-lsa>—No documentation is available yet. <ospf-network-lsa>—No documentation is available yet.

- <ospf-opaque-area-lsa>—No documentation is available yet.
- <ospf-opaque-link-local-lsa>—No documentation is available yet.
- <ospf-router-lsa>—No documentation is available yet.
- <ospf-summary-lsa>—No documentation is available yet.
- <our-entry>—No documentation is available yet.
- <sequence-number>—No documentation is available yet.

< ospf-database-extensive >

Usage <ospf-database>
 <ospf-database-extensive>
 <generation-timer>*generation-timer*</generation-timer>
 <aging-timer>*aging-timer*</aging-timer>
 <installation-time>*installation-time*</installation-time>
 <expiration-time>*expiration-time*</expiration-time>
 <send-time>*send-time*</send-time>
 <database-entry-state>*database-entry-state*</database-entry-state>
 </ospf-database-extensive>
 </ospf-database>

Description No documentation is available yet.

Contents <aging-timer>—No documentation is available yet.

 <database-entry-state>—No documentation is available yet.

 <expiration-time>—No documentation is available yet.

 <generation-timer>—No documentation is available yet.

 <installation-time>—No documentation is available yet.

 <send-time>—No documentation is available yet.

< **ospf-database-information**>

Usage	<rpc-reply> <ospf-database-information> <ospf-area-header>...</ospf-area-header> <ospf-intf-header>...</ospf-intf-header> <ospf-database>...</ospf-database> <ospf-database-summary>...</ospf-database-summary> </ospf-database-information> </rpc-reply>
Description	No documentation is available yet.
Contents	<ospf-area-header>—No documentation is available yet. <ospf-database>—No documentation is available yet. <ospf-database-summary>—No documentation is available yet. <ospf-intf-header>—No documentation is available yet.

< **ospf-database-summary**>

Usage	<ospf-database-information> <ospf-database-summary> <ospf-area>ospf-area</ospf-area> <ospf-intf>ospf-intf</ospf-intf> <ospf-lsa-count>ospf-lsa-count</ospf-lsa-count> <ospf-lsa-type>ospf-lsa-type</ospf-lsa-type> </ospf-database-summary> </ospf-database-information>
Description	No documentation is available yet.
Contents	<ospf-area>—No documentation is available yet. <ospf-intf>—No documentation is available yet. <ospf-lsa-count>—No documentation is available yet. <ospf-lsa-type>—No documentation is available yet.

•	< ospf-errors>
•	<p>Usage <ospf-io-statistics ospf-statistics></p> <pre><ospf-errors> <runt-header-error>runt-header-error</runt-header-error> <short-packets-error>short-packets-error</short-packets-error> <bad-version-error>bad-version-error</bad-version-error> <truncated-packets-error>truncated-packets-error</truncated-packets-error> <checksum-error>checksum-error</checksum-error> <subnet-mismatch-error>subnet-mismatch-error</subnet-mismatch-error> <virtual-link-error>virtual-link-error</virtual-link-error> <area-mismatch-error>area-mismatch-error</area-mismatch-error> <authentication-mismatch-error>mismatch-error</authentication-mismatch-error> <authentication-failure-error>authentication-failure-error</authentication-failure-error> <bad-packettype-error>bad-packettype-error</bad-packettype-error> <netmask-mismatch-error>netmask-mismatch-error</netmask-mismatch-error> <hello-interval-mismatch-error>mismatch-error</hello-interval-mismatch-error> <dead-interval-mismatch-error>mismatch-error</dead-interval-mismatch-error> <stub-area-mismatch-error>stub-area-mismatch-error</stub-area-mismatch-error> <nssa-mismatch-error>nssa-mismatch-error</nssa-mismatch-error> <mtu-mismatch-error>mtu-mismatch-error</mtu-mismatch-error> <hello-received-error>hello-received-error</hello-received-error> <no-interface-error>no-interface-error</no-interface-error> <no-router-id-error>no-router-id-error</no-router-id-error> <no-error/> </ospf-errors></pre> <p></ospf-io-statistics ospf-statistics></p>
•	Description No documentation is available yet.
•	Contents
•	<area-mismatch-error>—No documentation is available yet.
•	<authentication-failure-error>—No documentation is available yet.
•	<authentication-mismatch-error>—No documentation is available yet.
•	<bad-packettype-error>—No documentation is available yet.
•	<bad-version-error>—No documentation is available yet.
•	<checksum-error>—No documentation is available yet.
•	<dead-interval-mismatch-error>—No documentation is available yet.
•	<hello-interval-mismatch-error>—No documentation is available yet.
•	<hello-received-error>—No documentation is available yet.
•	<mtu-mismatch-error>—No documentation is available yet.
•	<netmask-mismatch-error>—No documentation is available yet.
•	<no-error>—No documentation is available yet.
•	<no-interface-error>—No documentation is available yet.
•	<no-router-id-error>—No documentation is available yet.

<nssa-mismatch-error>—No documentation is available yet.
 •
 <runt-header-error>—No documentation is available yet.
 •
 <short-packets-error>—No documentation is available yet.
 •
 <stub-area-mismatch-error>—No documentation is available yet.
 •
 <subnet-mismatch-error>—No documentation is available yet.
 •
 <truncated-packets-error>—No documentation is available yet.
 •
 <virtual-link-error>—No documentation is available yet.
 •

< ospf-external-lsa >

Usage	<ospf-database> <ospf-external-lsa> <address-mask>address-mask</address-mask> <type-value>type-value</type-value> <tos-count>tos-count</tos-count> <metric>metric</metric> <forward-address>forward-address</forward-address> <tag>tag</tag> </ospf-external-lsa> </ospf-database>
Description	No documentation is available yet.
Contents	<address-mask>—No documentation is available yet. <forward-address>—No documentation is available yet. <metric>—No documentation is available yet. <tag>—No documentation is available yet. <tos-count>—No documentation is available yet. <type-value>—No documentation is available yet.

- < **ospf-interface**>

Usage <ospf-interface-information>
 <ospf-interface>
 <interface-name>*interface-name*</interface-name>
 <ospf-interface-state>*ospf-interface-state*</ospf-interface-state>
 <ospf-area>*ospf-area*</ospf-area>
 <dr-id>*dr-id*</dr-id>
 <bdr-id>*bdr-id*</bdr-id>
 <neighbor-count>*neighbor-count*</neighbor-count>
 <interface-type>*interface-type*</interface-type>
 <interface-address>*interface-address*</interface-address>
 <address-mask>*address-mask*</address-mask>
 <mtu>*mtu*</mtu>
 <interface-cost>*interface-cost*</interface-cost>
 <dr-address>*dr-address*</dr-address>
 <bdr-address>*bdr-address*</bdr-address>
 <adj-count>*adj-count*</adj-count>
 <router-priority>*router-priority*</router-priority>
 <passive>*passive*</passive>
 <hello-interval>*hello-interval*</hello-interval>
 <poll-interval>*poll-interval*</poll-interval>
 <dead-interval>*dead-interval*</dead-interval>
 <retransmit-interval>*retransmit-interval*</retransmit-interval>
 <ospf-stub-type>*ospf-stub-type*</ospf-stub-type>
 <interface-flood-list-count>*interface-flood-list-count*</interface-flood-list-count>
 <flood-list-count>*flood-list-count*</flood-list-count>
 <l3a-list>*l3a-list*</l3a-list>
 <interface-description-list>*interface-description-list*</interface-description-list>
 </ospf-interface>
 </ospf-interface-information>

Description No documentation is available yet.

Contents <address-mask>—No documentation is available yet.

 <adj-count>—Count of fully adjacent neighbors.

 <bdr-address>—IP address of BDR.

 <bdr-id>—No documentation is available yet.

 <dead-interval>—No documentation is available yet.

 <dr-address>—IP address of DR.

 <dr-id>—No documentation is available yet.

 <flood-list-count>—No documentation is available yet.

 <hello-interval>—Determines the rate at which RSVP hellos are sent out. Default is 3 seconds.

 <interface-address>—No documentation is available yet.

 <interface-cost>—Cost associated with this interface.

<interface-description-list>—No documentation is available yet.

<interface-flood-list-count>—No documentation is available yet.

<interface-name>—No documentation is available yet.

<interface-type>—No documentation is available yet.

<lisa-list>—No documentation is available yet.

<mtu>—MTU along an interface.

<neighbor-count>—No documentation is available yet.

<ospf-area>—No documentation is available yet.

<ospf-interface-state>—No documentation is available yet.

<ospf-stub-type>—No documentation is available yet.

<passive>—No documentation is available yet.

<poll-interval>—No documentation is available yet.

<retransmit-interval>—No documentation is available yet.

<router-priority>—Router priority used in DR election on broadcast/NBMA interface.

< ospf-interface-information >

Usage	<rpc-reply> <ospf-interface-information> <ospf-interface>...</ospf-interface> </ospf-interface-information> </rpc-reply>
Description	No documentation is available yet.
Contents	<ospf-interface>—No documentation is available yet.

< ospf-intf-header >

Usage	<ospf-database-information> <ospf-intf-header> <ospf-intf>ospf-intf</ospf-intf> </ospf-intf-header> </ospf-database-information>
Description	No documentation is available yet.
Contents	<ospf-intf>—No documentation is available yet.

< ospf-io-statistics>

Usage <ospf-io-statistics-information>
 <ospf-io-statistics>
 <packets-read>packets-read</packets-read>
 <average-per-run>average-per-run</average-per-run>
 <max-run>max-run</max-run>
 <ospf-errors>...</ospf-errors>
 </ospf-io-statistics>
</ospf-io-statistics-information>

Description No documentation is available yet.

Contents <average-per-run>—No documentation is available yet.
<max-run>—No documentation is available yet.
<ospf-errors>—No documentation is available yet.
<packets-read>—No documentation is available yet.

< ospf-io-statistics-information>

Usage <rpc-reply>
 <ospf-io-statistics-information>
 <ospf-io-statistics>...</ospf-io-statistics>
 </ospf-io-statistics-information>
</rpc-reply>

Description No documentation is available yet.

Contents <ospf-io-statistics>—No documentation is available yet.

< ospf-link>

Usage <ospf-router-lsa>
 <ospf-link>
 <link-id>link-id</link-id>
 <link-data>link-data</link-data>
 <link-type-name>link-type-name</link-type-name>
 <link-type-value>link-type-value</link-type-value>
 <tos-count>tos-count</tos-count>
 <tos-0-metric>tos-0-metric</tos-0-metric>
 </ospf-link>
</ospf-router-lsa>

Description No documentation is available yet.

Contents <link-data>—No documentation is available yet.
<link-id>—No documentation is available yet.
<link-type-name>—No documentation is available yet.
<link-type-value>—No documentation is available yet.

<tos-0-metric>—No documentation is available yet.

<tos-count>—No documentation is available yet.

< ospf-log-events >

Usage <ospf-log-information>
 <ospf-log-events>
 <log-element>...</log-element>
 <number-events>number-events</number-events>
 </ospf-log-events>
 </ospf-log-information>

Description No documentation is available yet.

Contents <log-element>—No documentation is available yet.

<number-events>—No documentation is available yet.

< ospf-log-information >

Usage <rpc-reply>
 <ospf-log-information>
 <ospf-log-instance>...</ospf-log-instance>
 <ospf-log-maximum-length>...</ospf-log-maximum-length>
 <ospf-log-events>...</ospf-log-events>
 </ospf-log-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <ospf-log-events>—No documentation is available yet.

<ospf-log-instance>—No documentation is available yet.

<ospf-log-maximum-length>—No documentation is available yet.

< ospf-log-instance >

Usage <ospf-log-information>
 <ospf-log-instance>
 <log-element>...</log-element>
 </ospf-log-instance>
 </ospf-log-information>

Description No documentation is available yet.

Contents <log-element>—No documentation is available yet.

< ospf-log-maximum-length>

Usage <ospf-log-information>
 <ospf-log-maximum-length>
 <log-element>...</log-element>
 </ospf-log-maximum-length>
</ospf-log-information>

Description No documentation is available yet.

Contents <log-element>—No documentation is available yet.

< ospf-neighbor>

Usage <ospf-neighbor-information>
 <ospf-neighbor>
 <neighbor-address>neighbor-address</neighbor-address>
 <interface-name>interface-name</interface-name>
 <ospf-neighbor-state>ospf-neighbor-state</ospf-neighbor-state>
 <neighbor-id>neighbor-id</neighbor-id>
 <neighbor-priority>neighbor-priority</neighbor-priority>
 <activity-timer>activity-timer</activity-timer>
 <ospf-area>ospf-area</ospf-area>
 <options>options</options>
 <dr-address>dr-address</dr-address>
 <bdr-address>bdr-address</bdr-address>
 <neighbor-up-time>neighbor-up-time</neighbor-up-time>
 <neighbor-adjacency-time>neighbor-adjacency-time</neighbor-adjacency-time>
 <master-slave>master-slave</master-slave>
 <sequence-number>sequence-number</sequence-number>
 <dbd-retransmit-time>dbd-retransmit-time</dbd-retransmit-time>
 <lsreq-retransmit-time>lsreq-retransmit-time</lsreq-retransmit-time>
 <lsreq-enqueued/>
 <lsreq-active/>
 <lsa-list>lsa-list</lsa-list>
 </ospf-neighbor>
</ospf-neighbor-information>

Description No documentation is available yet.

Contents <activity-timer>—No documentation is available yet.

<bdr-address>—IP address of BDR.

<dbd-retransmit-time>—Seconds until DBD is retransmitted.

<dr-address>—IP address of DR.

<interface-name>—No documentation is available yet.

<lsa-list>—No documentation is available yet.

<lsreq-active>—No documentation is available yet.

<lsreq-enqueued>—No documentation is available yet.

<lsreq-retransmit-time>—Seconds until LSREQ is retransmitted.

<master-slave>—No documentation is available yet.

<neighbor-address>—IP address of this neighbor.

<neighbor-adjacency-time>—Time when neighbor became adjacent.

<neighbor-id>—No documentation is available yet.

<neighbor-priority>—No documentation is available yet.

<neighbor-up-time>—Time when neighbor came up.

<options>—No documentation is available yet.

<ospf-area>—No documentation is available yet.

<ospf-neighbor-state>—No documentation is available yet.

<sequence-number>—No documentation is available yet.

< ospf-neighbor-information >

Usage <rpc-reply>
 <ospf-neighbor-information>
 <ospf-neighbor>...</ospf-neighbor>
 </ospf-neighbor-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <ospf-neighbor>—No documentation is available yet.

< ospf-network-lsa >

Usage <ospf-database>
 <ospf-network-lsa>
 <address-mask>address-mask</address-mask>
 <attached-router>attached-router</attached-router>
 </ospf-network-lsa>
 </ospf-database>

Description No documentation is available yet.

Contents <address-mask>—No documentation is available yet.

<attached-router>—No documentation is available yet.

• **< ospf-opaque-area-lsa >**

• **Usage** <ospf-database>
 <ospf-opaque-area-lsa>
 <tlv-block>...</tlv-block>
 <link-subtlv>...</link-subtlv>
 </ospf-opaque-area-lsa>
</ospf-database>

• **Description** No documentation is available yet.

• **Contents** <link-subtlv>—No documentation is available yet.
 <tlv-block>—No documentation is available yet.

• **< ospf-opaque-link-local-lsa >**

• **Usage** <ospf-database>
 <ospf-opaque-link-local-lsa>
 <tlv-grace-type-name>tlv-grace-type-name</tlv-grace-type-name>
 <tlv-grace-value>tlv-grace-value</tlv-grace-value>
 </ospf-opaque-link-local-lsa>
</ospf-database>

• **Description** No documentation is available yet.

• **Contents** <tlv-grace-type-name>—No documentation is available yet.
 <tlv-grace-value>—No documentation is available yet.

• **< ospf-route >**

• **Usage** <ospf-route-information>
 <ospf-route>
 <address-prefix>address-prefix</address-prefix>
 <route-path-type>route-path-type</route-path-type>
 <route-type>route-type</route-type>
 <next-hop-type>next-hop-type</next-hop-type>
 <interface-cost>interface-cost</interface-cost>
 <next-hop-name>...</next-hop-name>
 <next-hop-address>...</next-hop-address>
 <ospf-area>ospf-area</ospf-area>
 <optional-capability>optional-capability</optional-capability>
 <route-origin>route-origin</route-origin>
 <type7/>
 <pbit/>
 <forward-nz/>
 </ospf-route>
</ospf-route-information>

• **Description** No documentation is available yet.

• **Contents** <address-prefix>—No documentation is available yet.
 <forward-nz>—No documentation is available yet.

<interface-cost>—Cost associated with this interface.

<next-hop-address>—No documentation is available yet.

<next-hop-name>—No documentation is available yet.

<next-hop-type>—No documentation is available yet.

<optional-capability>—VIE bits received in the router LSA.

<ospf-area>—No documentation is available yet.

<pbit>—No documentation is available yet.

<route-origin>—No documentation is available yet.

<route-path-type>—No documentation is available yet.

<route-type>—No documentation is available yet.

<type7>—No documentation is available yet.

< ospf-route-information >

Usage <rpc-reply>
 <ospf-route-information>
 <ospf-route>...</ospf-route>
 </ospf-route-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <ospf-route>—No documentation is available yet.

< ospf-router-lsa >

Usage <ospf-database>
 <ospf-router-lsa>
 <bits>bits</bits>
 <link-count>link-count</link-count>
 <ospf-link>...</ospf-link>
 </ospf-router-lsa>
 </ospf-database>

Description No documentation is available yet.

Contents <bits>—No documentation is available yet.

<link-count>—No documentation is available yet.

<ospf-link>—No documentation is available yet.

- **< ospf-statistics>**

Usage <ospf-statistics-information>
 <ospf-statistics>
 <packet-statistics>...</packet-statistics>
 <lsas-retransmit>lsas-retransmit</lsas-retransmit>
 <lsas-retransmit-5seconds>lsas-retransmit-5seconds</lsas-retransmit-5seconds>
 <flood-queue-depth>flood-queue-depth</flood-queue-depth>
 <total-retransmits>total-retransmits</total-retransmits>
 <total-database-summaries>total-database-summaries</total-database-summaries>
 <total-linkstate-request>total-linkstate-request</total-linkstate-request>
 <ospf-errors>...</ospf-errors>
 </ospf-statistics>
 </ospf-statistics-information>

Description No documentation is available yet.

Contents <flood-queue-depth>—No documentation is available yet.

 <lsas-retransmit>—No documentation is available yet.

 <lsas-retransmit-5seconds>—No documentation is available yet.

 <ospf-errors>—No documentation is available yet.

 <packet-statistics>—No documentation is available yet.

 <total-database-summaries>—No documentation is available yet.

 <total-linkstate-request>—No documentation is available yet.

 <total-retransmits>—No documentation is available yet.

- **< ospf-statistics-information>**

Usage <rpc-reply>
 <ospf-statistics-information>
 <ospf-statistics>...</ospf-statistics>
 </ospf-statistics-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <ospf-statistics>—No documentation is available yet.

< ospf-summary-lsa >

Usage	<ospf-database> <ospf-summary-lsa> <address-mask> <i>address-mask</i> </address-mask> <tos-count> <i>tos-count</i> </tos-count> <metric> <i>metric</i> </metric> </ospf-summary-lsa> </ospf-database>
Description	No documentation is available yet.
Contents	<address-mask>—No documentation is available yet. <metric>—No documentation is available yet. <tos-count>—No documentation is available yet.

< packet-information >

Usage	<rsvp-session detour detour-branch> <packet-information> <previous-hop> <i>previous-hop</i> </previous-hop> <next-hop> <i>next-hop</i> </next-hop> <interface-name> <i>interface-name</i> </interface-name> <count> <i>count</i> </count> </packet-information> </rsvp-session detour detour-branch>
Description	RSVP packets sent or received per session.
Contents	<count>—No documentation is available yet. <interface-name>—No documentation is available yet. <next-hop>—Next hop address. <previous-hop>—Previous hop address.

< packet-statistics >

Usage	<ospf-statistics> <packet-statistics> <ospf-packet-type> <i>ospf-packet-type</i> </ospf-packet-type> <packets-sent> <i>packets-sent</i> </packets-sent> <packets-received> <i>packets-received</i> </packets-received> <packets-sent-5seconds> <i>packets-sent-5seconds</i> </packets-sent-5seconds> <packets-received-5seconds> <i>packets-received-5seconds</i> </packets-received-5seconds> </packet-statistics> </ospf-statistics>
Description	No documentation is available yet.

- **Contents** <ospf-packet-type>—No documentation is available yet.
 - <packets-received>—No documentation is available yet.
 - <packets-received-5seconds>—No documentation is available yet.
 - <packets-sent>—No documentation is available yet.
 - <packets-sent-5seconds>—No documentation is available yet.

<path-history>

- | | |
|--------------------|---|
| Usage | <mpls-lsp-path>
<path-history>
<sequence-number>sequence-number</sequence-number>
<time>time</time>
<log>log</log>
<route>route</route>
</path-history>
</mpls-lsp-path> |
| Description | Log over time of LSP path-related events. |
| Contents | <log>—No documentation is available yet.

<route>—No documentation is available yet.

<sequence-number>—No documentation is available yet.

<time>—No documentation is available yet. |

<prefix-element>

- | | |
|--------------------|--|
| Usage | <isis-spf-result>
<prefix-element>
<address-prefix>address-prefix</address-prefix>
<prefix-metric>prefix-metric</prefix-metric>
<external-prefix-metric>external-prefix-metric</external-prefix-metric>
</prefix-element>
</isis-spf-result> |
| Description | No documentation is available yet. |
| Contents | <address-prefix>—No documentation is available yet.

<external-prefix-metric>—No documentation is available yet.

<prefix-metric>—No documentation is available yet. |

<prefix-limit>

Usage	<pre><bgp-option-information> <prefix-limit> <nlri-type>nlri-type</nlri-type> <prefix-count>prefix-count</prefix-count> <limit-action>limit-action</limit-action> <warning-percentage>warning-percentage</warning-percentage> </prefix-limit> </bgp-option-information></pre>
Description	No documentation is available yet.
Contents	<p><limit-action>—No documentation is available yet.</p> <p><nlri-type>—No documentation is available yet.</p> <p><prefix-count>—No documentation is available yet.</p> <p><warning-percentage>—No documentation is available yet.</p>

<protocol-nh>

Usage	<pre><rt-entry> <protocol-nh> <to>to</to> <metric>metric</metric> <indirect-nh>indirect-nh</indirect-nh> <mpls-label>mpls-label</mpls-label> <forwarding-nh-count>forwarding-nh-count</forwarding-nh-count> <nh>...</nh> </protocol-nh> </rt-entry></pre>
Description	Protocol next hop.
Contents	<p><forwarding-nh-count>—Number of indirect path forwarding next hops.</p> <p><indirect-nh>—No documentation is available yet.</p> <p><metric>—No documentation is available yet.</p> <p><mpls-label>—Tunneled by MPLS label.</p> <p><nh>—Next-hop gateway information.</p> <p><to>—Neighbor address to send to (next hop address).</p>

<protocols>

Usage <route-table>
 <protocols>
 <protocol-name>protocol-name</protocol-name>
 <protocol-route-count>protocol-route-count</protocol-route-count>
 <active-route-count>active-route-count</active-route-count>
 </protocols>
</route-table>

Description No documentation is available yet.

Contents <active-route-count>—Active routes.

<protocol-name>—No documentation is available yet.

<protocol-route-count>—Total protocol routes.

<protocols-tlv>

Usage <isis-tlv>
 <protocols-tlv>
 <protocol>protocol</protocol>
 </protocols-tlv>
</isis-tlv>

Description No documentation is available yet.

Contents <protocol>—No documentation is available yet.

<reachability-tlv>

Usage <isis-tlv>
 <reachability-tlv>
 <isis-topology-id>isis-topology-id</isis-topology-id>
 <address-prefix>address-prefix</address-prefix>
 <metric>metric</metric>
 <prefix-flag>prefix-flag</prefix-flag>
 <reachability-delay/>
 <reachability-expense/>
 <reachability-error/>
 <address>address</address>
 <neighbor-prefix>neighbor-prefix</neighbor-prefix>
 <tlv-length>tlv-length</tlv-length>
 </reachability-tlv>
</isis-tlv>

Description No documentation is available yet.

Contents <address>—No documentation is available yet.

<address-prefix>—No documentation is available yet.

<isis-topology-id>—No documentation is available yet.

<metric>—No documentation is available yet.

<neighbor-prefix>—No documentation is available yet.

<prefix-flag>—No documentation is available yet.

<reachability-delay>—No documentation is available yet.

<reachability-error>—No documentation is available yet.

<reachability-expense>—No documentation is available yet.

<tlv-length>—No documentation is available yet.

< record-route >

Usage	<rsvp-session detour detour-branch> <record-route> <address>address</address> <self/> <incomplete/> </record-route> </rsvp-session detour detour-branch>
Description	Record Route Object (RRO).
Contents	<address>—No documentation is available yet. <incomplete>—No documentation is available yet. <self>—No documentation is available yet.

< reference-site >

Usage	<instance> <reference-site> <local-site-id>local-site-id</local-site-id> <remote-site-id>remote-site-id</remote-site-id> <interface>...</interface> <label-block>...</label-block> <connection>...</connection> </reference-site> </instance>
Description	No documentation is available yet.
Contents	<connection>—No documentation is available yet. <interface>—No documentation is available yet. <label-block>—No documentation is available yet. <local-site-id>—No documentation is available yet. <remote-site-id>—No documentation is available yet.

<remote-interface>

Usage <connection>
 <remote-interface>
 <interface-name>*interface-name*</interface-name>
 <interface-status>*interface-status*</interface-status>
 <interface-encapsulation>*interface-encapsulation*</interface-encapsulation>
 </remote-interface>
</connection>

Description No documentation is available yet.

Contents <interface-encapsulation>—No documentation is available yet.
<interface-name>—No documentation is available yet.
<interface-status>—No documentation is available yet.

<reserved-bandwidth>

Usage <rsvp-telink | rsvp-interface>
 <reserved-bandwidth>
 <bandwidth-priority>*bandwidth-priority*</bandwidth-priority>
 <total-reserved-bandwidth>*total-reserved-bandwidth*</total-reserved-bandwidth>
 </reserved-bandwidth>
</rsvp-telink | rsvp-interface>

Description Bandwidth reserved at different priority levels.

Contents <bandwidth-priority>—No documentation is available yet.
<total-reserved-bandwidth>—Total amount of bandwidth currently reserved.

<rip-error>

Usage <rpc-reply>
 <rip-error>
 <rip-error-message>*rip-error-message*</rip-error-message>
 </rip-error>
</rpc-reply>

Description No documentation is available yet.

Contents <rip-error-message>—RIP error message.

<rip-general-statistics>

Usage	<rip-general-statistics-information> <rip-general-statistics> <rip-protocol-name> <i>rip-protocol-name</i> </rip-protocol-name> <rip-bad-messages> <i>rip-bad-messages</i> </rip-bad-messages> <rip-interface-count> <i>rip-interface-count</i> </rip-interface-count> <rip-current-memory> <i>rip-current-memory</i> </rip-current-memory> <rip-maximum-memory> <i>rip-maximum-memory</i> </rip-maximum-memory> </rip-general-statistics> </rip-general-statistics-information>
Description	No documentation is available yet.
Contents	<p><rip-bad-messages>—Number of bad messages received so far.</p> <p><rip-current-memory>—The amount of memory allocated by the protocol at this time. This value is zero if the protocol is not running.</p> <p><rip-interface-count>—Number of interfaces on which the protocol is enabled.</p> <p><rip-maximum-memory>—The maximum amount of memory the protocol ever used. This value might be nonzero even if the protocol is not currently running.</p> <p><rip-protocol-name>—Protocol name for the information following. Is either RIPv2 or RIPng.</p>

<rip-general-statistics-information>

Usage	<rpc-reply> <rip-general-statistics-information> <rip-general-statistics>...</rip-general-statistics> </rip-general-statistics-information> </rpc-reply>
Description	No documentation is available yet.
Contents	<rip-general-statistics>—No documentation is available yet.

<rip-global-statistics>

Usage	<rip-statistics-information> <rip-global-statistics> <rip-routes-learned> <i>rip-routes-learned</i> </rip-routes-learned> <rip-routes-holddown> <i>rip-routes-holddown</i> </rip-routes-holddown> <rip-requests-dropped> <i>rip-requests-dropped</i> </rip-requests-dropped> <rip-responses-dropped> <i>rip-responses-dropped</i> </rip-responses-dropped> </rip-global-statistics> </rip-statistics-information>
Description	No documentation is available yet.
Contents	<p><rip-requests-dropped>—Number of requests dropped.</p> <p><rip-responses-dropped>—Number of responses dropped.</p>

- <rip-routes-holddown>—Number of routes in holddown.
- <rip-routes-learned>—Number of routes learned.

<rip-message-statistics>

Usage <rip-neighbor-statistics>
<rip-message-statistics>
 <rip-message>rip-message</rip-message>
 <rip-message-total>rip-message-total</rip-message-total>
 <rip-message-last-5minutes>rip-message-last-5minutes</rip-message-last-5minutes>
 <rip-message-last-minute>rip-message-last-minute</rip-message-last-minute>
</rip-message-statistics>
</rip-neighbor-statistics>

Description No documentation is available yet.

Contents <rip-message>—No documentation is available yet.

<rip-message-last-5minutes>—Number of messages in the last 5 minutes.

<rip-message-last-minute>—Number of messages in the last minute.

<rip-message-total>—Total number of messages.

<rip-neighbor>

Usage <rip-neighbor-information>
<rip-neighbor>
 <rip-neighbor-name>rip-neighbor-name</rip-neighbor-name>
 <rip-neighbor-state>rip-neighbor-state</rip-neighbor-state>
 <rip-neighbor-metric-in>rip-neighbor-metric-in</rip-neighbor-metric-in>
 <rip-local-address-ipv4>rip-local-address-ipv4</rip-local-address-ipv4>
 <rip-remote-address-ipv4>rip-remote-address-ipv4</rip-remote-address-ipv4>
 <send-mode-ipv2>send-mode-ipv2</send-mode-ipv2>
 <receive-mode-ipv2>receive-mode-ipv2</receive-mode-ipv2>
 <rip-local-address-ipv6>rip-local-address-ipv6</rip-local-address-ipv6>
 <rip-remote-address-ipv6>rip-remote-address-ipv6</rip-remote-address-ipv6>
 <send-mode-ripng>send-mode-ripng</send-mode-ripng>
 <receive-mode-ripng>receive-mode-ripng</receive-mode-ripng>
</rip-neighbor>
</rip-neighbor-information>

Description No documentation is available yet.

Contents <receive-mode-ripng>—Specifies the receive state of the neighbor, which determines whether RIPng packets are accepted through that interface.

<receive-mode-ripv2>—Specifies the receive state of the neighbor, which determines which RIP packets are accepted. It is one of four values: (1) v1 only--only RIPv1 packets are received, (2) v2 only--only RIPv2 packets are received, (3) both--both RIPv1 and RIPv2 packets are received, or (4) none--no packets are received.

<rip-local-address-ipv4>—Local address of this neighbor (IPv4 address of the interface over which the protocol is configured).

<rip-local-address-ipv6>—Local address of this neighbor (IPv6 address of the interface over which the protocol is configured).

<rip-neighbor-metric-in>—Metric value to add to incoming routes. This is a value between 1 and 15.

<rip-neighbor-name>—Name of the interface over which the protocol is configured.

<rip-neighbor-state>—Indicates whether a neighbor is up or down.

<rip-remote-address-ipv4>—Remote address for this neighbor. If the neighbor is configured for broadcast mode, this is the broadcast address; otherwise, it is the RIP multicast address.

<rip-remote-address-ipv6>—Remote address of this neighbor (RIPng multicast address).

<send-mode-ripng>—Specifies the send state of the neighbor, which determines whether the neighbor sends RIPng updates.

<send-mode-ripv2>—Specifies the send state of the neighbor, which determines how RIP updates are sent. It is one of four values: (1) bcast--broadcast of RIPv2 packets (compatible with RIPv1), (2) mcast--multicast of RIPv2 packets, (3) v1--broadcast of RIPv1 packets, or (4) none--silent neighbor; no updates sent.

< rip-neighbor-information >

Usage <rpc-reply>
 <rip-neighbor-information>
 <rip-neighbor>...</rip-neighbor>
 </rip-neighbor-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <rip-neighbor>—No documentation is available yet.

< rip-neighbor-statistics >

Usage <rip-statistics-information>
 <rip-neighbor-statistics>
 <rip-neighbor-name>rip-neighbor-name</rip-neighbor-name>
 <rip-neighbor-learnt-routes>rip-neighbor-learnt-routes</rip-neighbor-learnt-routes>
 <rip-neighbor-advertised-routes>advertised-routes</rip-neighbor-advertised-routes>
 <rip-message-statistics>...</rip-message-statistics>
 </rip-neighbor-statistics>
 </rip-statistics-information>

Description No documentation is available yet.

Contents <rip-message-statistics>—No documentation is available yet.

<rip-neighbor-advertised-routes>—Number of routes advertised by this neighbor.

- `<rip-neighbor-learnt-routes>`—Number of routes learned by this neighbor.
- `<rip-neighbor-name>`—Name of the interface over which the protocol is configured.

<rip-statistics-information>

Usage `<rpc-reply>`
 `<rip-statistics-information>`
 `<rip-timer-values>...</rip-timer-values>`
 `<rip-global-statistics>...</rip-global-statistics>`
 `<rip-neighbor-statistics>...</rip-neighbor-statistics>`
 `</rip-statistics-information>`
 `</rpc-reply>`

Description No documentation is available yet.

Contents `<rip-global-statistics>`—No documentation is available yet.

`<rip-neighbor-statistics>`—No documentation is available yet.

`<rip-timer-values>`—No documentation is available yet.

<rip-timer-values>

Usage `<rip-statistics-information>`
 `<rip-timer-values>`
 `<rip-protocol-name>rip-protocol-name</rip-protocol-name>`
 `<rip-port>rip-port</rip-port>`
 `<rip-update-interval>rip-update-interval</rip-update-interval>`
 `<rip-holddown>rip-holddown</rip-holddown>`
 `<rip-timeout>rip-timeout</rip-timeout>`
 `</rip-timer-values>`
 `</rip-statistics-information>`

Description No documentation is available yet.

Contents `<rip-holddown>`—Value of the hold-down timer.

`<rip-port>`—Port on which the protocol is running.

`<rip-protocol-name>`—Protocol name for the information following. Is either RIPv2 or RIPng.

`<rip-timeout>`—Timeout value.

`<rip-update-interval>`—Number of seconds between updates.

< route-filter>

Usage	<rt-martians unconfigured-peers> <route-filter> <address>address</address> <flags>flags</flags> <extended-information>extended-information</extended-information> </route-filter> </rt-martians unconfigured-peers>
Description	Entries in martian table.
Contents	<address>—No documentation is available yet. <extended-information>—No documentation is available yet. <flags>—Enabled trace flags.

< route-flap-damping>

Usage	<rt-entry> <route-flap-damping> <merit>merit</merit> <last-merit>last-merit</last-merit> <damping-parameters>damping-parameters</damping-parameters> <default-damping-parameters/> <last-update>last-update</last-update> <first-update>first-update</first-update> <route-flap-count>route-flap-count</route-flap-count> <suppressed/> <reuse-time>reuse-time</reuse-time> <reuse-preference>reuse-preference</reuse-preference> <expire-time>expire-time</expire-time> </route-flap-damping> </rt-entry>
Description	No documentation is available yet.
Contents	<damping-parameters>—No documentation is available yet. <default-damping-parameters>—Default damping parameters used. <expire-time>—Time when this damping entry expires. <first-update>—No documentation is available yet. <last-merit>—Last merit value. <last-update>—No documentation is available yet. <merit>—Current merit value. <reuse-preference>—Preference to use when this route is reused. <reuse-time>—Time until this route is reusable.

- <route-flap-count>—Number of times this route has flapped.

<route-information>

```
Usage <rpc-reply>
      <route-information>
        <as-number>as-number</as-number>
        <router-id>router-id</router-id>
        <route-table>...</route-table>
        <rt-martians>...</rt-martians>
        <rt-test-policy>...</rt-test-policy>
      </route-information>
    </rpc-reply>
```

Description No documentation is available yet.

Contents	<as-number>—No documentation is available yet.
	<route-table>—No documentation is available yet.
	<router-id>—No documentation is available yet.
	<rt-martians>—No documentation is available yet.
	<rt-test-policy>—No documentation is available yet.

<route-queue>

```
Usage <bgp-peer | bgp-group>
      <route-queue>
        <timer>timer</timer>
        <state>state</state>
        <element>element</element>
      </route-queue>
    </bgp-peer | bgp-group>
```

Description No documentation is available yet.

Contents	<element>—No documentation is available yet. <state>—No documentation is available yet. <timer>—No documentation is available yet.
-----------------	--

< route-summary-information >

Usage	<rpc-reply> <route-summary-information> <as-number>as-number</as-number> <router-id>router-id</router-id> <route-table>...</route-table> </route-summary-information> </rpc-reply>
Description	No documentation is available yet.
Contents	<as-number>—No documentation is available yet. <route-table>—No documentation is available yet. <router-id>—No documentation is available yet.

< route-table >

Usage	<route-information route-summary-information> <route-table> <protocols>...</protocols> <table-name>table-name</table-name> <destination-count>destination-count</destination-count> <total-route-count>total-route-count</total-route-count> <active-route-count>active-route-count</active-route-count> <holddown-route-count>holddown-route-count</holddown-route-count> <hidden-route-count>hidden-route-count</hidden-route-count> <rt>...</rt> </route-table> </route-information route-summary-information>
Description	No documentation is available yet.
Contents	<active-route-count>—Active routes. <destination-count>—Number of destinations in this rib. <hidden-route-count>—No documentation is available yet. <holddown-route-count>—No documentation is available yet. <protocols>—No documentation is available yet. <rt>—No documentation is available yet. <table-name>—No documentation is available yet. <total-route-count>—No documentation is available yet.

• **<router-id-tlv>**

Usage <isis-tlv>
 <router-id-tlv>
 <router-id>router-id</router-id>
 </router-id-tlv>
 </isis-tlv>

Description No documentation is available yet.

Contents <router-id>—No documentation is available yet.

• **<rsvp-error>**

Usage <rsvp-statistics-information>
 <rsvp-error>
 <error-message>error-message</error-message>
 <error-count>error-count</error-count>
 <error-count-5seconds>error-count-5seconds</error-count-5seconds>
 </rsvp-error>
 </rsvp-statistics-information>

Description No documentation is available yet.

Contents <error-count>—Total number of errors encountered.

 <error-count-5seconds>—Number of errors encountered in the last 5 seconds.

 <error-message>—No documentation is available yet.

• **<rsvp-interface>**

Usage <rsvp-interface-information>
 <rsvp-interface>
 <interface-name>interface-name</interface-name>
 <rsvp-status>rsvp-status</rsvp-status>
 <active-control-channel>active-control-channel</active-control-channel>
 <control-channel-unusable/>
 <index>index</index>
 <authentication-flag>authentication-flag</authentication-flag>
 <aggregate-flag>aggregate-flag</aggregate-flag>
 <ack-flag>ack-flag</ack-flag>
 <protect-flag>protect-flag</protect-flag>
 <hello-interval>hello-interval</hello-interval>
 <forward-rsvp/>
 <interface-address>interface-address</interface-address>
 <loopback-address>loopback-address</loopback-address>
 <rsvp-telink>...</rsvp-telink>
 <message-statistics>...</message-statistics>
 <reserved-bandwidth>...</reserved-bandwidth>
 <detour-bandwidth>...</detour-bandwidth>
 </rsvp-interface>
 </rsvp-interface-information>

Description No documentation is available yet.

Contents	<ack-flag>—No documentation is available yet.
	<active-control-channel>—Denotes the currently active control channel for the peer.
	<aggregate-flag>—No documentation is available yet.
	<authentication-flag>—No documentation is available yet.
	<control-channel-unusable>—Indicates that control channel does not have RSVP enabled on it.
	<detour-bandwidth>—Bandwidth reserved on detour at different priority levels.
	<forward-rsvp>—This allows us to forward incoming RSVP messages on this interface when RSVP is disabled on the interface.
	<hello-interval>—Determines the rate at which RSVP hellos are sent out. Default is 3 seconds.
	<index>—No documentation is available yet.
	<interface-address>—No documentation is available yet.
	<interface-name>—No documentation is available yet.
	<loopback-address>—No documentation is available yet.
	<message-statistics>—Statistics per RSVP message type.
	<protect-flag>—No documentation is available yet.
	<reserved-bandwidth>—Bandwidth reserved at different priority levels.
	<rsvp-status>—Indicates whether RSVP has been enabled, whether an RSVP interface is up or down, or whether aggregation of messages is supported.
	<rsvp-telink>—No documentation is available yet.

< rsvp-interface-information >

Usage <rpc-reply>
 <rsvp-interface-information>
 <active-count>active-count</active-count>
 <rsvp-interface>...</rsvp-interface>
 </rsvp-interface-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <active-count>—Number of active RSVP interfaces.
 <rsvp-interface>—No documentation is available yet.

< rsvp-neighbor>

Usage <rsvp-neighbor-information>
<rsvp-neighbor>
 <rsvp-neighbor-address>rsvp-neighbor-address</rsvp-neighbor-address>
 <rsvp-neighbor-interface>rsvp-neighbor-interface</rsvp-neighbor-interface>
 <rsvp-neighbor-status>rsvp-neighbor-status</rsvp-neighbor-status>
 <neighbor-idle>neighbor-idle</neighbor-idle>
 <neighbor-up-count>neighbor-up-count</neighbor-up-count>
 <neighbor-down-count>neighbor-down-count</neighbor-down-count>
 <last-changed-time>last-changed-time</last-changed-time>
 <hello-interval>hello-interval</hello-interval>
 <hellos-sent>hellos-sent</hellos-sent>
 <hellos-received>hellos-received</hellos-received>
 <messages-received>messages-received</messages-received>
 <rsvp-neighbor-remote-instance>remote-instance</rsvp-neighbor-remote-instance>
 <rsvp-neighbor-local-instance>local-instance</rsvp-neighbor-local-instance>
 <rsvp-message>rsvp-message</rsvp-message>
 <rsvp-refresh-reduct-status>rsvp-refresh-reduct-status</rsvp-refresh-reduct-status>
 <rsvp-refresh-reduct-remote-status>remote-status</rsvp-refresh-reduct-remote-status>
 <rsvp-refresh-reduct-ack-status>ack-status</rsvp-refresh-reduct-ack-status>
 <rsvp-link-protect-status>rsvp-link-protect-status</rsvp-link-protect-status>
 <rsvp-lp-bypass-name>rsvp-lp-bypass-name</rsvp-lp-bypass-name>
 <rsvp-link-protection-bypass-status>bypass-status</rsvp-link-protection-bypass-status>
 <rsvp-lp-backup-route-cnt>rsvp-lp-backup-route-cnt</rsvp-lp-backup-route-cnt>
 <rsvp-lp-backup-lsp-cnt>rsvp-lp-backup-lsp-cnt</rsvp-lp-backup-lsp-cnt>
 <explicit-route>...</explicit-route>
</rsvp-neighbor>
</rsvp-neighbor-information>

Description No documentation is available yet.

Contents <explicit-route>—Explicit Route Object (ERO).

<hello-interval>—Determines the rate at which RSVP hellos are sent out. Default is 3 seconds.

<hellos-received>—Number of hellos received.

<hellos-sent>—Number of hellos sent.

<last-changed-time>—Time this neighbor last changed state.

<messages-received>—Total number of messages received.

<neighbor-down-count>—Number of times neighbor went down.

<neighbor-idle>—Length of time this neighbor has been idle.

<neighbor-up-count>—Number of times neighbor came up.

<rsvp-link-protect-status>—No documentation is available yet.

<rsvp-link-protection-bypass-status>—No documentation is available yet.

<rsvp-lp-backup-lsp-cnt>—Total number of backup LSPs.

<rsvp-lp-backup-route-cnt>—Total number of backup routes.

<rsvp-lp-bypass-name>—No documentation is available yet.

<rsvp-message>—No documentation is available yet.

<rsvp-neighbor-address>—No documentation is available yet.

<rsvp-neighbor-interface>—local interface name.

<rsvp-neighbor-local-instance>—Local instance.

<rsvp-neighbor-remote-instance>—Remote instance.

<rsvp-neighbor-status>—No documentation is available yet.

<rsvp-refresh-reduct-ack-status>—No documentation is available yet.

<rsvp-refresh-reduct-remote-status>—No documentation is available yet.

<rsvp-refresh-reduct-status>—No documentation is available yet.

< rsvp-neighbor-information >

Usage <rpc-reply>
 <rsvp-neighbor-information>
 <rsvp-neighbor-count>rsvp-neighbor-count</rsvp-neighbor-count>
 <rsvp-neighbor>...</rsvp-neighbor>
 </rsvp-neighbor-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <rsvp-neighbor>—No documentation is available yet.

<rsvp-neighbor-count>—Number of RSVP neighbors learnt.

• **< rsvp-session >**

```

Usage   <rsvp-session-data>
        <rsvp-session>
            <destination-address>destination-address</destination-address>
            <is-detour/>
            <source-address>source-address</source-address>
            <lsp-state>lsp-state</lsp-state>
            <lsp-pktbytes>lsp-pktbytes</lsp-pktbytes>
            <no-statistics/>
            <route-count>route-count</route-count>
            <rsb-count>rsb-count</rsb-count>
            <resv-style>resv-style</resv-style>
            <label-in>label-in</label-in>
            <label-out>label-out</label-out>
            <name>name</name>
            <bidirectional/>
            <upstream-label-in>upstream-label-in</upstream-label-in>
            <upstream-label-out>upstream-label-out</upstream-label-out>
            <suggested-label-in>suggested-label-in</suggested-label-in>
            <suggested-label-out>suggested-label-out</suggested-label-out>
            <psb-lifetime>psb-lifetime</psb-lifetime>
            <psb-creation-time>psb-creation-time</psb-creation-time>
            <sender-tspec>sender-tspec</sender-tspec>
            <lsp-id>lsp-id</lsp-id>
            <tunnel-id>tunnel-id</tunnel-id>
            <proto-id>proto-id</proto-id>
            <is-fastreroute/>
            <rsvp-path-status>rsvp-path-status</rsvp-path-status>
            <packet-information>...</packet-information>
            <explicit-route>...</explicit-route>
            <record-route>...</record-route>
            <detour>...</detour>
            <detour-branch>...</detour-branch>
            <mpls-lsp>...</mpls-lsp>
        </rsvp-session>
    </rsvp-session-data>

```

Description Single RSVP session.

Contents <bidirectional>—LSP is bidirectional.

<destination-address>—Session destination address.

<detour>—Detour that originated at this LSR.

<detour-branch>—Detour that originated at some other LSR.

<explicit-route>—Explicit Route Object (ERO).

<is-detour>—Indicates that this is a detour session.

<is-fastreroute>—Indicates that detours will be established for an LSP so that if a node or link in the LSP fails, the traffic on the LSP can be rerouted with minimal packet loss.

<label-in>—Incoming label.

- <label-out>—Outgoing label.
- <lsp-id>—LSP ID or source port for some sender. It is unique to every sender or LSP.
- <lsp-pktbytes>—No documentation is available yet.
- <lsp-state>—State of an LSP.
- <mpls-lsp>—MPLS Label Switched Path (LSP).
- <name>—No documentation is available yet.
- <no-statistics>—Indicates that no statistics are available for this session.
- <packet-information>—RSVP packets sent or received per session.
- <proto-id>—No documentation is available yet.
- <psb-creation-time>—Time when this PSB was created.
- <psb-lifetime>—This timer maintains the soft state of a PSB.
- <record-route>—Record Route Object (RRO).
- <resv-style>—Corresponds to one of the reservation styles: FF or SE.
- <route-count>—Number of active routes.
- <rsb-count>—Number of RSBs.
- <rsvp-path-status>—No documentation is available yet.
- <sender-tspec>—Sender TSpec.
- <source-address>—No documentation is available yet.
- <suggested-label-in>—Suggested label received.
- <suggested-label-out>—Suggested label sent.
- <tunnel-id>—Tunnel ID or destination port for this session. It is unique to every session.
- <upstream-label-in>—Incoming upstream label.
- <upstream-label-out>—Outgoing upstream label.

• **< rsvp-session-data >**

Usage <rsvp-session-information | mpls-lsp-information>
 <rsvp-session-data>
 <session-type>session-type</session-type>
 <count>count</count>
 <display-count>display-count</display-count>
 <up-count>up-count</up-count>
 <down-count>down-count</down-count>
 <detours>detours</detours>
 <rsvp-session>...</rsvp-session>
 </rsvp-session-data>
 </rsvp-session-information | mpls-lsp-information>

Description No documentation is available yet.

Contents <count>—No documentation is available yet.

 <detours>—Number of detour sessions.

 <display-count>—Number of sessions displayed.

 <down-count>—Number of sessions in down state.

 <rsvp-session>—Single RSVP session.

 <session-type>—Indicates whether the router is at the ingress, egress, or transit for this session.

 <up-count>—Number of sessions in up state.

• **< rsvp-session-information >**

Usage <rpc-reply>
 <rsvp-session-information>
 <rsvp-session-data>...</rsvp-session-data>
 </rsvp-session-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <rsvp-session-data>—No documentation is available yet.

< rsvp-statistics-information >

Usage	<rpc-reply> <rsvp-statistics-information> <message-statistics>...</message-statistics> <rsvp-error>...</rsvp-error> </rsvp-statistics-information> </rpc-reply>
Description	No documentation is available yet.
Contents	<message-statistics>—Statistics per RSVP message type. <rsvp-error>—No documentation is available yet.

< rsvp-telink >

Usage	<rsvp-interface> <rsvp-telink> <telink-name>telink-name</telink-name> <telink-local-id>telink-local-id</telink-local-id> <active-reservation>active-reservation</active-reservation> <subscription>subscription</subscription> <static-bandwidth>static-bandwidth</static-bandwidth> <available-bandwidth>available-bandwidth</available-bandwidth> <total-reserved-bandwidth>total-reserved-bandwidth</total-reserved-bandwidth> <high-watermark>high-watermark</high-watermark> <preemption-count>preemption-count</preemption-count> <update-threshold>update-threshold</update-threshold> <reserved-bandwidth>...</reserved-bandwidth> <detour-bandwidth>...</detour-bandwidth> </rsvp-telink> </rsvp-interface>
Description	No documentation is available yet.
Contents	<active-reservation>—Number of active reservations. <available-bandwidth>—Amount of bandwidth available for reservations. <detour-bandwidth>—Bandwidth reserved on detour at different priority levels. <high-watermark>—Maximum bandwidth that was ever reserved. <preemption-count>—Number of preemptions that occurred on an interface. <reserved-bandwidth>—Bandwidth reserved at different priority levels. <static-bandwidth>—Static bandwidth capacity of the link. <subscription>—Percentage of link capacity available for bandwidth reservations. <telink-local-id>—Local identifier of TE link. <telink-name>—Name of the TE link.

- <total-reserved-bandwidth>—Total amount of bandwidth currently reserved.
<update-threshold>—Percentage change in reserved bandwidth to trigger IGP update.

< rsvp-version >

Usage	<rsvp-version-information> <rsvp-version> <rsvp-status>rsvp-status</rsvp-status> <refresh-timer>refresh-timer</refresh-timer> <keep-multiplier>keep-multiplier</keep-multiplier> <preemption-type>preemption-type</preemption-type> </rsvp-version> </rsvp-version-information>
Description	No documentation is available yet.
Contents	<keep-multiplier>—A measure of the number of RSVP message losses that can be tolerated before a state is timed out. Default is 3. <preemption-type>—Type of preemption scheme. <refresh-timer>—Indicates the rate at which RSVP refresh messages (Path and Resv) are sent out to maintain the soft-state. Default is 30 seconds. <rsvp-status>—Indicates whether RSVP has been enabled, whether an RSVP interface is up or down, or whether aggregation of messages is supported.

< rsvp-version-information >

Usage	<rpc-reply> <rsvp-version-information> <rsvp-version>...</rsvp-version> </rsvp-version-information> </rpc-reply>
Description	No documentation is available yet.
Contents	<rsvp-version>—No documentation is available yet.

<rt>

Usage	<pre><route-table> <rt> <rtrib-primary>rtrib-primary</rtrib-primary> <rtrib-secondary>rtrib-secondary</rtrib-secondary> <rt-destination>rt-destination</rt-destination> <rt-prefix-length>rt-prefix-length</rt-prefix-length> <rt-entry-count>rt-entry-count</rt-entry-count> <rt-announced-count>rt-announced-count</rt-announced-count> <rt-state>rt-state</rt-state> <rt-entry>...</rt-entry> <tsi>tsi</tsi> </rt> </route-table></pre>
Description	No documentation is available yet.
Contents	<p><rt-announced-count>—Number of announced route entries.</p> <p><rt-destination>—No documentation is available yet.</p> <p><rt-entry>—No documentation is available yet.</p> <p><rt-entry-count>—Number of route entries in this route.</p> <p><rt-prefix-length>—No documentation is available yet.</p> <p><rt-state>—State of this route.</p> <p><rtrib-primary>—Primary routing table.</p> <p><rtrib-secondary>—Secondary routing table.</p> <p><tsi>—Task-specific information.</p>

- **<rt-entry>**

Usage <rt>

```

<rt>
  <rt-entry>
    <active-tag>active-tag</active-tag>
    <last-active/>
    <current-active/>
    <protocol-name>protocol-name</protocol-name>
    <preference>preference</preference>
    <preference2>preference2</preference2>
    <route-distinguisher>route-distinguisher</route-distinguisher>
    <color>color</color>
    <color2>color2</color2>
    <age>age</age>
    <metric>metric</metric>
    <metric2>metric2</metric2>
    <rt-tag>rt-tag</rt-tag>
    <rt-tag2>rt-tag2</rt-tag2>
    <learned-from>learned-from</learned-from>
    <peer-as>peer-as</peer-as>
    <local-as>local-as</local-as>
    <rt-entry-state>rt-entry-state</rt-entry-state>
    <inactive-reason>inactive-reason</inactive-reason>
    <task-name>task-name</task-name>
    <announce-bits>announce-bits</announce-bits>
    <announce-tasks>announce-tasks</announce-tasks>
    <as-path>as-path</as-path>
    <local-preference>local-preference</local-preference>
    <med>med</med>
    <peer-id>peer-id</peer-id>
    <route-flap-damping>...</route-flap-damping>
    <aggregate>...</aggregate>
    <gateway>gateway</gateway>
    <indirect-nh-count>indirect-nh-count</indirect-nh-count>
    <nh-type>nh-type</nh-type>
    <nh>...</nh>
    <protocol-nh>...</protocol-nh>
  </rt-entry>
</rt>
```

Description No documentation is available yet.

Contents <active-tag>—Visual indication of active state of this route entry.

<age>—No documentation is available yet.

<aggregate>—No documentation is available yet.

<announce-bits>—No documentation is available yet.

<announce-tasks>—No documentation is available yet.

<as-path>—AS path of this route.

<color>—No documentation is available yet.

<color2>—No documentation is available yet.

<current-active>—This route entry is currently active.

<gateway>—Sourcing gateway.

<inactive-reason>—No documentation is available yet.

<indirect-nh-count>—Number of indirect next hops.

<last-active>—This route entry was the last active route entry.

<learned-from>—Peer address from which this route was learned.

<local-as>—Local AS number.

<local-preference>—No documentation is available yet.

<med>—Multiple exit discriminator.

<metric>—No documentation is available yet.

<metric2>—No documentation is available yet.

<nh>—Next-hop gateway information.

<nh-type>—Special next hop, Reject/Blackhole/Receive/Multicast/Local/Unused.

<peer-as>—Peer AS number.

<peer-id>—Router identifier of the peer.

<preference>—Preference value configured with the preference statement. The default preference value is 170.

<preference2>—No documentation is available yet.

<protocol-name>—No documentation is available yet.

<protocol-nh>—Protocol next hop.

<route-distinguisher>—No documentation is available yet.

<route-flap-damping>—No documentation is available yet.

<rt-entry-state>—State of this route entry.

<rt-tag>—No documentation is available yet.

<rt-tag2>—No documentation is available yet.

<task-name>—The name of this task.

< rt-martians >

Usage <route-information>
 <rt-martians>
 <rt-martian-table-name>*rt-martian-table-name*</rt-martian-table-name>
 <route-filter>...</route-filter>
 </rt-martians>
 </route-information>

Description No documentation is available yet.

Contents <route-filter>—Entries in martian table.

<rt-martian-table-name>—Name of the martian table, such as inet.0.

< rt-test-policy >

Usage <route-information>
 <rt-test-policy>
 <rt-policy-name>*rt-policy-name*</rt-policy-name>
 <rt-route-accepted>*rt-route-accepted*</rt-route-accepted>
 <rt-route-rejected>*rt-route-rejected*</rt-route-rejected>
 </rt-test-policy>
 </route-information>

Description No documentation is available yet.

Contents <rt-policy-name>—No documentation is available yet.

<rt-route-accepted>—No documentation is available yet.

<rt-route-rejected>—No documentation is available yet.

< rte-instance >

Usage <rte-export-table-information>
 <rte-instance>
 <instance-name>*instance-name*</instance-name>
 <rte-instance-type>*rte-instance-type*</rte-instance-type>
 <instance-flags>*instance-flags*</instance-flags>
 <instance-options>*instance-options*</instance-options>
 <import-policy>*import-policy*</import-policy>
 <export-policy>*export-policy*</export-policy>
 </rte-instance>
 </rte-export-table-information>

Description No documentation is available yet.

Contents <export-policy>—No documentation is available yet.

<import-policy>—No documentation is available yet.

<instance-flags>—No documentation is available yet.

<instance-name>—No documentation is available yet.

<instance-options>—No documentation is available yet.

<rte-instance-type>—No documentation is available yet.

< rte-table >

Usage <rtextport-table-information>
 <rte-table>
 <table-name>table-name</table-name>
 <table-export-on>table-export-on</table-export-on>
 <import-list>import-list</import-list>
 <table-flags>table-flags</table-flags>
 <table-usage>table-usage</table-usage>
 </rte-table>
 </rtextport-table-information>

Description No documentation is available yet.

Contents <import-list>—No documentation is available yet.

 <table-export-on>—No documentation is available yet.

 <table-flags>—No documentation is available yet.

 <table-name>—No documentation is available yet.

 <table-usage>—Number of exported routes.

< rte-target >

Usage <rtextport-table-information>
 <rte-target>
 <target-string>target-string</target-string>
 <family>family</family>
 <subaf>subaf</subaf>
 <import-count>import-count</import-count>
 <export-count>export-count</export-count>
 <import-list>import-list</import-list>
 <export-list>export-list</export-list>
 </rte-target>
 </rtextport-table-information>

Description No documentation is available yet.

Contents <export-count>—No documentation is available yet.

 <export-list>—No documentation is available yet.

 <family>—No documentation is available yet.

 <import-count>—No documentation is available yet.

 <import-list>—No documentation is available yet.

• <subaf>—No documentation is available yet.

• <target-string>—Route target.

< **rlexport-table-information**>

Usage <rpc-reply>
 <rlexport-table-information>
 <rte-table>...</rte-table>
 <rte-target>...</rte-target>
 <rte-instance>...</rte-instance>
 </rlexport-table-information>
 </rpc-reply>

Description Operational information policy-based instance export.

Contents <rte-instance>—No documentation is available yet.

• <rte-table>—No documentation is available yet.

• <rte-target>—No documentation is available yet.

< **task**>

Usage <task-information>
 <task>
 <task-name>task-name</task-name>
 <task-no-information/>
 </task>
 </task-information>

Description No documentation is available yet.

Contents <task-name>—The name of this task.

• <task-no-information>—No information is available for this task.

< **task-information**>

Usage <rpc-reply>
 <task-information>
 <task>...</task>
 </task-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <task>—No documentation is available yet.

< ted-database >

Usage	<pre><ted-database-information> <ted-database> <ted-database-id>ted-database-id</ted-database-id> <ted-database-id-overload>ted-database-id-overload</ted-database-id-overload> <ted-database-type>ted-database-type</ted-database-type> <ted-database-age>ted-database-age</ted-database-age> <ted-database-link-in>ted-database-link-in</ted-database-link-in> <ted-database-link-out>ted-database-link-out</ted-database-link-out> <ted-database-protocol>ted-database-protocol</ted-database-protocol> <ted-link>...</ted-link> </ted-database> </ted-database-information></pre>
Description	MPLS Traffic Engineering Database.
Contents	<p><ted-database-age>—No documentation is available yet.</p> <p><ted-database-id>—No documentation is available yet.</p> <p><ted-database-id-overload>—No documentation is available yet.</p> <p><ted-database-link-in>—No documentation is available yet.</p> <p><ted-database-link-out>—No documentation is available yet.</p> <p><ted-database-protocol>—No documentation is available yet.</p> <p><ted-database-type>—No documentation is available yet.</p> <p><ted-link>—No documentation is available yet.</p>

< ted-database-information >

Usage	<pre><rpc-reply> <ted-database-information> <ted-database-summary>...</ted-database-summary> <ted-database>...</ted-database> </ted-database-information> </rpc-reply></pre>
Description	No documentation is available yet.
Contents	<p><ted-database>—MPLS Traffic Engineering Database.</p> <p><ted-database-summary>—No documentation is available yet.</p>

- **< ted-database-summary >**

Usage <ted-database-information>
 <**ted-database-summary**>
 <ted-database-iso-count>*ted-database-iso-count*</ted-database-iso-count>
 <ted-database-inet-count>*ted-database-inet-count*</ted-database-inet-count>
 </**ted-database-summary**>
 </ted-database-information>

Description No documentation is available yet.

Contents <ted-database-inet-count>—No documentation is available yet.

<ted-database-iso-count>—No documentation is available yet.

- **< ted-link >**

Usage <ted-database | ted-link-information>
 <**ted-link**>
 <ted-link-from>*ted-link-from*</ted-link-from>
 <ted-link-to>*ted-link-to*</ted-link-to>
 <ted-link-local-address>*ted-link-local-address*</ted-link-local-address>
 <ted-link-remote-address>*ted-link-remote-address*</ted-link-remote-address>
 <admin-groups>...</admin-groups>
 <ted-link-metric>*ted-link-metric*</ted-link-metric>
 <ted-link-link-out>*ted-link-link-out*</ted-link-link-out>
 <ted-link-static-bandwidth>*ted-link-static-bandwidth*</ted-link-static-bandwidth>
 <ted-link-reservable-bandwidth>*bandwidth*</ted-link-reservable-bandwidth>
 <ted-link-local-bw0>*ted-link-local-bw0*</ted-link-local-bw0>
 <ted-link-local-bw1>*ted-link-local-bw1*</ted-link-local-bw1>
 <ted-link-local-bw2>*ted-link-local-bw2*</ted-link-local-bw2>
 <ted-link-local-bw3>*ted-link-local-bw3*</ted-link-local-bw3>
 <ted-link-local-bw4>*ted-link-local-bw4*</ted-link-local-bw4>
 <ted-link-local-bw5>*ted-link-local-bw5*</ted-link-local-bw5>
 <ted-link-local-bw6>*ted-link-local-bw6*</ted-link-local-bw6>
 <ted-link-local-bw7>*ted-link-local-bw7*</ted-link-local-bw7>
 <ted-link-avail-bw0>*ted-link-avail-bw0*</ted-link-avail-bw0>
 <ted-link-avail-bw1>*ted-link-avail-bw1*</ted-link-avail-bw1>
 <ted-link-avail-bw2>*ted-link-avail-bw2*</ted-link-avail-bw2>
 <ted-link-avail-bw3>*ted-link-avail-bw3*</ted-link-avail-bw3>
 <ted-link-avail-bw4>*ted-link-avail-bw4*</ted-link-avail-bw4>
 <ted-link-avail-bw5>*ted-link-avail-bw5*</ted-link-avail-bw5>
 <ted-link-avail-bw6>*ted-link-avail-bw6*</ted-link-avail-bw6>
 <ted-link-avail-bw7>*ted-link-avail-bw7*</ted-link-avail-bw7>
 </**ted-link**>
 </ted-database | ted-link-information>

Description No documentation is available yet.

Contents <admin-groups>—No documentation is available yet.

<ted-link-avail-bw0>—No documentation is available yet.

<ted-link-avail-bw1>—No documentation is available yet.

<ted-link-avail-bw2>—No documentation is available yet.

<ted-link-avail-bw3>—No documentation is available yet.

<ted-link-avail-bw4>—No documentation is available yet.

<ted-link-avail-bw5>—No documentation is available yet.

<ted-link-avail-bw6>—No documentation is available yet.

<ted-link-avail-bw7>—No documentation is available yet.

<ted-link-from>—No documentation is available yet.

<ted-link-link-out>—No documentation is available yet.

<ted-link-local-address>—No documentation is available yet.

<ted-link-local-bw0>—No documentation is available yet.

<ted-link-local-bw1>—No documentation is available yet.

<ted-link-local-bw2>—No documentation is available yet.

<ted-link-local-bw3>—No documentation is available yet.

<ted-link-local-bw4>—No documentation is available yet.

<ted-link-local-bw5>—No documentation is available yet.

<ted-link-local-bw6>—No documentation is available yet.

<ted-link-local-bw7>—No documentation is available yet.

<ted-link-metric>—No documentation is available yet.

<ted-link-remote-address>—No documentation is available yet.

<ted-link-reservable-bandwidth>—No documentation is available yet.

<ted-link-static-bandwidth>—No documentation is available yet.

<ted-link-to>—No documentation is available yet.

< ted-link-information >

Usage

```
<rpc-reply>
  <ted-link-information>
    <ted-link>...</ted-link>
  </ted-link-information>
</rpc-reply>
```

Description No documentation is available yet.

Contents <ted-link>—No documentation is available yet.

< ted-protocol >

Usage <ted-protocol-information>
 <ted-protocol>
 <ted-protocol-name>*ted-protocol-name*</ted-protocol-name>
 <ted-protocol-credibility>*ted-protocol-credibility*</ted-protocol-credibility>
 <ted-protocol-self-node>*ted-protocol-self-node*</ted-protocol-self-node>
 </ted-protocol>
 </ted-protocol-information>

Description No documentation is available yet.

Contents <ted-protocol-credibility>—No documentation is available yet.

 <ted-protocol-name>—Protocol that filled in the TED entry.

 <ted-protocol-self-node>—No documentation is available yet.

< ted-protocol-information >

Usage <rpc-reply>
 <ted-protocol-information>
 <ted-protocol>...</ted-protocol>
 </ted-protocol-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <ted-protocol>—No documentation is available yet.

< tlv-block >

Usage <ospf-opaque-area-lsa>
 <tlv-block>
 <tlv-type-name>*tlv-type-name*</tlv-type-name>
 <tlv-type-value>*tlv-type-value*</tlv-type-value>
 <tlv-length>*tlv-length*</tlv-length>
 <bytes-left>*bytes-left*</bytes-left>
 <formatted-tlv-data>*formatted-tlv-data*</formatted-tlv-data>
 </tlv-block>
 </ospf-opaque-area-lsa>

Description No documentation is available yet.

Contents <bytes-left>—No documentation is available yet.

 <formatted-tlv-data>—No documentation is available yet.

 <tlv-length>—No documentation is available yet.

 <tlv-type-name>—No documentation is available yet.

 <tlv-type-value>—No documentation is available yet.

< **tlv-stragglers**>

Usage <isis-tlv>
 <tlv-stragglers>
 <bytes-left>bytes-left</bytes-left>
 </tlv-stragglers>
 </isis-tlv>

Description No documentation is available yet.

Contents <bytes-left>—No documentation is available yet.

< **totals-information**>

Usage <isis-statistics>
 <totals-information>
 <packets-received>packets-received</packets-received>
 <packets-sent>packets-sent</packets-sent>
 </totals-information>
 </isis-statistics>

Description No documentation is available yet.

Contents <packets-received>—No documentation is available yet.
 <packets-sent>—No documentation is available yet.

< **tracing-information**>

Usage <bgp-peer | bgp-group>
 <tracing-information>
 <flags>flags</flags>
 <filename>filename</filename>
 <filesize>filesize</filesize>
 <filelimit>filelimit</filelimit>
 </tracing-information>
 </bgp-peer | bgp-group>

Description No documentation is available yet.

Contents <filelimit>—Maximum number of retained trace files.
 <filename>—The name of the trace file.
 <filesize>—Maximum size of the trace file.
 <flags>—Enabled trace flags.

• **< transmission-status>**

Usage <isis-database-entry>
 <transmission-status>
 <transmit-count>*transmit-count*</transmit-count>
 <message>*message*</message>
 <interface-name>*interface-name*</interface-name>
 <transmit-time>*transmit-time*</transmit-time>
 </transmission-status>
 </isis-database-entry>

Description No documentation is available yet.

Contents <interface-name>—No documentation is available yet.

 <message>—No documentation is available yet.

 <transmit-count>—No documentation is available yet.

 <transmit-time>—Time at which this message is queued for transmission.

• **< unconfigured-peers>**

Usage <bgp-group>
 <unconfigured-peers>
 <route-filter>...</route-filter>
 </unconfigured-peers>
 </bgp-group>

Description The set of address prefixes this group will allow peering from.

Contents <route-filter>—Entries in martian table.

• **< unknown-tlv>**

Usage <isis-tlv>
 <unknown-tlv>
 <isis-tlv-type>*isis-tlv-type*</isis-tlv-type>
 <tlv-length>*tlv-length*</tlv-length>
 </unknown-tlv>
 </isis-tlv>

Description No documentation is available yet.

Contents <isis-tlv-type>—No documentation is available yet.

 <tlv-length>—No documentation is available yet.

Summary of SNMP Response Tags

This section lists the tags returned by the JUNOScript server to describe Simple Network Management Protocol (SNMP) settings. The associated XML namespace is <http://xml.juniper.net/junos/5.4R1/junos-snmp>. To review the DTD for the tags, see “DTD for SNMP Response Tags” on page 1569.

< rmon-alarm >

Usage <rmon-alarm-information>
 <rmon-alarm>
 <alarm-index>alarm-index</alarm-index>
 <var-name>var-name</var-name>
 <var-oid>var-oid</var-oid>
 <sample-type>sample-type</sample-type>
 <alarm-value>alarm-value</alarm-value>
 <startup>startup</startup>
 <alarm-interval>alarm-interval</alarm-interval>
 <rising-threshold>rising-threshold</rising-threshold>
 <falling-threshold>falling-threshold</falling-threshold>
 <rising-event-index>rising-event-index</rising-event-index>
 <falling-event-index>falling-event-index</falling-event-index>
 <alarm-owner>alarm-owner</alarm-owner>
 <alarm-creator>alarm-creator</alarm-creator>
 <alarm-state>alarm-state</alarm-state>
 </rmon-alarm>
 </rmon-alarm-information>

Description No documentation is available yet.

Contents <alarm-creator>—Method by which entry was created.
 <alarm-index>—Alarm instance identifier.
 <alarm-interval>—Interval between samples in seconds.
 <alarm-owner>—Name of owner of this entry.
 <alarm-state>—Current state of the entry.
 <alarm-value>—Most recently monitored value.
 <falling-event-index>—Event generated when a falling alarm is sent.
 <falling-threshold>—Falling alarm threshold.
 <rising-event-index>—Event generated when a rising alarm is sent.
 <rising-threshold>—Rising alarm threshold.
 <sample-type>—Method of sampling the monitored variable.
 <startup>—Alarm that might be sent when entry is activated.

- `<var-name>`—Monitored variable name.
- `<var-oid>`—Monitored variable OID.

< rmon-alarm-information >

Usage `<rmon-information>`
 `<rmon-alarm-information>`
 `<rmon-alarm>...</rmon-alarm>`
 `</rmon-alarm-information>`
 `</rmon-information>`

Description No documentation is available yet.

Contents `<rmon-alarm>`—No documentation is available yet.

< rmon-event >

Usage `<rmon-event-information>`
 `<rmon-event>`
 `<event-index>event-index</event-index>`
 `<event-descr>event-descr</event-descr>`
 `<event-type>event-type</event-type>`
 `<community>community</community>`
 `<last-time-sent>last-time-sent</last-time-sent>`
 `<event-owner>event-owner</event-owner>`
 `<event-creator>event-creator</event-creator>`
 `<event-state>event-state</event-state>`
 `</rmon-event>`
 `</rmon-event-information>`

Description No documentation is available yet.

Contents `<community>`—Trap group to which trap is sent.

`<event-creator>`—Method by which the entry was created.

`<event-descr>`—Comment describing the event entry.

`<event-index>`—Event instance identifier.

`<event-owner>`—Name of owner of the event.

`<event-state>`—Current state of the entry.

`<event-type>`—Type of notification made about this event.

`<last-time-sent>`—Time this event was last generated.

< rmon-event-information >

Usage <rmon-information>
 <rmon-event-information>
 <rmon-event>...</rmon-event>
 </rmon-event-information>
 </rmon-information>

Description No documentation is available yet.

Contents <rmon-event>—No documentation is available yet.

< rmon-information >

Usage <rpc-reply>
 <rmon-information>
 <rmon-alarm-information>...</rmon-alarm-information>
 <rmon-event-information>...</rmon-event-information>
 </rmon-information>
 </rpc-reply>

Description No documentation is available yet.

Contents <rmon-alarm-information>—No documentation is available yet.

<rmon-event-information>—No documentation is available yet.

< snmp-input-statistics >

Usage <snmp-statistics>
 <snmp-input-statistics>
 <packets>packets</packets>
 <bad-versions>bad-versions</bad-versions>
 <bad-community-names>bad-community-names</bad-community-names>
 <bad-community-uses>bad-community-uses</bad-community-uses>
 <asn-parse-errors>asn-parse-errors</asn-parse-errors>
 <too-bigs>too-bigs</too-bigs>
 <no-such-names>no-such-names</no-such-names>
 <bad-values>bad-values</bad-values>
 <read-onlys>read-onlys</read-onlys>
 <general-errors>general-errors</general-errors>
 <total-request-varbinds>total-request-varbinds</total-request-varbinds>
 <total-set-varbinds>total-set-varbinds</total-set-varbinds>
 <get-requests>get-requests</get-requests>
 <get-nexsts>get-nexsts</get-nexsts>
 <set-requests>set-requests</set-requests>
 <get-responses>get-responses</get-responses>
 <traps>traps</traps>
 <silent-drops>silent-drops</silent-drops>
 <proxy-drops>proxy-drops</proxy-drops>
 </snmp-input-statistics>
 </snmp-statistics>

Description No documentation is available yet.

- | | |
|-----------------|---|
| Contents | <asn-parse-errors>—No documentation is available yet.

<bad-community-names>—No documentation is available yet.

<bad-community-uses>—No documentation is available yet.

<bad-values>—No documentation is available yet.

<bad-versions>—No documentation is available yet.

<general-errors>—No documentation is available yet.

<get-nexts>—No documentation is available yet.

<get-requests>—No documentation is available yet.

<get-responses>—No documentation is available yet.

<no-such-names>—No documentation is available yet.

<packets>—No documentation is available yet.

<proxy-drops>—No documentation is available yet.

<read-only>—No documentation is available yet.

<set-requests>—No documentation is available yet.

<silent-drops>—No documentation is available yet.

<too-bigs>—No documentation is available yet.

<total-request-varbinds>—No documentation is available yet.

<total-set-varbinds>—No documentation is available yet.

<traps>—No documentation is available yet. |
|-----------------|---|

<snmp-output-statistics>

- | | |
|--------------------|---|
| Usage | <snmp-statistics>
<snmp-output-statistics>
<packets>packets</packets>
<too-bigs>too-bigs</too-bigs>
<no-such-names>no-such-names</no-such-names>
<bad-values>bad-values</bad-values>
<general-errors>general-errors</general-errors>
<get-requests>get-requests</get-requests>
<get-nexts>get-nexts</get-nexts>
<set-requests>set-requests</set-requests>
<get-responses>get-responses</get-responses>
<traps>traps</traps>
</snmp-output-statistics>
</snmp-statistics> |
| Description | No documentation is available yet. |

Contents	<bad-values>—No documentation is available yet.
	<general-errors>—No documentation is available yet.
	<get-nexsts>—No documentation is available yet.
	<get-requests>—No documentation is available yet.
	<get-responses>—No documentation is available yet.
	<no-such-names>—No documentation is available yet.
	<packets>—No documentation is available yet.
	<set-requests>—No documentation is available yet.
	<too-bigs>—No documentation is available yet.
	<traps>—No documentation is available yet.

< snmp-statistics >

Usage	<rpc-reply> <snmp-statistics> <snmp-input-statistics>...</snmp-input-statistics> <snmp-output-statistics>...</snmp-output-statistics> <sub-agent-control-blocks>...</sub-agent-control-blocks> <sub-agent-registration>...</sub-agent-registration> </snmp-statistics> </rpc-reply>
--------------	--

Description No documentation is available yet.

Contents	<snmp-input-statistics>—No documentation is available yet.
	<snmp-output-statistics>—No documentation is available yet.
	<sub-agent-control-blocks>—No documentation is available yet.
	<sub-agent-registration>—No documentation is available yet.

< sub-agent-control-blocks >

Usage	<snmp-statistics> <sub-agent-control-blocks> <total>total</total> <currently-active>currently-active</currently-active> <max-active>max-active</max-active> <not-found>not-found</not-found> <timed-out>timed-out</timed-out> <max-latency>max-latency</max-latency> </sub-agent-control-blocks> </snmp-statistics>
--------------	--

Description No documentation is available yet.

- **Contents** <currently-active>—No documentation is available yet.
- <max-active>—No documentation is available yet.
- <max-latency>—No documentation is available yet.
- <not-found>—No documentation is available yet.
- <timed-out>—No documentation is available yet.
- <total>—No documentation is available yet.

<**sub-agent-registration**>

Usage <snmp-statistics>
 <**sub-agent-registration**>
 <group-registers>group-registers</group-registers>
 <group-deregisters>group-deregisters</group-deregisters>
 <group-removes>group-removes</group-removes>
 </**sub-agent-registration**>
</snmp-statistics>

Description No documentation is available yet.

- Contents** <group-deregisters>—No documentation is available yet.
 <group-registers>—No documentation is available yet.
 <group-removes>—No documentation is available yet.

Summary of UDP Forwarding Helper Response Tags

This section lists the tags returned by the JUNOScript server to describe output from the User Datagram Protocol (UDP) forwarding helper. The associated XML namespace is <http://xml.juniper.net/junos/5.4R1/junos-helper>. To review the DTD for the tags, see “DTD for UDP Forwarding Helper Response Tags” on page 1573.

<**helper-statistics-information**>

Usage <rpc-reply>
 <**helper-statistics-information**>
 <helper-statistics-service-information>...</helper-statistics-service-information>
 </**helper-statistics-information**>
</rpc-reply>

Description Port forwarding helper statistics.

- Contents** <helper-statistics-service-information>—Port forwarding helper statistics for a particular service.

<**helper-statistics-service-information**>

Usage <helper-statistics-information>
<helper-statistics-service-information>
 <service-name>service-name</service-name>
 <received-packets>received-packets</received-packets>
 <forwarded-packets>forwarded-packets</forwarded-packets>
 <dropped-packets>dropped-packets</dropped-packets>
 <dropped-packets-nointerface>dropped-packets</dropped-packets-nointerface>
 <dropped-packets-badread>dropped-packets-badread</dropped-packets-badread>
 <dropped-packets-badsend>dropped-packets-badsend</dropped-packets-badsend>
</helper-statistics-service-information>
</helper-statistics-information>

Description Port forwarding helper statistics for a particular service.

Contents <dropped-packets>—Number of packets dropped.
<dropped-packets-badread>—Number of packets dropped because of an error during the packet read.
<dropped-packets-badsend>—Number of packets dropped because of an error during the packet send.
<dropped-packets-nointerface>—Number of packets dropped because of no interface.
<forwarded-packets>—Number of packets forwarded.
<received-packets>—Number of packets received.
<service-name>—Name of this service.



Chapter 5

Summary of Configuration Tags

This chapter lists the tags that describe a router's configuration. The tag names are in alphabetical order. For information about the notation used in this chapter, see "Conventions for Tag Summaries" on page lxvi.



Every tag in this chapter optionally accepts the <apply-groups> tag as one of its children. For brevity, the reference entries do not list the tag as a child. For information about this tag, see <apply-groups> on page 329.

Note

<access> (configuration)

Usage <configuration>
 <access>
 <profile>...</profile>
 <traceoptions>...</traceoptions>
 </access>
 </configuration>

Description Network access configuration.

Contents <profile>—Set of attributes that define access.

 <traceoptions>—Network access daemon tracing options.

<access> (configuration/snmp)

Usage <configuration>
 <snmp>
 <access>
 <user>...</user>
 <group>...</group>
 <context>...</context>
 </access>
 </snmp>
 </configuration>

Description SNMPv3 access information.

- **Contents** <context>—SNMPv3 context information.
 - <group>—SNMPv3 USM group information.
 - <user>—SNMPv3 USM user information.
 - <accounting> (configuration/interfaces/interface/unit/family/inet)

```
Usage <configuration>
    <interfaces>
        <interface>
            <unit>
                <family>
                    <inet>
                        <accounting>
                            <source-class-usage>...</source-class-usage>
                            <destination-class-usage/>
                        </accounting>
                    </inet>
                </family>
            </unit>
        </interface>
    </interfaces>
</configuration>
```

Description Configure interface-based accounting options.

Contents <destination-class-usage>—Enable destination class usage on this interface.
<source-class-usage>—No documentation is available yet.

- <accounting> (configuration/interfaces/interface/unit/family/inet6)

```
Usage <configuration>
      <interfaces>
        <interface>
          <unit>
            <family>
              <inet6>
                <accounting>
                  <source-class-usage>...</source-class-usage>
                  <destination-class-usage/>
                </accounting>
              </inet6>
            </family>
          </unit>
        </interface>
      </interfaces>
    </configuration>
```

Description Configure interface-based accounting options.

Contents <destination-class-usage>—Enable destination class usage on this interface.
<source-class-usage>—No documentation is available yet.

<accounting-options> (configuration)

Usage <configuration>
 <accounting-options>
 <file>...</file>
 <interface-profile>...</interface-profile>
 <filter-profile>...</filter-profile>
 <class-usage-profile>...</class-usage-profile>
 <routing-engine-profile>...</routing-engine-profile>
 </accounting-options>
</configuration>

Description Accounting data configuration.

Contents <class-usage-profile>—Class usage profile for accounting data.
<file>—Accounting data file configuration.
<filter-profile>—Filter profile for accounting data.
<interface-profile>—Interface profile for accounting data.
<routing-engine-profile>—Routing Engine profile for accounting data.

<accounting-profile> (configuration/firewall/family/inet/filter)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <accounting-profile>
 <name>name</name> <!-- identifier -->
 </accounting-profile>
 </filter>
 </inet>
 </family>
 </firewall>
</configuration>

Description Accounting profile name.

Contents <name>—Accounting profile name.

- <accounting-profile> (configuration/firewall/family/inet6/filter)

Usage <configuration>
 <firewall>
 <family>
 <inet6>
 <filter>
 <accounting-profile>
 <name>name</name> <!-- identifier -->
 </accounting-profile>
 </filter>
 </inet6>
 </family>
 </firewall>
 </configuration>

Description Accounting profile name.

Contents <name>—Accounting profile name.

- <address> (configuration/firewall/family/inet/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <address>
 <name>name</name> <!-- identifier -->
 <except/>
 </address>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
 </configuration>

Description Match IP source or destination address.

Contents <except>—Match address not in this prefix.

 <name>—Prefix to match.

<address> (configuration/firewall/family/inet6/filter/term/from)

```
Usage  <configuration>
        <firewall>
            <family>
                <inet6>
                    <filter>
                        <term>
                            <from>
                                <address>
                                    <name>name</name>    <!-- identifier -->
                                    <except/>
                                </address>
                            </from>
                        </term>
                    </filter>
                </inet6>
            </family>
        </firewall>
    </configuration>
```

Description Match IP source or destination address.

Contents <except>—Match address not in this prefix.

<name>—Prefix to match.

<address> (configuration/interfaces/interface/unit/family/inet)

```
Usage  <configuration>
        <interfaces>
            <interface>
                <unit>
                    <family>
                        <inet>
                            <address>
                                <name>name</name>    <!-- identifier -->
                                <destination>destination</destination>
                                <broadcast>broadcast</broadcast>
                                <primary/>
                                <preferred/>
                                <multipoint-destination>...</multipoint-destination>
                                <arp>...</arp>
                                <vrrp-group>...</vrrp-group>
                            </address>
                        </inet>
                    </family>
                </unit>
            </interface>
        </interfaces>
    </configuration>
```

Description Interface address/destination prefix.

- **Contents** <arp>—Static ARP entries.
- <broadcast>—Broadcast address.
- <destination>—Destination address.
- <multipoint-destination>—Multipoint NBMA destination.
- <name>—Interface address/destination prefix.
- <preferred>—Preferred address on interface.
- <primary>—Candidate for primary address in system.
- <vrrp-group>—VRRP group.

<address> (configuration/interfaces/interface/unit/family/inet6)

Usage <configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <inet6>
 <address>
 <name>*name*</name> <!-- identifier -->
 <destination>*destination*</destination>
 <eui-64/>
 <primary/>
 <preferred/>
 </address>
 </inet6>
 </family>
 </unit>
 </interface>
 </interfaces>
</configuration>

Description Interface address/destination prefix.

- **Contents** <destination>—Destination address.
- <eui-64>—Generate EUI-64 interface ID.
- <name>—Interface address/destination prefix.
- <preferred>—Preferred address on interface.
- <primary>—Candidate for primary address in system.

<address> (configuration/protocols/pim/rp/static)

```
Usage  <configuration>
        <protocols>
            <pim>
                <rp>
                    <static>
                        <address>
                            <name>name</name>    <!-- identifier -->
                            <version>version</version>
                            <group-ranges>...</group-ranges>
                        </address>
                    </static>
                </rp>
            </pim>
        </protocols>
    </configuration>
```

Description RP address.

Contents <group-ranges>—Group address range of RP.

<name>—IP address of RP.

<version>—PIM version of RP.

<address> (configuration/protocols/router-discovery)

```
Usage  <configuration>
        <protocols>
            <router-discovery>
                <address>
                    <name>name</name>    <!-- identifier -->
                    <advertise/>
                    <ignore/>
                    <broadcast/>
                    <multicast/>
                    <ineligible/>
                    <priority>priority</priority>
                </address>
            </router-discovery>
        </protocols>
    </configuration>
```

Description IP addresses to include in advertisements.

Contents <advertise>—Advertise the IP address in advertisements.

<broadcast>—Include IP address only in broadcast advertisements.

<ignore>—Do not advertise the IP address in advertisements.

<ineligible>—IP address can never become a default router.

<multicast>—Include IP address only in multicast advertisements.

- <name>—IP addresses to include in router advertisements.
<priority>—Preference of the address to become a default router.

<address> (configuration/routing-instances/instance/protocols/pim/rp/static)

```
Usage <configuration>
      <routing-instances>
        <instance>
          <protocols>
            <pim>
              <rp>
                <static>
                  <address>
                    <name>name</name>    <!-- identifier -->
                    <version>version</version>
                    <group-ranges>...</group-ranges>
                  </address>
                </static>
              </rp>
            </pim>
          </protocols>
        </instance>
      </routing-instances>
</configuration>
```

Description RP address.

Contents <group-ranges>—Group address range of RP.

<name>—IP address of RP.

<version>—PIM version of RP.

<address> (configuration/routing-instances/instance/protocols/router-discovery)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <router-discovery>
          <address>
            <name>name</name>    <!-- identifier -->
            <advertise/>
            <ignore/>
            <broadcast/>
            <multicast/>
            <ineligible/>
            <priority>priority</priority>
          </address>
        </router-discovery>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description IP addresses to include in advertisements.

Contents <advertise>—Advertise the IP address in advertisements.

<broadcast>—Include IP address only in broadcast advertisements.

<ignore>—Do not advertise the IP address in advertisements.

<ineligible>—IP address can never become a default router.

<multicast>—Include IP address only in multicast advertisements.

<name>—IP addresses to include in router advertisements.

<priority>—Preference of the address to become a default router.

<admin-group> (configuration/protocols/mpls)

Usage

```

<configuration>
  <protocols>
    <mpls>
      <admin-group>
        <include>...</include>
        <exclude>...</exclude>
      </admin-group>
    </mpls>
  </protocols>
</configuration>
```

Description Administrative group policy.

- **Contents** <exclude>—Groups to reject.
 <include>—Groups to require.

<admin-group> (configuration/protocols/mpls/interface)

```
Usage  <configuration>
       <protocols>
         <mpls>
           <interface>
             <admin-group>
               <name>name</name>    <!-- identifier -->
             </admin-group>
           </interface>
         </mpls>
       </protocols>
     </configuration>
```

Description Administrative groups.

Contents <name>—Administrative groups.

<admin-group> (configuration/protocols/mpls/label-switched-path)

```
Usage  <configuration>
       <protocols>
         <mpls>
           <label-switched-path>
             <admin-group>
               <include>...</include>
               <exclude>...</exclude>
             </admin-group>
           </label-switched-path>
         </mpls>
       </protocols>
     </configuration>
```

Description Administrative group policy.

Contents <exclude>—Groups to reject.

 <include>—Groups to require.

<admin-group> (configuration/protocols/mpls/label-switched-path/primary)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <primary>
 <admin-group>
 <include>...</include>
 <exclude>...</exclude>
 </admin-group>
 </primary>
 </label-switched-path>
 </mpls>
 </protocols>
</configuration>

Description Administrative group policy.

Contents <exclude>—Groups to reject.

<include>—Groups to require.

<admin-group> (configuration/protocols/mpls/label-switched-path/secondary)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <secondary>
 <admin-group>
 <include>...</include>
 <exclude>...</exclude>
 </admin-group>
 </secondary>
 </label-switched-path>
 </mpls>
 </protocols>
</configuration>

Description Administrative group policy.

Contents <exclude>—Groups to reject.

<include>—Groups to require.

- <admin-groups> (configuration/protocols/mpls)

Usage <configuration>
 <protocols>
 <mpls>
 <admin-groups>
 <name>name</name> <!-- identifier -->
 <group-value>group-value</group-value>
 </admin-groups>
 </mpls>
 </protocols>
 </configuration>

Description Administrative groups.

Contents <group-value>—Group bit position.

 <name>—Group name.

- <aggregate> (configuration/routing-instances/instance/routing-options)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <defaults>...</defaults>
 <route>...</route>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Coalesced routes.

Contents <defaults>—Global route options.

 <route>—Individual route options.

<aggregate> (configuration/routing-instances/instance/routing-options/rib)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <aggregate>
 <defaults>...</defaults>
 <route>...</route>
 </aggregate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Coalesced routes.

Contents <defaults>—Global route options.
<route>—Individual route options.

<aggregate> (configuration/routing-options)

Usage <configuration>
 <routing-options>
 <aggregate>
 <defaults>...</defaults>
 <route>...</route>
 </aggregate>
 </routing-options>
</configuration>

Description Coalesced routes.

Contents <defaults>—Global route options.
<route>—Individual route options.

- <aggregate> (configuration/routing-options/rib)

Usage

```
<configuration>
  <routing-options>
    <rib>
      <aggregate>
        <defaults>...</defaults>
        <route>...</route>
      </aggregate>
    </rib>
  </routing-options>
</configuration>
```

Description Coalesced routes.

Contents <defaults>—Global route options.

<route>—Individual route options.

- <aggregated-devices> (configuration/chassis)

Usage

```
<configuration>
  <chassis>
    <aggregated-devices>
      <ethernet>...</ethernet>
      <sonet>...</sonet>
    </aggregated-devices>
  </chassis>
</configuration>
```

Description Aggregated devices configuration.

Contents <ethernet>—Aggregated device options for Ethernet.

<sonet>—Aggregated device options for POS.

- <aggregated-ether-options> (configuration/interfaces/interface)

Usage

```
<configuration>
  <interfaces>
    <interface>
      <aggregated-ether-options>
        <loopback/>
        <flow-control/>
        <source-filtering/>
        <source-address-filter>...</source-address-filter>
        <minimum-links>minimum-links</minimum-links>
        <link-speed>link-speed</link-speed>
      </aggregated-ether-options>
    </interface>
  </interfaces>
</configuration>
```

Description Aggregated Ethernet interface-specific options.

Contents	<flow-control>—Enable flow control.
	<link-speed>—Aggregated links speed.
	<loopback>—Enable loopback.
	<minimum-links>—Minimum number of aggregated links.
	<source-address-filter>—Source address filters.
	<source-filtering>—Enable source address filtering.

<aggregated-sonet-options> (configuration/interfaces/interface)

```

Usage   <configuration>
          <interfaces>
            <interface>
              <aggregated-sonet-options>
                <minimum-links>minimum-links</minimum-links>
                <link-speed>link-speed-choice</link-speed>
              </aggregated-sonet-options>
            </interface>
          </interfaces>
        </configuration>
    
```

Description Aggregated SONET interface-specific options.

Contents	<link-speed>—Aggregated links speed.
	<ul style="list-style-type: none"> ■ oc12—Links are OC-12c or STM-4c. ■ oc192—Links are OC-192c or STM-64c. ■ oc3—Links are OC-3c or STM-1c. ■ oc48—Links are OC-48c or STM-16c.
	<minimum-links>—Minimum number of aggregated links.

- <aggregation> (configuration/forwarding-options/sampling/output/cflowd)

Usage <configuration>
 <forwarding-options>
 <sampling>
 <output>
 <cflowd>
 <aggregation>
 <autonomous-system/>
 <protocol-port/>
 <source-prefix/>
 <destination-prefix/>
 <source-destination-prefix>...</source-destination-prefix>
 </aggregation>
 </cflowd>
 </output>
 </sampling>
 </forwarding-options>
 </configuration>

Description Aggregations to perform for exported flows (version 8 only).

Contents <autonomous-system>—Aggregate by autonomous system number.
 <destination-prefix>—Aggregate by destination prefix.
 <protocol-port>—Aggregate by protocol and port number.
 <source-destination-prefix>—Aggregate by source and destination prefix.
 <source-prefix>—Aggregate by source prefix.

- <alarm> (configuration/chassis)

Usage <configuration>
 <chassis>
 <alarm>
 <management-ethernet>...</management-ethernet>
 <sonet>...</sonet>
 <t3>...</t3>
 <e3>...</e3>
 <ds1>...</ds1>
 <ethernet>...</ethernet>
 </alarm>
 </chassis>
 </configuration>

Description Global alarm settings.

Contents <ds1>—DS-1 alarms.
 <e3>—E3 alarms.
 <ethernet>—Ethernet alarms.
 <management-ethernet>—Management Ethernet alarms.

<sonet>—SONET alarms.

<t3>—DS-3 alarms.

<alarm> (configuration/snmp/rmon)

Usage <configuration>
 <snmp>
 <rmon>
 <alarm>
 <name>name</name> <!-- identifier -->
 <description>description</description>
 <interval>seconds</interval>
 <variable>variable</variable> <!-- mandatory -->
 <sample-type>sample-type-choice</sample-type> <!-- mandatory -->
 <startup-alarm>startup-alarm-choice</startup-alarm>
 <rising-threshold>rising-threshold</rising-threshold> <!-- mandatory -->
 <falling-threshold>falling-threshold</falling-threshold>
 <rising-event-index>rising-event-index</rising-event-index>
 <falling-event-index>falling-event-index</falling-event-index>
 </alarm>
 </rmon>
 </snmp>
</configuration>

Description RMON alarm entries.

Contents <description>—General description of alarm (stored in alarmOwner).

<falling-event-index>—Event triggered after falling threshold is crossed.

<falling-threshold>—The falling threshold.

<interval>—Interval between samples.

<name>—RMON alarm identifier.

<rising-event-index>—Event triggered after rising threshold is crossed.

<rising-threshold>—The rising threshold.

<sample-type>—Method of sampling the selected variable.

- absolute-value—Absolute sample value is used.

- delta-value—Difference between sampled values is used.

<startup-alarm>—The alarm that may be sent upon entry startup.

- falling-alarm—Falling alarm may be sent at startup.

- rising-alarm—Rising alarm may be sent at startup.

- rising-or-falling-alarm—Rising or falling alarm may be sent at startup.

<variable>—OID of MIB variable to be monitored.

- <alias> (configuration/system/static-host-mapping)

Usage <configuration>
 <system>
 <static-host-mapping>
 <alias>
 <name>name</name> <!-- identifier -->
 </alias>
 </static-host-mapping>
 </system>
 </configuration>

Description Hostname alias.

Contents <name>—Hostname alias.

- <allow> (configuration/protocols/bgp/group)

Usage <configuration>
 <protocols>
 <bpg>
 <group>
 <allow>
 <name>name</name> <!-- identifier -->
 </allow>
 </group>
 </bpg>
 </protocols>
 </configuration>

Description Configure peer connections for specific networks.

Contents <name>—Configure peer connections for specific networks.

- <allow> (configuration/routing-instances/instance/protocols/bgp/group)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bpg>
 <group>
 <allow>
 <name>name</name> <!-- identifier -->
 </allow>
 </group>
 </bpg>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Configure peer connections for specific networks.

Contents <name>—Configure peer connections for specific networks.

<any> (configuration/protocols/bgp/family/inet)

```
Usage  <configuration>
        <protocols>
          <bgp>
            <family>
              <inet>
                <any>
                  <prefix-limit>...</prefix-limit>
                  <rib-group>...</rib-group>
                </any>
              </inet>
            </family>
          </bgp>
        </protocols>
      </configuration>
```

Description Include unicast or multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.
<rib-group>—Routing table group.

<any> (configuration/protocols/bgp/family/inet-vpn)

```
Usage  <configuration>
        <protocols>
          <bgp>
            <family>
              <inet-vpn>
                <any>
                  <prefix-limit>...</prefix-limit>
                  <rib-group>...</rib-group>
                </any>
              </inet-vpn>
            </family>
          </bgp>
        </protocols>
      </configuration>
```

Description Include unicast or multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.
<rib-group>—Routing table group.

- <any> (configuration/protocols/bgp/family/inet6)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <family>
        <inet6>
          <any>
            <prefix-limit>...</prefix-limit>
            <rib-group>...</rib-group>
          </any>
        </inet6>
      </family>
    </bgp>
  </protocols>
</configuration>
```

Description Include unicast or multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.
 <rib-group>—Routing table group.

- <any> (configuration/protocols/bgp/group/family/inet)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <group>
        <family>
          <inet>
            <any>
              <prefix-limit>...</prefix-limit>
              <rib-group>...</rib-group>
            </any>
          </inet>
        </family>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Include unicast or multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.
 <rib-group>—Routing table group.

<any> (configuration/protocols/bgp/group/family/inet-vpn)

```
Usage  <configuration>
        <protocols>
            <bgp>
                <group>
                    <family>
                        <inet-vpn>
                            <any>
                                <prefix-limit>...</prefix-limit>
                                <rib-group>...</rib-group>
                            </any>
                        </inet-vpn>
                    </family>
                </group>
            </bgp>
        </protocols>
    </configuration>
```

Description Include unicast or multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.
<rib-group>—Routing table group.

<any> (configuration/protocols/bgp/group/family/inet6)

```
Usage  <configuration>
        <protocols>
            <bgp>
                <group>
                    <family>
                        <inet6>
                            <any>
                                <prefix-limit>...</prefix-limit>
                                <rib-group>...</rib-group>
                            </any>
                        </inet6>
                    </family>
                </group>
            </bgp>
        </protocols>
    </configuration>
```

Description Include unicast or multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.
<rib-group>—Routing table group.

- <any> (configuration/protocols/bgp/group/neighbor/family/inet)

Usage <configuration>
 <protocols>
 <bpg>
 <group>
 <neighbor>
 <family>
 <inet>
 <any>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </any>
 </inet>
 </family>
 </neighbor>
 </group>
 </bpg>
 </protocols>
 </configuration>

Description Include unicast or multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

 <rib-group>—Routing table group.

- <any> (configuration/protocols/bgp/group/neighbor/family/inet-vpn)

Usage <configuration>
 <protocols>
 <bpg>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <any>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </any>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bpg>
 </protocols>
 </configuration>

Description Include unicast or multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

 <rib-group>—Routing table group.

<any> (configuration/protocols/bgp/group/neighbor/family/inet6)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <group>
        <neighbor>
          <family>
            <inet6>
              <any>
                <prefix-limit>...</prefix-limit>
                <rib-group>...</rib-group>
              </any>
            </inet6>
          </family>
        </neighbor>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Include unicast or multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

<any> (configuration/routing-instances/instance/protocols/bgp/family/inet)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <family>
            <inet>
              <any>
                <prefix-limit>...</prefix-limit>
                <rib-group>...</rib-group>
              </any>
            </inet>
          </family>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Include unicast or multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

- <any> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <family>
            <inet-vpn>
              <any>
                <prefix-limit>...</prefix-limit>
                <rib-group>...</rib-group>
              </any>
            </inet-vpn>
          </family>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Include unicast or multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

- <any> (configuration/routing-instances/instance/protocols/bgp/family/inet6)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <family>
            <inet6>
              <any>
                <prefix-limit>...</prefix-limit>
                <rib-group>...</rib-group>
              </any>
            </inet6>
          </family>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Include unicast or multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

<any> (configuration/routing-instances/instance/protocols/bgp/group/family/inet)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <family>
              <inet>
                <any>
                  <prefix-limit>...</prefix-limit>
                  <rib-group>...</rib-group>
                </any>
              </inet>
            </family>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Include unicast or multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.
 <rib-group>—Routing table group.

<any> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <family>
              <inet-vpn>
                <any>
                  <prefix-limit>...</prefix-limit>
                  <rib-group>...</rib-group>
                </any>
              </inet-vpn>
            </family>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Include unicast or multicast NLRI.

- Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.
<rib-group>—Routing table group.

```
Usage <configuration>
      <routing-instances>
        <instance>
          <protocols>
            <bgp>
              <group>
                <family>
                  <inet6>
                    <any>
                      <prefix-limit>...</prefix-limit>
                      <rib-group>...</rib-group>
                    </any>
                  </inet6>
                </family>
              </group>
            </bgp>
          </protocols>
        </instance>
      </routing-instances>
    </configuration>
```

Description Include unicast or multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

<any> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <any>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </any>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Include unicast or multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

- <any> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <any>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </any>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Include unicast or multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

 <rib-group>—Routing table group.

<any> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <family>
                <inet6>
                  <any>
                    <prefix-limit>...</prefix-limit>
                    <rib-group>...</rib-group>
                  </any>
                </inet6>
              </family>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Include unicast or multicast NLRI.

Contents

- <prefix-limit>—Limit maximum number of prefixes from a peer.
- <rib-group>—Routing table group.

<apply-groups>

Usage

```

<!-- any tag -->
<apply-groups>
  <name>value</name>  <!-- identifier -->
</apply-groups>
<!-- any tag -->
```

Description Groups from which to inherit configuration data.

Contents

- <name>—Groups from which to inherit configuration data.

- <aps> (configuration/interfaces/interface/sonet-options)
 - **Usage** <configuration>
 <interfaces>
 <interface>
 <sonet-options>
 <aps>
 <working-circuit>*working-circuit*</working-circuit>
 <protect-circuit>*protect-circuit*</protect-circuit>
 <neighbor>*neighbor*</neighbor>
 <paired-group>*paired-group*</paired-group>
 <authentication-key>...</authentication-key>
 <advertise-interval>*milliseconds*</advertise-interval>
 <hold-time>*milliseconds*</hold-time>
 <revert-time>*seconds*</revert-time>
 <request>*request-choice*</request>
 <force>*force-choice*</force>
 <lockout/>
 </aps>
 </sonet-options>
 </interface>
 </interfaces>
 </configuration>

Description Automatic Protect Switching.

Contents <advertise-interval>—Advertise interval.

<authentication-key>—Authentication parameters.

<force>—Force circuit state.

- protect—Force protect circuit.

- working—Force working circuit.

<hold-time>—Hold time.

<lockout>—Lockout protection.

<neighbor>—Neighbor address.

<paired-group>—Name of paired APS group.

<protect-circuit>—Protect circuit group name.

<request>—Request circuit state.

- protect—Request protect circuit.

- working—Request working circuit.

<revert-time>—Circuit revert time.

<working-circuit>—Working circuit group name.

<archive> (configuration/system/syslog)

```
Usage   <configuration>
          <system>
            <syslog>
              <archive>
                <size>bytes</size>
                <files>files</files>
                <world-readable/>
              </archive>
            </syslog>
          </system>
        </configuration>
```

Description Archive file information.

Contents <files>—Number of files to be archived.

<size>—Size of files to be archived.

<world-readable>—Allow any user to read the log file.

<archive> (configuration/system/syslog/file)

```
Usage   <configuration>
          <system>
            <syslog>
              <file>
                <archive>
                  <size>bytes</size>
                  <files>files</files>
                  <world-readable/>
                </archive>
              </file>
            </syslog>
          </system>
        </configuration>
```

Description Archive file information.

Contents <files>—Number of files to be archived.

<size>—Size of files to be archived.

<world-readable>—Allow any user to read the log file.

- <archive-sites> (configuration/accounting-options/file)

Usage

```
<configuration>
  <accounting-options>
    <file>
      <archive-sites>
        <name>name</name>    <!-- identifier -->
      </archive-sites>
    </file>
  </accounting-options>
</configuration>
```

Description No documentation is available yet.

Contents <name>—Primary and failover URLs to receive archive files.

- <area> (configuration/protocols/ospf)

Usage

```
<configuration>
  <protocols>
    <ospf>
      <area>
        <name>name</name>    <!-- identifier -->
        <stub>...</stub>
        <nssa>...</nssa>
        <area-range>...</area-range>
        <authentication-type>authentication-type-choice</authentication-type>
        <virtual-link>...</virtual-link>
        <interface>...</interface>
        <label-switched-path>...</label-switched-path>
      </area>
    </ospf>
  </protocols>
</configuration>
```

Description Configure an OSPF area.

Contents <area-range>—Configure area ranges.

<authentication-type>—Authentication type.

- md5—MD5 authentication.

- none—No authentication.

- simple—Simple password authentication.

<interface>—Include an interface in this area.

<label-switched-path>—Configuration for advertisement of a label-switched path.

<name>—Area ID.

<nssa>—Configure a not-so-stubby area.

<stub>—Configure a stub area.

<virtual-link>—Configure virtual links.

<area> (configuration/routing-instances/instance/protocols/ospf)

Usage	<pre><configuration> <routing-instances> <instance> <protocols> <ospf> <area> <name>name</name> <!-- identifier --> <stub>...</stub> <nssa>...</nssa> <area-range>...</area-range> <authentication-type>authentication-type-choice</authentication-type> <virtual-link>...</virtual-link> <interface>...</interface> <label-switched-path>...</label-switched-path> </area> </ospf> </protocols> </instance> </routing-instances> </configuration></pre>
--------------	---

Description	Configure an OSPF area.
--------------------	-------------------------

Contents	<area-range>—Configure area ranges.
-----------------	-------------------------------------

<p><authentication-type>—Authentication type.</p> <ul style="list-style-type: none"> ■ md5—MD5 authentication. ■ none—No authentication. ■ simple—Simple password authentication.
--

<p><interface>—Include an interface in this area.</p>

<p><label-switched-path>—Configuration for advertisement of a label-switched path.</p>
--

<p><name>—Area ID.</p>

<p><nssa>—Configure a not-so-stubby area.</p>

<p><stub>—Configure a stub area.</p>
--

<p><virtual-link>—Configure virtual links.</p>
--

- <area-range> (configuration/protocols/ospf/area)

Usage <configuration>
 <protocols>
 <ospf>
 <area>
 <area-range>
 <name>name</name> <!-- identifier -->
 <restrict/>
 </area-range>
 </area>
 </ospf>
 </protocols>
 </configuration>

Description Configure area ranges.

Contents <name>—Range to summarize this area.

 <restrict>—Restrict advertisement of this area range.

- <area-range> (configuration/protocols/ospf/area/nssa)

Usage <configuration>
 <protocols>
 <ospf>
 <area>
 <nssa>
 <area-range>
 <name>name</name> <!-- identifier -->
 <restrict/>
 </area-range>
 </nssa>
 </area>
 </ospf>
 </protocols>
 </configuration>

Description Configure NSSA area ranges.

Contents <name>—Range to summarize NSSA routes in this area.

 <restrict>—Restrict advertisement of this area range.

<area-range> (configuration/routing-instances/instance/protocols/ospf/area)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ospf>
 <area>
 <area-range>
 <name>name</name> <!-- identifier -->
 <restrict/>
 </area-range>
 </area>
 </ospf>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Configure area ranges.

Contents <name>—Range to summarize this area.

<restrict>—Restrict advertisement of this area range.

<area-range> (configuration/routing-instances/instance/protocols/ospf/area/nssa)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ospf>
 <area>
 <nssa>
 <area-range>
 <name>name</name> <!-- identifier -->
 <restrict/>
 </area-range>
 </nssa>
 </area>
 </ospf>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Configure NSSA area ranges.

Contents <name>—Range to summarize NSSA routes in this area.

<restrict>—Restrict advertisement of this area range.

- <arp> (configuration/interfaces/interface/unit/family/inet/address)

Usage

```

<configuration>
  <interfaces>
    <interface>
      <unit>
        <family>
          <inet>
            <address>
              <arp>
                <name>name</name>    <!-- identifier -->
                <mac>mac</mac>
                <multicast-mac>multicast-mac</multicast-mac>
                <publish/>
              </arp>
            </address>
          </inet>
        </family>
      </unit>
    </interface>
  </interfaces>
</configuration>
```

Description Static ARP entries.

Contents <mac>—MAC address.

<multicast-mac>—Multicast MAC address.

<name>—Destination IP address.

<publish>—Reply to ARP requests for this entry.

- <as-path> (configuration/policy-options)

Usage

```

<configuration>
  <policy-options>
    <as-path>
      <name>name</name>    <!-- identifier -->
      <path>path</path>
    </as-path>
  </policy-options>
</configuration>
```

Description BGP autonomous system path regular expression.

Contents <name>—Name to identify AS path regular expression.

<path>—AS path regular expression.

<as-path> (configuration/policy-options/policy-statement/from)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <from>
        <as-path>
          <name>name</name>    <!-- identifier -->
        </as-path>
      </from>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Name of AS path regular expression (BGP only).

Contents <name>—Name of AS path regular expression (BGP only).

<as-path> (configuration/policy-options/policy-statement/term/from)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <from>
          <as-path>
            <name>name</name>    <!-- identifier -->
          </as-path>
        </from>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Name of AS path regular expression (BGP only).

Contents <name>—Name of AS path regular expression (BGP only).

• <as-path> (configuration/policy-options/policy-statement/term/to)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <to>
 <as-path>
 <name>name</name> <!-- identifier -->
 </as-path>
 </to>
 </term>
 </policy-statement>
 </policy-options>
</configuration>

Description Name of AS path regular expression (BGP only).

Contents <name>—Name of AS path regular expression (BGP only).

• <as-path> (configuration/policy-options/policy-statement/to)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <to>
 <as-path>
 <name>name</name> <!-- identifier -->
 </as-path>
 </to>
 </policy-statement>
 </policy-options>
</configuration>

Description Name of AS path regular expression (BGP only).

Contents <name>—Name of AS path regular expression (BGP only).

<as-path> (configuration/routing-instances/instance/routing-options/aggregate/defaults)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <aggregate>
          <defaults>
            <as-path>
              <path>path</path>
              <origin>origin-choice</origin>
              <atomicAggregate/>
              <as-number>as-number</as-number>
              <address>address</address>
            </as-path>
          </defaults>
        </aggregate>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Autonomous system path.

Contents <atomicAggregate>—Add ATOMIC_AGGREGATE path attribute to route.

<origin>—No documentation is available yet.

- egp—Path originated in another AS.
- igp—Path originated in the local IGP.
- incomplete—Path was learned by some other means.

<path>—Autonomous system path.

- <as-path> (configuration/routing-instances/instance/routing-options/aggregate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <route>
 <as-path>
 <path>path</path>
 <origin>origin-choice</origin>
 <atomicAggregate/>
 <as-number>as-number</as-number>
 <address>address</address>
 </as-path>
 </route>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Autonomous system path.

Contents <atomicAggregate>—Add ATOMIC_AGGREGATE path attribute to route.

<origin>—No documentation is available yet.

- egp—Path originated in another AS.
- igp—Path originated in the local IGP.
- incomplete—Path was learned by some other means.

<path>—Autonomous system path.

<as-path> (configuration/routing-instances/instance/routing-options/generate/defaults)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <generate>
          <defaults>
            <as-path>
              <path>path</path>
              <origin>origin-choice</origin>
              <atomic-aggregate/>
              <as-number>as-number</as-number>
              <address>address</address>
            </as-path>
          </defaults>
        </generate>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Autonomous system path.

Contents <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.

<origin>—No documentation is available yet.

- egp—Path originated in another AS.
- igp—Path originated in the local IGP.
- incomplete—Path was learned by some other means.

<path>—Autonomous system path.

- <as-path> (configuration/routing-instances/instance/routing-options/generate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <route>
 <as-path>
 <path>path</path>
 <origin>origin-choice</origin>
 <atomic-aggregate/>
 <as-number>as-number</as-number>
 <address>address</address>
 </as-path>
 </route>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Autonomous system path.

Contents <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.

<origin>—No documentation is available yet.

- egp—Path originated in another AS.
- igp—Path originated in the local IGP.
- incomplete—Path was learned by some other means.

<path>—Autonomous system path.

<as-path> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)

```
Usage  <configuration>
        <routing-instances>
            <instance>
                <routing-options>
                    <rib>
                        <aggregate>
                            <defaults>
                                <as-path>
                                    <path>path</path>
                                    <origin>origin-choice</origin>
                                    <atomic-aggregate/>
                                    <as-number>as-number</as-number>
                                    <address>address</address>
                                </as-path>
                            </defaults>
                        </aggregate>
                    </rib>
                </routing-options>
            </instance>
        </routing-instances>
    </configuration>
```

Description Autonomous system path.

Contents <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.

<origin>—No documentation is available yet.

- egp—Path originated in another AS.
- igp—Path originated in the local IGP.
- incomplete—Path was learned by some other means.

<path>—Autonomous system path.

- <as-path> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <aggregate>
            <route>
              <as-path>
                <path>path</path>
                <origin>origin-choice</origin>
                <atomic-aggregate/>
                <as-number>as-number</as-number>
                <address>address</address>
              </as-path>
            </route>
          </aggregate>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Autonomous system path.

Contents <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.

<origin>—No documentation is available yet.

- egp—Path originated in another AS.
- igp—Path originated in the local IGP.
- incomplete—Path was learned by some other means.

<path>—Autonomous system path.

<as-path> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <generate>
            <defaults>
              <as-path>
                <path>path</path>
                <origin>origin-choice</origin>
                <atomic-aggregate/>
                <as-number>as-number</as-number>
                <address>address</address>
              </as-path>
            </defaults>
          </generate>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Autonomous system path.

Contents <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.

<origin>—No documentation is available yet.

- egp—Path originated in another AS.
- igp—Path originated in the local IGP.
- incomplete—Path was learned by some other means.

<path>—Autonomous system path.

- <as-path> (configuration/routing-instances/instance/routing-options/rib/generate/route)

```
Usage <configuration>
    <routing-instances>
        <instance>
            <routing-options>
                <rib>
                    <generate>
                        <route>
                            <as-path>
                                <path>path</path>
                                <origin>origin-choice</origin>
                                <atomic-aggregate/>
                                <as-number>as-number</as-number>
                                <address>address</address>
                            </as-path>
                        </route>
                    </generate>
                </rib>
            </routing-options>
        </instance>
    </routing-instances>
</configuration>
```

Description Autonomous system path.

Contents <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.

<origin>—No documentation is available yet.

- **egp**—Path originated in another AS.
 - **igp**—Path originated in the local IGP.
 - **incomplete**—Path was learned by some other means.

<path>—Autonomous system path.

<as-path> (configuration/routing-instances/instance/routing-options/rib/static/defaults)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <static>
            <defaults>
              <as-path>
                <path>path</path>
                <origin>origin-choice</origin>
                <atomic-aggregate/>
                <as-number>as-number</as-number>
                <address>address</address>
              </as-path>
            </defaults>
          </static>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Autonomous system path.

Contents <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.

<origin>—No documentation is available yet.

- egp—Path originated in another AS.
- igp—Path originated in the local IGP.
- incomplete—Path was learned by some other means.

<path>—Autonomous system path.

- <as-path> (configuration/routing-instances/instance/routing-options/rib/static/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <static>
 <route>
 <as-path>
 <path>path</path>
 <origin>origin-choice</origin>
 <atomic-aggregate/>
 <as-number>as-number</as-number>
 <address>address</address>
 </as-path>
 </route>
 </static>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Autonomous system path.

Contents <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.

<origin>—No documentation is available yet.

- egp—Path originated in another AS.
- igp—Path originated in the local IGP.
- incomplete—Path was learned by some other means.

<path>—Autonomous system path.

<as-path> (configuration/routing-instances/instance/routing-options/static/defaults)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <static>
          <defaults>
            <as-path>
              <path>path</path>
              <origin>origin-choice</origin>
              <atomic-aggregate/>
              <as-number>as-number</as-number>
              <address>address</address>
            </as-path>
          </defaults>
        </static>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Autonomous system path.

Contents <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.

<origin>—No documentation is available yet.

- egp—Path originated in another AS.
- igp—Path originated in the local IGP.
- incomplete—Path was learned by some other means.

<path>—Autonomous system path.

- <as-path> (configuration/routing-instances/instance/routing-options/static/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <static>
 <route>
 <as-path>
 <path>path</path>
 <origin>origin-choice</origin>
 <atomic-aggregate/>
 <as-number>as-number</as-number>
 <address>address</address>
 </as-path>
 </route>
 </static>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Autonomous system path.

Contents <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.

<origin>—No documentation is available yet.

- egp—Path originated in another AS.
- igp—Path originated in the local IGP.
- incomplete—Path was learned by some other means.

<path>—Autonomous system path.

<as-path> (configuration/routing-options/aggregate/defaults)

Usage

```
<configuration>
  <routing-options>
    <aggregate>
      <defaults>
        <as-path>
          <path>path</path>
          <origin>origin-choice</origin>
          <atomicAggregate/>
          <as-number>as-number</as-number>
          <address>address</address>
        </as-path>
      </defaults>
    </aggregate>
  </routing-options>
</configuration>
```

Description Autonomous system path.

Contents <atomicAggregate>—Add ATOMIC_AGGREGATE path attribute to route.

<origin>—No documentation is available yet.

- egp—Path originated in another AS.
- igp—Path originated in the local IGP.
- incomplete—Path was learned by some other means.

<path>—Autonomous system path.

<as-path> (configuration/routing-options/aggregate/route)

Usage

```
<configuration>
  <routing-options>
    <aggregate>
      <route>
        <as-path>
          <path>path</path>
          <origin>origin-choice</origin>
          <atomicAggregate/>
          <as-number>as-number</as-number>
          <address>address</address>
        </as-path>
      </route>
    </aggregate>
  </routing-options>
</configuration>
```

Description Autonomous system path.

- **Contents** <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.
- <origin>—No documentation is available yet.
 - egp—Path originated in another AS.
 - igp—Path originated in the local IGP
 - incomplete—Path was learned by some other means.
- <path>—Autonomous system path.

<as-path> (configuration/routing-options/generate/defaults)

Usage <configuration>
 <routing-options>
 <generate>
 <defaults>
 <as-path>
 <path>path</path>
 <origin>origin-choice</origin>
 <atomic-aggregate/>
 <as-number>as-number</as-number>
 <address>address</address>
 </as-path>
 </defaults>
 </generate>
 </routing-options>
 </configuration>

Description Autonomous system path.

- Contents** <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.
- <origin>—No documentation is available yet.
 - egp—Path originated in another AS.
 - igp—Path originated in the local IGP
 - incomplete—Path was learned by some other means.
 - <path>—Autonomous system path.

<as-path> (configuration/routing-options/generate/route)

Usage

```
<configuration>
  <routing-options>
    <generate>
      <route>
        <as-path>
          <path>path</path>
          <origin>origin-choice</origin>
          <atomic-aggregate/>
          <as-number>as-number</as-number>
          <address>address</address>
        </as-path>
      </route>
    </generate>
  </routing-options>
</configuration>
```

Description Autonomous system path.

Contents <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.

<origin>—No documentation is available yet.

- egp—Path originated in another AS.
- igp—Path originated in the local IGP.
- incomplete—Path was learned by some other means.

<path>—Autonomous system path.

<as-path> (configuration/routing-options/rib/aggregate/defaults)

Usage

```
<configuration>
  <routing-options>
    <rib>
      <aggregate>
        <defaults>
          <as-path>
            <path>path</path>
            <origin>origin-choice</origin>
            <atomic-aggregate/>
            <as-number>as-number</as-number>
            <address>address</address>
          </as-path>
        </defaults>
      </aggregate>
    </rib>
  </routing-options>
</configuration>
```

Description Autonomous system path.

- **Contents** <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.
- <origin>—No documentation is available yet.
 - egp—Path originated in another AS.
 - igp—Path originated in the local IGP
 - incomplete—Path was learned by some other means.
- <path>—Autonomous system path.

<as-path> (configuration/routing-options/rib/aggregate/route)

Usage <configuration>
 <routing-options>
 <rib>
 <aggregate>
 <route>
 <as-path>
 <path>path</path>
 <origin>origin-choice</origin>
 <atomic-aggregate/>
 <as-number>as-number</as-number>
 <address>address</address>
 </as-path>
 </route>
 </aggregate>
 </rib>
 </routing-options>
 </configuration>

Description Autonomous system path.

- Contents** <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.
- <origin>—No documentation is available yet.
 - egp—Path originated in another AS.
 - igp—Path originated in the local IGP
 - incomplete—Path was learned by some other means.
 - <path>—Autonomous system path.

<as-path> (configuration/routing-options/rib/generate/defaults)

Usage <configuration>
 <routing-options>
 <rib>
 <generate>
 <defaults>
 <as-path>
 <path>path</path>
 <origin>origin-choice</origin>
 <atomic-aggregate/>
 <as-number>as-number</as-number>
 <address>address</address>
 </as-path>
 </defaults>
 </generate>
 </rib>
 </routing-options>
</configuration>

Description Autonomous system path.

Contents <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.

<origin>—No documentation is available yet.

- egp—Path originated in another AS.
- igp—Path originated in the local IGP.
- incomplete—Path was learned by some other means.

<path>—Autonomous system path.

<as-path> (configuration/routing-options/rib/generate/route)

Usage <configuration>
 <routing-options>
 <rib>
 <generate>
 <route>
 <as-path>
 <path>path</path>
 <origin>origin-choice</origin>
 <atomic-aggregate/>
 <as-number>as-number</as-number>
 <address>address</address>
 </as-path>
 </route>
 </generate>
 </rib>
 </routing-options>
</configuration>

Description Autonomous system path.

- **Contents** <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.
- <origin>—No documentation is available yet.
 - egp—Path originated in another AS.
 - igp—Path originated in the local IGP
 - incomplete—Path was learned by some other means.
- <path>—Autonomous system path.

<as-path> (configuration/routing-options/rib/static/defaults)

Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <defaults>
 <as-path>
 <path>path</path>
 <origin>origin-choice</origin>
 <atomic-aggregate/>
 <as-number>as-number</as-number>
 <address>address</address>
 </as-path>
 </defaults>
 </static>
 </rib>
 </routing-options>
</configuration>

Description Autonomous system path.

- Contents** <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.
- <origin>—No documentation is available yet.
 - egp—Path originated in another AS.
 - igp—Path originated in the local IGP
 - incomplete—Path was learned by some other means.
 - <path>—Autonomous system path.

<as-path> (configuration/routing-options/rib/static/route)

```
Usage  <configuration>
        <routing-options>
            <rib>
                <static>
                    <route>
                        <as-path>
                            <path>path</path>
                            <origin>origin-choice</origin>
                            <atomic-aggregate/>
                            <as-number>as-number</as-number>
                            <address>address</address>
                        </as-path>
                    </route>
                </static>
            </rib>
        </routing-options>
    </configuration>
```

Description Autonomous system path.

Contents <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.

<origin>—No documentation is available yet.

- egp—Path originated in another AS.
- igp—Path originated in the local IGP.
- incomplete—Path was learned by some other means.

<path>—Autonomous system path.

<as-path> (configuration/routing-options/static/defaults)

```
Usage  <configuration>
        <routing-options>
            <static>
                <defaults>
                    <as-path>
                        <path>path</path>
                        <origin>origin-choice</origin>
                        <atomic-aggregate/>
                        <as-number>as-number</as-number>
                        <address>address</address>
                    </as-path>
                </defaults>
            </static>
        </routing-options>
    </configuration>
```

Description Autonomous system path.

- **Contents** <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.
- <origin>—No documentation is available yet.
 - egp—Path originated in another AS.
 - igp—Path originated in the local IGP
 - incomplete—Path was learned by some other means.
- <path>—Autonomous system path.

<as-path> (configuration/routing-options/static/route)

Usage <configuration>
 <routing-options>
 <static>
 <route>
 <as-path>
 <path>path</path>
 <origin>origin-choice</origin>
 <atomic-aggregate/>
 <as-number>as-number</as-number>
 <address>address</address>
 </as-path>
 </route>
 </static>
 </routing-options>
 </configuration>

Description Autonomous system path.

- **Contents** <atomic-aggregate>—Add ATOMIC_AGGREGATE path attribute to route.
- <origin>—No documentation is available yet.
 - egp—Path originated in another AS.
 - igp—Path originated in the local IGP
 - incomplete—Path was learned by some other means.
- <path>—Autonomous system path.

<as-path-expand> (configuration/policy-options/policy-statement/from/route-filter)

Usage

```

<configuration>
  <policy-options>
    <policy-statement>
      <from>
        <route-filter>
          <as-path-expand>
            <last-as>...</last-as>
            <aspath>aspath</aspath>
          </as-path-expand>
        </route-filter>
      </from>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Prepend AS numbers prior to adding local-as (BGP only).

Contents

- <aspath>—AS path string.
- <last-as>—Prepend last AS.

<as-path-expand> (configuration/policy-options/policy-statement/from/source-address-filter)

Usage

```

<configuration>
  <policy-options>
    <policy-statement>
      <from>
        <source-address-filter>
          <as-path-expand>
            <last-as>...</last-as>
            <aspath>aspath</aspath>
          </as-path-expand>
        </source-address-filter>
      </from>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Prepend AS numbers prior to adding local-as (BGP only).

Contents

- <aspath>—AS path string.
- <last-as>—Prepend last AS.

- <as-path-expand> (configuration/policy-options/policy-statement/term/from/route-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <route-filter>
 <as-path-expand>
 <last-as>...</last-as>
 <aspath>aspath</aspath>
 </as-path-expand>
 </route-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Prepend AS numbers prior to adding local-as (BGP only).

Contents <aspath>—AS path string.

 <last-as>—Prepend last AS.

- <as-path-expand> (configuration/policy-options/policy-statement/term/from/source-address-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <source-address-filter>
 <as-path-expand>
 <last-as>...</last-as>
 <aspath>aspath</aspath>
 </as-path-expand>
 </source-address-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Prepend AS numbers prior to adding local-as (BGP only).

Contents <aspath>—AS path string.

 <last-as>—Prepend last AS.

<as-path-expand> (configuration/policy-options/policy-statement/term/then)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <then>
 <as-path-expand>
 <last-as>...</last-as>
 <aspath>aspath</aspath>
 </as-path-expand>
 </then>
 </term>
 </policy-statement>
 </policy-options>
</configuration>

Description Prepend AS numbers prior to adding local-as (BGP only).

Contents <aspath>—AS path string.

<last-as>—Prepend last AS.

<as-path-expand> (configuration/policy-options/policy-statement/then)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <then>
 <as-path-expand>
 <last-as>...</last-as>
 <aspath>aspath</aspath>
 </as-path-expand>
 </then>
 </policy-statement>
 </policy-options>
</configuration>

Description Prepend AS numbers prior to adding local-as (BGP only).

Contents <aspath>—AS path string.

<last-as>—Prepend last AS.

- <atm-options> (configuration/interfaces/interface)

Usage <configuration>
 <interfaces>
 <interface>
 <atm-options>
 <promiscuous-mode>...</promiscuous-mode>
 <vpi>...</vpi>
 <ilmi>ilmi</ilmi>
 </atm-options>
 </interface>
 </interfaces>
 </configuration>

Description ATM interface-specific options.

Contents <ilmi>—Enable Interim Local Management Interface.

<promiscuous-mode>—Set ATM interface to promiscuous mode.

<vpi>—Define a virtual path.

- <authentication> (configuration/security/ipsec/security-association/manual/direction)

Usage <configuration>
 <security>
 <ipsec>
 <security-association>
 <manual>
 <direction>
 <authentication>
 <algorithm>algorithm-choice</algorithm>
 <key>...</key>
 </authentication>
 </direction>
 </manual>
 </security-association>
 </ipsec>
 </security>
 </configuration>

Description Define authentication parameters.

Contents <algorithm>—Define authentication algorithm.

■ hmac-md5-96—HMAC-MD5-96 authentication algorithm.

■ hmac-sha1-96—HMAC-SHA1-96 authentication algorithm.

<key>—Define an authentication key.

<authentication> (configuration/system/login/user)

Usage

```
<configuration>
  <system>
    <login>
      <user>
        <authentication>
          <plain-text-password-value>plain-text-password</plain-text-password-value>
          <encrypted-password>encrypted-password</encrypted-password>
          <ssh-rsa>...</ssh-rsa>
          <ssh-dsa>...</ssh-dsa>
          <load-key-file>load-key-file</load-key-file>
        </authentication>
      </user>
    </login>
  </system>
</configuration>
```

Description Authentication method.

Contents

- <encrypted-password>—Crypted password string.
- <load-key-file>—File (URL) containing one or more ssh keys.
- <plain-text-password-value>—Plain text password.
- <ssh-dsa>—SSH DSA public key string.
- <ssh-rsa>—Secure shell (ssh) RSA public key string.

<authentication-key> (configuration/interfaces/interface/sonet-options/aps)

Usage

```
<configuration>
  <interfaces>
    <interface>
      <sonet-options>
        <aps>
          <authentication-key>
            <auth-key>auth-key</auth-key>    <!-- mandatory -->
          </authentication-key>
        </aps>
      </sonet-options>
    </interface>
  </interfaces>
</configuration>
```

Description Authentication parameters.

Contents <auth-key>—Authentication key.

• <authentication-key> (configuration/protocols/ospf/area/interface)

Usage <configuration>
 <protocols>
 <ospf>
 <area>
 <interface>
 <authentication-key>
 <keyname>keyname</keyname> <!-- mandatory -->
 <key-id>key-id</key-id>
 </authentication-key>
 </interface>
 </area>
 </ospf>
 </protocols>
</configuration>

Description Authentication key.

Contents <key-id>—Key ID for MD5 authentication.

<keyname>—Authentication key value.

• <authentication-key> (configuration/protocols/ospf/area/virtual-link)

Usage <configuration>
 <protocols>
 <ospf>
 <area>
 <virtual-link>
 <authentication-key>
 <keyname>keyname</keyname> <!-- mandatory -->
 <key-id>key-id</key-id>
 </authentication-key>
 </virtual-link>
 </area>
 </ospf>
 </protocols>
</configuration>

Description Authentication key.

Contents <key-id>—Key ID for MD5 authentication.

<keyname>—Authentication key value.

<authentication-key> (configuration/routing-instances/instance/protocols/ospf/area/interface)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <ospf>
          <area>
            <interface>
              <authentication-key>
                <keyname>keyname</keyname>    <!-- mandatory -->
                <key-id>key-id</key-id>
              </authentication-key>
            </interface>
          </area>
        </ospf>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Authentication key.

Contents <key-id>—Key ID for MD5 authentication.

<keyname>—Authentication key value.

<authentication-key> (configuration/routing-instances/instance/protocols/ospf/area/virtual-link)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <ospf>
          <area>
            <virtual-link>
              <authentication-key>
                <keyname>keyname</keyname>    <!-- mandatory -->
                <key-id>key-id</key-id>
              </authentication-key>
            </virtual-link>
          </area>
        </ospf>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Authentication key.

Contents <key-id>—Key ID for MD5 authentication.

<keyname>—Authentication key value.

• <authentication-order> (configuration/access/profile)

Usage <configuration>
 <access>
 <profile>
 <authentication-order>
 <name>name</name> <!-- identifier -->
 </authentication-order>
 </profile>
 </access>
</configuration>

Description Order in which authentication mechanisms are used.

Contents <name>—Order in which authentication mechanisms are used.

- password—Locally configured password in access profile.
- radius—Remote Authentication Dial-In User Service.

• <authentication-order> (configuration/system)

Usage <configuration>
 <system>
 <authentication-order>
 <name>name</name> <!-- identifier -->
 </authentication-order>
 </system>
</configuration>

Description Order in which authentication methods are invoked.

Contents <name>—Order in which authentication methods are invoked.

- password—Traditional password authentication.
- radius—Remote Authentication Dial-In User Service.
- tacplus—TACACS+ authentication services.

<auto-bandwidth> (configuration/protocols/mpls/label-switched-path)

Usage

```
<configuration>
  <protocols>
    <mpls>
      <label-switched-path>
        <auto-bandwidth>
          <adjust-interval>seconds</adjust-interval>
          <adjust-threshold>percent</adjust-threshold>
          <minimum-bandwidth>bps</minimum-bandwidth>
          <maximum-bandwidth>bps</maximum-bandwidth>
          <monitor-bandwidth/>
        </auto-bandwidth>
      </label-switched-path>
    </mpls>
  </protocols>
</configuration>
```

Description Do auto bandwidth allocation for this LSP.

Contents

- <adjust-interval>—Time to adjust LSP bandwidth.
- <adjust-threshold>—Change in average LSP utilization to trigger auto-adjustment.
- <maximum-bandwidth>—Maximum LSP bandwidth.
- <minimum-bandwidth>—Minimum LSP bandwidth.
- <monitor-bandwidth>—Monitor LSP bandwidth without adjustments.

<auto-export> (configuration/routing-instances/instance/routing-options)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <auto-export>
          <disable/>
          <traceoptions>...</traceoptions>
          <family>...</family>
        </auto-export>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Export routes between routing instances.

Contents

- <disable>—Disable auto-export.
- <family>—No documentation is available yet.
- <traceoptions>—Trace options.

- <auto-export> (configuration/routing-options)

Usage <configuration>
 <routing-options>
 <auto-export>
 <disable/>
 <traceoptions>...</traceoptions>
 <family>...</family>
 </auto-export>
 </routing-options>
 </configuration>

Description Export routes between routing instances.

Contents <disable>—Disable auto-export.

 <family>—No documentation is available yet.

 <traceoptions>—Trace options.

- <auto-rp> (configuration/protocols/pim/rp)

Usage <configuration>
 <protocols>
 <pim>
 <rp>
 <auto-rp>
 <discover/>
 <announce/>
 <mapping/>
 </auto-rp>
 </rp>
 </pim>
 </protocols>
 </configuration>

Description Set auto-RP mode.

Contents <announce>—Transmit auto-RP announcement messages.

 <discover>—Listen for auto-RP discovery messages.

 <mapping>—Transmit auto-RP mapping messages.

<auto-rp> (configuration/routing-instances/instance/protocols/pim/rp)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <pim>
          <rp>
            <auto-rp>
              <discovery/>
              <announce/>
              <mapping/>
            </auto-rp>
          </rp>
        </pim>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Set auto-RP mode.

Contents <announce>—Transmit auto-RP announcement messages.

<discovery>—Listen for auto-RP discovery messages.

<mapping>—Transmit auto-RP mapping messages.

<autonomous-system> (configuration/routing-instances/instance/routing-options)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <autonomous-system>
          <as-number>as-number</as-number>    <!-- mandatory -->
          <loops>loops</loops>
        </autonomous-system>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Autonomous system number.

Contents <as-number>—Autonomous system number.

<loops>—Maximum number of times this AS can be in an AS path.

- <autonomous-system> (configuration/routing-options)

Usage <configuration>
 <routing-options>
 <autonomous-system>
 <as-number>as-number</as-number> <!-- mandatory -->
 <loops>loops</loops>
 </autonomous-system>
 </routing-options>
 </configuration>

Description Autonomous system number.

Contents <as-number>—Autonomous system number.

 <loops>—Maximum number of times this AS can be in an AS path.

- <auxiliary> (configuration/system/ports)

Usage <configuration>
 <system>
 <ports>
 <auxiliary>
 <insecure/>
 <type>type-choice</type>
 </auxiliary>
 </ports>
 </system>
 </configuration>

Description Auxiliary port.

Contents <insecure>—Disallow superuser access.

 <type>—Terminal type.

- ansi—ANSI-compatible terminal.
- small-xterm—Small (24-line) xterm window.
- vt100—VT100-compatible terminal.
- xterm—Large (65-line) xterm window.

<backup-router> (configuration/system)

Usage <configuration>
 <system>
 <backup-router>
 <address>address</address> <!-- mandatory -->
 <destination>destination</destination>
 </backup-router>
 </system>
</configuration>

Description IPv4 router to use while booting.

Contents <address>—Address of router to use while booting.

<destination>—Destination network reachable through the router.

- <bgp> (configuration/protocols)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <disable/>
      <path-selection>path-selection-choice</path-selection>
      <traceoptions>...</traceoptions>
      <description>description</description>
      <metric-out>...</metric-out>
      <multihop>...</multihop>
      <preference>preference</preference>
      <local-preference>local-preference</local-preference>
      <local-address>local-address</local-address>
      <local-interface>local-interface</local-interface>
      <hold-time>hold-time</hold-time>
      <passive/>
      <advertise-inactive/>
      <keep>keep-choice</keep>
      <no-aggregator-id/>
      <out-delay>out-delay</out-delay>
      <log-updown/>
      <damping/>
      <import>...</import>
      <family>...</family>
      <authentication-key>authentication-key</authentication-key>
      <export>...</export>
      <remove-private/>
      <cluster>cluster</cluster>
      <no-client-reflect/>
      <peer-as>peer-as</peer-as>
      <local-as>...</local-as>
      <ipsec-sa>ipsec-sa</ipsec-sa>
      <graceful-restart>...</graceful-restart>
      <group>...</group>
    </bgp>
  </protocols>
</configuration>
```

Description BGP options.

Contents <advertise-inactive>—Advertise non-active routes.

<authentication-key>—MD5 authentication key.

<cluster>—Cluster identifier.

<damping>—Enable route flap damping.

<description>—Text description.

<disable>—Disable BGP.

<export>—Export policy.

<family>—Protocol family for NLRI in updates.

- <graceful-restart>—BGP graceful restart options.
- <group>—Define a peer group.
- <hold-time>—Hold time used when negotiating with a peer.
- <import>—Import policy.
- <ipsec-sa>—IPSec SA name.
- <keep>—How to retain routes in the routing table.
 - all—Retain all routes.
 - none—Retain no routes.
- <local-address>—Address of local end of BGP session.
- <local-as>—Local autonomous system number.
- <local-interface>—Local interface for IPv6 link local EBGP peering.
- <local-preference>—Value of LOCAL_PREF path attribute.
- <log-updown>—Log a message for peer state transitions.
- <metric-out>—Route metric sent in MED.
- <multihop>—Configure an EBGP multihop session.
- <no-aggregator-id>—Set router ID in aggregator path attribute to 0.
- <no-client-reflect>—Disable intracluster route redistribution.
- <out-delay>—How long before exporting routes from routing table.
- <passive>—Do not send open messages to a peer.
- <path-selection>—Configure path selection strategy.
 - always-compare-med—Always compare MED values, regardless of neighbor AS.
 - cisco-non-deterministic—Use Cisco IOS nondeterministic path selection algorithm.
- <peer-as>—Peer autonomous system number.
- <preference>—Preference value.
- <remove-private>—Remove well-known private AS numbers.
- <traceoptions>—Trace options.

- <bgp> (configuration/routing-instances/instance/protocols)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bpg>
          <disable/>
          <path-selection>path-selection-choice</path-selection>
          <traceoptions>...</traceoptions>
          <description>description</description>
          <metric-out>...</metric-out>
          <multihop>...</multihop>
          <preference>preference</preference>
          <local-preference>local-preference</local-preference>
          <local-address>local-address</local-address>
          <local-interface>local-interface</local-interface>
          <hold-time>hold-time</hold-time>
          <passive/>
          <advertise-inactive/>
          <keep>keep-choice</keep>
          <no-aggregator-id/>
          <out-delay>out-delay</out-delay>
          <log-updown/>
          <damping/>
          <import>...</import>
          <family>...</family>
          <authentication-key>authentication-key</authentication-key>
          <export>...</export>
          <remove-private/>
          <cluster>cluster</cluster>
          <no-client-reflect/>
          <peer-as>peer-as</peer-as>
          <local-as>...</local-as>
          <ipsec-sa>ipsec-sa</ipsec-sa>
          <graceful-restart>...</graceful-restart>
          <group>...</group>
        </bpg>
        </protocols>
      </instance>
    </routing-instances>
  </configuration>

```

Description BGP options.

Contents <advertise-inactive>—Advertise non-active routes.

<authentication-key>—MD5 authentication key.

<cluster>—Cluster identifier.

<damping>—Enable route flap damping.

<description>—Text description.

<disable>—Disable BGP.

- <export>—Export policy.
- <family>—Protocol family for NLRI in updates.
- <graceful-restart>—BGP graceful restart options.
- <group>—Define a peer group.
- <hold-time>—Hold time used when negotiating with a peer.
- <import>—Import policy.
- <ipsec-sa>—IPSec SA name.
- <keep>—How to retain routes in the routing table.
 - all—Retain all routes.
 - none—Retain no routes.
- <local-address>—Address of local end of BGP session.
- <local-as>—Local autonomous system number.
- <local-interface>—Local interface for IPv6 link local EBGP peering.
- <local-preference>—Value of LOCAL_PREF path attribute.
- <log-updown>—Log a message for peer state transitions.
- <metric-out>—Route metric sent in MED.
- <multihop>—Configure an EBGP multihop session.
- <no-aggregator-id>—Set router ID in aggregator path attribute to 0.
- <no-client-reflect>—Disable intracluster route redistribution.
- <out-delay>—How long before exporting routes from routing table.
- <passive>—Do not send open messages to a peer.
- <path-selection>—Configure path selection strategy.
 - always-compare-med—Always compare MED values, regardless of neighbor AS.
 - cisco-non-deterministic—Use Cisco IOS nondeterministic path selection algorithm.
- <peer-as>—Peer autonomous system number.
- <preference>—Preference value.
- <remove-private>—Remove well-known private AS numbers.
- <traceoptions>—Trace options.

- <bootp> (configuration/forwarding-options/helpers)

Usage <configuration>
 <forwarding-options>
 <helpers>
 <bootp>
 <description>*description*</description>
 <server>...</server>
 <maximum-hop-count>*maximum-hop-count*</maximum-hop-count>
 <minimum-wait-time>*minimum-wait-time*</minimum-wait-time>
 <interface>...</interface>
 </bootp>
 </helpers>
 </forwarding-options>
 </configuration>

Description Incoming BOOTP/DHCP request forwarding configuration.

Contents <description>—Text description of BOOTP/DHCP service.

<interface>—Incoming BOOTP/DHCP request forwarding interface configuration.

<maximum-hop-count>—Maximum number of hops per packet.

<minimum-wait-time>—Minimum number of seconds client must wait.

<server>—Name or address of BOOTP/DHCP server to which to forward.

- <bootstrap-export> (configuration/protocols/pim/rp)

Usage <configuration>
 <protocols>
 <pim>
 <rp>
 <bootstrap-export>
 <name>*name*</name> <!-- identifier -->
 </bootstrap-export>
 </rp>
 </pim>
 </protocols>
 </configuration>

Description Bootstrap export policy.

Contents <name>—Bootstrap export policy.

<bootstrap-export> (configuration/routing-instances/instance/protocols/pim/rp)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <pim>
 <rp>
 <bootstrap-export>
 <name>name</name> <!-- identifier -->
 </bootstrap-export>
 </rp>
 </pim>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Bootstrap export policy.

Contents <name>—Bootstrap export policy.

<bootstrap-import> (configuration/protocols/pim/rp)

Usage <configuration>
 <protocols>
 <pim>
 <rp>
 <bootstrap-import>
 <name>name</name> <!-- identifier -->
 </bootstrap-import>
 </rp>
 </pim>
 </protocols>
</configuration>

Description Bootstrap import policy.

Contents <name>—Bootstrap import policy.

- <bootstrap-import> (configuration/routing-instances/instance/protocols/pim/rp)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <pim>
 <rp>
 <bootstrap-import>
 <name>name</name> <!-- identifier -->
 </bootstrap-import>
 </rp>
 </pim>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Bootstrap import policy.

Contents <name>—Bootstrap import policy.

- <buffer-size> (configuration/class-of-service/schedulers)

Usage <configuration>
 <class-of-service>
 <schedulers>
 <buffer-size>
 <percent>percent</percent>
 <remainder/>
 </buffer-size>
 </Schedulers>
 </class-of-service>
 </configuration>

Description Queue transmission buffer size.

Contents <percent>—Buffer size as a percentage.

 <remainder>—Remainder of buffer size available.

<bytes> (configuration/interfaces/interface/sonet-options)

```
Usage  <configuration>
        <interfaces>
            <interface>
                <sonet-options>
                    <bytes>
                        <e1-quiet>e1-quiet</e1-quiet>
                        <f1>f1</f1>
                        <f2>f2</f2>
                        <s1>s1</s1>
                        <z3>z3</z3>
                        <z4>z4</z4>
                    </bytes>
                </sonet-options>
            </interface>
        </interfaces>
    </configuration>
```

Description Set SONET header bytes.

Contents <e1-quiet>—E1-quiet value.

<f1>—F1 user value.

<f2>—F2 user value.

<s1>—S1/Z1 value (stratum clock by convention).

<z3>—Z3 user value.

<z4>—Z4 user value.

<categories> (configuration/snmp/trap-group)

```
Usage  <configuration>
        <snmp>
            <trap-group>
                <categories>
                    <authentication/>
                    <chassis/>
                    <link/>
                    <remote-operations/>
                    <routing/>
                    <startup/>
                    <rmon-alarm/>
                    <vrrp-events/>
                </categories>
            </trap-group>
        </snmp>
    </configuration>
```

Description Trap categories.

- **Contents** <authentication>—Authentication failures.
- <chassis>—Chassis/environment notifications.
- <link>—Link up-down transitions.
- <remote-operations>—Remote operations.
- <rmon-alarm>—RMON rising and falling alarms.
- <routing>—Routing protocol notifications.
- <startup>—System warm and cold starts.
- <vrrp-events>—VRRP notifications.

<ccc> (configuration/interfaces/interface/unit/family)

Usage <configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <ccc>
 <policer>...</policer>
 </ccc>
 </family>
 </unit>
 </interface>
 </interfaces>
</configuration>

- Description** Circuit cross-connect parameters.
- Contents** <policer>—Interface policing.

<ce1> (configuration/chassis/fpc/pic)

Usage <configuration>
 <chassis>
 <fpc>
 <pic>
 <ce1>
 <e1>...</e1>
 </ce1>
 </pic>
 </fpc>
 </chassis>
</configuration>

- Description** CE1 NxDS0 PIC configuration.
- Contents** <e1>—E1 link.

<certificates> (configuration/security)

Usage <configuration>
 <security>
 <certificates>
 <local>...</local>
 </certificates>
 </security>
</configuration>

Description X.509 certificate configuration.

Contents <local>—Local X.509 certificate configuration.

<cflowd> (configuration/forwarding-options/sampling/output)

Usage <configuration>
 <forwarding-options>
 <sampling>
 <output>
 <cflowd>
 <name>name</name> <!-- identifier -->
 <port>port</port> <!-- mandatory -->
 <version>version-choice</version>
 <local-dump/>
 <autonomous-system-type>system-type</autonomous-system-type>
 <aggregation>...</aggregation>
 </cflowd>
 </output>
 </sampling>
 </forwarding-options>
</configuration>

Description Configure sending traffic aggregates in cflowd format.

Contents <aggregation>—Aggregations to perform for exported flows (version 8 only).

<autonomous-system-type>—Type of autonomous system number to export.

- origin—Export origin-AS numbers.

- peer—Export peer-AS numbers.

<local-dump>—Dump cflow records to log file before exporting.

<name>—Name of host collecting cflowd packets.

<port>—UDP port number on host collecting cflowd packets.

<version>—Format of exported cflowd aggregates.

- 5—Export cflowd aggregates in version 5 format.

- 8—Export cflowd aggregates in version 8 format.

- <channel-group> (configuration/chassis/fpc/pic/ce1/e1)

Usage <configuration>
 <chassis>
 <fpc>
 <pic>
 <ce1>
 <e1>
 <channel-group>
 <name>name</name> <!-- identifier -->
 <timeslots>timeslots</timeslots>
 </channel-group>
 </e1>
 </ce1>
 </pic>
 </fpc>
 </chassis>
 </configuration>

Description Define a channel group.

Contents <name>—Channel group number.

<timeslots>—DS-0 timeslots (1..31), for example 1-3,4,9,22-24 (no space).

- <channel-group> (configuration/chassis/fpc/pic/ct3/port/t1)

Usage <configuration>
 <chassis>
 <fpc>
 <pic>
 <ct3>
 <port>
 <t1>
 <channel-group>
 <name>name</name> <!-- identifier -->
 <timeslots>timeslots</timeslots>
 </channel-group>
 </t1>
 </port>
 </ct3>
 </pic>
 </fpc>
 </chassis>
 </configuration>

Description Define a channel group.

Contents <name>—Channel group number.

<timeslots>—DS-0 timeslots (1..24), for example 1-3,4,9,22-24 (no space).

<chap> (configuration/interfaces/interface/ppp-options)

Usage

```
<configuration>
  <interfaces>
    <interface>
      <ppp-options>
        <chap>
          <access-profile>access-profile</access-profile>    <!-- mandatory -->
          <local-name>local-name</local-name>
          <passive/>
        </chap>
      </ppp-options>
    </interface>
  </interfaces>
</configuration>
```

Description Challenge Handshake Authentication Protocol options.

Contents

- <access-profile>—Profile containing client list and access parameters.
- <local-name>—Name sent in CHAP-Challenge and CHAP-Response.
- <passive>—Handle incoming CHAP requests only.

<chassis> (configuration)

Usage

```
<configuration>
  <chassis>
    <source-route/>
    <packet-scheduling/>
    <redundancy>...</redundancy>
    <aggregated-devices>...</aggregated-devices>
    <fpc>...</fpc>
    <sfm>...</sfm>
    <alarm>...</alarm>
  </chassis>
</configuration>
```

Description Chassis configuration.

Contents

- <aggregated-devices>—Aggregated devices configuration.
- <alarm>—Global alarm settings.
- <fpc>—Flexible PIC Concentrator (FPC) card parameters.
- <packet-scheduling>—Enable DX2.0 packet scheduling.
- <redundancy>—Redundancy settings.
- <sfm>—Switching and Forwarding Module (SFM) card parameters.
- <source-route>—Enable IP source-route processing.

• <class> (configuration/class-of-service/forwarding-policy)

Usage <configuration>
 <class-of-service>
 <forwarding-policy>
 <class>
 <name>name</name> <!-- identifier -->
 <classification-override>...</classification-override>
 </class>
 </forwarding-policy>
 </class-of-service>
 </configuration>

Description Class-of-service description.

Contents <classification-override>—Define classification overrides.

 <name>—Name to identify class of service.

• <class> (configuration/system/login)

Usage <configuration>
 <system>
 <login>
 <class>
 <name>name</name> <!-- identifier -->
 <idle-timeout>minutes</idle-timeout>
 <permissions>...</permissions>
 <allow-commands>allow-commands</allow-commands>
 <deny-commands>deny-commands</deny-commands>
 <allow-configuration>allow-configuration</allow-configuration>
 <deny-configuration>deny-configuration</deny-configuration>
 </class>
 </login>
 </system>
 </configuration>

Description Login class.

Contents <allow-commands>—Regular expression for commands to allow explicitly.

 <allow-configuration>—Regular expression for configure to allow explicitly.

 <deny-commands>—Regular expression for commands to deny explicitly.

 <deny-configuration>—Regular expression for configure to deny explicitly.

 <idle-timeout>—Maximum idle time before logout.

 <name>—Login class name.

 <permissions>—Set of permitted operation categories.

<class-of-service> (configuration)

Usage <configuration>
 <class-of-service>
 <forwarding-policy>...</forwarding-policy>
 </class-of-service>
</configuration>

Description No documentation is available yet.

Contents <forwarding-policy>—Class-of-service forwarding policy.

<class-usage-profile> (configuration/accounting-options)

Usage <configuration>
 <accounting-options>
 <class-usage-profile>
 <name>name</name> <!-- identifier -->
 <file>file</file>
 <interval>minutes</interval>
 <destination-classes>...</destination-classes>
 <source-classes>...</source-classes>
 </class-usage-profile>
 </accounting-options>
</configuration>

Description Class usage profile for accounting data.

Contents <destination-classes>—Name of destination class.

<file>—Name of file for accounting data.

<interval>—Polling interval.

<name>—Name of profile.

<source-classes>—Name of source class.

- <classificationOverride> (configuration/class-of-service/forwarding-policy/class)

Usage

```
<configuration>
  <class-of-service>
    <forwarding-policy>
      <class>
        <classificationOverride>
          <forwarding-class>forwarding-class</forwarding-class>
        </classificationOverride>
      </class>
    </forwarding-policy>
  </class-of-service>
</configuration>
```

Description Define classification overrides.

Contents <forwarding-class>—Forwarding class name.

- <classifiers> (configuration/class-of-service)

Usage

```
<configuration>
  <class-of-service>
    <classifiers>
      <dscp>...</dscp>
      <exp>...</exp>
      <ieee-802.1>...</ieee-802.1>
      <inetprecedence>...</inetprecedence>
    </classifiers>
  </class-of-service>
</configuration>
```

Description Classify incoming packets based on code point value.

Contents <dscp>—Differentiated Service Code Point (DSCP) classifier.

<exp>—MPLS EXP classifier.

<ieee-802.1>—IEEE-802.1 classifier.

<inetprecedence>—IPv4 precedence classifier.

<classifiers> (configuration/class-of-service/interfaces/unit)

Usage <configuration>
 <class-of-service>
 <interfaces>
 <unit>
 <classifiers>
 <dscp>...</dscp>
 <exp>...</exp>
 <ieee-802.1>...</ieee-802.1>
 <inet-precedence>...</inet-precedence>
 </classifiers>
 </unit>
 </interfaces>
 </class-of-service>
</configuration>

Description Classifiers applied to incoming packets.

Contents <dscp>—DSCP classifier.

<exp>—EXP classifier.

<ieee-802.1>—IEEE-802.1 classifier.

<inet-precedence>—IPv4 precedence classifier.

<client> (configuration/access/profile)

Usage <configuration>
 <access>
 <profile>
 <client>
 <name>name</name> <!-- identifier -->
 <chap-secret>chap-secret</chap-secret>
 </client>
 </profile>
 </access>
</configuration>

Description Entity requesting access.

Contents <chap-secret>—CHAP secret.

<name>—Name of entity requesting access.

- <clients> (configuration/snmp/access/user)

```

Usage  <configuration>
        <snmp>
            <access>
                <user>
                    <clients>
                        <name>name</name>    <!-- identifier -->
                        <restrict/>
                    </clients>
                </user>
            </access>
        </snmp>
    </configuration>

```

Description List of source address prefix ranges to accept.

Contents <name>—Address or prefix.

<restrict>—Deny access.

- <clients> (configuration/snmp/community)

```

Usage  <configuration>
        <snmp>
            <community>
                <clients>
                    <name>name</name>    <!-- identifier -->
                    <restrict/>
                </clients>
            </community>
        </snmp>
    </configuration>

```

Description List of source address prefix ranges to accept.

Contents <name>—Address or prefix.

<restrict>—Deny access.

- <code-point-aliases> (configuration/class-of-service)

```

Usage  <configuration>
        <class-of-service>
            <code-point-aliases>
                <dscp>...</dscp>
                <exp>...</exp>
                <ieee-802.1>...</ieee-802.1>
                <inet-precedence>...</inet-precedence>
            </code-point-aliases>
        </class-of-service>
    </configuration>

```

Description Mapping of code point aliases to bit strings.

Contents <dscp>—Differentiated Service Code Point (DSCP) aliases.

<exp>—MPLS EXP code point aliases.

<ieee-802.1>—IEEE-802.1 code point aliases.

<inet-precedence>—IPv4 precedence code point aliases.

<code-points> (configuration/class-of-service/classifiers/dscp/forwarding-class/loss-priority)

```
Usage  <configuration>
        <class-of-service>
            <classifiers>
                <dscp>
                    <forwarding-class>
                        <loss-priority>
                            <code-points>
                                <name>name</name>    <!-- identifier -->
                            </code-points>
                        </loss-priority>
                    </forwarding-class>
                </dscp>
            </classifiers>
        </class-of-service>
    </configuration>
```

Description List of code point aliases and/or bit strings.

Contents <name>—List of code point aliases and/or bit strings.

<code-points> (configuration/class-of-service/classifiers/exp/forwarding-class/loss-priority)

```
Usage  <configuration>
        <class-of-service>
            <classifiers>
                <exp>
                    <forwarding-class>
                        <loss-priority>
                            <code-points>
                                <name>name</name>    <!-- identifier -->
                            </code-points>
                        </loss-priority>
                    </forwarding-class>
                </exp>
            </classifiers>
        </class-of-service>
    </configuration>
```

Description List of code point aliases and/or bit strings.

Contents <name>—List of code point aliases and/or bit strings.

- <code-points> (configuration/class-of-service/classifiers/ieee-802.1/forwarding-class/loss-priority)

Usage

```
<configuration>
  <class-of-service>
    <classifiers>
      <ieee-802.1>
        <forwarding-class>
          <loss-priority>
            <code-points>
              <name>name</name>    <!-- identifier -->
            </code-points>
          </loss-priority>
        </forwarding-class>
      </ieee-802.1>
    </classifiers>
  </class-of-service>
</configuration>
```

Description List of code point aliases and/or bit strings.

Contents <name>—List of code point aliases and/or bit strings.

- <code-points> (configuration/class-of-service/classifiers/inet-precedence/forwarding-class/loss-priority)

Usage

```
<configuration>
  <class-of-service>
    <classifiers>
      <inet-precedence>
        <forwarding-class>
          <loss-priority>
            <code-points>
              <name>name</name>    <!-- identifier -->
            </code-points>
          </loss-priority>
        </forwarding-class>
      </inet-precedence>
    </classifiers>
  </class-of-service>
</configuration>
```

Description List of code point aliases and/or bit strings.

Contents <name>—List of code point aliases and/or bit strings.

<color> (configuration/policy-options/policy-statement/from/route-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <route-filter>
 <color>
 <color>color</color>
 <add>add</add>
 <subtract>subtract</subtract>
 </color>
 </route-filter>
 </from>
 </policy-statement>
 </policy-options>
</configuration>

Description Color (preference) value.

Contents <add>—Add constant to attribute.

<color>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

<color> (configuration/policy-options/policy-statement/from/source-address-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <source-address-filter>
 <color>
 <color>color</color>
 <add>add</add>
 <subtract>subtract</subtract>
 </color>
 </source-address-filter>
 </from>
 </policy-statement>
 </policy-options>
</configuration>

Description Color (preference) value.

Contents <add>—Add constant to attribute.

<color>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

- <color> (configuration/policy-options/policy-statement/term/from/route-filter)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <from>
          <route-filter>
            <color>
              <color>color</color>
              <add>add</add>
              <subtract>subtract</subtract>
            </color>
          </route-filter>
        </from>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Color (preference) value.

Contents <add>—Add constant to attribute.

<color>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

- <color> (configuration/policy-options/policy-statement/term/from/source-address-filter)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <from>
          <source-address-filter>
            <color>
              <color>color</color>
              <add>add</add>
              <subtract>subtract</subtract>
            </color>
          </source-address-filter>
        </from>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Color (preference) value.

Contents <add>—Add constant to attribute.

<color>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

<color> (configuration/policy-options/policy-statement/term/then)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <then>
          <color>
            <color>color</color>
            <add>add</add>
            <subtract>subtract</subtract>
          </color>
        </then>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Color (preference) value.

Contents <add>—Add constant to attribute.

<color>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

<color> (configuration/policy-options/policy-statement/then)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <then>
        <color>
          <color>color</color>
          <add>add</add>
          <subtract>subtract</subtract>
        </color>
      </then>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Color (preference) value.

Contents <add>—Add constant to attribute.

<color>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

- <color> (configuration/routing-instances/instance/routing-options/aggregate/defaults)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <aggregate>
          <defaults>
            <color>
              <metric-value>metric-value</metric-value>    <!-- mandatory -->
              <type>type</type>
            </color>
          </defaults>
        </aggregate>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <color> (configuration/routing-instances/instance/routing-options/aggregate/route)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <aggregate>
          <route>
            <color>
              <metric-value>metric-value</metric-value>    <!-- mandatory -->
              <type>type</type>
            </color>
          </route>
        </aggregate>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

<color> (configuration/routing-instances/instance/routing-options/generate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <defaults>
 <color>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </color>
 </defaults>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

<color> (configuration/routing-instances/instance/routing-options/generate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <route>
 <color>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </color>
 </route>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <color> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <aggregate>
 <defaults>
 <color>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color>
 </defaults>
 </aggregate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Color (preference) value.

Contents <metric-value>—Metric value.

 <type>—Metric type.

- <color> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <aggregate>
 <route>
 <color>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color>
 </route>
 </aggregate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Color (preference) value.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<color> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <generate>
 <defaults>
 <color>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </color>
 </defaults>
 </generate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

<color> (configuration/routing-instances/instance/routing-options/rib/generate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <generate>
 <route>
 <color>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </color>
 </route>
 </generate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <color> (configuration/routing-instances/instance/routing-options/rib/static/defaults)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <static>
            <defaults>
              <color>
                <metric-value>metric-value</metric-value>    <!-- mandatory -->
                <type>type</type>
              </color>
            </defaults>
          </static>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <color> (configuration/routing-instances/instance/routing-options/rib/static/route)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <static>
            <route>
              <color>
                <metric-value>metric-value</metric-value>    <!-- mandatory -->
                <type>type</type>
              </color>
            </route>
          </static>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

<color> (configuration/routing-instances/instance/routing-options/static/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <static>
 <defaults>
 <color>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </color>
 </defaults>
 </static>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

<color> (configuration/routing-instances/instance/routing-options/static/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <static>
 <route>
 <color>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </color>
 </route>
 </static>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

• <color> (configuration/routing-options/aggregate/defaults)

Usage <configuration>
 <routing-options>
 <aggregate>
 <defaults>
 <color>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color>
 </defaults>
 </aggregate>
 </routing-options>
</configuration>

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

• <color> (configuration/routing-options/aggregate/route)

Usage <configuration>
 <routing-options>
 <aggregate>
 <route>
 <color>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color>
 </route>
 </aggregate>
 </routing-options>
</configuration>

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

<color> (configuration/routing-options/generate/defaults)

Usage <configuration>
 <routing-options>
 <generate>
 <defaults>
 <color>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color>
 </defaults>
 </generate>
 </routing-options>
</configuration>

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

<color> (configuration/routing-options/generate/route)

Usage <configuration>
 <routing-options>
 <generate>
 <route>
 <color>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color>
 </route>
 </generate>
 </routing-options>
</configuration>

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <color> (configuration/routing-options/rib/aggregate/defaults)
 - **Usage** <configuration>
 <routing-options>
 <rib>
 <aggregate>
 <defaults>
 <color>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color>
 </defaults>
 </aggregate>
 </rib>
 </routing-options>
</configuration>
 - **Description** Color (preference) value.
 - **Contents** <metric-value>—Metric value.

<type>—Metric type.
- <color> (configuration/routing-options/rib/aggregate/route)
 - **Usage** <configuration>
 <routing-options>
 <rib>
 <aggregate>
 <route>
 <color>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color>
 </route>
 </aggregate>
 </rib>
 </routing-options>
</configuration>
 - **Description** Color (preference) value.
 - **Contents** <metric-value>—Metric value.

<type>—Metric type.

<color> (configuration/routing-options/rib/generate/defaults)

Usage

```
<configuration>
  <routing-options>
    <rib>
      <generate>
        <defaults>
          <color>
            <metric-value>metric-value</metric-value>    <!-- mandatory -->
            <type>type</type>
          </color>
        </defaults>
      </generate>
    </rib>
  </routing-options>
</configuration>
```

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

<color> (configuration/routing-options/rib/generate/route)

Usage

```
<configuration>
  <routing-options>
    <rib>
      <generate>
        <route>
          <color>
            <metric-value>metric-value</metric-value>    <!-- mandatory -->
            <type>type</type>
          </color>
        </route>
      </generate>
    </rib>
  </routing-options>
</configuration>
```

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

• <color> (configuration/routing-options/rib/static/defaults)

Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <defaults>
 <color>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color>
 </defaults>
 </static>
 </rib>
 </routing-options>
</configuration>

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

• <color> (configuration/routing-options/rib/static/route)

Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <route>
 <color>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color>
 </route>
 </static>
 </rib>
 </routing-options>
</configuration>

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

<color> (configuration/routing-options/static/defaults)

```
Usage  <configuration>
        <routing-options>
            <static>
                <defaults>
                    <color>
                        <metric-value>metric-value</metric-value>    <!-- mandatory -->
                        <type>type</type>
                    </color>
                </defaults>
            </static>
        </routing-options>
    </configuration>
```

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

<color> (configuration/routing-options/static/route)

```
Usage  <configuration>
        <routing-options>
            <static>
                <route>
                    <color>
                        <metric-value>metric-value</metric-value>    <!-- mandatory -->
                        <type>type</type>
                    </color>
                </route>
            </static>
        </routing-options>
    </configuration>
```

Description Color (preference) value.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <color2> (configuration/policy-options/policy-statement/from/route-filter)

•

• **Usage** <configuration>
• <policy-options>
• <policy-statement>
• <from>
• <route-filter>
• <color2>
• <color2>color2</color2>
• <add>add</add>
• <subtract>subtract</subtract>
• </color2>
• </route-filter>
• </from>
• </policy-statement>
• </policy-options>
• </configuration>

• **Description** Color (preference) value 2.

• **Contents** <add>—Add constant to attribute.

• <color2>—No documentation is available yet.

• <subtract>—Subtract constant from attribute.

- <color2> (configuration/policy-options/policy-statement/from/source-address-filter)

•

• **Usage** <configuration>
• <policy-options>
• <policy-statement>
• <from>
• <source-address-filter>
• <color2>
• <color2>color2</color2>
• <add>add</add>
• <subtract>subtract</subtract>
• </color2>
• </source-address-filter>
• </from>
• </policy-statement>
• </policy-options>
• </configuration>

• **Description** Color (preference) value 2.

• **Contents** <add>—Add constant to attribute.

• <color2>—No documentation is available yet.

• <subtract>—Subtract constant from attribute.

<color2> (configuration/policy-options/policy-statement/term/from/route-filter)

```
Usage   <configuration>
          <policy-options>
              <policy-statement>
                  <term>
                      <from>
                          <route-filter>
                              <color2>
                                  <color2>color2</color2>
                                  <add>add</add>
                                  <subtract>subtract</subtract>
                              </color2>
                          </route-filter>
                      </from>
                  </term>
              </policy-statement>
          </policy-options>
      </configuration>
```

Description Color (preference) value 2.

Contents <add>—Add constant to attribute.

<color2>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

<color2> (configuration/policy-options/policy-statement/term/from/source-address-filter)

```
Usage   <configuration>
          <policy-options>
              <policy-statement>
                  <term>
                      <from>
                          <source-address-filter>
                              <color2>
                                  <color2>color2</color2>
                                  <add>add</add>
                                  <subtract>subtract</subtract>
                              </color2>
                          </source-address-filter>
                      </from>
                  </term>
              </policy-statement>
          </policy-options>
      </configuration>
```

Description Color (preference) value 2.

< color2> (configuration/policy-options/policy-statement/term/then)

- **Contents** <add>—Add constant to attribute.
• <color2>—No documentation is available yet.
• <subtract>—Subtract constant from attribute.
• <color2> (configuration/policy-options/policy-statement/term/then)

<color2> (configuration/policy-options/policy-statement/term/then)

```
Usage <configuration>
      <policy-options>
        <policy-statement>
          <term>
            <then>
              <color2>
                <color2>color2</color2>
                <add>add</add>
                <subtract>subtract</subtract>
              </color2>
            </then>
          </term>
        </policy-statement>
      </policy-options>
    </configuration>
```

Description Color (preference) value 2.

Contents <add>—Add constant to attribute.

<color2>—No documentation is available yet

<subtract>—Subtract constant from attribute

- <color2> (configuration/policy-options/policy-statement/then)

```
Usage <configuration>
      <policy-options>
        <policy-statement>
          <then>
            <color2>
              <color2>color2</color2>
              <add>add</add>
              <subtract>subtract</subtract>
            </color2>
          </then>
        </policy-statement>
      </policy-options>
    </configuration>
```

Description Color (preference) value 2.

Contents <add>—Add constant to attribute.

<color2>—No documentation is available yet

<subtract>—Subtract constant from attribute

<color2> (configuration/routing-instances/instance/routing-options/aggregate/defaults)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <aggregate>
          <defaults>
            <color2>
              <metric-value>metric-value</metric-value>    <!-- mandatory -->
              <type>type</type>
            </color2>
          </defaults>
        </aggregate>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

<color2> (configuration/routing-instances/instance/routing-options/aggregate/route)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <aggregate>
          <route>
            <color2>
              <metric-value>metric-value</metric-value>    <!-- mandatory -->
              <type>type</type>
            </color2>
          </route>
        </aggregate>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <color2> (configuration/routing-instances/instance/routing-options/generate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <defaults>
 <color2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </color2>
 </defaults>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

 <type>—Metric type.

- <color2> (configuration/routing-instances/instance/routing-options/generate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <route>
 <color2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </color2>
 </route>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<color2> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <aggregate>
 <defaults>
 <color2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </color2>
 </defaults>
 </aggregate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

<color2> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <aggregate>
 <route>
 <color2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </color2>
 </route>
 </aggregate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <color2> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <generate>
 <defaults>
 <color2>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color2>
 </defaults>
 </generate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

 <type>—Metric type.

- <color2> (configuration/routing-instances/instance/routing-options/rib/generate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <generate>
 <route>
 <color2>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color2>
 </route>
 </generate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<color2> (configuration/routing-instances/instance/routing-options/rib/static/defaults)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <static>
            <defaults>
              <color2>
                <metric-value>metric-value</metric-value>    <!-- mandatory -->
                <type>type</type>
              </color2>
            </defaults>
          </static>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

<color2> (configuration/routing-instances/instance/routing-options/rib/static/route)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <static>
            <route>
              <color2>
                <metric-value>metric-value</metric-value>    <!-- mandatory -->
                <type>type</type>
              </color2>
            </route>
          </static>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <color2> (configuration/routing-instances/instance/routing-options/static/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <static>
 <defaults>
 <color2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </color2>
 </defaults>
 </static>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

 <type>—Metric type.

- <color2> (configuration/routing-instances/instance/routing-options/static/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <static>
 <route>
 <color2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </color2>
 </route>
 </static>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<color2> (configuration/routing-options/aggregate/defaults)

Usage <configuration>
 <routing-options>
 <aggregate>
 <defaults>
 <color2>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color2>
 </defaults>
 </aggregate>
 </routing-options>
</configuration>

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

<color2> (configuration/routing-options/aggregate/route)

Usage <configuration>
 <routing-options>
 <aggregate>
 <route>
 <color2>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color2>
 </route>
 </aggregate>
 </routing-options>
</configuration>

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

- < color2> (configuration/routing-options/generate/defaults)

•

• **Usage** <configuration>
• <routing-options>
• <generate>
• <defaults>
• **<color2>**
• <metric-value>*metric-value*</metric-value> <!-- mandatory -->
• <type>*type*</type>
• **</color2>**
• </defaults>
• </generate>
• </routing-options>
• </configuration>

• **Description** Color (preference) value 2.

• **Contents** <metric-value>—Metric value.

• <type>—Metric type.

- < color2> (configuration/routing-options/generate/route)

•

• **Usage** <configuration>
• <routing-options>
• <generate>
• <route>
• **<color2>**
• <metric-value>*metric-value*</metric-value> <!-- mandatory -->
• <type>*type*</type>
• **</color2>**
• </route>
• </generate>
• </routing-options>
• </configuration>

• **Description** Color (preference) value 2.

• **Contents** <metric-value>—Metric value.

• <type>—Metric type.

<color2> (configuration/routing-options/rib/aggregate/defaults)

Usage <configuration>
 <routing-options>
 <rib>
 <aggregate>
 <defaults>
 <color2>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color2>
 </defaults>
 </aggregate>
 </rib>
 </routing-options>
</configuration>

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

<color2> (configuration/routing-options/rib/aggregate/route)

Usage <configuration>
 <routing-options>
 <rib>
 <aggregate>
 <route>
 <color2>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color2>
 </route>
 </aggregate>
 </rib>
 </routing-options>
</configuration>

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <color2> (configuration/routing-options/rib/generate/defaults)

Usage <configuration>
 <routing-options>
 <rib>
 <generate>
 <defaults>
 <color2>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color2>
 </defaults>
 </generate>
 </rib>
 </routing-options>
 </configuration>

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

 <type>—Metric type.

- <color2> (configuration/routing-options/rib/generate/route)

Usage <configuration>
 <routing-options>
 <rib>
 <generate>
 <route>
 <color2>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color2>
 </route>
 </generate>
 </rib>
 </routing-options>
 </configuration>

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<color2> (configuration/routing-options/rib/static/defaults)

Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <defaults>
 <color2>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color2>
 </defaults>
 </static>
 </rib>
 </routing-options>
</configuration>

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

<color2> (configuration/routing-options/rib/static/route)

Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <route>
 <color2>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </color2>
 </route>
 </static>
 </rib>
 </routing-options>
</configuration>

Description Color (preference) value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <color2> (configuration/routing-options/static/defaults)

•

• **Usage** <configuration>
• <routing-options>
• <static>
• <defaults>
• **<color2>**
• <metric-value>*metric-value*</metric-value> <!-- mandatory -->
• <type>*type*</type>
• **</color2>**
• </defaults>
• </static>
• </routing-options>
• </configuration>

•

• **Description** Color (preference) value 2.

• **Contents** <metric-value>—Metric value.

• <type>—Metric type.

- <color2> (configuration/routing-options/static/route)

•

• **Usage** <configuration>
• <routing-options>
• <static>
• <route>
• **<color2>**
• <metric-value>*metric-value*</metric-value> <!-- mandatory -->
• <type>*type*</type>
• **</color2>**
• </route>
• </static>
• </routing-options>
• </configuration>

•

• **Description** Color (preference) value 2.

• **Contents** <metric-value>—Metric value.

• <type>—Metric type.

<community> (configuration/policy-options)

Usage

```
<configuration>
  <policy-options>
    <community>
      <name>name</name>    <!-- identifier -->
      <members>...</members>
    </community>
  </policy-options>
</configuration>
```

Description BGP community information.

Contents <members>—Community members.

<name>—Name to identify BGP community.

<community> (configuration/policy-options/policy-statement/from)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <from>
        <community>
          <name>name</name>    <!-- identifier -->
        </community>
      </from>
    </policy-statement>
  </policy-options>
</configuration>
```

Description BGP community.

Contents <name>—BGP community.

- <community> (configuration/policy-options/policy-statement/from/route-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <route-filter>
 <community>
 <equal-literal/> <!-- identifier -->
 <set/> <!-- identifier -->
 <plus-literal/> <!-- identifier -->
 <add/> <!-- identifier -->
 <minus-literal/> <!-- identifier -->
 <delete/> <!-- identifier -->
 <community-name>name</community-name> <!-- identifier -->
 </community>
 </route-filter>
 </from>
 </policy-statement>
 </policy-options>
 </configuration>

Description BGP community properties associated with a route.

Contents <add>—Add BGP communities to the route.

 <community-name>—Name to identify a BGP community.

 <delete>—Remove BGP communities from the route.

 <equal-literal>—Set the BGP communities in the route.

 <minus-literal>—Remove BGP communities from the route.

 <plus-literal>—Add BGP communities to the route.

 <set>—Set the BGP communities in the route.

<community> (configuration/policy-options/policy-statement/from/source-address-filter)

Usage

```

<configuration>
  <policy-options>
    <policy-statement>
      <from>
        <source-address-filter>
          <community>
            <equal-literal/>    <!-- identifier -->
            <set/>    <!-- identifier -->
            <plus-literal/>    <!-- identifier -->
            <add/>    <!-- identifier -->
            <minus-literal/>    <!-- identifier -->
            <delete/>    <!-- identifier -->
            <community-name>name</community-name>    <!-- identifier -->
          </community>
        </source-address-filter>
      </from>
    </policy-statement>
  </policy-options>
</configuration>
```

Description BGP community properties associated with a route.

Contents <add>—Add BGP communities to the route.

<community-name>—Name to identify a BGP community.

<delete>—Remove BGP communities from the route.

<equal-literal>—Set the BGP communities in the route.

<minus-literal>—Remove BGP communities from the route.

<plus-literal>—Add BGP communities to the route.

<set>—Set the BGP communities in the route.

- <community> (configuration/policy-options/policy-statement/term/from)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <from>
          <community>
            <name>name</name>    <!-- identifier -->
          </community>
        </from>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description BGP community.

Contents <name>—BGP community.

- <community> (configuration/policy-options/policy-statement/term/from/route-filter)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <from>
          <route-filter>
            <community>
              <equal-literal/>    <!-- identifier -->
              <set/>    <!-- identifier -->
              <plus-literal/>    <!-- identifier -->
              <add/>    <!-- identifier -->
              <minus-literal/>    <!-- identifier -->
              <delete/>    <!-- identifier -->
              <community-name>name</community-name>    <!-- identifier -->
            </community>
          </route-filter>
        </from>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description BGP community properties associated with a route.

Contents <add>—Add BGP communities to the route.

<community-name>—Name to identify a BGP community.

<delete>—Remove BGP communities from the route.

<equal-literal>—Set the BGP communities in the route.

<minus-literal>—Remove BGP communities from the route.

<plus-literal>—Add BGP communities to the route.

<set>—Set the BGP communities in the route.

<community> (configuration/policy-options/policy-statement/term/from/source-address-filter)

Usage

```

<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <from>
          <source-address-filter>
            <community>
              <equal-literal/>  <!-- identifier -->
              <set/>  <!-- identifier -->
              <plus-literal/>  <!-- identifier -->
              <add/>  <!-- identifier -->
              <minus-literal/>  <!-- identifier -->
              <delete/>  <!-- identifier -->
              <community-name>name</community-name>  <!-- identifier -->
            </community>
          </source-address-filter>
        </from>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description BGP community properties associated with a route.

Contents <add>—Add BGP communities to the route.

<community-name>—Name to identify a BGP community.

<delete>—Remove BGP communities from the route.

<equal-literal>—Set the BGP communities in the route.

<minus-literal>—Remove BGP communities from the route.

<plus-literal>—Add BGP communities to the route.

<set>—Set the BGP communities in the route.

- <community> (configuration/policy-options/policy-statement/term/then)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <then>
 <community>
 <equal-literal/> <!-- identifier -->
 <set/> <!-- identifier -->
 <plus-literal/> <!-- identifier -->
 <add/> <!-- identifier -->
 <minus-literal/> <!-- identifier -->
 <delete/> <!-- identifier -->
 <community-name>name</community-name> <!-- identifier -->
 </community>
 </then>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description BGP community properties associated with a route.

Contents <add>—Add BGP communities to the route.

 <community-name>—Name to identify a BGP community.

 <delete>—Remove BGP communities from the route.

 <equal-literal>—Set the BGP communities in the route.

 <minus-literal>—Remove BGP communities from the route.

 <plus-literal>—Add BGP communities to the route.

 <set>—Set the BGP communities in the route.

<community> (configuration/policy-options/policy-statement/term/to)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <to>
          <community>
            <name>name</name>    <!-- identifier -->
          </community>
        </to>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description BGP community.

Contents <name>—BGP community.

<community> (configuration/policy-options/policy-statement/then)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <then>
        <community>
          <equal-literal/>    <!-- identifier -->
          <set/>    <!-- identifier -->
          <plus-literal/>    <!-- identifier -->
          <add/>    <!-- identifier -->
          <minus-literal/>    <!-- identifier -->
          <delete/>    <!-- identifier -->
          <community-name>name</community-name>    <!-- identifier -->
        </community>
      </then>
    </policy-statement>
  </policy-options>
</configuration>
```

Description BGP community properties associated with a route.

Contents <add>—Add BGP communities to the route.

<community-name>—Name to identify a BGP community.

<delete>—Remove BGP communities from the route.

<equal-literal>—Set the BGP communities in the route.

<minus-literal>—Remove BGP communities from the route.

<plus-literal>—Add BGP communities to the route.

<set>—Set the BGP communities in the route.

• <community> (configuration/policy-options/policy-statement/to)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <to>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </to>
 </policy-statement>
 </policy-options>
 </configuration>

Description BGP community.

Contents <name>—BGP community.

• <community> (configuration/routing-instances/instance/routing-options/aggregate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <defaults>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </defaults>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

<community> (configuration/routing-instances/instance/routing-options/aggregate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <route>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </route>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

<community> (configuration/routing-instances/instance/routing-options/generate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <defaults>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </defaults>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

- <community> (configuration/routing-instances/instance/routing-options/generate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <route>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </route>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

- <community> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <aggregate>
 <defaults>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </defaults>
 </aggregate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

<community> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <aggregate>
 <route>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </route>
 </aggregate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

<community> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <generate>
 <defaults>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </defaults>
 </generate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

- <community> (configuration/routing-instances/instance/routing-options/rib/generate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <generate>
 <route>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </route>
 </generate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

- <community> (configuration/routing-instances/instance/routing-options/rib/static/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <static>
 <defaults>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </defaults>
 </static>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

<community> (configuration/routing-instances/instance/routing-options/rib/static/route)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <static>
            <route>
              <community>
                <name>name</name>    <!-- identifier -->
              </community>
            </route>
          </static>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description BGP community identifier.

Contents <name>—BGP community identifier.

<community> (configuration/routing-instances/instance/routing-options/static/defaults)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <static>
          <defaults>
            <community>
              <name>name</name>    <!-- identifier -->
            </community>
          </defaults>
        </static>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description BGP community identifier.

Contents <name>—BGP community identifier.

- <community> (configuration/routing-instances/instance/routing-options/static/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <static>
 <route>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </route>
 </static>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

- <community> (configuration/routing-options/aggregate/defaults)

Usage <configuration>
 <routing-options>
 <aggregate>
 <defaults>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </defaults>
 </aggregate>
 </routing-options>
 </configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

<community> (configuration/routing-options/aggregate/route)

Usage

```
<configuration>
  <routing-options>
    <aggregate>
      <route>
        <community>
          <name>name</name>    <!-- identifier -->
        </community>
      </route>
    </aggregate>
  </routing-options>
</configuration>
```

Description BGP community identifier.

Contents <name>—BGP community identifier.

<community> (configuration/routing-options/generate/defaults)

Usage

```
<configuration>
  <routing-options>
    <generate>
      <defaults>
        <community>
          <name>name</name>    <!-- identifier -->
        </community>
      </defaults>
    </generate>
  </routing-options>
</configuration>
```

Description BGP community identifier.

Contents <name>—BGP community identifier.

<community> (configuration/routing-options/generate/route)

Usage

```
<configuration>
  <routing-options>
    <generate>
      <route>
        <community>
          <name>name</name>    <!-- identifier -->
        </community>
      </route>
    </generate>
  </routing-options>
</configuration>
```

Description BGP community identifier.

Contents <name>—BGP community identifier.

• <community> (configuration/routing-options/rib/aggregate/defaults)

Usage <configuration>
 <routing-options>
 <rib>
 <aggregate>
 <defaults>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </defaults>
 </aggregate>
 </rib>
 </routing-options>
 </configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

• <community> (configuration/routing-options/rib/aggregate/route)

Usage <configuration>
 <routing-options>
 <rib>
 <aggregate>
 <route>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </route>
 </aggregate>
 </rib>
 </routing-options>
 </configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

<community> (configuration/routing-options/rib/generate/defaults)

Usage <configuration>
 <routing-options>
 <rib>
 <generate>
 <defaults>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </defaults>
 </generate>
 </rib>
 </routing-options>
 </configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

<community> (configuration/routing-options/rib/generate/route)

Usage <configuration>
 <routing-options>
 <rib>
 <generate>
 <route>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </route>
 </generate>
 </rib>
 </routing-options>
 </configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

• <community> (configuration/routing-options/rib/static/defaults)

Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <defaults>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </defaults>
 </static>
 </rib>
 </routing-options>
 </configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

• <community> (configuration/routing-options/rib/static/route)

Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <route>
 <community>
 <name>name</name> <!-- identifier -->
 </community>
 </route>
 </static>
 </rib>
 </routing-options>
 </configuration>

Description BGP community identifier.

Contents <name>—BGP community identifier.

<community> (configuration/routing-options/static/defaults)

Usage

```
<configuration>
  <routing-options>
    <static>
      <defaults>
        <community>
          <name>name</name>    <!-- identifier -->
        </community>
      </defaults>
    </static>
  </routing-options>
</configuration>
```

Description BGP community identifier.

Contents <name>—BGP community identifier.

<community> (configuration/routing-options/static/route)

Usage

```
<configuration>
  <routing-options>
    <static>
      <route>
        <community>
          <name>name</name>    <!-- identifier -->
        </community>
      </route>
    </static>
  </routing-options>
</configuration>
```

Description BGP community identifier.

Contents <name>—BGP community identifier.

- <community> (configuration/snmp)

Usage <configuration>
 <snmp>
 <community>
 <name>name</name> <!-- identifier -->

 <view>view</view>
 <authorization>authorization-choice</authorization>
 <clients>...</clients>
 </community>
 </snmp>
 </configuration>

Description Configure a community string.

Contents <authorization>—Authorization type.

- read-only—Allow read-only access.
- read-write—Allow read and write access.

<clients>—List of source address prefix ranges to accept.

<name>—Community name.

<view>—View name.

- <compatibility-mode> (configuration/interfaces/interface/e3-options)

Usage <configuration>
 <interfaces>
 <interface>
 <e3-options>
 <compatibility-mode>
 <larscom/>
 <digital-link>...</digital-link>
 <kentrox/>
 </compatibility-mode>
 </e3-options>
 </interface>
 </interfaces>
 </configuration>

Description Set CSU compatibility mode.

Contents <digital-link>—Compatible with Digital Link CSU.

<kentrox>—Compatible with Kentrox CSU.

<larscom>—Compatible with Larscom CSU.

<compatibility-mode> (configuration/interfaces/interface/t3-options)

Usage <configuration>
 <interfaces>
 <interface>
 <t3-options>
 <compatibility-mode>
 <larscom>...</larscom>
 <digital-link>...</digital-link>
 <kentrox/>
 </compatibility-mode>
 </t3-options>
 </interface>
 </interfaces>
</configuration>

Description Set CSU compatibility mode.

Contents <digital-link>—Compatible with Digital Link CSU.
 <kentrox>—Compatible with Kentrox CSU.
 <larscom>—Compatible with Larscom CSU.

<confederation> (configuration/routing-instances/instance/routing-options)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <confederation>
 <confederation-as>confederation-as</confederation-as> <!-- mandatory -->
 <members>...</members>
 </confederation>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Confederation autonomous system number.

Contents <confederation-as>—Confederation autonomous system number.
 <members>—Autonomous system numbers of confederation members.

- <confederation> (configuration/routing-options)

Usage <configuration>
 <routing-options>
 <confederation>
 <confederation-as>*confederation-as*</confederation-as> <!-- mandatory -->
 <members>...</members>
 </confederation>
 </routing-options>
 </configuration>

Description Confederation autonomous system number.

Contents <confederation-as>—Confederation autonomous system number.

 <members>—Autonomous system numbers of confederation members.

- <connections> (configuration/protocols)

Usage <configuration>
 <protocols>
 <connections>
 <interface-switch>...</interface-switch>
 <remote-interface-switch>...</remote-interface-switch>
 <lsp-switch>...</lsp-switch>
 </connections>
 </protocols>
 </configuration>

Description Circuit cross-connect configuration.

Contents <interface-switch>—Bidirectional switch between interfaces.

 <lsp-switch>—Unidirectional switch between two label-switched paths.

 <remote-interface-switch>—Bidirectional switch between a local and a remote interface.

<console> (configuration/system/ports)

Usage

```
<configuration>
  <system>
    <ports>
      <console>
        <insecure/>
        <type>type-choice</type>
      </console>
    </ports>
  </system>
</configuration>
```

Description Console port.

Contents <insecure>—Disallow superuser access.

<type>—Terminal type.

- ansi—ANSI-compatible terminal.
- small-xterm—Small (24-line) xterm window.
- vt100—VT100-compatible terminal.
- xterm—Large (65-line) xterm window.

<console> (configuration/system/syslog)

Usage

```
<configuration>
  <system>
    <syslog>
      <console>
        <name>name</name>  <!-- identifier -->
        <any/>
        <emergency/>
        <alert/>
        <critical/>
        <error/>
        <warning/>
        <notice/>
        <info/>
      </console>
    </syslog>
  </system>
</configuration>
```

Description Console logging.

Contents <alert>—Conditions that should be corrected immediately.

<any>—Matches any level.

<critical>—Critical conditions.

<emergency>—Panic conditions.

- <error>—Error conditions.
- <info>—Informational messages.
- <name>—Facility type.
 - any—Matches any facility.
 - authorization—The authorization system.
 - change-log—Configuration change log.
 - conflict-log—Configuration conflict log.
 - cron—The cron daemon.
 - daemon—Various system daemons.
 - firewall—Firewall filtering system.
 - ftp—The file transfer protocol daemon.
 - interactive-commands—Commands executed by the UI.
 - kernel—Messages generated by the kernel.
 - pfe—Messages generated by the Packet Forwarding Engine.
 - user—Messages from random user processes.
- <notice>—Conditions that should be handled specially.
- <warning>—Warning messages.

<contents> (configuration/system/syslog/file)

```

Usage   <configuration>
          <system>
              <syslog>
                  <file>
                      <contents>
                          <name>name</name>    <!-- identifier -->
                          <any/>
                          <emergency/>
                          <alert/>
                          <critical/>
                          <error/>
                          <warning/>
                          <notice/>
                          <info/>
                      </contents>
                  </file>
              </syslog>
          </system>
      </configuration>
  
```

Description No documentation is available yet.

Contents <alert>—Conditions that should be corrected immediately.

<any>—Matches any level.

<critical>—Critical conditions.

<emergency>—Panic conditions.

<error>—Error conditions.

<info>—Informational messages.

<name>—Facility type.

- any—Matches any facility.
- authorization—The authorization system.
- change-log—Configuration change log.
- conflict-log—Configuration conflict log.
- cron—The cron daemon.
- daemon—Various system daemons.
- firewall—Firewall filtering system.
- ftp—The file transfer protocol daemon.
- interactive-commands—Commands executed by the UI.
- kernel—Messages generated by the kernel.

- pfe—Messages generated by the Packet Forwarding Engine.
 - user—Messages from random user processes.
- <notice>—Conditions that should be handled specially.
- <warning>—Warning messages.

<contents> (configuration/system/syslog/host)

Usage

```
<configuration>
  <system>
    <syslog>
      <host>
        <contents>
          <name>name</name>    <!-- identifier -->
          <any/>
          <emergency/>
          <alert/>
          <critical/>
          <error/>
          <warning/>
          <notice/>
          <info/>
        </contents>
      </host>
    </syslog>
  </system>
</configuration>
```

Description No documentation is available yet.

Contents <alert>—Conditions that should be corrected immediately.

<any>—Matches any level.

<critical>—Critical conditions.

<emergency>—Panic conditions.

<error>—Error conditions.

<info>—Informational messages.

<name>—Facility type.

- any—Matches any facility.

- authorization—The authorization system.

- change-log—Configuration change log.

- conflict-log—Configuration conflict log.

- cron—The cron daemon.

- daemon—Various system daemons.
 - firewall—Firewall filtering system.
 - ftp—The file transfer protocol daemon.
 - interactive-commands—Commands executed by the UI.
 - kernel—Messages generated by the kernel.
 - pfe—Messages generated by the Packet Forwarding Engine.
 - user—Messages from random user processes.
- <notice>—Conditions that should be handled specially.
- <warning>—Warning messages.

<contents> (configuration/system/syslog/user)

Usage

```
<configuration>
  <system>
    <syslog>
      <user>
        <contents>
          <name>name</name>    <!-- identifier -->
          <any/>
          <emergency/>
          <alert/>
          <critical/>
          <error/>
          <warning/>
          <notice/>
          <info/>
        </contents>
      </user>
    </syslog>
  </system>
</configuration>
```

Description No documentation is available yet.

Contents

- <alert>—Conditions that should be corrected immediately.
- <any>—Matches any level.
- <critical>—Critical conditions.
- <emergency>—Panic conditions.
- <error>—Error conditions.
- <info>—Informational messages.

- `<name>`—Facility type.
 - `any`—Matches any facility.
 - `authorization`—The authorization system.
 - `change-log`—Configuration change log.
 - `conflict-log`—Configuration conflict log.
 - `cron`—The cron daemon.
 - `daemon`—Various system daemons.
 - `firewall`—Firewall filtering system.
 - `ftp`—The file transfer protocol daemon.
 - `interactive-commands`—Commands executed by the UI.
 - `kernel`—Messages generated by the kernel.
 - `pfe`—Messages generated by the Packet Forwarding Engine.
 - `user`—Messages from random user processes.
- `<notice>`—Conditions that should be handled specially.
- `<warning>`—Warning messages.

<context> (configuration/snmp/access)

Usage

```
<configuration>
  <snmp>
    <access>
      <context>
        <name>name</name>    <!-- identifier -->
        <description>description</description>
        <group>...</group>
      </context>
    </access>
  </snmp>
</configuration>
```

Description SNMPv3 context information.

Contents <description>—SNMPv3 context description.

<group>—Access group.

<name>—SNMPv3 context name.

<counters> (configuration/accounting-options/filter-profile)

Usage <configuration>
 <accounting-options>
 <filter-profile>
 <counters>
 <name>name</name> <!-- identifier -->
 </counters>
 </filter-profile>
 </accounting-options>
</configuration>

Description Name of counter.

Contents <name>—Name of counter.

<csnp-interval> (configuration/protocols/isis/interface)

Usage <configuration>
 <protocols>
 <isis>
 <interface>
 <csnp-interval>
 <csnp-interval-number>seconds</csnp-interval-number>
 <disable/>
 </csnp-interval>
 </interface>
 </isis>
 </protocols>
</configuration>

Description Rate of CSN packets.

Contents <csnp-interval-number>—Interval between CSN packets.

<disable>—Do not send CSN packets on this interface.

- <csnp-interval> (configuration/routing-instances/instance/protocols/isis/interface)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <isis>
 <interface>
 <csnp-interval>
 <csnp-interval-number>seconds</csnp-interval-number>
 <disable/>
 </csnp-interval>
 </interface>
 </isis>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Rate of CSN packets.

Contents <csnp-interval-number>—Interval between CSN packets.

 <disable>—Do not send CSN packets on this interface.

- <ct3> (configuration/chassis/fpc/pic)

Usage <configuration>
 <chassis>
 <fpc>
 <pic>
 <ct3>
 <port>...</port>
 </ct3>
 </pic>
 </fpc>
 </chassis>
 </configuration>

Description CT3 NxDS0 PIC configuration.

Contents <port>—Ct3 port.

<damping> (configuration/policy-options)

Usage <configuration>
 <policy-options>
 <damping>
 <name>name</name> <!-- identifier -->

 <disable/>
 <half-life>minutes</half-life>
 <reuse>reuse</reuse>
 <suppress>suppress</suppress>
 <max-suppress>minutes</max-suppress>
 </damping>
 </policy-options>
</configuration>

Description BGP route flap damping properties.

Contents <disable>—Disable damping.
 <half-life>—Decay half-life.
 <max-suppress>—Maximum hold-down time.
 <name>—Name to identify route flap damping parameters.
 <reuse>—Reuse threshold (figure-of-merit value).
 <suppress>—Cutoff threshold (figure-of-merit value).

<default-lsa> (configuration/protocols/ospf/area/nssa)

Usage <configuration>
 <protocols>
 <ospf>
 <area>
 <nssa>
 <default-lsa>
 <default-metric>default-metric</default-metric>
 <metric-type>metric-type</metric-type>
 <type-7/>
 </default-lsa>
 </nssa>
 </area>
 </ospf>
 </protocols>
</configuration>

Description Configure a default LSA.

Contents <default-metric>—Metric for the default route in this area.
 <metric-type>—External metric type for the default type 7 LSA.
 <type-7>—Flood type-7 default LSA if no-summaries configured.

- <default-lsa> (configuration/routing-instances/instance/protocols/ospf/area/nssa)

```
Usage <configuration>
      <routing-instances>
        <instance>
          <protocols>
            <ospf>
              <area>
                <nssa>
                  <default-lsa>
                    <default-metric>default-metric</default-metric>
                    <metric-type>metric-type</metric-type>
                    <type-7/>
                  </default-lsa>
                </nssa>
              </area>
            </ospf>
          </protocols>
        </instance>
      </routing-instances>
    </configuration>
```

Description Configure a default LSA.

Contents <default-metric>—Metric for the default route in this area.

<metric-type>—External metric type for the default type 7 LSA.

<type-7>—Flood type-7 default LSA if no-summaries configured.

<defaults> (configuration/routing-instances/instance/routing-options/aggregate)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <aggregate>
          <defaults>
            <metric>...</metric>
            <metric2>...</metric2>
            <metric3>...</metric3>
            <metric4>...</metric4>
            <tag>...</tag>
            <tag2>...</tag2>
            <preference>...</preference>
            <preference2>...</preference2>
            <color>...</color>
            <color2>...</color2>
            <community>...</community>
            <as-path>...</as-path>
            <discard/>
            <brief/>
            <full/>
            <active/>
            <passive/>
          </defaults>
        </aggregate>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Global route options.

Contents <active>—Remove inactive route from forwarding table.

<as-path>—Autonomous system path.

<brief>—Include longest common sequences from contributing paths.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community identifier.

<discard>—Drop packets to destination; send no ICMP unreachables.

<full>—Include all AS numbers from all contributing paths.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<defaults> (configuration/routing-instances/instance/routing-options/generate)

- `<metric4>`—Metric value 4.
- `<passive>`—Retain inactive route in forwarding table.
- `<preference>`—Preference value.
- `<preference2>`—Preference value 2.
- `<tag>`—Tag string.
- `<tag2>`—Tag string 2.

<defaults> (configuration/routing-instances/instance/routing-options/generate)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <defaults>
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <community>...</community>
 <as-path>...</as-path>
 <discard/>
 <brief/>
 <full/>
 <active/>
 <passive/>
 </defaults>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Global route options.

Contents <active>—Remove inactive route from forwarding table.

 <as-path>—Autonomous system path.

 <brief>—Include longest common sequences from contributing paths.

 <color>—Color (preference) value.

 <color2>—Color (preference) value 2.

<community>—BGP community identifier.

<discard>—Drop packets to destination; send no ICMP unreachable.

<full>—Include all AS numbers from all contributing paths.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<passive>—Retain inactive

<preference>—Preference value.

<preference2>—Preference value

<tag>—Tag string

<tag?>—Tag string

- < defaults> (configuration/routing-instances/instance/routing-options/rib/aggregate)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <aggregate>
            <defaults>
              <metric>...</metric>
              <metric2>...</metric2>
              <metric3>...</metric3>
              <metric4>...</metric4>
              <tag>...</tag>
              <tag2>...</tag2>
              <preference>...</preference>
              <preference2>...</preference2>
              <color>...</color>
              <color2>...</color2>
              <community>...</community>
              <as-path>...</as-path>
              <discard/>
              <brief/>
              <full/>
              <active/>
              <passive/>
            </defaults>
          </aggregate>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Global route options.

Contents <active>—Remove inactive route from forwarding table.

<as-path>—Autonomous system path.

<brief>—Include longest common sequences from contributing paths.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community identifier.

<discard>—Drop packets to destination; send no ICMP unreachables.

<full>—Include all AS numbers from all contributing paths.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.
 <metric4>—Metric value 4.
 <passive>—Retain inactive route in forwarding table.
 <preference>—Preference value.
 <preference2>—Preference value 2.
 <tag>—Tag string.
 <tag2>—Tag string 2.

<defaults> (configuration/routing-instances/instance/routing-options/rib/generate)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <generate>
            <defaults>
              <metric>...</metric>
              <metric2>...</metric2>
              <metric3>...</metric3>
              <metric4>...</metric4>
              <tag>...</tag>
              <tag2>...</tag2>
              <preference>...</preference>
              <preference2>...</preference2>
              <color>...</color>
              <color2>...</color2>
              <community>...</community>
              <as-path>...</as-path>
              <discard/>
              <brief/>
              <full/>
              <active/>
              <passive/>
            </defaults>
          </generate>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Global route options.

Contents <active>—Remove inactive route from forwarding table.

<as-path>—Autonomous system path.

<brief>—Include longest common sequences from contributing paths.

- <color>—Color (preference) value.
 - <color2>—Color (preference) value 2.
 - <community>—BGP community identifier.
 - <discard>—Drop packets to destination; send no ICMP unreachables.
 - <full>—Include all AS numbers from all contributing paths.
 - <metric>—Metric value.
 - <metric2>—Metric value 2.
 - <metric3>—Metric value 3.
 - <metric4>—Metric value 4.
 - <passive>—Retain inactive route in forwarding table.
 - <preference>—Preference value.
 - <preference2>—Preference value 2.
 - <tag>—Tag string.
 - <tag2>—Tag string 2.

<defaults> (configuration/routing-instances/instance/routing-options/rib/static)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <static>
            <defaults>
              <retain/>
              <install/>
              <readvertise/>
              <resolve/>
              <active/>
              <passive/>
              <metric>...</metric>
              <metric2>...</metric2>
              <metric3>...</metric3>
              <metric4>...</metric4>
              <tag>...</tag>
              <tag2>...</tag2>
              <preference>...</preference>
              <preference2>...</preference2>
              <color>...</color>
              <color2>...</color2>
              <community>...</community>
              <as-path>...</as-path>
            </defaults>
          </static>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Global route options.

Contents <active>—Remove inactive route from forwarding table.

<as-path>—Autonomous system path.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community identifier.

<install>—Install route into forwarding table.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

- <passive>—Retain inactive route in forwarding table.
-
-
- <preference>—Preference value.
-
- <preference2>—Preference value 2.
-
- <readvertise>—Mark route as eligible to be readvertised.
-
- <resolve>—Allow resolution of non-directly connected next hops.
-
- <retain>—Always keep route in forwarding table.
-
- <tag>—Tag string.
-
- <tag2>—Tag string 2.
-
-
- <defaults> (configuration/routing-instances/instance/routing-options/static)
-

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <static>
          <defaults>
            <retain/>
            <install/>
            <readvertise/>
            <resolve/>
            <active/>
            <passive/>
            <metric>...</metric>
            <metric2>...</metric2>
            <metric3>...</metric3>
            <metric4>...</metric4>
            <tag>...</tag>
            <tag2>...</tag2>
            <preference>...</preference>
            <preference2>...</preference2>
            <color>...</color>
            <color2>...</color2>
            <community>...</community>
            <as-path>...</as-path>
          </defaults>
        </static>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Global route options.

Contents

- <active>—Remove inactive route from forwarding table.
- <as-path>—Autonomous system path.
- <color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community identifier.

<install>—Install route into forwarding table.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<passive>—Retain inactive

<preference>—Preference value.

<preference2>—Preference value

reductions. Much more is eligible

5 8 8

Aug 2 - Aug 5th 2001

- <defaults> (configuration/routing-options/aggregate)

```

Usage   <configuration>
          <routing-options>
              <aggregate>
                  <defaults>
                      <metric>...</metric>
                      <metric2>...</metric2>
                      <metric3>...</metric3>
                      <metric4>...</metric4>
                      <tag>...</tag>
                      <tag2>...</tag2>
                      <preference>...</preference>
                      <preference2>...</preference2>
                      <color>...</color>
                      <color2>...</color2>
                      <community>...</community>
                      <as-path>...</as-path>
                      <discard/>
                      <brief/>
                      <full/>
                      <active/>
                      <passive/>
                  </defaults>
              </aggregate>
          </routing-options>
      </configuration>
  
```

Description Global route options.

Contents

- <active>—Remove inactive route from forwarding table.
- <as-path>—Autonomous system path.
- <brief>—Include longest common sequences from contributing paths.
- <color>—Color (preference) value.
- <color2>—Color (preference) value 2.
- <community>—BGP community identifier.
- <discard>—Drop packets to destination; send no ICMP unreachables.
- <full>—Include all AS numbers from all contributing paths.
- <metric>—Metric value.
- <metric2>—Metric value 2.
- <metric3>—Metric value 3.
- <metric4>—Metric value 4.
- <passive>—Retain inactive route in forwarding table.
- <preference>—Preference value.

<preference2>—Preference value 2.

<tag>—Tag string.

<tag2>—Tag string 2.

<defaults> (configuration/routing-options/generate)

```
Usage   <configuration>
          <routing-options>
            <generate>
              <defaults>
                <metric>...</metric>
                <metric2>...</metric2>
                <metric3>...</metric3>
                <metric4>...</metric4>
                <tag>...</tag>
                <tag2>...</tag2>
                <preference>...</preference>
                <preference2>...</preference2>
                <color>...</color>
                <color2>...</color2>
                <community>...</community>
                <as-path>...</as-path>
                <discard/>
                <brief/>
                <full/>
                <active/>
                <passive/>
              </defaults>
            </generate>
          </routing-options>
        </configuration>
```

Description Global route options.

Contents <active>—Remove inactive route from forwarding table.

<as-path>—Autonomous system path.

<brief>—Include longest common sequences from contributing paths.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community identifier.

<discard>—Drop packets to destination; send no ICMP unreachables.

<full>—Include all AS numbers from all contributing paths.

<metric>—Metric value.

<metric2>—Metric value 2.

< defaults> (configuration/routing-options/rib/aggregate)

- <metric3>—Metric value 3.
- <metric4>—Metric value 4.
- <passive>—Retain inactive route in forwarding table.
- <preference>—Preference value.
- <preference2>—Preference value 2.
- <tag>—Tag string.
- <tag2>—Tag string 2.

<defaults> (configuration/routing-options/rib/aggregate)

Usage <configuration>
 <routing-options>
 <rib>
 <aggregate>
 <defaults>
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <community>...</community>
 <as-path>...</as-path>
 <discard/>
 <brief/>
 <full/>
 <active/>
 <passive/>
 </defaults>
 </aggregate>
 </rib>
 </routing-options>
 </configuration>

Description Global route options.

Contents <active>—Remove inactive route from forwarding table.

 <as-path>—Autonomous system path.

 <brief>—Include longest common sequences from contributing paths.

 <color>—Color (preference) value.

 <color2>—Color (preference) value 2.

<community>—BGP community identifier.

<discard>—Drop packets to destination; send no ICMP unreachables.

<full>—Include all AS numbers from all contributing paths.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<passive>—Retain inactive route in forwarding table.

<preference>—Preference value.

<preference2>—Preference value 2.

<tag>—Tag string.

<tag2>—Tag string 2.

<defaults> (configuration/routing-options/rib/generate)

Usage

```

<configuration>
  <routing-options>
    <rib>
      <generate>
        <defaults>
          <metric>...</metric>
          <metric2>...</metric2>
          <metric3>...</metric3>
          <metric4>...</metric4>
          <tag>...</tag>
          <tag2>...</tag2>
          <preference>...</preference>
          <preference2>...</preference2>
          <color>...</color>
          <color2>...</color2>
          <community>...</community>
          <as-path>...</as-path>
          <discard/>
          <brief/>
          <full/>
          <active/>
          <passive/>
        </defaults>
      </generate>
    </rib>
  </routing-options>
</configuration>
```

Description Global route options.

- | | |
|-----------------|---|
| Contents | <active>—Remove inactive route from forwarding table. |
| | <as-path>—Autonomous system path. |
| | <brief>—Include longest common sequences from contributing paths. |
| | <color>—Color (preference) value. |
| | <color2>—Color (preference) value 2. |
| | <community>—BGP community identifier. |
| | <discard>—Drop packets to destination; send no ICMP unreachables. |
| | <full>—Include all AS numbers from all contributing paths. |
| | <metric>—Metric value. |
| | <metric2>—Metric value 2. |
| | <metric3>—Metric value 3. |
| | <metric4>—Metric value 4. |
| | <passive>—Retain inactive route in forwarding table. |
| | <preference>—Preference value. |
| | <preference2>—Preference value 2. |
| | <tag>—Tag string. |
| | <tag2>—Tag string 2. |

<defaults> (configuration/routing-options/rib/static)

```

Usage   <configuration>
          <routing-options>
            <rib>
              <static>
                <defaults>
                  <retain/>
                  <install/>
                  <readvertise/>
                  <resolve/>
                  <active/>
                  <passive/>
                  <metric>...</metric>
                  <metric2>...</metric2>
                  <metric3>...</metric3>
                  <metric4>...</metric4>
                  <tag>...</tag>
                  <tag2>...</tag2>
                  <preference>...</preference>
                  <preference2>...</preference2>
                  <color>...</color>
                  <color2>...</color2>
                  <community>...</community>
                  <as-path>...</as-path>
                </defaults>
              </static>
            </rib>
          </routing-options>
        </configuration>

```

Description Global route options.

Contents <active>—Remove inactive route from forwarding table.

<as-path>—Autonomous system path.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community identifier.

<install>—Install route into forwarding table.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<passive>—Retain inactive route in forwarding table.

<preference>—Preference value.

<defaults> (configuration/routing-options/static)

- <preference2>—Preference value 2.
- <readvertise>—Mark route as eligible to be readvertised.
- <resolve>—Allow resolution of non-directly connected next hops.
- <retain>—Always keep route in forwarding table.
- <tag>—Tag string.
- <tag2>—Tag string 2.

<defaults> (configuration/routing-options/static)

Usage <configuration>
 <routing-options>
 <static>
 <defaults>
 <retain/>
 <install/>
 <readvertise/>
 <resolve/>
 <active/>
 <passive/>
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <community>...</community>
 <as-path>...</as-path>
 </defaults>
 </static>
 </routing-options>
 </configuration>

Description Global route options.

Contents <active>—Remove inactive route from forwarding table.

 <as-path>—Autonomous system path.

 <color>—Color (preference) value.

 <color2>—Color (preference) value 2.

 <community>—BGP community identifier.

 <install>—Install route into forwarding table.

 <metric>—Metric value.

<metric2>—Metric value 2.
 <metric3>—Metric value 3.
 <metric4>—Metric value 4.
 <passive>—Retain inactive route in forwarding table.
 <preference>—Preference value.
 <preference2>—Preference value 2.
 <readvertise>—Mark route as eligible to be readvertised.
 <resolve>—Allow resolution of non-directly connected next hops.
 <retain>—Always keep route in forwarding table.
 <tag>—Tag string.
 <tag2>—Tag string 2.

<dense-groups> (configuration/protocols/pim)

Usage <configuration>
 <protocols>
 <pim>
 <dense-groups>
 <name>name</name> <!-- identifier -->
 <reject/>
 <announce/>
 </dense-groups>
 </pim>
 </protocols>
 </configuration>

Description Dense mode groups for sparse-dense mode.

Contents <announce>—Advertise as negative prefix in auto-RP announce messages.
 <name>—Group address or range to forward in dense mode.
 <reject>—Do not include prefix as dense mode; force sparse mode.

- <dense-groups> (configuration/routing-instances/instance/protocols/pim)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <pim>
          <dense-groups>
            <name>name</name>    <!-- identifier -->
            <reject/>
            <announce/>
          </dense-groups>
        </pim>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Dense mode groups for sparse-dense mode.

Contents <announce>—Advertise as negative prefix in auto-RP announce messages.

<name>—Group address or range to forward in dense mode.

<reject>—Do not include prefix as dense mode; force sparse mode.

- <destination-address> (configuration/firewall/family/inet/filter/term/from)

Usage

```

<configuration>
  <firewall>
    <family>
      <inet>
        <filter>
          <term>
            <from>
              <destination-address>
                <name>name</name>    <!-- identifier -->
                <except/>
              </destination-address>
            </from>
          </term>
        </filter>
      </inet>
    </family>
  </firewall>
</configuration>
```

Description Match IP destination address.

Contents <except>—Match address not in this prefix.

<name>—Prefix to match.

<destination-address> (configuration/firewall/family/inet6/filter/term/from) . . .

Usage <configuration>
 <firewall>
 <family>
 <inet6>
 <filter>
 <term>
 <from>
 <destination-address>
 <name>name</name> <!-- identifier -->
 <except/>
 </destination-address>
 </from>
 </term>
 </filter>
 </inet6>
 </family>
 </firewall>
 </configuration>

Description Match IP destination address.

Contents <except>—Match address not in this prefix.

<name>—Prefix to match.

<destination-classes> (configuration/accounting-options/class-usage-profile) . . .

Usage <configuration>
 <accounting-options>
 <class-usage-profile>
 <destination-classes>
 <name>name</name> <!-- identifier -->
 </destination-classes>
 </class-usage-profile>
 </accounting-options>
 </configuration>

Description Name of destination class.

Contents <name>—Class name.

- <destination-port> (configuration/firewall/family/inet/filter/term/from)

•

• **Usage** <configuration>
• <firewall>
• <family>
• <inet>
• <filter>
• <term>
• <from>
• **<destination-port>**
• <name>name</name> <!-- identifier -->
• **</destination-port>**
• </from>
• </term>
• </filter>
• </inet>
• </family>
• </firewall>
• </configuration>

• **Description** Match TCP/UDP destination port.

• **Contents** <name>—No documentation is available yet.

- afs—Andrew File System.
- bgp—BGP.
- biff—Biff/Comsat.
- bootpc—BOOTP Client.
- bootps—BOOTP Server.
- cmd—UNIX rsh.
- cvspserver—CVS pserver.
- dhcp—DHCP.
- domain—Domain Name System (DNS).
- eklogin—Encrypted Kerberos rlogin.
- ekshell—Encrypted Kerberos rsh.
- exec—UNIX rexec.
- finger—Finger
- ftp—FTP.
- ftp-data—FTP data.
- http—HTTP.
- https—Secure HTTP.

- ident—Ident.
- imap—IMAP.
- kerberos-sec—Kerberos Sec.
- klogin—Kerberos rlogin.
- kpasswd—Kerberos passwd.
- krb-prop—Kerberos db propagation.
- krbupdate—Kerberos db update.
- kshell—Kerberos rsh.
- ldap—LDAP.
- ldp—Label Distribution Protocol.
- login—UNIX rlogin.
- mobileip-agent—Mobile IP agent.
- mobilip-mn—Mobile IP MN.
- msdp—Multicast Source Discovery Protocol.
- name—Range of values.
- netbios-dgm—NETBIOS DGM.
- netbios-ns—NETBIOS NS.
- netbios-ssn—NETBIOS SSN.
- nfsd—NFS.
- nntp—NNTP.
- ntalk—New Talk.
- ntp—NTP.
- pop3—POP3.
- pptp—Point-to-Point Tunneling.
- printer—Printer.
- radacct—RADIUS accounting.
- radius—RADIUS authentication.
- rip—Routing Information Protocol.
- rkinit—Kerberos remote kinit.

- smtp—SMTP.
- snmp—SNMP.
- snmptrap—SNMP traps.
- snpp—Simple paging protocol.
- socks—Socks.
- ssh—Secure shell (ssh).
- sunrpc—SUN RPC.
- syslog—Syslog.
- tacacs—TACACS (original, not TACACS+).
- talk—UNIX Talk.
- telnet—Telnet.
- tftp—TFTP.
- timed—UNIX Time Daemon.
- who—UNIX rwho.
- xdmcp—XDMCP.

<destination-port> (configuration/firewall/family/inet6/filter/term/from) . . .

```
Usage  <configuration>
        <firewall>
            <family>
                <inet6>
                    <filter>
                        <term>
                            <from>
                                <destination-port>
                                    <name>name</name>    <!-- identifier -->
                                </destination-port>
                            </from>
                        </term>
                    </filter>
                </inet6>
            </family>
        </firewall>
    </configuration>
```

Description Match TCP/UDP destination port.

Contents <name>—No documentation is available yet.

- afs—Andrew File System.
- bgp—BGP.
- biff—Biff/Comsat.
- bootpc—BOOTP Client.
- bootps—BOOTP Server.
- cmd—UNIX rsh.
- cvspserver—CVS pserver.
- dhcp—DHCP.
- domain—Domain Name System (DNS).
- eklogin—Encrypted Kerberos rlogin.
- ekshell—Encrypted Kerberos rsh.
- exec—UNIX rexec.
- finger—Finger
- ftp—FTP.
- ftp-data—FTP data.
- http—HTTP.
- https—Secure HTTP.

- ■ ident—Ident.
- ■ imap—IMAP.
- ■ kerberos-sec—Kerberos Sec.
- ■ klogin—Kerberos rlogin.
- ■ kpasswd—Kerberos passwd.
- ■ krb-prop—Kerberos db propagation.
- ■ krbupdate—Kerberos db update.
- ■ kshell—Kerberos rsh.
- ■ ldap—LDAP.
- ■ ldp—Label Distribution Protocol.
- ■ login—UNIX rlogin.
- ■ mobileip-agent—Mobile IP agent.
- ■ mobilip-mn—Mobile IP MN.
- ■ msdp—Multicast Source Discovery Protocol.
- ■ name—Range of values.
- ■ netbios-dgm—NETBIOS DGM.
- ■ netbios-ns—NETBIOS NS.
- ■ netbios-ssn—NETBIOS SSN.
- ■ nfsd—NFS.
- ■ nntp—NNTP.
- ■ ntalk—New Talk.
- ■ ntp—NTP.
- ■ pop3—POP3.
- ■ pptp—Point-to-Point Tunneling.
- ■ printer—Printer.
- ■ radacct—RADIUS accounting.
- ■ radius—RADIUS authentication.
- ■ rip—Routing Information Protocol.
- ■ rkinit—Kerberos remote kinit.

- smtp—SMTP.
- snmp—SNMP.
- snmptrap—SNMP traps.
- snpp—Simple paging protocol.
- socks—Socks.
- ssh—Secure shell (ssh).
- sunrpc—SUN RPC.
- syslog—Syslog.
- tacacs—TACACS (original, not TACACS+).
- talk—UNIX Talk.
- telnet—Telnet.
- tftp—TFTP.
- timed—UNIX Time Daemon.
- who—UNIX rwho.
- xdmcp—XDMCP.

<destination-port-except> (configuration/firewall/family/inet/filter/term/from)

Usage

```

<configuration>
  <firewall>
    <family>
      <inet>
        <filter>
          <term>
            <from>
              <destination-port-except>
                <name>name</name>  <!-- identifier -->
              </destination-port-except>
            </from>
          </term>
        </filter>
      </inet>
    </family>
  </firewall>
</configuration>
```

Description Do not match TCP/UDP destination port.

- **Contents** <name>—No documentation is available yet.
 - afs—Andrew File System.
 - bgp—BGP.
 - biff—Biff/Comsat.
 - bootpc—BOOTP Client.
 - bootps—BOOTP Server.
 - cmd—UNIX rsh.
 - cvspserver—CVS pserver.
 - dhcp—DHCP.
 - domain—Domain Name System (DNS).
 - eklogin—Encrypted Kerberos rlogin.
 - ekshell—Encrypted Kerberos rsh.
 - exec—UNIX rexec.
 - finger—Finger.
 - ftp—FTP.
 - ftp-data—FTP data.
 - http—HTTP.
 - https—Secure HTTP.
 - ident—Ident.
 - imap—IMAP.
 - kerberos-sec—Kerberos Sec.
 - klogin—Kerberos rlogin.
 - kpasswd—Kerberos passwd.
 - krb-prop—Kerberos db propagation.
 - krbupdate—Kerberos db update.
 - kshell—Kerberos rsh.
 - ldap—LDAP.
 - ldp—Label Distribution Protocol.
 - login—UNIX rlogin.

- mobileip-agent—Mobile IP agent.
- mobilip-mn—Mobile IP MN.
- msdp—Multicast Source Discovery Protocol.
- name—Range of values.
- netbios-dgm—NETBIOS DGM.
- netbios-ns—NETBIOS NS.
- netbios-ssn—NETBIOS SSN.
- nfsd—NFS.
- nntp—NNTP.
- ntalk—New Talk.
- ntp—NTP.
- pop3—POP3.
- pptp—Point-to-Point Tunneling.
- printer—Printer.
- radacct—RADIUS accounting.
- radius—RADIUS authentication.
- rip—Routing Information Protocol.
- rkinit—Kerberos remote kinit.
- smtp—SMTP.
- snmp—SNMP.
- snmptrap—SNMP traps.
- snpp—Simple paging protocol.
- socks—Socks.
- ssh—Secure shell (ssh).
- sunrpc—SUN RPC.
- syslog—Syslog.
- tacacs—TACACS (original, not TACACS+).
- talk—UNIX Talk.
- telnet—Telnet.

- tftp—TFTP.
 - timed—UNIX Time Daemon.
 - who—UNIX rwho.
 - xdmcp—XDMCP.
- <destination-port-except> (configuration/firewall/family/inet6/filter/term/from)

```
Usage  <configuration>
        <firewall>
            <family>
                <inet6>
                    <filter>
                        <term>
                            <from>
                                <destination-port-except>
                                    <name>name</name>    <!-- identifier -->
                                </destination-port-except>
                            </from>
                        </term>
                    </filter>
                </inet6>
            </family>
        </firewall>
    </configuration>
```

Description Do not match TCP/UDP destination port.

Contents <name>—No documentation is available yet.

- afs—Andrew File System.
- bgp—BGP.
- biff—Biff/Comsat.
- bootpc—BOOTP Client.
- bootps—BOOTP Server.
- cmd—UNIX rsh.
- cvspserver—CVS pserver.
- dhcp—DHCP.
- domain—Domain Name System (DNS).
- eklogin—Encrypted Kerberos rlogin.
- ekshell—Encrypted Kerberos rsh.
- exec—UNIX rexec.

- finger—Finger.
- ftp—FTP.
- ftp-data—FTP data.
- http—HTTP.
- https—Secure HTTP.
- ident—Ident.
- imap—IMAP.
- kerberos-sec—Kerberos Sec.
- klogin—Kerberos rlogin.
- kpasswd—Kerberos passwd.
- krb-prop—Kerberos db propagation.
- krbupdate—Kerberos db update.
- kshell—Kerberos rsh.
- ldap—LDAP.
- ldp—Label Distribution Protocol.
- login—UNIX rlogin.
- mobileip-agent—Mobile IP agent.
- mobilip-mn—Mobile IP MN.
- msdp—Multicast Source Discovery Protocol.
- name—Range of values.
- netbios-dgm—NETBIOS DGM.
- netbios-ns—NETBIOS NS.
- netbios-ssn—NETBIOS SSN.
- nfsd—NFS.
- nntp—NNTP.
- ntalk—New Talk.
- ntp—NTP.
- pop3—POP3.
- pptp—Point-to-Point Tunneling.

- ■ printer—Printer.
- ■ radacct—RADIUS accounting.
- ■ radius—RADIUS authentication.
- ■ rip—Routing Information Protocol.
- ■ rkinit—Kerberos remote kinit.
- ■ smtp—SMTP.
- ■ snmp—SNMP.
- ■ snmptrap—SNMP traps.
- ■ snpp—Simple paging protocol.
- ■ socks—Socks.
- ■ ssh—Secure shell (ssh).
- ■ sunrpc—SUN RPC.
- ■ syslog—Syslog.
- ■ tacacs—TACACS (original, not TACACS+).
- ■ talk—UNIX Talk.
- ■ telnet—Telnet.
- ■ tftp—TFTP.
- ■ timed—UNIX Time Daemon.
- ■ who—UNIX rwho.
- ■ xdmcp—XDMCP.

<destination-prefix-list> (configuration/firewall/family/inet/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <destination-prefix-list>
 <name>name</name> <!-- identifier -->
 <except/>
 </destination-prefix-list>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
 </configuration>

Description Match IP destination prefix list.

Contents <except>—Match addresses not in this prefix list.

<name>—Prefix list to match.

<diag-port-authentication> (configuration/system)

Usage <configuration>
 <system>
 <diag-port-authentication>
 <plain-text-password-value>plain-text-password</plain-text-password-value>
 <encrypted-password>encrypted-password</encrypted-password>
 </diag-port-authentication>
 </system>
 </configuration>

Description Authentication for the diagnostic port.

Contents <encrypted-password>—Crypted password string.

<plain-text-password-value>—Plain text password.

- <digital-link> (configuration/interfaces/interface/e3-options/compatibility-mode)

Usage <configuration>
 <interfaces>
 <interface>
 <e3-options>
 <compatibility-mode>
 <digital-link>
 <substrate>substrate-choice</substrate>
 </digital-link>
 </compatibility-mode>
 </e3-options>
 </interface>
 </interfaces>
 </configuration>

Description Compatible with Digital Link CSU.

Contents <substrate>—Set substrate value.

- 1.1Mb—1.1 Mbps.
- 1.4Mb—1.4 Mbps.
- 1.8Mb—1.8 Mbps.
- 10.0Mb—10.0 Mbps.
- 10.4Mb—10.4 Mbps.
- 10.7Mb—10.7 Mbps.
- 11.1Mb—11.1 Mbps.
- 11.5Mb—11.5 Mbps.
- 11.8Mb—11.8 Mbps.
- 12.2Mb—12.2 Mbps.
- 12.5Mb—12.5 Mbps.
- 12.9Mb—12.9 Mbps.
- 13.2Mb—13.2 Mbps.
- 13.6Mb—13.6 Mbps.
- 14.0Mb—14.0 Mbps.
- 14.3Mb—14.3 Mbps.
- 14.7Mb—14.7 Mbps.
- 15.0Mb—15.0 Mbps.

- 15.4Mb—15.4 Mbps.
- 15.8Mb—15.8 Mbps.
- 16.1Mb—16.1 Mbps.
- 16.5Mb—16.5 Mbps.
- 16.8Mb—16.8 Mbps.
- 17.2Mb—17.2 Mbps.
- 17.5Mb—17.5 Mbps.
- 17.9Mb—17.9 Mbps.
- 18.3Mb—18.3 Mbps.
- 18.6Mb—18.6 Mbps.
- 19.0Mb—19.0 Mbps.
- 19.3Mb—19.3 Mbps.
- 19.7Mb—19.7 Mbps.
- 2.1Mb—2.1 Mbps.
- 2.5Mb—2.5 Mbps.
- 2.9Mb—2.9 Mbps.
- 20.0Mb—20.0 Mbps.
- 20.4Mb—20.4 Mbps.
- 20.8Mb—20.8 Mbps.
- 21.1Mb—21.1 Mbps.
- 21.5Mb—21.5 Mbps.
- 21.8Mb—21.8 Mbps.
- 22.2Mb—22.2 Mbps.
- 22.6Mb—22.6 Mbps.
- 22.9Mb—22.9 Mbps.
- 23.3Mb—23.3 Mbps.
- 23.6Mb—23.6 Mbps.
- 24.0Mb—24.0 Mbps.
- 24.3Mb—24.3 Mbps.

- ■ 24.7Mb—24.7 Mbps.
- ■ 25.1Mb—25.1 Mbps.
- ■ 25.4Mb—25.4 Mbps.
- ■ 25.8Mb—25.8 Mbps.
- ■ 26.1Mb—26.1 Mbps.
- ■ 26.5Mb—26.5 Mbps.
- ■ 26.9Mb—26.9 Mbps.
- ■ 27.2Mb—27.2 Mbps.
- ■ 27.6Mb—27.6 Mbps.
- ■ 27.9Mb—27.9 Mbps.
- ■ 28.3Mb—28.3 Mbps.
- ■ 28.6Mb—28.6 Mbps.
- ■ 29.0Mb—29.0 Mbps.
- ■ 29.4Mb—29.4 Mbps.
- ■ 29.7Mb—29.7 Mbps.
- ■ 3.2Mb—3.2 Mbps.
- ■ 3.6Mb—3.6 Mbps.
- ■ 3.9Mb—3.9 Mbps.
- ■ 30.1Mb—30.1 Mbps.
- ■ 30.4Mb—30.4 Mbps.
- ■ 30.8Mb—30.8 Mbps.
- ■ 31.1Mb—31.1 Mbps.
- ■ 31.5Mb—31.5 Mbps.
- ■ 31.9Mb—31.9 Mbps.
- ■ 32.2Mb—32.2 Mbps.
- ■ 32.6Mb—32.6 Mbps.
- ■ 32.9Mb—32.9 Mbps.
- ■ 33.3Mb—33.3 Mbps.
- ■ 33.7Mb—33.7 Mbps.

- 358Kb—358 Kbps.
- 4.3Mb—4.3 Mbps.
- 4.7Mb—4.7 Mbps.
- 5.0Mb—5.0 Mbps.
- 5.4Mb—5.4 Mbps.
- 5.7Mb—5.7 Mbps.
- 6.1Mb—6.1 Mbps.
- 6.4Mb—6.4 Mbps.
- 6.8Mb—6.8 Mbps.
- 7.2Mb—7.2 Mbps.
- 7.5Mb—7.5 Mbps.
- 7.9Mb—7.9 Mbps.
- 716Kb—716 Kbps.
- 8.2Mb—8.2 Mbps.
- 8.6Mb—8.6 Mbps.
- 9.0Mb—9.0 Mbps.
- 9.3Mb—9.3 Mbps.
- 9.7Mb—9.7 Mbps.

<digital-link> (configuration/interfaces/interface/t3-options/compatibility-mode)

Usage <configuration>
 <interfaces>
 <interface>
 <t3-options>
 <compatibility-mode>
 <digital-link>
 <substrate>substrate-choice</substrate>
 </digital-link>
 </compatibility-mode>
 </t3-options>
 </interface>
 </interfaces>
 </configuration>

Description Compatible with Digital Link CSU.

• **Contents** <substrate>—Set substrate value.

- 1.2Mb—1.2 Mbps.
- 1.5Mb—1.5 Mbps.
- 1.8Mb—1.8 Mbps.
- 10.2Mb—10.2 Mbps.
- 10.5Mb—10.5 Mbps.
- 10.8Mb—10.8 Mbps.
- 11.1Mb—11.1 Mbps.
- 11.4Mb—11.4 Mbps.
- 11.7Mb—11.7 Mbps.
- 12.0Mb—12.0 Mbps.
- 12.3Mb—12.3 Mbps.
- 12.6Mb—12.6 Mbps.
- 12.9Mb—12.9 Mbps.
- 13.2Mb—13.2 Mbps.
- 13.5Mb—13.5 Mbps.
- 13.8Mb—13.8 Mbps.
- 14.1Mb—14.1 Mbps.
- 14.4Mb—14.4 Mbps.
- 14.7Mb—14.7 Mbps.
- 15.0Mb—15.0 Mbps.
- 15.3Mb—15.3 Mbps.
- 15.6Mb—15.6 Mbps.
- 15.9Mb—15.9 Mbps.
- 16.2Mb—16.2 Mbps.
- 16.5Mb—16.5 Mbps.
- 16.8Mb—16.8 Mbps.
- 17.1Mb—17.1 Mbps.
- 17.4Mb—17.4 Mbps.

- 17.7Mb—17.7 Mbps.
- 18.0Mb—18.0 Mbps.
- 18.3Mb—18.3 Mbps.
- 18.6Mb—18.6 Mbps.
- 18.9Mb—18.9 Mbps.
- 19.2Mb—19.2 Mbps.
- 19.5Mb—19.5 Mbps.
- 19.8Mb—19.8 Mbps.
- 2.1Mb—2.1 Mbps.
- 2.4Mb—2.4 Mbps.
- 2.7Mb—2.7 Mbps.
- 20.1Mb—20.1 Mbps.
- 20.5Mb—20.5 Mbps.
- 20.8Mb—20.8 Mbps.
- 21.1Mb—21.1 Mbps.
- 21.4Mb—21.4 Mbps.
- 21.7Mb—21.7 Mbps.
- 22.0Mb—22.0 Mbps.
- 22.3Mb—22.3 Mbps.
- 22.6Mb—22.6 Mbps.
- 22.9Mb—22.9 Mbps.
- 23.2Mb—23.2 Mbps.
- 23.5Mb—23.5 Mbps.
- 23.8Mb—23.8 Mbps.
- 24.1Mb—24.1 Mbps.
- 24.4Mb—24.4 Mbps.
- 24.7Mb—24.7 Mbps.
- 25.0Mb—25.0 Mbps.
- 25.3Mb—25.3 Mbps.

- ■ 25.6Mb—25.6 Mbps.
- ■ 25.9Mb—25.9 Mbps.
- ■ 26.2Mb—26.2 Mbps.
- ■ 26.5Mb—26.5 Mbps.
- ■ 26.8Mb—26.8 Mbps.
- ■ 27.1Mb—27.1 Mbps.
- ■ 27.4Mb—27.4 Mbps.
- ■ 27.7Mb—27.7 Mbps.
- ■ 28.0Mb—28.0 Mbps.
- ■ 28.3Mb—28.3 Mbps.
- ■ 28.6Mb—28.6 Mbps.
- ■ 28.9Mb—28.9 Mbps.
- ■ 29.2Mb—29.2 Mbps.
- ■ 29.5Mb—29.5 Mbps.
- ■ 29.8Mb—29.8 Mbps.
- ■ 3.0Mb—3.0 Mbps.
- ■ 3.3Mb—3.3 Mbps.
- ■ 3.6Mb—3.6 Mbps.
- ■ 3.9Mb—3.9 Mbps.
- ■ 30.1Mb—30.1 Mbps.
- ■ 30.4Mb—30.4 Mbps.
- ■ 30.7Mb—30.7 Mbps.
- ■ 301Kb—301 Kbps.
- ■ 31.0Mb—31.0 Mbps.
- ■ 31.3Mb—31.3 Mbps.
- ■ 31.6Mb—31.6 Mbps.
- ■ 31.9Mb—31.9 Mbps.
- ■ 32.2Mb—32.2 Mbps.
- ■ 32.5Mb—32.5 Mbps.

- 32.8Mb—32.8 Mbps.
- 33.1Mb—33.1 Mbps.
- 33.4Mb—33.4 Mbps.
- 33.7Mb—33.7 Mbps.
- 34.0Mb—34.0 Mbps.
- 34.3Mb—34.3 Mbps.
- 34.6Mb—34.6 Mbps.
- 34.9Mb—34.9 Mbps.
- 35.2Mb—35.2 Mbps.
- 35.5Mb—35.5 Mbps.
- 35.8Mb—35.8 Mbps.
- 36.1Mb—36.1 Mbps.
- 36.4Mb—36.4 Mbps.
- 36.7Mb—36.7 Mbps.
- 37.0Mb—37.0 Mbps.
- 37.3Mb—37.3 Mbps.
- 37.6Mb—37.6 Mbps.
- 37.9Mb—37.9 Mbps.
- 38.2Mb—38.2 Mbps.
- 38.5Mb—38.5 Mbps.
- 38.8Mb—38.8 Mbps.
- 39.1Mb—39.1 Mbps.
- 39.4Mb—39.4 Mbps.
- 39.7Mb—39.7 Mbps.
- 4.2Mb—4.2 Mbps.
- 4.5Mb—4.5 Mbps.
- 4.8Mb—4.8 Mbps.
- 40.0Mb—40.0 Mbps.
- 40.3Mb—40.3 Mbps.

- ■ 40.6Mb—40.6 Mbps.
- ■ 40.9Mb—40.9 Mbps.
- ■ 41.2Mb—41.2 Mbps.
- ■ 41.5Mb—41.5 Mbps.
- ■ 41.8Mb—41.8 Mbps.
- ■ 42.1Mb—42.1 Mbps.
- ■ 42.4Mb—42.4 Mbps.
- ■ 42.7Mb—42.7 Mbps.
- ■ 43.0Mb—43.0 Mbps.
- ■ 43.3Mb—43.3 Mbps.
- ■ 43.6Mb—43.6 Mbps.
- ■ 43.9Mb—43.9 Mbps.
- ■ 44.2Mb—44.2 Mbps.
- ■ 5.1Mb—5.1 Mbps.
- ■ 5.4Mb—5.4 Mbps.
- ■ 5.7Mb—5.7 Mbps.
- ■ 6.0Mb—6.0 Mbps.
- ■ 6.3Mb—6.3 Mbps.
- ■ 6.6Mb—6.6 Mbps.
- ■ 6.9Mb—6.9 Mbps.
- ■ 601Kb—601 Kbps.
- ■ 7.2Mb—7.2 Mbps.
- ■ 7.5Mb—7.5 Mbps.
- ■ 7.8Mb—7.8 Mbps.
- ■ 8.1Mb—8.1 Mbps.
- ■ 8.4Mb—8.4 Mbps.
- ■ 8.7Mb—8.7 Mbps.
- ■ 9.0Mb—9.0 Mbps.
- ■ 9.3Mb—9.3 Mbps.

- 9.6Mb—9.6 Mbps.
- 9.9Mb—9.9 Mbps.
- 902Kb—902 Kbps.

<direction> (configuration/security/ipsec/security-association/manual)

Usage

```

<configuration>
  <security>
    <ipsec>
      <security-association>
        <manual>
          <direction>
            <name>name</name>    <!-- identifier -->
            <protocol>protocol-choice</protocol>
            <spi>spi</spi>    <!-- mandatory -->
            <authentication>...</authentication>
            <encryption>...</encryption>
          </direction>
        </manual>
      </security-association>
    </ipsec>
  </security>
</configuration>
```

Description Define the direction of the security association.

Contents <authentication>—Define authentication parameters.

<encryption>—Define encryption parameters.

<name>—No documentation is available yet.

- bidirectional—Bidirectional SA.
- inbound—Inbound SA.
- outbound—Outbound SA.

<protocol>—Define an IPSec protocol for the SA.

- ah—Authentication header.
- esp—Encapsulated Security Payload header.

<spi>—Security Parameter Index for an SA.

- <domain> (configuration/forwarding-options/helpers)

•

• **Usage** <configuration>
• <forwarding-options>
• <helpers>
• <**domain**>
• <description>*description*</description>
• <server>*server*</server>
• <interface>...</interface>
• </**domain**>
• </helpers>
• </forwarding-options>
• </configuration>

• **Description** Incoming DNS request forwarding configuration.

• **Contents** <description>—Text description of DNS service.

• <interface>—Incoming DNS request forwarding interface configuration.

• <server>—Name or address of DNS server to which to forward.

- <domain-id> (configuration/protocols/ospf)

•

• **Usage** <configuration>
• <protocols>
• <ospf>
• <**domain-id**>
• <domain-id>*domain-id*</domain-id>
• <disable/>
• </**domain-id**>
• </ospf>
• </protocols>
• </configuration>

• **Description** Configure domain ID.

• **Contents** <disable>—Disable domain ID.

• <domain-id>—Domain ID.

<domain-id> (configuration/routing-instances/instance/protocols/ospf)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <ospf>
          <domain-id>
            <domain-id>domain-id</domain-id>
            <disable/>
          </domain-id>
        </ospf>
        </protocols>
      </instance>
    </routing-instances>
  </configuration>

```

Description Configure domain ID.

Contents <disable>—Disable domain ID.

<domain-id>—Domain ID.

<domain-search> (configuration/system)

Usage

```

<configuration>
  <system>
    <domain-search>
      <name>name</name>    <!-- identifier -->
    </domain-search>
  </system>
</configuration>

```

Description List of domain names to search.

Contents <name>—List of domain names to search.

<drop-probability> (configuration/class-of-service/drop-profiles/interpolate)

Usage

```

<configuration>
  <class-of-service>
    <drop-profiles>
      <interpolate>
        <drop-probability>
          <name>name</name>    <!-- identifier -->
        </drop-probability>
      </interpolate>
    </drop-profiles>
  </class-of-service>
</configuration>

```

Description Data points for packet drop probability.

Contents <name>—Data points for packet drop probability.

- <drop-profile-map> (configuration/class-of-service/schedulers)
 - Usage** <configuration>
 <class-of-service>
 <schedulers>
 <drop-profile-map>
 <loss-priority>loss-priority-choice</loss-priority> <!-- identifier -->
 <protocol>protocol-choice</protocol> <!-- identifier -->
 <drop-profile>drop-profile</drop-profile>
 </drop-profile-map>
 </schedulers>
 </class-of-service>
 </configuration>
 - Description** Assign drop profile to a loss priority and protocol.
 - Contents** <drop-profile>—Name of drop profile to apply.
 - <loss-priority>—Loss priority value.
 - any—Ignore loss priority when assigning drop profile.
 - high—Loss priority high.
 - low—Loss priority low.
 - <protocol>—Protocol type.
 - any—Ignore protocol type when assigning drop profile.
 - non-tcp—Non-TCP protocols only.
 - tcp—TCP protocol only.

<drop-profiles> (configuration/class-of-service)

Usage <configuration>
 <class-of-service>
 <drop-profiles>
 <name>name</name> <!-- identifier -->
 <fill-level>...</fill-level>
 <interpolate>...</interpolate>
 </drop-profiles>
</class-of-service>
</configuration>

- Description** Random Early Drop (RED) data point map.
- Contents** <name>—Drop profile name.

<ds0-options> (configuration/interfaces/interface)

```

Usage   <configuration>
          <interfaces>
            <interface>
              <interface>
                <ds0-options>
                  <byte-encoding>byte-encoding-choice</byte-encoding>
                  <invert-data/>
                  <fcs>fcs-choice</fcs>
                  <idle-cycle-flag>idle-cycle-flag-choice</idle-cycle-flag>
                  <start-end-flag>start-end-flag-choice</start-end-flag>
                </ds0-options>
              </interface>
            </interfaces>
          </configuration>

```

Description DS-0 interface-specific options.

Contents <byte-encoding>—Byte encoding.

- nx56—7 bits per byte.
- nx64—8 bits per byte.

<fcs>—Frame checksum.

- 16—16-bit mode.
- 32—32-bit mode.

<idle-cycle-flag>—Value to transmit in idle cycles.

- flags—Transmit 0x7E in idle cycles.
- ones—Transmit 0xFF (all ones) in idle cycles.

<invert-data>—Invert data.

<start-end-flag>—Set start/end flags on transmission.

- filler—Send two idle cycles between start/end flags.
- shared—Share start/end flags on transmit.

- <ds1> (configuration/chassis/alarm)

Usage <configuration>
 <chassis>
 <alarm>
 <ds1>
 <ais>ais-choice</ais>
 <ylw>ylw-choice</ylw>
 </ds1>
 </alarm>
 </chassis>
 </configuration>

Description DS-1 alarms.

Contents <ais>—Alarm indicator signal.

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

<ylw>—Yellow alarm.

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

- <dscp> (configuration/class-of-service/classifiers)

Usage <configuration>
 <class-of-service>
 <classifiers>
 <dscp>
 <name>name</name> <!-- identifier -->
 <import>import</import>
 <forwarding-class>...</forwarding-class>
 </dscp>
 </classifiers>
 </class-of-service>
 </configuration>

Description Differentiated Service Code Point (DSCP) classifier.

Contents <forwarding-class>—Define a classification of code point aliases.

<import>—Include this classifier in this definition.

<name>—Classifier name.

<dscp> (configuration/class-of-service/code-point-aliases)

Usage

```
<configuration>
  <class-of-service>
    <code-point-aliases>
      <dscp>
        <name>name</name>    <!-- identifier -->
        <bits>bits</bits>    <!-- mandatory -->
      </dscp>
    </code-point-aliases>
  </class-of-service>
</configuration>
```

Description Differentiated Service Code Point (DSCP) aliases.

Contents <bits>—DSCP 6-bit pattern.

<name>—DSCP alias name.

<dscp> (configuration/class-of-service/interfaces/unit/classifiers)

Usage

```
<configuration>
  <class-of-service>
    <interfaces>
      <unit>
        <classifiers>
          <dscp>
            <classifier-name>classifier-name</classifier-name>
          </dscp>
        </classifiers>
      </unit>
    </interfaces>
  </class-of-service>
</configuration>
```

Description DSCP classifier.

Contents <classifier-name>—Name of classifier to be applied.

• <dscp> (configuration/class-of-service/interfaces/unit/rewrite-rules)

Usage <configuration>
 <class-of-service>
 <interfaces>
 <unit>
 <rewrite-rules>
 <dscp>
 <rewrite-rule-name>rewrite-rule-name</rewrite-rule-name>
 </dscp>
 </rewrite-rules>
 </unit>
 </interfaces>
 </class-of-service>
 </configuration>

Description DSCP rewrite rule.

Contents <rewrite-rule-name>—Name of rewrite rule to be applied.

• <dscp> (configuration/class-of-service/rewrite-rules)

Usage <configuration>
 <class-of-service>
 <rewrite-rules>
 <dscp>
 <name>name</name> <!-- identifier -->
 <import>import</import>
 <forwarding-class>...</forwarding-class>
 </dscp>
 </rewrite-rules>
 </class-of-service>
 </configuration>

Description Differentiated Service Code Point (DSCP) rewrite rule.

Contents <forwarding-class>—Markings for named forwarding class.

 <import>—Include this rewrite rule in this definition.

 <name>—Rewrite rule name.

<dscp> (configuration/firewall/family/inet/filter/term/from)

```

Usage   <configuration>
          <firewall>
              <family>
                  <inet>
                      <filter>
                          <term>
                              <from>
                                  <dscp>
                                      <name>name</name>    <!-- identifier -->
                                  </dscp>
                              </from>
                          </term>
                      </filter>
                  </inet>
              </family>
          </firewall>
      </configuration>
  
```

Description Match diffserv codepoint.

Contents <name>—No documentation is available yet.

- af11—Assured Forwarding Class 1, Low Drop Precedence.
- af12—Assured Forwarding Class 1, Medium Drop Precedence.
- af13—Assured Forwarding Class 1, High Drop Precedence.
- af21—Assured Forwarding Class 2, Low Drop Precedence.
- af22—Assured Forwarding Class 2, Medium Drop Precedence.
- af23—Assured Forwarding Class 2, High Drop Precedence.
- af31—Assured Forwarding Class 3, Low Drop Precedence.
- af32—Assured Forwarding Class 3, Medium Drop Precedence.
- af33—Assured Forwarding Class 3, High Drop Precedence.
- af41—Assured Forwarding Class 4, Low Drop Precedence.
- af42—Assured Forwarding Class 4, Medium Drop Precedence.
- af43—Assured Forwarding Class 4, High Drop Precedence.
- ef—Expedited forwarding.
- name—Range of values.

- <dscp-except> (configuration/firewall/family/inet/filter/term/from)

```
Usage <configuration>
      <firewall>
        <family>
          <inet>
            <filter>
              <term>
                <from>
                  <dscp-except>
                    <name>name</name>    <!-- identifier -->
                  </dscp-except>
                </from>
              </term>
            </filter>
          </inet>
        </family>
      </firewall>
</configuration>
```

Description Do not match diffserv codepoint.

Contents <name>—No documentation is available yet.

- af11—Assured Forwarding Class 1, Low Drop Precedence.
 - af12—Assured Forwarding Class 1, Medium Drop Precedence.
 - af13—Assured Forwarding Class 1, High Drop Precedence.
 - af21—Assured Forwarding Class 2, Low Drop Precedence.
 - af22—Assured Forwarding Class 2, Medium Drop Precedence.
 - af23—Assured Forwarding Class 2, High Drop Precedence.
 - af31—Assured Forwarding Class 3, Low Drop Precedence.
 - af32—Assured Forwarding Class 3, Medium Drop Precedence.
 - af33—Assured Forwarding Class 3, High Drop Precedence.
 - af41—Assured Forwarding Class 4, Low Drop Precedence.
 - af42—Assured Forwarding Class 4, Medium Drop Precedence.
 - af43—Assured Forwarding Class 4, High Drop Precedence.
 - ef—Expedited forwarding.
 - name—Range of values.

<dvmrp> (configuration/protocols)

Usage <configuration>
 <protocols>
 <dvmrp>
 <disable/>
 <traceoptions>...</traceoptions>
 <rib-group>...</rib-group>
 <import>...</import>
 <export>...</export>
 <interface>...</interface>
 </dvmrp>
 </protocols>
</configuration>

Description DVMRP options.

Contents <disable>—Disable DVMRP.
<export>—Export policy.
<import>—Import policy.
<interface>—DVMRP interface options.
<rib-group>—Routing table group.
<traceoptions>—Trace options for DVMRP.

<dynamic> (configuration/security/ipsec/security-association)

Usage <configuration>
 <security>
 <ipsec>
 <security-association>
 <dynamic>
 <replay-window-size>replay-window-size-choice</replay-window-size>
 <ipsec-policy>ipsec-policy</ipsec-policy>
 </dynamic>
 </security-association>
 </ipsec>
 </security>
</configuration>

Description Define a dynamic IPSec security association.

Contents <ipsec-policy>—Name of the IPSec policy.
<replay-window-size>—Set replay protection window size.
■ 32—32-packet window size.
■ 64—64-packet window size.

- <e1> (configuration/chassis/fpc/pic/ce1)

Usage <configuration>
 <chassis>
 <fpc>
 <pic>
 <ce1>
 <e1>
 <name>name</name> <!-- identifier -->
 <channel-group>...</channel-group>
 </e1>
 </ce1>
 </pic>
 </fpc>
 </chassis>
 </configuration>

Description E1 link.

Contents <channel-group>—Define a channel group.
 <name>—E1 link number.

- <e1-options> (configuration/interfaces/interface)

Usage <configuration>
 <interfaces>
 <interface>
 <e1-options>
 <timeslots>timeslots</timeslots>
 <loopback>loopback-choice</loopback>
 <framing>framing-choice</framing>
 <fcs>fcs-choice</fcs>
 <idle-cycle-flag>idle-cycle-flag-choice</idle-cycle-flag>
 <start-end-flag>start-end-flag-choice</start-end-flag>
 <bert-error-rate>bert-error-rate</bert-error-rate>
 <bert-period>seconds</bert-period>
 </e1-options>
 </interface>
 </interfaces>
 </configuration>

Description E1 interface-specific options.

Contents <bert-error-rate>—Bit error rate to use in BERT test (10^{-n}).

<bert-period>—Length of BERT test.

<fcs>—Frame checksum.

■ 16—16-bit mode.

■ 32—32-bit mode.

<framing>—Framing mode.

- g704—G704 mode with CRC4.
- g704-no-crc4—G704 mode without CRC4.
- unframed—Unframed mode.

<idle-cycle-flag>—Value to transmit in idle cycles.

- flags—Transmit 0x7E in idle cycles.
- ones—Transmit 0xFF (all ones) in idle cycles.

<loopback>—Loopback mode.

- local—Local loopback.
- remote—Remote loopback.

<start-end-flag>—Set start/end flags on transmission.

- filler—Send two idle cycles between start/end flags.
- shared—Share start/end flags on transmit.

<timeslots>—1..32, for example 1-4,6,9-11,32 (no space).

<e3> (configuration/chassis/alarm)

```
Usage   <configuration>
          <chassis>
            <alarm>
              <e3>
                <ais>ais-choice</ais>
                <exz>exz-choice</exz>
                <ferf>ferf-choice</ferf>
                <idle>idle-choice</idle>
                <lcv>lcv-choice</lcv>
                <lof>lof-choice</lof>
                <los>los-choice</los>
                <pll>pll-choice</pll>
                <ylw>ylw-choice</ylw>
              </e3>
            </alarm>
          </chassis>
        </configuration>
```

Description E3 alarms.

- **Contents** <ais>—Alarm indicator signal.
 - ignore—Do not assert any alarm signals.
 - red—Assert red system alarm.
 - yellow—Assert yellow system alarm.
- <exz>—Excessive zeros.
 - ignore—Do not assert any alarm signals.
 - red—Assert red system alarm.
 - yellow—Assert yellow system alarm.
- <ferf>—Far-end failure.
 - ignore—Do not assert any alarm signals.
 - red—Assert red system alarm.
 - yellow—Assert yellow system alarm.
- <idle>—Idle alarm.
 - ignore—Do not assert any alarm signals.
 - red—Assert red system alarm.
 - yellow—Assert yellow system alarm.
- <lcv>—Line code violation.
 - ignore—Do not assert any alarm signals.
 - red—Assert red system alarm.
 - yellow—Assert yellow system alarm.
- <lof>—Loss of frame.
 - ignore—Do not assert any alarm signals.
 - red—Assert red system alarm.
 - yellow—Assert yellow system alarm.
- <los>—Loss of signal.
 - ignore—Do not assert any alarm signals.
 - red—Assert red system alarm.
 - yellow—Assert yellow system alarm.

<pll>—Phase-locked loop out of lock.

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

<ylw>—Yellow alarm.

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

<e3-options> (configuration/interfaces/interface)

```
Usage   <configuration>
          <interfaces>
            <interface>
              <e3-options>
                <loopback>loopback-choice</loopback>
                <compatibility-mode>...</compatibility-mode>
                <payload-scrambler/>
                <fcs>fcs-choice</fcs>
                <idle-cycle-flag>idle-cycle-flag-choice</idle-cycle-flag>
                <start-end-flag>start-end-flag-choice</start-end-flag>
                <bert-algorithm>bert-algorithm-choice</bert-algorithm>
                <bert-error-rate>bert-error-rate</bert-error-rate>
                <bert-period>seconds</bert-period>
                <buildout>feet</buildout>
                <atm-encapsulation>atm-encapsulation-choice</atm-encapsulation>
                <framing>framing-choice</framing>
              </e3-options>
            </interface>
          </interfaces>
        </configuration>
```

Description E3 interface-specific options.

Contents <atm-encapsulation>—E3 interface encapsulation.

- direct—ATM direct mapping.
- plcp—PLCP encapsulation.

<bert-algorithm>—Set BERT algorithm.

- all-ones-repeating—Repeating one bits.
- all-zeros-repeating—Repeating zero bits.
- alternating-double-ones-zeros—Alternating pairs of ones and zeros.
- alternating-ones-zeros—Alternating ones and zeros.

- pseudo-2e10—Pattern is $2^{10} - 1$.
 - pseudo-2e11-o152—Pattern is $2^{11} - 1$ (per O.152 standard).
 - pseudo-2e15-o151—Pattern is $2^{15} - 1$ (per O.152 standard).
 - pseudo-2e17—Pattern is $2^{17} - 1$.
 - pseudo-2e18—Pattern is $2^{18} - 1$.
 - pseudo-2e20-o151—Pattern is $2^{20} - 1$ (per O.151 standard).
 - pseudo-2e20-o153—Pattern is $2^{20} - 1$ (per O.153 standard).
 - pseudo-2e21—Pattern is $2^{21} - 1$.
 - pseudo-2e22—Pattern is $2^{22} - 1$.
 - pseudo-2e23-o151—Pattern is 2^{23} (per O.151 standard).
 - pseudo-2e25—Pattern is $2^{25} - 1$.
 - pseudo-2e28—Pattern is $2^{28} - 1$.
 - pseudo-2e29—Pattern is $2^{29} - 1$.
 - pseudo-2e3—Pattern is $2^3 - 1$.
 - pseudo-2e31—Pattern is $2^{31} - 1$.
 - pseudo-2e32—Pattern is $2^{32} - 1$.
 - pseudo-2e4—Pattern is $2^4 - 1$.
 - pseudo-2e5—Pattern is $2^5 - 1$.
 - pseudo-2e6—Pattern is $2^6 - 1$.
 - pseudo-2e7—Pattern is $2^7 - 1$.
 - pseudo-2e9-o153—Pattern is $2^9 - 1$ (per O.153 standard).
 - repeating-1-in-4—1 bit in 4 is set.
 - repeating-1-in-8—1 bit in 8 is set.
 - repeating-3-in-24—3 bits in 24 are set.

<bert-error-rate>—BERT error rate (10^{-n}).

<bert-period>—Length of BERT test.

<buildout>—Line buildout.

<compatibility-mode>—Set CSU compatibility mode.

<fcs>—Frame checksum.

- 16—16-bit mode.

- 32—32-bit mode.

<framing>—E3 line format.

- g.751—G.751 format.

- g.832—G.832 format.

<idle-cycle-flag>—Value to transmit in idle cycles.

- flags—Transmit 0x7E in idle cycles.

- ones—Transmit 0xFF (all ones) in idle cycles.

<loopback>—Loopback mode.

- local—Local loopback.

- remote—Remote loopback.

<payload-scrambler>—Enable payload scrambling.

<start-end-flag>—Set start/end flags on transmission.

- filler—Send two idle cycles between start/end flags.

- shared—Share start/end flags on transmit.

<egress-policy> (configuration/protocols/ldp)

```
Usage  <configuration>
        <protocols>
            <ldp>
                <egress-policy>
                    <name>name</name>    <!-- identifier -->
                </egress-policy>
            </ldp>
        </protocols>
    </configuration>
```

Description Configure LSP egress policy.

Contents <name>—Configure LSP egress policy.

- <egress-policy> (configuration/routing-instances/instance/protocols/ldp)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <ldp>
          <egress-policy>
            <name>name</name>    <!-- identifier -->
          </egress-policy>
        </ldp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Configure LSP egress policy.

Contents <name>—Configure LSP egress policy.

- <encryption> (configuration/security/ipsec/security-association/manual/direction)

Usage

```
<configuration>
  <security>
    <ipsec>
      <security-association>
        <manual>
          <direction>
            <encryption>
              <algorithm>algorithm-choice</algorithm>
              <key>...</key>
            </encryption>
          </direction>
        </manual>
      </security-association>
    </ipsec>
  </security>
</configuration>
```

Description Define encryption parameters.

Contents <algorithm>—Define encryption algorithm.

- 3des-cbc—3DES-CBC encryption algorithm.

- des-cbc—DES-CBC encryption algorithm.

<key>—Define an encryption key.

<engine-id> (configuration/snmp)

Usage <configuration>
 <snmp>
 <engine-id>
 <local>/local</local>
 </engine-id>
 </snmp>
</configuration>

Description SNMPv3 engine ID.

Contents <local>—Local engine ID.

<ethernet> (configuration/chassis/aggregated-devices)

Usage <configuration>
 <chassis>
 <aggregated-devices>
 <ethernet>
 <device-count>device-count</device-count>
 </ethernet>
 </aggregated-devices>
 </chassis>
</configuration>

Description Aggregated device options for Ethernet.

Contents <device-count>—Number of aggregated Ethernet devices.

<ethernet> (configuration/chassis/alarm)

Usage <configuration>
 <chassis>
 <alarm>
 <ethernet>
 <link-down>link-down-choice</link-down>
 </ethernet>
 </alarm>
 </chassis>
</configuration>

Description Ethernet alarms.

Contents <link-down>—Link has gone down.

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

- <event> (configuration/snmp/rmon)

Usage <configuration>
 <snmp>
 <rmon>
 <event>
 <name>name</name> <!-- identifier -->
 <description>description</description>
 <type>type-choice</type>
 <community>community</community>
 </event>
 </rmon>
 </snmp>
 </configuration>

Description RMON event entries.

Contents <community>—The community (trap group) for outgoing traps.

<description>—General description of event.

<name>—RMON event identifier.

<type>—The type of notification for this event.

- log—Add entry to logTable.
- log-and-trap—Send SNMP trap and make log entry.
- none—No notifications.
- snmptrap—Send SNMP trap.

- <exclude> (configuration/protocols/mpls/admin-group)

Usage <configuration>
 <protocols>
 <mpls>
 <admin-group>
 <exclude>
 <name>name</name> <!-- identifier -->
 </exclude>
 </admin-group>
 </mpls>
 </protocols>
 </configuration>

Description Groups to reject.

Contents <name>—Groups to reject.

<exclude> (configuration/protocols/mpls/label-switched-path/admin-group)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <admin-group>
 <exclude>
 <name>name</name> <!-- identifier -->
 </exclude>
 </admin-group>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>

Description Groups to reject.

Contents <name>—Groups to reject.

<exclude> (configuration/protocols/mpls/label-switched-path/fast-reroute)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <fast-reroute>
 <exclude>
 <name>name</name> <!-- identifier -->
 </exclude>
 </fast-reroute>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>

Description Groups to reject.

Contents <name>—Groups to reject.

- <exclude> (configuration/protocols/mpls/label-switched-path/primary/admin-group)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <primary>
 <admin-group>
 <exclude>
 <name>name</name> <!-- identifier -->
 </exclude>
 </admin-group>
 </primary>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>

Description Groups to reject.

Contents <name>—Groups to reject.

- <exclude> (configuration/protocols/mpls/label-switched-path/secondary/admin-group)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <secondary>
 <admin-group>
 <exclude>
 <name>name</name> <!-- identifier -->
 </exclude>
 </admin-group>
 </secondary>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>

Description Groups to reject.

Contents <name>—Groups to reject.

<exp> (configuration/class-of-service/classifiers)

Usage <configuration>
 <class-of-service>
 <classifiers>
 <exp>
 <name>name</name> <!-- identifier -->
 <import>import</import>
 <forwarding-class>...</forwarding-class>
 </exp>
 </classifiers>
 </class-of-service>
</configuration>

Description MPLS EXP classifier.

Contents <forwarding-class>—Define a classification of code point aliases.

<import>—Include this classifier in this definition.

<name>—Classifier name.

<exp> (configuration/class-of-service/code-point-aliases)

Usage <configuration>
 <class-of-service>
 <code-point-aliases>
 <exp>
 <name>name</name> <!-- identifier -->
 <bits>bits</bits> <!-- mandatory -->
 </exp>
 </code-point-aliases>
 </class-of-service>
</configuration>

Description MPLS EXP code point aliases.

Contents <bits>—EXP 3 bit pattern.

<name>—EXP alias name.

• <exp> (configuration/class-of-service/interfaces/unit/classifiers)

Usage <configuration>
 <class-of-service>
 <interfaces>
 <unit>
 <classifiers>
 <exp>
 <classifier-name>classifier-name</classifier-name>
 </exp>
 </classifiers>
 </unit>
 </interfaces>
 </class-of-service>
</configuration>

Description EXP classifier.

Contents <classifier-name>—Name of classifier to be applied.

• <exp> (configuration/class-of-service/interfaces/unit/rewrite-rules)

Usage <configuration>
 <class-of-service>
 <interfaces>
 <unit>
 <rewrite-rules>
 <exp>
 <rewrite-rule-name>rewrite-rule-name</rewrite-rule-name>
 </exp>
 </rewrite-rules>
 </unit>
 </interfaces>
 </class-of-service>
</configuration>

Description EXP rewrite rule.

Contents <rewrite-rule-name>—Name of rewrite rule to be applied.

<exp> (configuration/class-of-service/rewrite-rules)

Usage <configuration>
 <class-of-service>
 <rewrite-rules>
 <exp>
 <name>name</name> <!-- identifier -->
 <import>import</import>
 <forwarding-class>...</forwarding-class>
 </exp>
 </rewrite-rules>
 </class-of-service>
</configuration>

Description MPLS EXP rewrite rule.

Contents <forwarding-class>—Markings for named forwarding class.

<import>—Include this rewrite rule in this definition.

<name>—Rewrite rule name.

<export> (configuration/protocols/bgp)

Usage <configuration>
 <protocols>
 <bpg>
 <export>
 <name>name</name> <!-- identifier -->
 </export>
 </bpg>
 </protocols>
</configuration>

Description Export policy.

Contents <name>—Export policy.

<export> (configuration/protocols/bgp/group)

Usage <configuration>
 <protocols>
 <bpg>
 <group>
 <export>
 <name>name</name> <!-- identifier -->
 </export>
 </group>
 </bpg>
 </protocols>
</configuration>

Description Export policy.

Contents <name>—Export policy.

- <export> (configuration/protocols/bgp/group/neighbor)

Usage <configuration>
 <protocols>
 <bpg>
 <group>
 <neighbor>
 <export>
 <name>name</name> <!-- identifier -->
 </export>
 </neighbor>
 </group>
 </bpg>
 </protocols>
 </configuration>

Description Export policy.

Contents <name>—Export policy.

- <export> (configuration/protocols/dvmrp)

Usage <configuration>
 <protocols>
 <dvmrp>
 <export>
 <name>name</name> <!-- identifier -->
 </export>
 </dvmrp>
 </protocols>
 </configuration>

Description Export policy.

Contents <name>—Export policy.

- <export> (configuration/protocols/isis)

Usage <configuration>
 <protocols>
 <isis>
 <export>
 <name>name</name> <!-- identifier -->
 </export>
 </isis>
 </protocols>
 </configuration>

Description Export policy.

Contents <name>—Export policy.

<export> (configuration/protocols/ldp)

```
Usage  <configuration>
        <protocols>
            <ldp>
                <export>
                    <name>name</name>    <!-- identifier -->
                </export>
            </ldp>
        </protocols>
    </configuration>
```

Description Export policy.

Contents <name>—Export policy.

<export> (configuration/protocols/msdp)

```
Usage  <configuration>
        <protocols>
            <msdp>
                <export>
                    <name>name</name>    <!-- identifier -->
                </export>
            </msdp>
        </protocols>
    </configuration>
```

Description Export policy.

Contents <name>—Export policy.

<export> (configuration/protocols/msdp/group)

```
Usage  <configuration>
        <protocols>
            <msdp>
                <group>
                    <export>
                        <name>name</name>    <!-- identifier -->
                    </export>
                </group>
            </msdp>
        </protocols>
    </configuration>
```

Description Export policy.

Contents <name>—Export policy.

- <export> (configuration/protocols/msdp/group/peer)

Usage <configuration>
 <protocols>
 <msdp>
 <group>
 <peer>
 <export>
 <name>name</name> <!-- identifier -->
 </export>
 </peer>
 </group>
 </msdp>
 </protocols>
 </configuration>

Description Export policy.

Contents <name>—Export policy.

- <export> (configuration/protocols/msdp/peer)

Usage <configuration>
 <protocols>
 <msdp>
 <peer>
 <export>
 <name>name</name> <!-- identifier -->
 </export>
 </peer>
 </msdp>
 </protocols>
 </configuration>

Description Export policy.

Contents <name>—Export policy.

- <export> (configuration/protocols/ospf)

Usage <configuration>
 <protocols>
 <ospf>
 <export>
 <name>name</name> <!-- identifier -->
 </export>
 </ospf>
 </protocols>
 </configuration>

Description Export policy.

Contents <name>—Export policy.

<export> (configuration/protocols/rip/group)

Usage

```
<configuration>
  <protocols>
    <rip>
      <group>
        <export>
          <name>name</name>    <!-- identifier -->
        </export>
      </group>
    </rip>
  </protocols>
</configuration>
```

Description Export policy.

Contents <name>—Export policy.

<export> (configuration/protocols/ripng/group)

Usage

```
<configuration>
  <protocols>
    <ripng>
      <group>
        <export>
          <name>name</name>    <!-- identifier -->
        </export>
      </group>
    </ripng>
  </protocols>
</configuration>
```

Description Export policy.

Contents <name>—Export policy.

<export> (configuration/routing-instances/instance/protocols/bgp)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bpg>
          <export>
            <name>name</name>    <!-- identifier -->
          </export>
        </bpg>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Export policy.

Contents <name>—Export policy.

• <export> (configuration/routing-instances/instance/protocols/bgp/group)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <export>
 <name>name</name> <!-- identifier -->
 </export>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Export policy.

Contents <name>—Export policy.

<export> (configuration/routing-instances/instance/protocols/bgp/group/neighbor)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <export>
 <name>name</name> <!-- identifier -->
 </export>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Export policy.

Contents <name>—Export policy.

<export> (configuration/routing-instances/instance/protocols/isis)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <isis>
 <export>
 <name>name</name> <!-- identifier -->
 </export>
 </isis>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Export policy.

Contents <name>—Export policy.

<export> (configuration/routing-instances/instance/protocols/ldp)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ldp>
 <export>
 <name>name</name> <!-- identifier -->
 </export>
 </ldp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Export policy.

Contents <name>—Export policy.

• <export> (configuration/routing-instances/instance/protocols/ospf)

• **Usage** <configuration>
• <routing-instances>
• <instance>
• <protocols>
• <ospf>
• <export>
• <name>name</name> <!-- identifier -->
• </export>
• </ospf>
• </protocols>
• </instance>
• </routing-instances>
• </configuration>

• **Description** Export policy.

• **Contents** <name>—Export policy.

• <export> (configuration/routing-instances/instance/protocols/rip/group)

• **Usage** <configuration>
• <routing-instances>
• <instance>
• <protocols>
• <rip>
• <group>
• <export>
• <name>name</name> <!-- identifier -->
• </export>
• </group>
• </rip>
• </protocols>
• </instance>
• </routing-instances>
• </configuration>

• **Description** Export policy.

• **Contents** <name>—Export policy.

<export> (configuration/routing-instances/instance/routing-options/forwarding-table)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <forwarding-table>
          <export>
            <name>name</name>    <!-- identifier -->
          </export>
        </forwarding-table>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Export policy.

Contents <name>—Export policy.

<export> (configuration/routing-options/forwarding-table)

Usage

```

<configuration>
  <routing-options>
    <forwarding-table>
      <export>
        <name>name</name>    <!-- identifier -->
      </export>
    </forwarding-table>
  </routing-options>
</configuration>
```

Description Export policy.

Contents <name>—Export policy.

<external> (configuration/policy-options/policy-statement/from)

Usage

```

<configuration>
  <policy-options>
    <policy-statement>
      <from>
        <external>
          <type>type</type>
        </external>
      </from>
    </policy-statement>
  </policy-options>
</configuration>
```

Description External route.

Contents <type>—OSPF external metric type.

- <external> (configuration/policy-options/policy-statement/from/route-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <route-filter>
 <external>
 <type>type</type> <!-- mandatory -->
 </external>
 </route-filter>
 </from>
 </policy-statement>
 </policy-options>
 </configuration>

Description External route.

Contents <type>—OSPF external metric type.

- <external> (configuration/policy-options/policy-statement/from/source-address-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <source-address-filter>
 <external>
 <type>type</type> <!-- mandatory -->
 </external>
 </source-address-filter>
 </from>
 </policy-statement>
 </policy-options>
 </configuration>

Description External route.

Contents <type>—OSPF external metric type.

<external> (configuration/policy-options/policy-statement/term/from)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <external>
 <type>type</type>
 </external>
 </from>
 </term>
 </policy-statement>
 </policy-options>
</configuration>

Description External route.

Contents <type>—OSPF external metric type.

<external> (configuration/policy-options/policy-statement/term/from/route-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <route-filter>
 <external>
 <type>type</type> <!-- mandatory -->
 </external>
 </route-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
</configuration>

Description External route.

Contents <type>—OSPF external metric type.

- <external> (configuration/policy-options/policy-statement/term/from/source-address-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <source-address-filter>
 <external>
 <type>type</type> <!-- mandatory -->
 </external>
 </source-address-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description External route.

Contents <type>—OSPF external metric type.

- <external> (configuration/policy-options/policy-statement/term/then)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <then>
 <external>
 <type>type</type> <!-- mandatory -->
 </external>
 </then>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description External route.

Contents <type>—OSPF external metric type.

<external> (configuration/policy-options/policy-statement/term/to)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <to>
          <external>
            <type>type</type>
          </external>
        </to>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description External route.

Contents <type>—OSPF external metric type.

<external> (configuration/policy-options/policy-statement/then)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <then>
        <external>
          <type>type</type>    <!-- mandatory -->
        </external>
      </then>
    </policy-statement>
  </policy-options>
</configuration>
```

Description External route.

Contents <type>—OSPF external metric type.

<external> (configuration/policy-options/policy-statement/to)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <to>
        <external>
          <type>type</type>
        </external>
      </to>
    </policy-statement>
  </policy-options>
</configuration>
```

Description External route.

Contents <type>—OSPF external metric type.

- <failover> (configuration/chassis/redundancy)

Usage <configuration>
 <chassis>
 <redundancy>
 <failover>
 <on-loss-of-keepalives/>
 </failover>
 </redundancy>
 </chassis>
</configuration>

Description Failover to other Routing Engine.

Contents <on-loss-of-keepalives>—Failover on loss of keepalives.

- <family> (configuration/firewall)

Usage <configuration>
 <firewall>
 <family>
 <inet>...</inet>
 <inet6>...</inet6>
 </family>
 </firewall>
</configuration>

Description Protocol family.

Contents <inet>—Protocol family IPv4 for firewall filter.

<inet6>—Protocol family IPv6 for firewall filter.

- <family> (configuration/forwarding-options/hash-key)

Usage <configuration>
 <forwarding-options>
 <hash-key>
 <family>
 <inet>...</inet>
 <mpls>...</mpls>
 </family>
 </hash-key>
 </forwarding-options>
</configuration>

Description Protocol family.

Contents <inet>—IPv4 protocol family.

<mpls>—MPLS protocol family.

<family> (configuration/forwarding-options/monitoring)

Usage <configuration>
 <forwarding-options>
 <monitoring>
 <family>
 <inet>...</inet>
 </family>
 </monitoring>
 </forwarding-options>
</configuration>

Description Address family of packets to monitor.

Contents <inet>—Monitor Internet Protocol (IPv4) packets.

<family> (configuration/forwarding-options/sampling/input)

Usage <configuration>
 <forwarding-options>
 <sampling>
 <input>
 <family>
 <inet>...</inet>
 </family>
 </input>
 </sampling>
 </forwarding-options>
</configuration>

Description Protocol family.

Contents <inet>—Sampling parameters for IPv4.

- <family> (configuration/interfaces/interface/unit)

Usage <configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <inet>...</inet>
 <iso>...</iso>
 <inet6>...</inet6>
 <mpls>...</mpls>
 <mlPPP>...</mlPPP>
 <mlfr>...</mlfr>
 <ccc>...</ccc>
 <tcc>...</tcc>
 </family>
 </unit>
 </interface>
 </interfaces>
 </configuration>

Description Protocol family.

Contents <ccc>—Circuit cross-connect parameters.

<inet>—Internet Protocol (IPv4) parameters.

<inet6>—IPv6 protocol parameters.

<iso>—OSI ISO protocol parameters.

<mlfr>—Multilink Frame Relay protocol parameters.

<mlPPP>—Multilink PPP protocol parameters.

<mpls>—MPLS protocol parameters.

<tcc>—Translational cross-connect parameters.

- <family> (configuration/protocols/bgp)

Usage <configuration>
 <protocols>
 <bpg>
 <family>
 <inet>...</inet>
 <inet-vpn>...</inet-vpn>
 <inet6>...</inet6>
 <l2vpn>...</l2vpn>
 </family>
 </bpg>
 </protocols>
 </configuration>

Description Protocol family for NLRIs in updates.

Contents	<inet>—Internet Protocol (IPv4) NLRI parameters. <inet-vpn>—Internet Protocol (IPv4) Layer 3 VPN NLRI parameters. <inet6>—Internet Protocol version 6 (IPv6) NLRI parameters. <l2vpn>—MPLS-based Layer 2 VPN (L2VPN) NLRI parameters.
-----------------	--

<family> (configuration/protocols/bgp/group)

Usage	<configuration> <protocols> <bpg> <group> <family> <inet>...</inet> <inet-vpn>...</inet-vpn> <inet6>...</inet6> <l2vpn>...</l2vpn> </family> </group> </bpg> </protocols> </configuration>
Description	Protocol family for NLRIs in updates.
Contents	<inet>—Internet Protocol (IPv4) NLRI parameters. <inet-vpn>—Internet Protocol (IPv4) Layer 3 VPN NLRI parameters. <inet6>—Internet Protocol version 6 (IPv6) NLRI parameters. <l2vpn>—MPLS-based Layer 2 VPN (L2VPN) NLRI parameters.

<family> (configuration/protocols/bgp/group/neighbor)

Usage	<configuration> <protocols> <bpg> <group> <neighbor> <family> <inet>...</inet> <inet-vpn>...</inet-vpn> <inet6>...</inet6> <l2vpn>...</l2vpn> </family> </neighbor> </group> </bpg> </protocols> </configuration>
Description	Protocol family for NLRIs in updates.

- **Contents** <inet>—Internet Protocol (IPv4) NLRI parameters.
 - <inet-vpn>—Internet Protocol (IPv4) Layer 3 VPN NLRI parameters.
 - <inet6>—Internet Protocol version 6 (IPv6) NLRI parameters.
 - <l2vpn>—MPLS-based Layer 2 VPN (L2VPN) NLRI parameters.

• <family> (configuration/routing-instances/instance/protocols/bgp)

<family> (configuration/routing-instances/instance/protocols/bgp)

```
Usage <configuration>
      <routing-instances>
        <instance>
          <protocols>
            <bgp>
              <family>
                <inet>...</inet>
                <inet-vpn>...</inet-vpn>
                <inet6>...</inet6>
                <l2vpn>...</l2vpn>
              </family>
            </bgp>
          </protocols>
        </instance>
      </routing-instances>
    </configuration>
```

Description Protocol family for NLRIIs in updates.

Contents <inet>—Internet Protocol (IPv4) NLRI parameters.

<inet-vpn>—Internet Protocol (IPv4) Layer 3 VPN NLRI parameters.

<inet6>—Internet Protocol version 6 (IPv6) NLRI parameters.

<|2vpn>—MPLS-based Layer 2 VPN (L2VPN) NLRI parameters.

<family> (configuration/routing-instances/instance/protocols/bgp/group)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bpg>
          <group>
            <family>
              <inet>...</inet>
              <inet-vpn>...</inet-vpn>
              <inet6>...</inet6>
              <l2vpn>...</l2vpn>
            </family>
          </group>
        </bpg>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Protocol family for NLRI in updates.

Contents <inet>—Internet Protocol (IPv4) NLRI parameters.

<inet-vpn>—Internet Protocol (IPv4) Layer 3 VPN NLRI parameters.

<inet6>—Internet Protocol version 6 (IPv6) NLRI parameters.

<l2vpn>—MPLS-based Layer 2 VPN (L2VPN) NLRI parameters.

<family> (configuration/routing-instances/instance/protocols/bgp/group/neighbor)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bpg>
          <group>
            <neighbor>
              <family>
                <inet>...</inet>
                <inet-vpn>...</inet-vpn>
                <inet6>...</inet6>
                <l2vpn>...</l2vpn>
              </family>
            </neighbor>
          </group>
        </bpg>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Protocol family for NLRI in updates.

- **Contents** <inet>—Internet Protocol (IPv4) NLRI parameters.
- <inet-vpn>—Internet Protocol (IPv4) Layer 3 VPN NLRI parameters.
- <inet6>—Internet Protocol version 6 (IPv6) NLRI parameters.
- <l2vpn>—MPLS-based Layer 2 VPN (L2VPN) NLRI parameters.

• <family> (configuration/routing-instances/instance/routing-options/auto-export)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <auto-export>
 <family>
 <inet>...</inet>
 </family>
 </auto-export>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description No documentation is available yet.

- **Contents** <inet>—Internet protocol (IPv4) parameters.

• <family> (configuration/routing-instances/instance/routing-options/interface-routes)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <interface-routes>
 <family>
 <name>name</name> <!-- identifier -->
 <import>...</import>
 </family>
 </interface-routes>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Address family.

- Contents** <import>—Import policy.
 <name>—No documentation is available yet.
 ■ inet—IPv4 family.
 ■ inet6—IPv6 family.

<family> (configuration/routing-options/auto-export)

- Usage** <configuration>
 <routing-options>
 <auto-export>
 <family>
 <inet>...</inet>
 </family>
 </auto-export>
 </routing-options>
</configuration>
- Description** No documentation is available yet.
- Contents** <inet>—Internet protocol (IPv4) parameters.

<family> (configuration/routing-options/interface-routes)

- Usage** <configuration>
 <routing-options>
 <interface-routes>
 <family>
 <name>name</name> <!-- identifier -->
 <import>...</import>
 </family>
 </interface-routes>
 </routing-options>
</configuration>
- Description** Address family.
- Contents** <import>—Import policy.
 <name>—No documentation is available yet.
 ■ inet—IPv4 family.
 ■ inet6—IPv6 family.

- <fast-reroute> (configuration/protocols/mpls/label-switched-path)

Usage

```
<configuration>
  <protocols>
    <mpls>
      <label-switched-path>
        <fast-reroute>
          <hop-limit>hop-limit</hop-limit>
          <bandwidth>bandwidth</bandwidth>
          <no-include/>
          <include>...</include>
          <no-exclude/>
          <exclude>...</exclude>
        </fast-reroute>
      </label-switched-path>
    </mpls>
  </protocols>
</configuration>
```

Description Fast reroute.

Contents

- <bandwidth>—Bandwidth to reserve (bps).
- <exclude>—Groups to reject.
- <hop-limit>—Maximum allowed router hops.
- <include>—Groups to require.
- <no-exclude>—Disable exclude checking.
- <no-include>—Disable include checking.

- <fastether-options> (configuration/interfaces/interface)

Usage

```
<configuration>
  <interfaces>
    <interface>
      <fastether-options>
        <loopback/>
        <flow-control/>
        <source-filtering/>
        <ingress-rate-limit>megabits per second</ingress-rate-limit>
        <source-address-filter>...</source-address-filter>
        <ieee-802.3ad>ieee-802.3ad</ieee-802.3ad>
      </fastether-options>
    </interface>
  </interfaces>
</configuration>
```

Description Fast Ethernet interface-specific options.

Contents

- <flow-control>—Enable flow control.
- <ieee-802.3ad>—Join an aggregated Ethernet interface.

<ingress-rate-limit>—Ingress rate at the port.
<loopback>—Enable loopback.
<source-address-filter>—Source address filters.
<source-filtering>—Enable source address filtering.

<fate-sharing> (configuration/routing-instances/instance/routing-options)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <fate-sharing>
 <group>...</group>
 </fate-sharing>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Fate sharing links/nodes database.

Contents <group>—Group of objects sharing common characteristics.

<fate-sharing> (configuration/routing-options)

Usage <configuration>
 <routing-options>
 <fate-sharing>
 <group>...</group>
 </fate-sharing>
 </routing-options>
</configuration>

Description Fate sharing links/nodes database.

Contents <group>—Group of objects sharing common characteristics.

- <fields> (configuration/accounting-options/interface-profile)
 - **Usage** <configuration>
 - <accounting-options>
 - <interface-profile>
 - <fields>
 - <input-bytes/>
 - <output-bytes/>
 - <input-packets/>
 - <output-packets/>
 - <input-errors/>
 - <output-errors/>
 - <input-multicast/>
 - <output-multicast/>
 - <input-unicast/>
 - <output-unicast/>
 - <unsupported-protocol/>
 - <rpf-check-bytes/>
 - <rpf-check-packets/>
 - <rpf-check6-bytes/>
 - <rpf-check6-packets/>
 - </fields>
 - </interface-profile>
 - </accounting-options>
 - </configuration>
- **Description** Statistics to log to file.
- **Contents**
 - <input-bytes>—Input bytes.
 - <input-errors>—Generic input error packets.
 - <input-multicast>—Input packets arriving by multicast.
 - <input-packets>—Input packets.
 - <input-unicast>—Input unicast packets.
 - <output-bytes>—Output bytes.
 - <output-errors>—Generic output error packets.
 - <output-multicast>—Output packets sent by multicast.
 - <output-packets>—Output packets.
 - <output-unicast>—Output unicast packets.
 - <rpf-check-bytes>—Bytes failing IPv4 reverse-path forwarding check.
 - <rpf-check-packets>—Packets failing IPv4 reverse-path forwarding check.
 - <rpf-check6-bytes>—Bytes failing IPv6 reverse-path forwarding check.
 - <rpf-check6-packets>—Packets failing IPv6 reverse-path forwarding check.
 - <unsupported-protocol>—Packets for unsupported protocol.

<fields> (configuration/accounting-options/routing-engine-profile)

```
Usage   <configuration>
          <accounting-options>
              <routing-engine-profile>
                  <fields>
                      <host-name/>
                      <date/>
                      <time-of-day/>
                      <uptime/>
                      <cpu-load-1/>
                      <cpu-load-5/>
                      <cpu-load-15/>
                  </fields>
              </routing-engine-profile>
          </accounting-options>
      </configuration>
```

Description Information to log to file.

Contents <cpu-load-1>—Average system load over last 1 minute.
<cpu-load-15>—Average system load over last 15 minutes.
<cpu-load-5>—Average system load over last 5 minutes.
<date>—Date.
<host-name>—Host name for this router.
<time-of-day>—Time of day.
<uptime>—Time since last reboot.

<file> (configuration/accounting-options)

```
Usage   <configuration>
          <accounting-options>
              <file>
                  <name>name</name>    <!-- identifier -->
                  <size>size</size>
                  <files>files</files>
                  <transfer-interval>minutes</transfer-interval>
                  <archive-sites>...</archive-sites>
              </file>
          </accounting-options>
      </configuration>
```

Description Accounting data file configuration.

Contents <archive-sites>—No documentation is available yet.
<files>—Maximum number of files for this profile.
<name>—Name of file to hold accounting data.

- <size>—Maximum accounting data file size.
- <transfer-interval>—Frequency at which to transfer files to archive sites.

<file> (configuration/forwarding-options/helpers/traceoptions)

Usage <configuration>
 <forwarding-options>
 <helpers>
 <traceoptions>
 <file>
 <size>size</size>
 <files>files</files>
 </file>
 </traceoptions>
 </helpers>
 </forwarding-options>
 </configuration>

Description Trace file options.

Contents <files>—Maximum number of trace files.

 <size>—Maximum trace file size, in kilobytes.

<file> (configuration/forwarding-options/sampling/output)

Usage <configuration>
 <forwarding-options>
 <sampling>
 <output>
 <file>
 <disable/>
 <filename>filename</filename> <!-- mandatory -->
 <files>files</files>
 <size>size</size>
 <world-readable/>
 <stamp/>
 </file>
 </output>
 </sampling>
 </forwarding-options>
 </configuration>

Description Configure parameters for dumping sampled packets.

Contents <disable>—Disable sampled packet dumps.

 <filename>—Name of file to contain sampled packet dumps.

 <files>—Maximum number of sampled packet dump files.

 <size>—Maximum sample dump file size.

<stamp>—Timestamp every packet in the dump.
 <world-readable>—Allow any user to read the sampled dump.

<file> (configuration/forwarding-options/sampling/traceoptions)

Usage <configuration>
 <forwarding-options>
 <sampling>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </sampling>
 </forwarding-options>
 </configuration>

Description Trace file information.

Contents <filename>—Filename to hold trace information.
 <files>—Maximum number of trace files.
 <size>—Maximum trace file size.
 <world-readable>—Allow any user to read the log file.

<file> (configuration/interfaces/traceoptions)

Usage <configuration>
 <interfaces>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </interfaces>
 </configuration>

Description Trace file information.

Contents <filename>—Filename to hold trace information.
 <files>—Maximum number of trace files.
 <size>—Maximum trace file size.
 <world-readable>—Allow any user to read the log file.

- <file> (configuration/protocols/bgp/group/neighbor/traceoptions)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file to hold trace information.

 <files>—Maximum number of trace files.

 <no-stamp>—Do not timestamp trace file.

 <replace>—Replace trace file rather than appending to it.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/bgp/group/traceoptions)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file to hold trace information.
 <files>—Maximum number of trace files.
 <no-stamp>—Do not timestamp trace file.
 <replace>—Replace trace file rather than appending to it.
 <size>—Maximum trace file size.
 <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/bgp/traceoptions)

Usage <configuration>
 <protocols>
 <bgp>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </bgp>
 </protocols>
 </configuration>

Description Trace file options.

- **Contents** <filename>—Name of file to hold trace information.
- <files>—Maximum number of trace files.
- <no-stamp>—Do not timestamp trace file.
- <replace>—Replace trace file rather than appending to it.
- <size>—Maximum trace file size.
- <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/dvmrp/traceoptions)

```
Usage  <configuration>
       <protocols>
         <dvmrp>
           <traceoptions>
             <file>
               <filename>filename</filename>    <!-- mandatory -->
               <replace/>
               <size>size</size>
               <files>files</files>
               <no-stamp/>
               <world-readable/>
             </file>
           </traceoptions>
         </dvmrp>
       </protocols>
     </configuration>
```

Description Trace file options.

- Contents** <filename>—Name of file to hold trace information.
- <files>—Maximum number of trace files.
- <no-stamp>—Do not timestamp trace file.
- <replace>—Replace trace file rather than appending to it.
- <size>—Maximum trace file size.
- <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/igmp/traceoptions)

```
Usage  <configuration>
        <protocols>
            <igmp>
                <traceoptions>
                    <file>
                        <filename>filename</filename>    <!-- mandatory -->
                        <replace/>
                        <size>size</size>
                        <files>files</files>
                        <no-stamp/>
                        <world-readable/>
                    </file>
                </traceoptions>
            </igmp>
        </protocols>
    </configuration>
```

Description Trace file options.

Contents

- <filename>—Name of file to hold trace information.
- <files>—Maximum number of trace files.
- <no-stamp>—Do not timestamp trace file.
- <replace>—Replace trace file rather than appending to it.
- <size>—Maximum trace file size.
- <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/isis/traceoptions)

```
Usage  <configuration>
        <protocols>
            <isis>
                <traceoptions>
                    <file>
                        <filename>filename</filename>    <!-- mandatory -->
                        <replace/>
                        <size>size</size>
                        <files>files</files>
                        <no-stamp/>
                        <world-readable/>
                    </file>
                </traceoptions>
            </isis>
        </protocols>
    </configuration>
```

Description Trace file options.

- **Contents** <filename>—Name of file to hold trace information.
- <files>—Maximum number of trace files.
- <no-stamp>—Do not timestamp trace file.
- <replace>—Replace trace file rather than appending to it.
- <size>—Maximum trace file size.
- <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/l2circuit/traceoptions)

```
Usage  <configuration>
       <protocols>
         <l2circuit>
           <traceoptions>
             <file>
               <filename>filename</filename>    <!-- mandatory -->
               <replace/>
               <size>size</size>
               <files>files</files>
               <no-stamp/>
               <world-readable/>
             </file>
           </traceoptions>
         </l2circuit>
       </protocols>
     </configuration>
```

Description Trace file options.

- Contents** <filename>—Name of file to hold trace information.
- <files>—Maximum number of trace files.
- <no-stamp>—Do not timestamp trace file.
- <replace>—Replace trace file rather than appending to it.
- <size>—Maximum trace file size.
- <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/ldp/traceoptions)

```
Usage  <configuration>
        <protocols>
            <ldp>
                <traceoptions>
                    <file>
                        <filename>filename</filename>    <!-- mandatory -->
                        <replace/>
                        <size>size</size>
                        <files>files</files>
                        <no-stamp/>
                        <world-readable/>
                    </file>
                </traceoptions>
            </ldp>
        </protocols>
    </configuration>
```

Description Trace file options.

Contents

- <filename>—Name of file to hold trace information.
- <files>—Maximum number of trace files.
- <no-stamp>—Do not timestamp trace file.
- <replace>—Replace trace file rather than appending to it.
- <size>—Maximum trace file size.
- <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/ldp/traffic-statistics)

```
Usage  <configuration>
        <protocols>
            <ldp>
                <traffic-statistics>
                    <file>
                        <filename>filename</filename>    <!-- mandatory -->
                        <replace/>
                        <size>size</size>
                        <files>files</files>
                        <no-stamp/>
                        <world-readable/>
                    </file>
                </traffic-statistics>
            </ldp>
        </protocols>
    </configuration>
```

Description Statistics file options.

- **Contents** <filename>—Name of file to hold trace information.
- <files>—Maximum number of trace files.
- <no-stamp>—Do not timestamp trace file.
- <replace>—Replace trace file rather than appending to it.
- <size>—Maximum trace file size.
- <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/link-management/traceoptions)

```
Usage  <configuration>
       <protocols>
         <link-management>
           <traceoptions>
             <file>
               <filename>filename</filename>    <!-- mandatory -->
               <replace/>
               <size>size</size>
               <files>files</files>
               <no-stamp/>
               <world-readable/>
             </file>
           </traceoptions>
         </link-management>
       </protocols>
     </configuration>
```

Description Trace file options.

- Contents** <filename>—Name of file to hold trace information.
- <files>—Maximum number of trace files.
- <no-stamp>—Do not timestamp trace file.
- <replace>—Replace trace file rather than appending to it.
- <size>—Maximum trace file size.
- <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/mpls/statistics)

```
Usage  <configuration>
        <protocols>
            <mpls>
                <statistics>
                    <file>
                        <filename>filename</filename>    <!-- mandatory -->
                        <replace/>
                        <size>size</size>
                        <files>files</files>
                        <no-stamp/>
                        <world-readable/>
                    </file>
                </statistics>
            </mpls>
        </protocols>
    </configuration>
```

Description Statistics file options.

Contents

- <filename>—Name of file to hold trace information.
- <files>—Maximum number of trace files.
- <no-stamp>—Do not timestamp trace file.
- <replace>—Replace trace file rather than appending to it.
- <size>—Maximum trace file size.
- <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/mpls/traceoptions)

```
Usage  <configuration>
        <protocols>
            <mpls>
                <traceoptions>
                    <file>
                        <filename>filename</filename>    <!-- mandatory -->
                        <replace/>
                        <size>size</size>
                        <files>files</files>
                        <no-stamp/>
                        <world-readable/>
                    </file>
                </traceoptions>
            </mpls>
        </protocols>
    </configuration>
```

Description Trace file options.

<file> (configuration/protocols/msdp/group/peer/traceoptions)

- **Contents** <filename>—Name of file to hold trace information.
- <files>—Maximum number of trace files.
- <no-stamp>—Do not timestamp trace file.
- <replace>—Replace trace file rather than appending to it.
- <size>—Maximum trace file size.
- <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/msdp/group/peer/traceoptions)

Usage <configuration>
 <protocols>
 <msdp>
 <group>
 <peer>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </peer>
 </group>
 </msdp>
 </protocols>
 </configuration>

Description Trace file options.

- **Contents** <filename>—Name of file to hold trace information.
- <files>—Maximum number of trace files.
- <no-stamp>—Do not timestamp trace file.
- <replace>—Replace trace file rather than appending to it.
- <size>—Maximum trace file size.
- <world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/msdp/group/traceoptions)

```

Usage   <configuration>
          <protocols>
              <msdp>
                  <group>
                      <traceoptions>
                          <file>
                              <filename>filename</filename>    <!-- mandatory -->
                              <replace/>
                              <size>size</size>
                              <files>files</files>
                              <no-stamp/>
                              <world-readable/>
                          </file>
                      </traceoptions>
                  </group>
              </msdp>
          </protocols>
      </configuration>
  
```

Description Trace file options.

Contents <filename>—Name of file to hold trace information.

<files>—Maximum number of trace files.

<no-stamp>—Do not timestamp trace file.

<replace>—Replace trace file rather than appending to it.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

- <file> (configuration/protocols/msdp/peer/traceoptions)

Usage <configuration>
 <protocols>
 <msdp>
 <peer>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </peer>
 </msdp>
 </protocols>
</configuration>

Description Trace file options.

Contents <filename>—Name of file to hold trace information.

<files>—Maximum number of trace files.

<no-stamp>—Do not timestamp trace file.

<replace>—Replace trace file rather than appending to it.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

- <file> (configuration/protocols/msdp/traceoptions)

Usage <configuration>
 <protocols>
 <msdp>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </msdp>
 </protocols>
</configuration>

Description Trace file options.

Contents	<filename>—Name of file to hold trace information.	•
	<files>—Maximum number of trace files.	•
	<no-stamp>—Do not timestamp trace file.	•
	<replace>—Replace trace file rather than appending to it.	•
	<size>—Maximum trace file size.	•
	<world-readable>—Allow any user to read the log file.	•

<file> (configuration/protocols/ospf/traceoptions)

```

Usage   <configuration>
          <protocols>
            <ospf>
              <traceoptions>
                <file>
                  <filename>filename</filename>    <!-- mandatory -->
                  <replace/>
                  <size>size</size>
                  <files>files</files>
                  <no-stamp/>
                  <world-readable/>
                </file>
              </traceoptions>
            </ospf>
          </protocols>
        </configuration>
      
```

Description Trace file options.

Contents	<filename>—Name of file to hold trace information.	•
	<files>—Maximum number of trace files.	•
	<no-stamp>—Do not timestamp trace file.	•
	<replace>—Replace trace file rather than appending to it.	•
	<size>—Maximum trace file size.	•
	<world-readable>—Allow any user to read the log file.	•

- <file> (configuration/protocols/pim/traceoptions)

```

Usage   <configuration>
          <protocols>
              <pim>
                  <traceoptions>
                      <file>
                          <filename>filename</filename>    <!-- mandatory -->
                          <replace/>
                          <size>size</size>
                          <files>files</files>
                          <no-stamp/>
                          <world-readable/>
                      </file>
                  </traceoptions>
              </pim>
          </protocols>
      </configuration>
  
```

Description Trace file options.

Contents

- <filename>—Name of file to hold trace information.
- <files>—Maximum number of trace files.
- <no-stamp>—Do not timestamp trace file.
- <replace>—Replace trace file rather than appending to it.
- <size>—Maximum trace file size.
- <world-readable>—Allow any user to read the log file.

- <file> (configuration/protocols/rip/traceoptions)

```

Usage   <configuration>
          <protocols>
              <rip>
                  <traceoptions>
                      <file>
                          <filename>filename</filename>    <!-- mandatory -->
                          <replace/>
                          <size>size</size>
                          <files>files</files>
                          <no-stamp/>
                          <world-readable/>
                      </file>
                  </traceoptions>
              </rip>
          </protocols>
      </configuration>
  
```

Description Trace file options.

Contents	<filename>—Name of file to hold trace information.
	<files>—Maximum number of trace files.
	<no-stamp>—Do not timestamp trace file.
	<replace>—Replace trace file rather than appending to it.
	<size>—Maximum trace file size.
	<world-readable>—Allow any user to read the log file.

<file> (configuration/protocols/ripng/traceoptions)

```

Usage   <configuration>
          <protocols>
              <ripng>
                  <traceoptions>
                      <file>
                          <filename>filename</filename>    <!-- mandatory -->
                          <replace/>
                          <size>size</size>
                          <files>files</files>
                          <no-stamp/>
                          <world-readable/>
                      </file>
                  </traceoptions>
              </ripng>
          </protocols>
      </configuration>
  
```

Description Trace file options.

Contents	<filename>—Name of file to hold trace information.
	<files>—Maximum number of trace files.
	<no-stamp>—Do not timestamp trace file.
	<replace>—Replace trace file rather than appending to it.
	<size>—Maximum trace file size.
	<world-readable>—Allow any user to read the log file.

- <file> (configuration/protocols/router-advertisement/traceoptions)

Usage <configuration>
 <protocols>
 <router-advertisement>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </router-advertisement>
 </protocols>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file to hold trace information.
 <files>—Maximum number of trace files.
 <no-stamp>—Do not timestamp trace file.
 <replace>—Replace trace file rather than appending to it.
 <size>—Maximum trace file size.
 <world-readable>—Allow any user to read the log file.

- <file> (configuration/protocols/router-discovery/traceoptions)

Usage <configuration>
 <protocols>
 <router-discovery>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </router-discovery>
 </protocols>
 </configuration>

Description Trace file options.

Contents	<filename>—Name of file to hold trace information.	•
	<files>—Maximum number of trace files.	•
	<no-stamp>—Do not timestamp trace file.	•
	<replace>—Replace trace file rather than appending to it.	•
	<size>—Maximum trace file size.	•
	<world-readable>—Allow any user to read the log file.	•

<file> (configuration/protocols/rsvp/traceoptions)

```

Usage   <configuration>
          <protocols>
            <rsvp>
              <traceoptions>
                <file>
                  <filename>filename</filename>    <!-- mandatory -->
                  <replace/>
                  <size>size</size>
                  <files>files</files>
                  <no-stamp/>
                  <world-readable/>
                </file>
              </traceoptions>
            </rsvp>
          </protocols>
        </configuration>
      
```

Description Trace file options.

Contents	<filename>—Name of file to hold trace information.	•
	<files>—Maximum number of trace files.	•
	<no-stamp>—Do not timestamp trace file.	•
	<replace>—Replace trace file rather than appending to it.	•
	<size>—Maximum trace file size.	•
	<world-readable>—Allow any user to read the log file.	•

- <file> (configuration/protocols/vrrp/traceoptions)
 - **Usage** <configuration>
 <protocols>
 <vrrp>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <size>size</size>
 <files>files</files>
 <world-readable/>
 </file>
 </traceoptions>
 </vrrp>
 </protocols>
 </configuration>
 - **Description** Trace file information.
 - **Contents** <filename>—Filename to hold trace information.
 <files>—Maximum number of trace files.
 <size>—Maximum trace file size.
 <world-readable>—Allow any user to read the log file.
- <file> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/traceoptions)
 - **Usage** <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bpg>
 <group>
 <neighbor>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </neighbor>
 </group>
 </bpg>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>
 - **Description** Trace file options.

Contents	<filename>—Name of file to hold trace information.
	<files>—Maximum number of trace files.
	<no-stamp>—Do not timestamp trace file.
	<replace>—Replace trace file rather than appending to it.
	<size>—Maximum trace file size.
	<world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/bgp/group/traceoptions)

```
Usage <configuration>
      <routing-instances>
        <instance>
          <protocols>
            <bpg>
              <group>
                <traceoptions>
                  <file>
                    <filename>filename</filename>    <!-- mandatory -->
                    <replace/>
                    <size>size</size>
                    <files>files</files>
                    <no-stamp/>
                    <world-readable/>
                  </file>
                </traceoptions>
              </group>
            </bpg>
          </protocols>
        </instance>
      </routing-instances>
    </configuration>
```

Description Trace file options.

Contents	<filename>—Name of file to hold trace information.
	<files>—Maximum number of trace files.
	<no-stamp>—Do not timestamp trace file.
	<replace>—Replace trace file rather than appending to it.
	<size>—Maximum trace file size.
	<world-readable>—Allow any user to read the log file.

- <file> (configuration/routing-instances/instance/protocols/bgp/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file to hold trace information.

 <files>—Maximum number of trace files.

 <no-stamp>—Do not timestamp trace file.

 <replace>—Replace trace file rather than appending to it.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/isis/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <isis>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </isis>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file to hold trace information.

<files>—Maximum number of trace files.

<no-stamp>—Do not timestamp trace file.

<replace>—Replace trace file rather than appending to it.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

- <file> (configuration/routing-instances/instance/protocols/l2vpn/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <l2vpn>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </l2vpn>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file to hold trace information.

 <files>—Maximum number of trace files.

 <no-stamp>—Do not timestamp trace file.

 <replace>—Replace trace file rather than appending to it.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/ldp/traceoptions)

```
Usage   <configuration>
          <routing-instances>
              <instance>
                  <protocols>
                      <ldp>
                          <traceoptions>
                              <file>
                                  <filename>filename</filename>    <!-- mandatory -->
                                  <replace/>
                                  <size>size</size>
                                  <files>files</files>
                                  <no-stamp/>
                                  <world-readable/>
                              </file>
                          </traceoptions>
                      </ldp>
                  </protocols>
              </instance>
          </routing-instances>
      </configuration>
```

Description Trace file options.

Contents

- <filename>—Name of file to hold trace information.
- <files>—Maximum number of trace files.
- <no-stamp>—Do not timestamp trace file.
- <replace>—Replace trace file rather than appending to it.
- <size>—Maximum trace file size.
- <world-readable>—Allow any user to read the log file.

- <file> (configuration/routing-instances/instance/protocols/ldp/traffic-statistics)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ldp>
 <traffic-statistics>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traffic-statistics>
 </ldp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Statistics file options.

Contents <filename>—Name of file to hold trace information.

 <files>—Maximum number of trace files.

 <no-stamp>—Do not timestamp trace file.

 <replace>—Replace trace file rather than appending to it.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/ospf/traceoptions) . . .

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ospf>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </ospf>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file to hold trace information.
 <files>—Maximum number of trace files.
 <no-stamp>—Do not timestamp trace file.
 <replace>—Replace trace file rather than appending to it.
 <size>—Maximum trace file size.
 <world-readable>—Allow any user to read the log file.

- <file> (configuration/routing-instances/instance/protocols/pim/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <pim>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </pim>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file to hold trace information.

 <files>—Maximum number of trace files.

 <no-stamp>—Do not timestamp trace file.

 <replace>—Replace trace file rather than appending to it.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/protocols/rip/traceoptions) . . .

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <rip>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </rip>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file to hold trace information.
 <files>—Maximum number of trace files.
 <no-stamp>—Do not timestamp trace file.
 <replace>—Replace trace file rather than appending to it.
 <size>—Maximum trace file size.
 <world-readable>—Allow any user to read the log file.

- <file> (configuration/routing-instances/instance/protocols/router-discovery/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <router-discovery>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </router-discovery>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file to hold trace information.

 <files>—Maximum number of trace files.

 <no-stamp>—Do not timestamp trace file.

 <replace>—Replace trace file rather than appending to it.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/routing-options/auto-export/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <auto-export>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </auto-export>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file to hold trace information.

<files>—Maximum number of trace files.

<no-stamp>—Do not timestamp trace file.

<replace>—Replace trace file rather than appending to it.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

- <file> (configuration/routing-instances/instance/routing-options/resolution/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <resolution>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </resolution>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Trace file options.

Contents <filename>—Name of file to hold trace information.

 <files>—Maximum number of trace files.

 <no-stamp>—Do not timestamp trace file.

 <replace>—Replace trace file rather than appending to it.

 <size>—Maximum trace file size.

 <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-instances/instance/routing-options/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Trace file options.

Contents <filename>—Name of file to hold trace information.
<files>—Maximum number of trace files.
<no-stamp>—Do not timestamp trace file.
<replace>—Replace trace file rather than appending to it.
<size>—Maximum trace file size.
<world-readable>—Allow any user to read the log file.

<file> (configuration/routing-options/auto-export/traceoptions)

Usage <configuration>
 <routing-options>
 <auto-export>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </auto-export>
 </routing-options>
</configuration>

Description Trace file options.

- **Contents** <filename>—Name of file to hold trace information.
- <files>—Maximum number of trace files.
- <no-stamp>—Do not timestamp trace file.
- <replace>—Replace trace file rather than appending to it.
- <size>—Maximum trace file size.
- <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-options/resolution/traceoptions)

Usage <configuration>
 <routing-options>
 <resolution>
 <traceoptions>
 <file>
 <filename>filename</filename> <!-- mandatory -->
 <replace/>
 <size>size</size>
 <files>files</files>
 <no-stamp/>
 <world-readable/>
 </file>
 </traceoptions>
 </resolution>
 </routing-options>
 </configuration>

Description Trace file options.

- Contents** <filename>—Name of file to hold trace information.
- <files>—Maximum number of trace files.
 - <no-stamp>—Do not timestamp trace file.
 - <replace>—Replace trace file rather than appending to it.
 - <size>—Maximum trace file size.
 - <world-readable>—Allow any user to read the log file.

<file> (configuration/routing-options/traceoptions)

Usage

```

<configuration>
  <routing-options>
    <traceoptions>
      <file>
        <filename>filename</filename>    <!-- mandatory -->
        <replace/>
        <size>size</size>
        <files>files</files>
        <no-stamp/>
        <world-readable/>
      </file>
    </traceoptions>
  </routing-options>
</configuration>
```

Description Trace file options.

Contents <filename>—Name of file to hold trace information.

<files>—Maximum number of trace files.

<no-stamp>—Do not timestamp trace file.

<replace>—Replace trace file rather than appending to it.

<size>—Maximum trace file size.

<world-readable>—Allow any user to read the log file.

<file> (configuration/security/traceoptions)

Usage

```

<configuration>
  <security>
    <traceoptions>
      <file>
        <size>bytes</size>
        <files>files</files>
      </file>
    </traceoptions>
  </security>
</configuration>
```

Description Trace file options.

Contents <files>—Maximum number of trace files.

<size>—Maximum trace file size.

- <file> (configuration/snmp/traceoptions)

Usage <configuration>
 <snmp>
 <traceoptions>
 <file>
 <size>bytes</size>
 <files>files</files>
 </file>
 </traceoptions>
 </snmp>
 </configuration>

Description Trace file options.

Contents <files>—Maximum number of trace files.

 <size>—Maximum trace file size.

- <file> (configuration/system/syslog)

Usage <configuration>
 <system>
 <syslog>
 <file>
 <name>name</name> <!-- identifier -->
 <contents>...</contents>
 <archive>...</archive>
 </file>
 </syslog>
 </system>
 </configuration>

Description Name of file for logging data.

Contents <archive>—Archive file information.

 <contents>—No documentation is available yet.

 <name>—File to record logging data.

- <fill-level> (configuration/class-of-service/drop-profiles)

Usage <configuration>
 <class-of-service>
 <drop-profiles>
 <fill-level>
 <name>name</name> <!-- identifier -->
 <drop-probability>drop-probability</drop-probability> <!-- mandatory -->
 </fill-level>
 </drop-profiles>
 </class-of-service>
 </configuration>

Description Fill-level value of data point.

Contents <drop-probability>—Probability packet will be dropped.

<name>—Percentage the queue is full.

<fill-level> (configuration/class-of-service/drop-profiles/interpolate)

```
Usage  <configuration>
        <class-of-service>
            <drop-profiles>
                <interpolate>
                    <fill-level>
                        <name>name</name>    <!-- identifier -->
                    </fill-level>
                </interpolate>
            </drop-profiles>
        </class-of-service>
    </configuration>
```

Description Data points for queue full percentage.

Contents <name>—Data points for queue full percentage.

<filter> (configuration/firewall/family/inet)

```
Usage  <configuration>
        <firewall>
            <family>
                <inet>
                    <filter>
                        <name>name</name>    <!-- identifier -->
                        <accounting-profile>...</accounting-profile>
                        <interface-specific/>
                        <policer>...</policer>
                        <term>...</term>
                    </filter>
                </inet>
            </family>
        </firewall>
    </configuration>
```

Description No documentation is available yet.

Contents <accounting-profile>—Accounting profile name.

<interface-specific>—Any counters defined will be interface specific.

<name>—Filter name.

<policer>—Define a policer.

<term>—Define a firewall term.

- <filter> (configuration/firewall/family/inet6)

Usage <configuration>
 <firewall>
 <family>
 <inet6>
 <filter>
 <name>*name*</name> <!-- identifier -->
 <accounting-profile>...</accounting-profile>
 <interface-specific/>
 <policer>...</policer>
 <term>...</term>
 </filter>
 </inet6>
 </family>
 </firewall>
 </configuration>

Description No documentation is available yet.

Contents <accounting-profile>—Accounting profile name.

 <interface-specific>—Any counters defined will be interface specific.

 <name>—Filter name.

 <policer>—Define a policer.

 <term>—Define a firewall term.

- <filter> (configuration/interfaces/interface/unit/family/inet)

Usage <configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <inet>
 <filter>
 <input>*input*</input>
 <output>*output*</output>
 <group>*group*</group>
 </filter>
 </inet>
 </family>
 </unit>
 </interface>
 </interfaces>
 </configuration>

Description Packet filtering.

- Contents** <group>—Group of which this interface is a member.
 <input>—Name of filter applied to received packets.
 <output>—Name of filter applied to transmitted packets.

<filter> (configuration/interfaces/interface/unit/family/inet6)

```
Usage  <configuration>
       <interfaces>
         <interface>
           <unit>
             <family>
               <inet6>
                 <filter>
                   <input>input</input>
                   <output>output</output>
                   <group>group</group>
                 </filter>
               </inet6>
             </family>
           </unit>
         </interface>
       </interfaces>
     </configuration>
```

- Description** Packet filtering.
- Contents** <group>—Group of which this interface is a member.
 <input>—Name of filter applied to received packets.
 <output>—Name of filter applied to transmitted packets.

- <filter> (configuration/protocols/bgp/group/neighbor/traceoptions/flag)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <group>
        <neighbor>
          <traceoptions>
            <flag>
              <filter>
                <match-on>match-on-choice</match-on>    <!-- mandatory -->
                <policy>...</policy>    <!-- mandatory -->
              </filter>
            </flag>
          </traceoptions>
        </neighbor>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

- prefix—Filter based on prefix.

<policy>—Filter policy.

- <filter> (configuration/protocols/bgp/group/traceoptions/flag)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <group>
        <traceoptions>
          <flag>
            <filter>
              <match-on>match-on-choice</match-on>    <!-- mandatory -->
              <policy>...</policy>    <!-- mandatory -->
            </filter>
          </flag>
        </traceoptions>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

- prefix—Filter based on prefix.

<policy>—Filter policy.

<filter> (configuration/protocols/bgp/traceoptions/flag)

```
Usage  <configuration>
        <protocols>
            <bgp>
                <traceoptions>
                    <flag>
                        <filter>
                            <match-on>match-on-choice</match-on>    <!-- mandatory -->
                            <policy>...</policy>    <!-- mandatory -->
                        </filter>
                    </flag>
                </traceoptions>
            </bgp>
        </protocols>
    </configuration>
```

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

- prefix—Filter based on prefix.

<policy>—Filter policy.

<filter> (configuration/protocols/rip/traceoptions/flag)

```
Usage  <configuration>
        <protocols>
            <rip>
                <traceoptions>
                    <flag>
                        <filter>
                            <match-on>match-on-choice</match-on>    <!-- mandatory -->
                            <policy>...</policy>    <!-- mandatory -->
                        </filter>
                    </flag>
                </traceoptions>
            </rip>
        </protocols>
    </configuration>
```

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

- prefix—Filter based on prefix.

<policy>—Filter policy.

- <filter> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/traceoptions/flag)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <traceoptions>
 <flag>
 <filter>
 <match-on>match-on-choice</match-on> <!-- mandatory -->
 <policy>...</policy> <!-- mandatory -->
 </filter>
 </flag>
 </traceoptions>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

■ prefix—Filter based on prefix.

<policy>—Filter policy.

<filter> (configuration/routing-instances/instance/protocols/bgp/group/traceoptions/flag)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <traceoptions>
              <flag>
                <filter>
                  <match-on>match-on-choice</match-on>    <!-- mandatory -->
                  <policy>...</policy>    <!-- mandatory -->
                </filter>
              </flag>
            </traceoptions>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

- prefix—Filter based on prefix.

<policy>—Filter policy.

<filter> (configuration/routing-instances/instance/protocols/bgp/traceoptions/flag)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <traceoptions>
            <flag>
              <filter>
                <match-on>match-on-choice</match-on>    <!-- mandatory -->
                <policy>...</policy>    <!-- mandatory -->
              </filter>
            </flag>
          </traceoptions>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Filter to apply to this flag.

< filter> (configuration/routing-instances/instance/protocols/rip/traceoptions/flag)

- **Contents** <match-on>—Argument on which to match.
 - ■ prefix—Filter based on prefix.
 - <policy>—Filter policy.

• **<filter>** (configuration/routing-instances/instance/protocols/rip/traceoptions/flag)

```
Usage <configuration>
      <routing-instances>
        <instance>
          <protocols>
            <rip>
              <traceoptions>
                <flag>
                  <filter>
                    <match-on>match-on-choice</match-on>      <!-- mandatory -->
                    <policy>...</policy>    <!-- mandatory -->
                  </filter>
                </flag>
              </traceoptions>
            </rip>
          <protocols>
        </instance>
      </routing-instances>
</configuration>
```

Description Filter to apply to this flag.

Contents <match-on>—Argument on which to match.

- prefix—Filter based on prefix.

<policy>—Filter policy.

<filter-profile> (configuration/accounting-options)

```
Usage <configuration>
    <accounting-options>
        <filter-profile>
            <name>name</name>      <!-- identifier -->
            <file>file</file>
            <interval>minutes</interval>
            <counters>...</counters>  <!-- mandatory -->
        </filter-profile>
    </accounting-options>
</configuration>
```

Description Filter profile for accounting data.

Contents <counters>—Name of counter.

<file>—Name of file for accounting data.

<interval>—Polling interval.

<name>—Name of profile.

<finger> (configuration/system/services)

Usage

```
<configuration>
  <system>
    <services>
      <finger>
        <connection-limit>connection-limit</connection-limit>
        <rate-limit>rate-limit</rate-limit>
      </finger>
    </services>
  </system>
</configuration>
```

Description Allow finger requests from remote systems.

Contents

- <connection-limit>—Maximum number of allowed connections.
- <rate-limit>—Maximum number of connections per minute.

<firewall> (configuration)

Usage

```
<configuration>
  <firewall>
    <policer>...</policer>
    <family>...</family>
  </firewall>
</configuration>
```

Description Define a firewall configuration.

Contents

- <family>—Protocol family.
- <policer>—Policer template definition.

<flag> (configuration/access/traceoptions)

Usage

```
<configuration>
  <access>
    <traceoptions>
      <flag>
        <name>name</name>    <!-- identifier -->
      </flag>
    </traceoptions>
  </access>
</configuration>
```

Description Tracing parameters.

• **Contents** <name>—No documentation is available yet.

- all—Trace everything.
- authentication—All authentication module handling.
- chap—All CHAP messages and handling.
- configuration—Reading of configuration.
- radius—All RADIUS messages and handling.

<flag> (configuration/forwarding-options/helpers/traceoptions)

• **Usage** <configuration>
 <forwarding-options>
 <helpers>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </helpers>
 </forwarding-options>
</configuration>

• **Description** Area of fud on which to enable debugging output.

• **Contents** <name>—No documentation is available yet.

- address—Trace address management code.
- all—Trace all area of code.
- bootp—Trace BOOTP/DHCP service-specific code.
- config—Trace configuration code.
- domain—Trace DNS service-specific code.
- ifdb—Trace interface database code.
- io—Trace I/O code.
- main—Trace main loop code.
- rtsock—Trace routing socket code.
- tftp—Trace TFTP service-specific code.
- trace—Trace tracing code.
- ui—Trace user interface code.
- util—Trace miscellaneous utility code.

<flag> (configuration/interfaces/interface/traceoptions)

Usage

```
<configuration>
  <interfaces>
    <interface>
      <traceoptions>
        <flag>
          <name>name</name>  <!-- identifier -->
        </flag>
      </traceoptions>
    </interface>
  </interfaces>
</configuration>
```

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Enable all interface trace flags.
- event—Trace interface events.
- ipc—Trace interface IPC messages.
- media—Trace interface media changes.

<flag> (configuration/interfaces/traceoptions)

Usage

```
<configuration>
  <interfaces>
    <traceoptions>
      <flag>
        <name>name</name>  <!-- identifier -->
        <disable/>
      </flag>
    </traceoptions>
  </interfaces>
</configuration>
```

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Enable all configuration logging.
- change-events—Log changes that produce configuration events.
- config-states—Log the configuration state machine changes.
- kernel—Log configuration IPC messages to kernel.
- kernel-detail—Log details of configuration messages to kernel.

- <flag> (configuration/protocols/bgp/group/neighbor/traceoptions)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <filter>—Filter to apply to this flag.

 <name>—No documentation is available yet.

■ all—Trace everything.

■ aspath—No documentation is available yet.

■ damping—No documentation is available yet.

■ general—Trace general events.

■ keepalive—No documentation is available yet.

■ normal—Trace normal events.

■ open—Trace BGP open packets.

■ packets—Trace all BGP protocol packets.

■ policy—Trace policy processing.

■ route—Trace routing information.

■ state—Trace state transitions.

■ task—Trace routing protocol task processing.

- timer—Trace routing protocol timer processing.

- update—Trace BGP update packets.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/bgp/group/traceoptions)

```
Usage   <configuration>
          <protocols>
            <bgp>
              <group>
                <traceoptions>
                  <flag>
                    <name>name</name>    <!-- identifier -->
                    <send/>
                    <receive/>
                    <detail/>
                    <disable/>
                    <filter>...</filter>
                  </flag>
                </traceoptions>
              </group>
            </bgp>
          </protocols>
        </configuration>
```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- all—Trace everything.

- aspath—No documentation is available yet.

- damping—No documentation is available yet.

- general—Trace general events.

- keepalive—No documentation is available yet.

- normal—Trace normal events.

- open—Trace BGP open packets.

- packets—Trace all BGP protocol packets.

- policy—Trace policy processing.

<flag> (configuration/protocols/bgp/traceoptions)

- ■ route—Trace routing information.
- ■ state—Trace state transitions.
- ■ task—Trace routing protocol task processing.
- ■ timer—Trace routing protocol timer processing.
- ■ update—Trace BGP update packets.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/protocols/bgp/traceoptions)

Usage <configuration>
 <protocols>
 <bpg>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </bpg>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <filter>—Filter to apply to this flag.

 <name>—No documentation is available yet.

 ■ all—Trace everything.

 ■ aspath—No documentation is available yet.

 ■ damping—No documentation is available yet.

 ■ general—Trace general events.

 ■ keepalive—No documentation is available yet.

 ■ normal—Trace normal events.

 ■ open—Trace BGP open packets.

- packets—Trace all BGP protocol packets.
 - policy—Trace policy processing.
 - route—Trace routing information.
 - state—Trace state transitions.
 - task—Trace routing protocol task processing.
 - timer—Trace routing protocol timer processing.
 - update—Trace BGP update packets.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/protocols/dvmrp/traceoptions)

Usage <configuration>
 <protocols>
 <dvmrp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->

 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </dvmrp>
 </protocols>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- graft—Trace graft messages.
- neighbor—Trace neighbor probe packets.
- normal—Trace normal events.
- packets—Trace all DVMRP packets.

<flag> (configuration/protocols/igmp/traceoptions)

- poison—Trace poison-route-reverse packets.
- policy—Trace policy processing.
- probe—Trace probe packets.
- prune—Trace prune messages.
- report—Trace DVMRP route report packets.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/protocols/igmp/traceoptions)

Usage <configuration>
 <protocols>
 <igmp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </igmp>
 </protocols>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- leave—Trace leave group messages (IGMPv2 only).
- mtrace—Trace mtrace packets.

- normal—Trace normal events.
 - packets—Trace all IGMP packets.
 - policy—Trace policy processing.
 - query—Trace IGMP membership query messages.
 - report—Trace membership report messages.
 - route—Trace routing information.
 - state—Trace state transitions.
 - task—Trace routing protocol task processing.
 - timer—Trace routing protocol timer processing.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/protocols/isis/traceoptions)

Usage

```

<configuration>
  <protocols>
    <isis>
      <traceoptions>
        <flag>
          <name>name</name>    <!-- identifier -->
          <send/>
          <receive/>
          <detail/>
          <disable/>
        </flag>
      </traceoptions>
    </isis>
  </protocols>
</configuration>
```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- csn—Trace Complete Sequence Number packets.
- error—Trace errored packets.
- general—Trace general events.

<flag> (configuration/protocols/l2circuit/traceoptions)

- ■ hello—Trace Hello packets.
- ■ lsp—Trace Link State packets.
- ■ lsp-generation—Trace LSP generation.
- ■ normal—Trace normal events.
- ■ packets—Trace IS-IS packets.
- ■ policy—Trace policy processing.
- ■ psn—Trace Partial Sequence Number packets.
- ■ route—Trace routing information.
- ■ spf—Trace SPF events.
- ■ state—Trace state transitions.
- ■ task—Trace routing protocol task processing.
- ■ timer—Trace routing protocol timer processing.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/protocols/l2circuit/traceoptions)

Usage <configuration>
 <protocols>
 <l2circuit>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </l2circuit>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- connections—Trace l2circuit connections.
- error—Trace errors.
- fec—Trace l2circuit VC FEC advertisements.
- topology—Trace l2circuit topology changes.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/ldp/traceoptions)

Usage

```

<configuration>
  <protocols>
    <ldp>
      <traceoptions>
        <flag>
          <name>name</name>  <!-- identifier -->
          <send/>
          <receive/>
          <detail/>
          <disable/>
        </flag>
      </traceoptions>
    </ldp>
  </protocols>
</configuration>
```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- address—Trace address packets.
- all—Trace everything.
- binding—Trace label binding state.
- error—Trace errored packets.
- event—Trace LDP state machine events.
- general—Trace general events.
- initialization—Trace initialization packets.

<flag> (configuration/protocols/link-management/traceoptions)

- ■ label—Trace label packets.
 - ■ normal—Trace normal events.
 - ■ notification—Trace notification packets.
 - ■ packet-dump—Dump the contents of selected packet types.
 - ■ packets—Trace all LDP packets.
 - ■ path—Trace label path state.
 - ■ periodic—Trace periodic (Hello/Keepalive) packets.
 - ■ policy—Trace policy processing.
 - ■ route—Trace routing information.
 - ■ state—Trace state transitions.
 - ■ task—Trace routing protocol task processing.
 - ■ timer—Trace routing protocol timer processing.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/protocols/link-management/traceoptions)

Usage <configuration>
 <protocols>
 <link-management>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </link-management>
 </protocols>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything, do it all.
- init—Trace initialization events.
- parse—Trace parser processing.
- process—Trace general configuration processing.
- route-socket—Trace route-socket events.
- routing—Trace routing protocols interworking.
- server—Trace server processing.
- show—Trace show command servicing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/mpls/traceoptions)

Usage

```

<configuration>
  <protocols>
    <mpls>
      <traceoptions>
        <flag>
          <name>name</name>  <!-- identifier -->
        </flag>
      </traceoptions>
    </mpls>
  </protocols>
</configuration>
```

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- connection—Trace CCC activity.
- connection-detail—Trace CCC activity in detail.
- cspf—Trace CSPF computation.
- cspf-link—Trace links visited during CSPF.
- cspf-node—Trace nodes visited during CSPF.
- error—Trace error conditions.
- state—Trace state transitions.

- <flag> (configuration/protocols/msdp/group/peer/traceoptions)

Usage <configuration>
 <protocols>
 <msdp>
 <group>
 <peer>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </peer>
 </group>
 </msdp>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/msdp/group/traceoptions)

Usage

```

<configuration>
  <protocols>
    <msdp>
      <group>
        <traceoptions>
          <flag>
            <name>name</name>    <!-- identifier -->
            <send/>
            <receive/>
            <detail/>
            <disable/>
          </flag>
        </traceoptions>
      </group>
    </msdp>
  </protocols>
</configuration>
```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.
- state—Trace state transitions.

<flag> (configuration/protocols/msdp/peer/traceoptions)

- ■ task—Trace routing protocol task processing.
- ■ timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/msdp/peer/traceoptions)

Usage <configuration>
 <protocols>
 <msdp>
 <peer>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </peer>
 </msdp>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.

- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.
- • • • •
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.
- • • • •

<flag> (configuration/protocols/msdp/traceoptions)

Usage

```
<configuration>
  <protocols>
    <msdp>
      <traceoptions>
        <flag>
          <name>name</name>    <!-- identifier -->
          <send/>
          <receive/>
          <detail/>
          <disable/>
        </flag>
      </traceoptions>
    </msdp>
  </protocols>
</configuration>
```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- keepalive—Trace keepalive messages.
- normal—Trace normal events.
- packets—Trace all MSDP packets.
- policy—Trace policy processing.
- route—Trace routing information.
- source-active—Trace source-active messages.
- source-active-request—Trace source-active request messages.
- source-active-response—Trace source-active response messages.
- • • • •

<flag> (configuration/protocols/ospf/traceoptions)

- ■ state—Trace state transitions.
- ■ task—Trace routing protocol task processing.
- ■ timer—Trace routing protocol timer processing.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/protocols/ospf/traceoptions)

Usage <configuration>
 <protocols>
 <ospf>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </ospf>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- database-description—Trace database description packets.
- error—Trace errored packets.
- event—Trace OSPF state machine events.
- flooding—Trace LSA flooding.
- general—Trace general events.
- hello—Trace hello packets.
- lsa-ack—Trace LSA acknowledgement packets.
- lsa-request—Trace LSA request packets.
- lsa-update—Trace LSA update packets.

- normal—Trace normal events.
 - packet-dump—Dump the contents of selected packet types.
 - packets—Trace all OSPF packets.
 - policy—Trace policy processing.
 - route—Trace routing information.
 - spf—Trace SPF calculations.
 - state—Trace state transitions.
 - task—Trace routing protocol task processing.
 - timer—Trace routing protocol timer processing.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/protocols/pim/traceoptions)

Usage

```

<configuration>
  <protocols>
    <pim>
      <traceoptions>
        <flag>
          <name>name</name>    <!-- identifier -->
          <send/>
          <receive/>
          <detail/>
          <disable/>
        </flag>
      </traceoptions>
    </pim>
  </protocols>
</configuration>
```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- assert—Trace assert messages.
- autorp—Trace bootstrap/RP/auto-RP messages.
- bootstrap—Trace bootstrap/RP/auto-RP messages.

<flag> (configuration/protocols/rip/traceoptions)

-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
- general—Trace general events.
- graft—Trace join/prune/graft/graft-ack messages.
- hello—Trace hello packets.
- join—Trace join/prune/graft/graft-ack messages.
- normal—Trace normal events.
- packets—Trace all PIM packets.
- policy—Trace policy processing.
- prune—Trace join/prune/graft/graft-ack messages.
- register—Trace register/register-stop messages.
- route—Trace routing information.
- rp—Trace bootstrap/RP/auto-RP messages.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

• <flag> (configuration/protocols/rip/traceoptions)

Usage <configuration>
 <protocols>
 <rip>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </rip>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- all—Trace everything.
- auth—Trace RIP authentication.
- error—Trace RIP errors.
- expiration—Trace RIP route expiration processing.
- general—Trace general events.
- holddown—Trace RIP holddown processing.
- normal—Trace normal events.
- packets—Trace all RIP packets.
- policy—Trace policy processing.
- request—Trace RIP information packets.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.
- trigger—Trace RIP triggered updates.
- update—Trace RIP update packets.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

- <flag> (configuration/protocols/ripng/traceoptions)

Usage <configuration>
 <protocols>
 <ripng>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </ripng>
 </protocols>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- error—Trace RIPng errors.
- expiration—Trace RIPng route expiration processing.
- general—Trace general events.
- holddown—Trace RIPng holddown processing.
- normal—Trace normal events.
- packets—Trace all RIPng packets.
- policy—Trace policy processing.
- request—Trace RIPng information packets.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.
- trigger—Trace RIPng triggered updates.
- update—Trace RIPng update packets.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/protocols/router-advertisement/traceoptions)

Usage

```
<configuration>
  <protocols>
    <router-advertisement>
      <traceoptions>
        <flag>
          <name>name</name>    <!-- identifier -->
        </flag>
      </traceoptions>
    </router-advertisement>
  </protocols>
</configuration>
```

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/protocols/router-discovery/traceoptions)

Usage

```
<configuration>
  <protocols>
    <router-discovery>
      <traceoptions>
        <flag>
          <name>name</name>    <!-- identifier -->
        </flag>
      </traceoptions>
    </router-discovery>
  </protocols>
</configuration>
```

Description Tracing parameters.

• **Contents** <name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/protocols/rsvp/traceoptions)

• **Usage** <configuration>
 <protocols>
 <rsvp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </rsvp>
 </protocols>
</configuration>

• **Description** Tracing parameters.

• **Contents** <detail>—Trace detailed information.

• <disable>—Disable this trace flag.

• <name>—No documentation is available yet.

- all—Trace everything.
- error—Trace error conditions.
- lmp—Trace RSVP-LMP related interactions.
- packets—Trace all RSVP packets.
- path—Trace RSVP path messages.
- pathtear—Trace RSVP PathTear messages.

- resv—Trace RSVP Resv messages.
 - resvtEAR—Trace RSVP ResvTear messages.
 - route—Trace routing information.
 - state—Trace state transitions.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/protocols/vrrp/traceoptions)

Usage <configuration>
 <protocols>
 <vrrp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </vrrp>
 </protocols>
</configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace all events.
- database—Trace database.
- general—Trace general events.
- interfaces—Trace interface messages.
- normal—Trace normal events.
- packets—Trace packets.
- state—Trace state transitions.
- timer—Trace timer events.

- <flag> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <filter>—Filter to apply to this flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- aspath—No documentation is available yet.
- damping—No documentation is available yet.
- general—Trace general events.
- keepalive—No documentation is available yet.
- normal—Trace normal events.
- open—Trace BGP open packets.
- packets—Trace all BGP protocol packets.
- policy—Trace policy processing.
- route—Trace routing information.

- state—Trace state transitions.
 - task—Trace routing protocol task processing.
 - timer—Trace routing protocol timer processing.
 - update—Trace BGP update packets.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/bgp/group/traceoptions)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bpg>
          <group>
            <traceoptions>
              <flag>
                <name>name</name>    <!-- identifier -->
                <send/>
                <receive/>
                <detail/>
                <disable/>
                <filter>...</filter>
              </flag>
            </traceoptions>
          </group>
        </bpg>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- all—Trace everything.
- aspath—No documentation is available yet.
- damping—No documentation is available yet.
- general—Trace general events.

<flag> (configuration/routing-instances/instance/protocols/bgp/traceoptions)

- ■ keepalive—No documentation is available yet.
- ■ normal—Trace normal events.
- ■ open—Trace BGP open packets.
- ■ packets—Trace all BGP protocol packets.
- ■ policy—Trace policy processing.
- ■ route—Trace routing information.
- ■ state—Trace state transitions.
- ■ task—Trace routing protocol task processing.
- ■ timer—Trace routing protocol timer processing.
- ■ update—Trace BGP update packets.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/bgp/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <filter>—Filter to apply to this flag.

<name>—No documentation is available yet.

- all—Trace everything.
- aspath—No documentation is available yet.
- damping—No documentation is available yet.
- general—Trace general events.
- keepalive—No documentation is available yet.
- normal—Trace normal events.
- open—Trace BGP open packets.
- packets—Trace all BGP protocol packets.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.
- update—Trace BGP update packets.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

- <flag> (configuration/routing-instances/instance/protocols/isis/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <isis>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </isis>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- csn—Trace Complete Sequence Number packets.
- error—Trace errored packets.
- general—Trace general events.
- hello—Trace Hello packets.
- lsp—Trace Link State packets.
- lsp-generation—Trace LSP generation.
- normal—Trace normal events.
- packets—Trace IS-IS packets.
- policy—Trace policy processing.
- psn—Trace Partial Sequence Number packets.
- route—Trace routing information.
- SPF—Trace SPF events.
- state—Trace state transitions.

- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/l2vpn/traceoptions)

```
Usage   <configuration>
          <routing-instances>
            <instance>
              <protocols>
                <l2vpn>
                  <traceoptions>
                    <flag>
                      <name>name</name>    <!-- identifier -->
                      <send/>
                      <receive/>
                      <detail/>
                      <disable/>
                    </flag>
                  </traceoptions>
                </l2vpn>
                </protocols>
              </instance>
            </routing-instances>
          </configuration>
```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- connections—Trace Layer 2 VPN connections.
- error—Trace errors.
- nlri—Trace Layer 2 VPN remote site advertisements.
- route—Trace Layer 2 VPN PE routes.
- topology—Trace Layer 2 VPN topology changes.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

- <flag> (configuration/routing-instances/instance/protocols/ldp/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ldp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </ldp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- address—Trace address packets.
- all—Trace everything.
- binding—Trace label binding state.
- error—Trace errored packets.
- event—Trace LDP state machine events.
- general—Trace general events.
- initialization—Trace initialization packets.
- label—Trace label packets.
- normal—Trace normal events.
- notification—Trace notification packets.
- packet-dump—Dump the contents of selected packet types.
- packets—Trace all LDP packets.
- path—Trace label path state.
- periodic—Trace periodic (Hello/Keepalive) packets.

- policy—Trace policy processing.
 - route—Trace routing information.
 - state—Trace state transitions.
 - task—Trace routing protocol task processing.
 - timer—Trace routing protocol timer processing.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/ospf/traceoptions)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <ospf>
          <traceoptions>
            <flag>
              <name>name</name>    <!-- identifier -->
              <send/>
              <receive/>
              <detail/>
              <disable/>
            </flag>
          </traceoptions>
        </ospf>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- database-description—Trace database description packets.
- error—Trace errored packets.
- event—Trace OSPF state machine events.
- flooding—Trace LSA flooding.
- general—Trace general events.

<flag> (configuration/routing-instances/instance/protocols/pim/traceoptions)

- ■ hello—Trace hello packets.
 - ■ lsa-ack—Trace LSA acknowledgement packets.
 - ■ lsa-request—Trace LSA request packets.
 - ■ lsa-update—Trace LSA update packets.
 - ■ normal—Trace normal events.
 - ■ packet-dump—Dump the contents of selected packet types.
 - ■ packets—Trace all OSPF packets.
 - ■ policy—Trace policy processing.
 - ■ route—Trace routing information.
 - ■ spf—Trace SPF calculations.
 - ■ state—Trace state transitions.
 - ■ task—Trace routing protocol task processing.
 - ■ timer—Trace routing protocol timer processing.
 - <receive>—Trace received packets.
 - <send>—Trace transmitted packets.
- <flag> (configuration/routing-instances/instance/protocols/pim/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <pim>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </pim>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
 - assert—Trace assert messages.
 - autorp—Trace bootstrap/RP/auto-RP messages.
 - bootstrap—Trace bootstrap/RP/auto-RP messages.
 - general—Trace general events.
 - graft—Trace join/prune/graft/graft-ack messages.
 - hello—Trace hello packets.
 - join—Trace join/prune/graft/graft-ack messages.
 - normal—Trace normal events.
 - packets—Trace all PIM packets.
 - policy—Trace policy processing.
 - prune—Trace join/prune/graft/graft-ack messages.
 - register—Trace register/register-stop messages.
 - route—Trace routing information.
 - rp—Trace bootstrap/RP/auto-RP messages.
 - state—Trace state transitions.
 - task—Trace routing protocol task processing.
 - timer—Trace routing protocol timer processing.
- <receive>—Trace received packets.
- <send>—Trace transmitted packets.

- <flag> (configuration/routing-instances/instance/protocols/rip/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <rip>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 <filter>...</filter>
 </flag>
 </traceoptions>
 </rip>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <filter>—Filter to apply to this flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- auth—Trace RIP authentication.
- error—Trace RIP errors.
- expiration—Trace RIP route expiration processing.
- general—Trace general events.
- holddown—Trace RIP holddown processing.
- normal—Trace normal events.
- packets—Trace all RIP packets.
- policy—Trace policy processing.
- request—Trace RIP information packets.
- route—Trace routing information.
- state—Trace state transitions.

- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.
- trigger—Trace RIP triggered updates.
- update—Trace RIP update packets.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/protocols/router-discovery/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <router-discovery>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </router-discovery>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

- <flag> (configuration/routing-instances/instance/routing-options/auto-export/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <auto-export>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </auto-export>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- export—Export processing.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

 <receive>—Trace received packets.

 <send>—Trace transmitted packets.

<flag> (configuration/routing-instances/instance/routing-options/resolution/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <resolution>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </resolution>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- event—Event processing.
- flash—Flash processing.
- indirect—Indirect next hop add/change/delete.
- kernel—Kernel communication.
- task—Task/job processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

- <flag> (configuration/routing-instances/instance/routing-options/traceoptions)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <disable/>
 </flag>
 </traceoptions>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- config-internal—Trace configuration internals.
- general—Trace general events.
- normal—Trace normal events.
- parse—Trace configuration parsing.
- policy—Trace policy processing.
- regex-parse—Trace regular-expression parsing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<flag> (configuration/routing-options/auto-export/traceoptions)

```

Usage   <configuration>
          <routing-options>
              <auto-export>
                  <traceoptions>
                      <flag>
                          <name>name</name>    <!-- identifier -->
                          <send/>
                          <receive/>
                          <detail/>
                          <disable/>
                      </flag>
                  </traceoptions>
              </auto-export>
          </routing-options>
      </configuration>
  
```

Description Tracing parameters.

Contents <detail>—Trace detailed information.

<disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- export—Export processing.
- general—Trace general events.
- normal—Trace normal events.
- policy—Trace policy processing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

<receive>—Trace received packets.

<send>—Trace transmitted packets.

- <flag> (configuration/routing-options/resolution/traceoptions)

Usage <configuration>
 <routing-options>
 <resolution>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 <send/>
 <receive/>
 <detail/>
 <disable/>
 </flag>
 </traceoptions>
 </resolution>
 </routing-options>
 </configuration>

Description Tracing parameters.

Contents <detail>—Trace detailed information.

 <disable>—Disable this trace flag.

 <name>—No documentation is available yet.

- all—Trace everything.
- event—Event processing.
- flash—Flash processing.
- indirect—Indirect next hop add/change/delete.
- kernel—Kernel communication.
- task—Task/job processing.

 <receive>—Trace received packets.

 <send>—Trace transmitted packets.

<flag> (configuration/routing-options/traceoptions)

Usage

```

<configuration>
  <routing-options>
    <traceoptions>
      <flag>
        <name>name</name>    <!-- identifier -->
        <disable/>
      </flag>
    </traceoptions>
  </routing-options>
</configuration>
```

Description Tracing parameters.

Contents <disable>—Disable this trace flag.

<name>—No documentation is available yet.

- all—Trace everything.
- config-internal—Trace configuration internals.
- general—Trace general events.
- normal—Trace normal events.
- parse—Trace configuration parsing.
- policy—Trace policy processing.
- regex-parse—Trace regular-expression parsing.
- route—Trace routing information.
- state—Trace state transitions.
- task—Trace routing protocol task processing.
- timer—Trace routing protocol timer processing.

• <flag> (configuration/security/traceoptions)

Usage <configuration>
 <security>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </security>
</configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- database—Trace database events.
- general—Trace general events.
- ike—Trace IKE module processing.
- parse—Trace configuration processing.
- policy-manager—Trace policy manager processing.
- routing-socket—Trace routing socket messages.
- timer—Trace internal timer events.

• <flag> (configuration/snmp/traceoptions)

Usage <configuration>
 <snmp>
 <traceoptions>
 <flag>
 <name>name</name> <!-- identifier -->
 </flag>
 </traceoptions>
 </snmp>
</configuration>

Description Tracing parameters.

Contents <name>—No documentation is available yet.

- all—Trace everything.
- general—Trace general events.
- interface-stats—Trace interface statistics (logical and physical).
- pdu—Dump SNMP request/response packets.

- protocol-timeouts—Trace SNMP request timeouts.
- routing-socket—Trace routing socket calls.
- subagent—Trace subagent restarts.
- timer—Trace internal timer events.
- varbind-error—Trace varbind errors.

<forwarding-class> (configuration/class-of-service/classifiers/dscp)

Usage

```
<configuration>
  <class-of-service>
    <classifiers>
      <dscp>
        <forwarding-class>
          <name>name</name>    <!-- identifier -->
          <loss-priority>...</loss-priority>
        </forwarding-class>
      </dscp>
    </classifiers>
  </class-of-service>
</configuration>
```

Description Define a classification of code point aliases.

Contents <loss-priority>—Classify code points to a loss priority.
 <name>—Forwarding class name.

<forwarding-class> (configuration/class-of-service/classifiers/exp)

Usage

```
<configuration>
  <class-of-service>
    <classifiers>
      <exp>
        <forwarding-class>
          <name>name</name>    <!-- identifier -->
          <loss-priority>...</loss-priority>
        </forwarding-class>
      </exp>
    </classifiers>
  </class-of-service>
</configuration>
```

Description Define a classification of code point aliases.

Contents <loss-priority>—Classify code points to a loss priority.
 <name>—Forwarding class name.

- <forwarding-class> (configuration/class-of-service/classifiers/ieee-802.1)

Usage <configuration>
 <class-of-service>
 <classifiers>
 <ieee-802.1>
 <forwarding-class>
 <name>name</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </ieee-802.1>
 </classifiers>
 </class-of-service>
 </configuration>

Description Define a classification of code point aliases.

Contents <loss-priority>—Classify code points to a loss priority.

 <name>—Forwarding class name.

- <forwarding-class> (configuration/class-of-service/classifiers/inet-precedence)

Usage <configuration>
 <class-of-service>
 <classifiers>
 <inet-precedence>
 <forwarding-class>
 <name>name</name> <!-- identifier -->
 <loss-priority>...</loss-priority>
 </forwarding-class>
 </inet-precedence>
 </classifiers>
 </class-of-service>
 </configuration>

Description Define a classification of code point aliases.

Contents <loss-priority>—Classify code points to a loss priority.

 <name>—Forwarding class name.

<forwarding-class> (configuration/class-of-service/forwarding-policy/next-hop-map)

Usage

```
<configuration>
  <class-of-service>
    <forwarding-policy>
      <next-hop-map>
        <forwarding-class>
          <name>name</name>    <!-- identifier -->
          <next-hop>...</next-hop>
          <lsp-next-hop>...</lsp-next-hop>
        </forwarding-class>
      </next-hop-map>
    </forwarding-policy>
  </class-of-service>
</configuration>
```

Description Forwarding class from which to map.

Contents <lsp-next-hop>—Regular expression for LSP next hop.

<name>—Forwarding class.

<next-hop>—Next-hop identifier to which to map.

<forwarding-class> (configuration/class-of-service/rewrite-rules/dscp)

Usage

```
<configuration>
  <class-of-service>
    <rewrite-rules>
      <dscp>
        <forwarding-class>
          <name>name</name>    <!-- identifier -->
          <loss-priority>...</loss-priority>
        </forwarding-class>
      </dscp>
    </rewrite-rules>
  </class-of-service>
</configuration>
```

Description Markings for named forwarding class.

Contents <loss-priority>—Code point marking based on loss priority.

<name>—Forwarding class name.

- <forwarding-class> (configuration/class-of-service/rewrite-rules/exp)

•

• **Usage** <configuration>
• <class-of-service>
• <rewrite-rules>
• <exp>
• <forwarding-class>
• <name>name</name> <!-- identifier -->
• <loss-priority>...</loss-priority>
• </forwarding-class>
• </exp>
• </rewrite-rules>
• </class-of-service>
• </configuration>

•

• **Description** Markings for named forwarding class.

• **Contents** <loss-priority>—Code point marking based on loss priority.

• <name>—Forwarding class name.

- <forwarding-class> (configuration/class-of-service/rewrite-rules/inet-precedence)

•

• **Usage** <configuration>
• <class-of-service>
• <rewrite-rules>
• <inetprecedence>
• <forwarding-class>
• <name>name</name> <!-- identifier -->
• <loss-priority>...</loss-priority>
• </forwarding-class>
• </inetprecedence>
• </rewrite-rules>
• </class-of-service>
• </configuration>

•

• **Description** Markings for named forwarding class.

• **Contents** <loss-priority>—Code point marking based on loss priority.

• <name>—Forwarding class name.

<forwarding-class> (configuration/class-of-service/scheduler-maps)

Usage

```
<configuration>
  <class-of-service>
    <scheduler-maps>
      <forwarding-class>
        <name>name</name>  <!-- identifier -->
        <scheduler>scheduler</scheduler>  <!-- mandatory -->
      </forwarding-class>
    </scheduler-maps>
  </class-of-service>
</configuration>
```

Description Forwarding class name to map to scheduler.

Contents <name>—Forwarding class name.

<scheduler>—Scheduler name.

<forwarding-classes> (configuration/class-of-service)

Usage

```
<configuration>
  <class-of-service>
    <forwarding-classes>
      <queue>...</queue>
    </forwarding-classes>
  </class-of-service>
</configuration>
```

Description Forwarding classes defined.

Contents <queue>—Queue number to map to forwarding class.

<forwarding-options> (configuration)

Usage

```
<configuration>
  <forwarding-options>
    <sampling>...</sampling>
    <monitoring>...</monitoring>
    <hash-key>...</hash-key>
    <helpers>...</helpers>
  </forwarding-options>
</configuration>
```

Description Configure options to control packet sampling.

Contents <hash-key>—Select data used in the hash key.

<helpers>—Port forwarding configuration.

<monitoring>—Configure lawful interception of traffic.

<sampling>—Statistical traffic sampling options.

- <forwarding-policy> (configuration/class-of-service)

Usage <configuration>
 <class-of-service>
 <forwarding-policy>
 <next-hop-map>...</next-hop-map>
 <class>...</class>
 </forwarding-policy>
 </class-of-service>
 </configuration>

Description Class-of-service forwarding policy.

Contents <class>—Class-of-service description.

 <next-hop-map>—Class-of-service next-hop map.

- <forwarding-table> (configuration/routing-instances/instance/routing-options)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <forwarding-table>
 <export>...</export>
 <unicast-reverse-path>unicast-reverse-path-choice</unicast-reverse-path>
 </forwarding-table>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Forwarding table management options.

Contents <export>—Export policy.

 <unicast-reverse-path>—Unicast Reverse Path verification.

- active-paths—Consider active paths when performing RP verification.
- feasible-paths—Consider all feasible paths for RP verification.

- <forwarding-table> (configuration/routing-options)

Usage <configuration>
 <routing-options>
 <forwarding-table>
 <export>...</export>
 <unicast-reverse-path>unicast-reverse-path-choice</unicast-reverse-path>
 </forwarding-table>
 </routing-options>
 </configuration>

Description Forwarding table management options.

Contents <export>—Export policy.

<unicast-reverse-path>—Unicast Reverse Path verification.

- active-paths—Consider active paths when performing RP verification.

- feasible-paths—Consider all feasible paths for RP verification.

<fpc> (configuration/chassis)

Usage <configuration>
 <chassis>
 <fpc>
 <name>name</name> <!-- identifier -->
 <pic>...</pic>
 </fpc>
 </chassis>
</configuration>

Description Flexible PIC Concentrator (FPC) card parameters.

Contents <name>—FPC slot number.

<pic>—Physical Interface Card (PIC) number.

<fragment-offset> (configuration/firewall/family/inet/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <fragment-offset>
 <name>name</name> <!-- identifier -->
 </fragment-offset>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
</configuration>

Description Match fragment offset.

Contents <name>—Range of values.

- <fragment-offset-except> (configuration/firewall/family/inet/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <fragment-offset-except>
 <name>name</name> <!-- identifier -->
 </fragment-offset-except>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
 </configuration>

Description Do not match fragment offset.

Contents <name>—Range of values.

<from> (configuration/firewall/family/inet/filter/term)

```

Usage   <configuration>
          <firewall>
              <family>
                  <inet>
                      <filter>
                          <term>
                              <from>
                                  <interface-group>...</interface-group>
                                  <interface-group-except>...</interface-group-except>
                                  <source-address>...</source-address>
                                  <destination-address>...</destination-address>
                                  <address>...</address>
                                  <source-prefix-list>...</source-prefix-list>
                                  <destination-prefix-list>...</destination-prefix-list>
                                  <prefix-list>...</prefix-list>
                                  <packet-length>...</packet-length>
                                  <packet-length-except>...</packet-length-except>
                                  <precedence>...</precedence>
                                  <precedence-except>...</precedence-except>
                                  <dscp>...</dscp>
                                  <dscp-except>...</dscp-except>
                                  <ip-options>ip-options</ip-options>
                                  <is-fragment/>
                                  <first-fragment/>
                                  <fragment-offset>...</fragment-offset>
                                  <fragment-offset-except>...</fragment-offset-except>
                                  <fragment-flags>fragment-flags</fragment-flags>
                                  <protocol>...</protocol>
                                  <protocol-except>...</protocol-except>
                                  <icmp-type>...</icmp-type>
                                  <icmp-type-except>...</icmp-type-except>
                                  <icmp-code>...</icmp-code>
                                  <icmp-code-except>...</icmp-code-except>
                                  <source-port>...</source-port>
                                  <source-port-except>...</source-port-except>
                                  <destination-port>...</destination-port>
                                  <destination-port-except>...</destination-port-except>
                                  <port>...</port>
                                  <port-except>...</port-except>
                                  <tcp-initial/>
                                  <tcp-established/>
                                  <tcp-flags>tcp-flags</tcp-flags>
                              </from>
                          </term>
                      </filter>
                  </inet>
              </family>
          </firewall>
      </configuration>
```

Description Define match criteria.

Contents <address>—Match IP source or destination address.

<destination-address>—Match IP destination address.

- `<destination-port>`—Match TCP/UDP destination port.
- `<destination-port-except>`—Do not match TCP/UDP destination port.
- `<destination-prefix-list>`—Match IP destination prefix list.
- `<dscp>`—Match diffserv codepoint.
- `<dscp-except>`—Do not match diffserv codepoint.
- `<first-fragment>`—Match if packet is the first fragment.
- `<fragment-flags>`—Match fragment flags.
- `<fragment-offset>`—Match fragment offset.
- `<fragment-offset-except>`—Do not match fragment offset.
- `<icmp-code>`—Match ICMP message code.
- `<icmp-code-except>`—Do not match ICMP message code.
- `<icmp-type>`—Match ICMP message type.
- `<icmp-type-except>`—Do not match ICMP message type.
- `<interface-group>`—Match interface group.
- `<interface-group-except>`—Do not match interface group.
- `<ip-options>`—Match IP options.
- `<is-fragment>`—Match if packet is a fragment.
- `<packet-length>`—Match packet length.
- `<packet-length-except>`—Do not match packet length.
- `<port>`—Match TCP/UDP source or destination port.
- `<port-except>`—Do not match TCP/UDP source or destination port.
- `<precedence>`—Match IP precedence value.
- `<precedence-except>`—Do not match IP precedence value.
- `<prefix-list>`—Match IP source or destination prefix list.
- `<protocol>`—Match IP protocol type.
- `<protocol-except>`—Do not match IP protocol type.
- `<source-address>`—Match IP source address.
- `<source-port>`—Match TCP/UDP source port.
- `<source-port-except>`—Do not match TCP/UDP source port.

<source-prefix-list>—Match IP source prefix list.
 <tcp-established>—Match packet of an established TCP connection.
 <tcp-flags>—Match TCP flags.
 <tcp-initial>—Match initial packet of a TCP connection.

<from> (configuration/firewall/family/inet6/filter/term)

Usage

```

<configuration>
  <firewall>
    <family>
      <inet6>
        <filter>
          <term>
            <from>
              <interface-group>...</interface-group>
              <interface-group-except>...</interface-group-except>
              <source-address>...</source-address>
              <destination-address>...</destination-address>
              <address>...</address>
              <packet-length>...</packet-length>
              <packet-length-except>...</packet-length-except>
              <traffic-class>...</traffic-class>
              <traffic-class-except>...</traffic-class-except>
              <next-header>...</next-header>
              <next-header-except>...</next-header-except>
              <icmp-type>...</icmp-type>
              <icmp-type-except>...</icmp-type-except>
              <icmp-code>...</icmp-code>
              <icmp-code-except>...</icmp-code-except>
              <source-port>...</source-port>
              <source-port-except>...</source-port-except>
              <destination-port>...</destination-port>
              <destination-port-except>...</destination-port-except>
              <port>...</port>
              <port-except>...</port-except>
            </from>
          </term>
        </filter>
      </inet6>
    </family>
  </firewall>
</configuration>
```

Description Define match criteria.

Contents

- <address>—Match IP source or destination address.
- <destination-address>—Match IP destination address.
- <destination-port>—Match TCP/UDP destination port.
- <destination-port-except>—Do not match TCP/UDP destination port.

- <icmp-code>—Match ICMP message code.

<icmp-code-except>—Do not match ICMP message code.

<icmp-type>—Match ICMP message type.

<icmp-type-except>—Do not match ICMP message type.

<interface-group>—Match interface group.

<interface-group-except>—Do not match interface group.

<next-header>—Match IP protocol type.

<next-header-except>—Do not match IP protocol type.

<packet-length>—Match packet length.

<packet-length-except>—Do not match packet length.

<port>—Match TCP/UDP source or destination port.

<port-except>—Do not match TCP/UDP source or destination port.

<source-address>—Match IP source address.

<source-port>—Match TCP/UDP source port.

<source-port-except>—Do not match TCP/UDP source port.

<traffic-class>—Match diffserv codepoint.

<traffic-class-except>—Do not match diffserv codepoint.

<from> (configuration/policy-options/policy-statement)

```

Usage   <configuration>
          <policy-options>
              <policy-statement>
                  <from>
                      <instance>instance</instance>
                      <protocol>...</protocol>
                      <rib>rib</rib>
                      <neighbor>...</neighbor>
                      <next-hop>...</next-hop>
                      <interface>...</interface>
                      <area>area</area>
                      <as-path>...</as-path>
                      <origin>origin-choice</origin>
                      <community>...</community>
                      <level>level</level>
                      <external>...</external>
                      <metric>metric</metric>
                      <metric2>metric2</metric2>
                      <metric3>metric3</metric3>
                      <metric4>metric4</metric4>
                      <tag>tag</tag>
                      <tag2>tag2</tag2>
                      <preference>preference</preference>
                      <preference2>preference2</preference2>
                      <color>color</color>
                      <color2>color2</color2>
                      <local-preference>local-preference</local-preference>
                      <policy>...</policy>
                      <family>family-choice</family>
                      <route-filter>...</route-filter>
                      <source-address-filter>...</source-address-filter>
                      <prefix-list>...</prefix-list>
                  </from>
              </policy-statement>
          </policy-options>
      </configuration>

```

Description Conditions to match a route's source.

Contents <area>—OSPF area identifier.

<as-path>—Name of AS path regular expression (BGP only).

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community.

<external>—External route.

- <family>—No documentation is available yet.
 - inet—IPv4 family.
 - inet6—IPv6 family.
 - <instance>—Routing protocol instance.
 - <interface>—Interface name or address.
 - <level>—IS-IS level.
 - <local-preference>—Local preference associated with a route.
 - <metric>—Metric value.
 - <metric2>—Metric value 2.
 - <metric3>—Metric value 3.
 - <metric4>—Metric value 4.
 - <neighbor>—Neighboring router.
 - <next-hop>—Next-hop router.
 - <origin>—BGP origin attribute.
 - egp—Path originated in another AS.
 - igp—Path originated in the local IGP.
 - incomplete—Path was learned by some other means.
 - <policy>—Name of policy to evaluate.
 - <preference>—Preference value.
 - <preference2>—Preference value 2.
 - <prefix-list>—List of prefix lists of routes to match.
 - <protocol>—Protocol from which route was learned.
 - <rib>—Routing table.
 - <route-filter>—List of routes to match.
 - <source-address-filter>—List of source addresses to match.
 - <tag>—Tag string.
 - <tag2>—Tag string 2.

<from> (configuration/policy-options/policy-statement/term)

```

Usage   <configuration>
          <policy-options>
              <policy-statement>
                  <term>
                      <from>
                          <instance>instance</instance>
                          <protocol>...</protocol>
                          <rib>rib</rib>
                          <neighbor>...</neighbor>
                          <next-hop>...</next-hop>
                          <interface>...</interface>
                          <area>area</area>
                          <as-path>...</as-path>
                          <origin>origin-choice</origin>
                          <community>...</community>
                          <level>level</level>
                          <external>...</external>
                          <metric>metric</metric>
                          <metric2>metric2</metric2>
                          <metric3>metric3</metric3>
                          <metric4>metric4</metric4>
                          <tag>tag</tag>
                          <tag2>tag2</tag2>
                          <preference>preference</preference>
                          <preference2>preference2</preference2>
                          <color>color</color>
                          <color2>color2</color2>
                          <local-preference>local-preference</local-preference>
                          <policy>...</policy>
                          <family>family-choice</family>
                          <route-filter>...</route-filter>
                          <source-address-filter>...</source-address-filter>
                          <prefix-list>...</prefix-list>
                      </from>
                  </term>
              </policy-statement>
          </policy-options>
      </configuration>
```

Description Conditions to match a route's source.

Contents <area>—OSPF area identifier.

<as-path>—Name of AS path regular expression (BGP only).

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community.

<external>—External route.

- <family>—No documentation is available yet.
 - ■ inet—IPv4 family.
 - ■ inet6—IPv6 family.
 - <instance>—Routing protocol instance.
 - <interface>—Interface name or address.
 - <level>—IS-IS level.
 - <local-preference>—Local preference associated with a route.
 - <metric>—Metric value.
 - <metric2>—Metric value 2.
 - <metric3>—Metric value 3.
 - <metric4>—Metric value 4.
 - <neighbor>—Neighboring router.
 - <next-hop>—Next-hop router.
 - <origin>—BGP origin attribute.
 - egp—Path originated in another AS.
 - igp—Path originated in the local IGP.
 - incomplete—Path was learned by some other means.
 - <policy>—Name of policy to evaluate.
 - <preference>—Preference value.
 - <preference2>—Preference value 2.
 - <prefix-list>—List of prefix lists of routes to match.
 - <protocol>—Protocol from which route was learned.
 - <rib>—Routing table.
 - <route-filter>—List of routes to match.
 - <source-address-filter>—List of source addresses to match.
 - <tag>—Tag string.
 - <tag2>—Tag string 2.

<from> (configuration/routing-instances/instance/routing-options/fate-sharing/group)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <fate-sharing>
          <group>
            <from>
              <name>name</name>    <!-- identifier -->
              <to>to</to>
            </from>
          </group>
        </fate-sharing>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description No documentation is available yet.

Contents <name>—Router ID or LAN interface address.

<to>—Point-to-point links.

<from> (configuration/routing-options/fate-sharing/group)

Usage

```

<configuration>
  <routing-options>
    <fate-sharing>
      <group>
        <from>
          <name>name</name>    <!-- identifier -->
          <to>to</to>
        </from>
      </group>
    </fate-sharing>
  </routing-options>
</configuration>
```

Description No documentation is available yet.

Contents <name>—Router ID or LAN interface address.

<to>—Point-to-point links.

- <ftp> (configuration/system/services)

Usage <configuration>
 <system>
 <services>
 <ftp>
 <connection-limit>connection-limit</connection-limit>
 <rate-limit>rate-limit</rate-limit>
 </ftp>
 </services>
 </system>
 </configuration>

Description Allow ftp file transfers.

Contents <connection-limit>—Maximum number of allowed connections.
 <rate-limit>—Maximum number of connections per minute.

- <generate> (configuration/routing-instances/instance/routing-options)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <defaults>...</defaults>
 <route>...</route>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Route of last resort.

Contents <defaults>—Global route options.
 <route>—Individual route options.

<generate> (configuration/routing-instances/instance/routing-options/rib)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <generate>
            <defaults>...</defaults>
            <route>...</route>
          </generate>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Route of last resort.

Contents

- <defaults>—Global route options.
- <route>—Individual route options.

<generate> (configuration/routing-options)

Usage

```
<configuration>
  <routing-options>
    <generate>
      <defaults>...</defaults>
      <route>...</route>
    </generate>
  </routing-options>
</configuration>
```

Description Route of last resort.

Contents

- <defaults>—Global route options.
- <route>—Individual route options.

<generate> (configuration/routing-options/rib)

Usage

```
<configuration>
  <routing-options>
    <rib>
      <generate>
        <defaults>...</defaults>
        <route>...</route>
      </generate>
    </rib>
  </routing-options>
</configuration>
```

Description Route of last resort.

Contents <defaults>—Global route options.

<route>—Individual route options.

<gigether-options> (configuration/interfaces/interface)

```
Usage  <configuration>
        <interfaces>
            <interface>
                <gigether-options>
                    <loopback/>
                    <flow-control/>
                    <source-filtering/>
                    <source-address-filter>...</source-address-filter>
                    <ieee-802.3ad>ieee-802.3ad</ieee-802.3ad>
                </gigether-options>
            </interface>
        </interfaces>
    </configuration>
```

Description Gigabit Ethernet interface-specific options.

Contents <flow-control>—Enable flow control.

<ieee-802.3ad>—Join an aggregated Ethernet interface.

<loopback>—Enable loopback.

<source-address-filter>—Source address filters.

<source-filtering>—Enable source address filtering.

<graceful-restart> (configuration/protocols/bgp)

```
Usage  <configuration>
        <protocols>
            <bpg>
                <graceful-restart>
                    <disable/>
                    <restart-time>restart-time</restart-time>
                    <stale-routes-time>stale-routes-time</stale-routes-time>
                </graceful-restart>
            </bpg>
        </protocols>
    </configuration>
```

Description BGP graceful restart options.

Contents <disable>—Disable graceful restart.

<restart-time>—Restart time used when negotiating with a peer.

<stale-routes-time>—Maximum time for which stale routes are kept.

<graceful-restart> (configuration/protocols/bgp/group)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <group>
        <graceful-restart>
          <disable/>
          <restart-time>restart-time</restart-time>
          <stale-routes-time>stale-routes-time</stale-routes-time>
        </graceful-restart>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description BGP graceful restart options.

Contents <disable>—Disable graceful restart.

<restart-time>—Restart time used when negotiating with a peer.

<stale-routes-time>—Maximum time for which stale routes are kept.

<graceful-restart> (configuration/protocols/bgp/group/neighbor)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <group>
        <neighbor>
          <graceful-restart>
            <disable/>
            <restart-time>restart-time</restart-time>
            <stale-routes-time>stale-routes-time</stale-routes-time>
          </graceful-restart>
        </neighbor>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description BGP graceful restart options.

Contents <disable>—Disable graceful restart.

<restart-time>—Restart time used when negotiating with a peer.

<stale-routes-time>—Maximum time for which stale routes are kept.

- <graceful-restart> (configuration/protocols/isis)

Usage <configuration>
 <protocols>
 <isis>
 <graceful-restart>
 <disable/>
 </graceful-restart>
 </isis>
 </protocols>
 </configuration>

Description IS-IS graceful restart options.

Contents <disable>—Disable graceful restart.

- <graceful-restart> (configuration/protocols/ospf)

Usage <configuration>
 <protocols>
 <ospf>
 <graceful-restart>
 <disable/>
 <restart-duration>seconds</restart-duration>
 <notify-duration>seconds</notify-duration>
 <helper-disable/>
 </graceful-restart>
 </ospf>
 </protocols>
 </configuration>

Description Configure graceful restart attributes.

Contents <disable>—Disable OSPF graceful-restart capability.

<helper-disable>—Disable graceful restart helper capability.

<notify-duration>—Time to send all max-aged grace LSAs.

<restart-duration>—Time for all neighbors to become full.

<graceful-restart> (configuration/routing-instances/instance/protocols/bgp)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bpg>
          <graceful-restart>
            <disable/>
            <restart-time>restart-time</restart-time>
            <stale-routes-time>stale-routes-time</stale-routes-time>
          </graceful-restart>
        </bpg>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description BGP graceful restart options.

Contents <disable>—Disable graceful restart.

<restart-time>—Restart time used when negotiating with a peer.

<stale-routes-time>—Maximum time for which stale routes are kept.

<graceful-restart> (configuration/routing-instances/instance/protocols/bgp/group)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bpg>
          <group>
            <graceful-restart>
              <disable/>
              <restart-time>restart-time</restart-time>
              <stale-routes-time>stale-routes-time</stale-routes-time>
            </graceful-restart>
          </group>
        </bpg>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description BGP graceful restart options.

Contents <disable>—Disable graceful restart.

<restart-time>—Restart time used when negotiating with a peer.

<stale-routes-time>—Maximum time for which stale routes are kept.

- <graceful-restart> (configuration/routing-instances/instance/protocols/bgp/group/neighbor)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <graceful-restart>
 <disable/>
 <restart-time>*restart-time*</restart-time>
 <stale-routes-time>*stale-routes-time*</stale-routes-time>
 </graceful-restart>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description BGP graceful restart options.

Contents <disable>—Disable graceful restart.

 <restart-time>—Restart time used when negotiating with a peer.

 <stale-routes-time>—Maximum time for which stale routes are kept.

- <graceful-restart> (configuration/routing-instances/instance/protocols/isis)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <isis>
 <graceful-restart>
 <disable/>
 </graceful-restart>
 </isis>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description IS-IS graceful restart options.

Contents <disable>—Disable graceful restart.

<graceful-restart> (configuration/routing-instances/instance/protocols/ospf)

```

Usage   <configuration>
          <routing-instances>
              <instance>
                  <protocols>
                      <ospf>
                          <graceful-restart>
                              <disable/>
                              <restart-duration>seconds</restart-duration>
                              <notify-duration>seconds</notify-duration>
                              <helper-disable/>
                          </graceful-restart>
                      </ospf>
                      </protocols>
                  </instance>
              </routing-instances>
          </configuration>

```

Description Configure graceful restart attributes.

Contents <disable>—Disable OSPF graceful-restart capability.
<helper-disable>—Disable graceful restart helper capability.
<notify-duration>—Time to send all max-aged grace LSAs.
<restart-duration>—Time for all neighbors to become full.

<graceful-restart> (configuration/routing-instances/instance/routing-options)

```

Usage   <configuration>
          <routing-instances>
              <instance>
                  <routing-options>
                      <graceful-restart>
                          <disable/>
                          <path-selection-defer-time-limit>time-limit</path-selection-defer-time-limit>
                      </graceful-restart>
                  </routing-options>
              </instance>
          </routing-instances>
      </configuration>

```

Description Graceful/hitless routing restart options.

Contents <disable>—Disable graceful restart.
<path-selection-defer-time-limit>—Maximum time for which path selection is deferred.

- | <graceful-restart> (configuration/routing-options) | |
|--|---|
| Usage | <configuration>
<routing-options>
<graceful-restart>
<disable/>
<path-selection-defer-time-limit> <i>time-limit</i> </path-selection-defer-time-limit>
</graceful-restart>
</routing-options>
</configuration> |
| Description | Graceful/hitless routing restart options. |
| Contents | <disable>—Disable graceful restart.

<path-selection-defer-time-limit>—Maximum time for which path selection is deferred. |

<group> (configuration/protocols/bgp)

```

Usage   <configuration>
          <protocols>
              <bgp>
                  <group>
                      <name>name</name>    <!-- identifier -->
                      <type>type-choice</type>
                      <protocol>protocol-choice</protocol>
                      <traceoptions>...</traceoptions>
                      <description>description</description>
                      <metric-out>...</metric-out>
                      <multipath>...</multipath>
                      <preference>preference</preference>
                      <local-preference>local-preference</local-preference>
                      <local-address>local-address</local-address>
                      <local-interface>local-interface</local-interface>
                      <hold-time>hold-time</hold-time>
                      <passive/>
                      <advertise-inactive/>
                      <keep>keep-choice</keep>
                      <no-aggregator-id/>
                      <out-delay>out-delay</out-delay>
                      <log-updown/>
                      <damping/>
                      <import>...</import>
                      <family>...</family>
                      <authentication-key>authentication-key</authentication-key>
                      <export>...</export>
                      <remove-private/>
                      <cluster>cluster</cluster>
                      <no-client-reflect/>
                      <peer-as>peer-as</peer-as>
                      <local-as>...</local-as>
                      <ipsec-sa>ipsec-sa</ipsec-sa>
                      <graceful-restart>...</graceful-restart>
                      <multipath/>
                      <as-override/>
                      <allow>...</allow>
                      <neighbor>...</neighbor>
                  </group>
              </bgp>
          </protocols>
      </configuration>

```

Description Define a peer group.

Contents <advertise-inactive>—Advertise non-active routes.

<allow>—Configure peer connections for specific networks.

<as-override>—Replace neighbor AS number with our AS number.

<authentication-key>—MD5 authentication key.

<cluster>—Cluster identifier.

- <damping>—Enable route flap damping.
 - <description>—Text description.
 - <export>—Export policy.
 - <family>—Protocol family for NLRI in updates.
 - <graceful-restart>—BGP graceful restart options.
 - <hold-time>—Hold time used when negotiating with a peer.
 - <import>—Import policy.
 - <ipsec-sa>—IPSec SA name.
 - <keep>—How to retain routes in the routing table.
 - all—Retain all routes.
 - none—Retain no routes.
 - <local-address>—Address of local end of BGP session.
 - <local-as>—Local autonomous system number.
 - <local-interface>—Local interface for IPv6 link local EBGP peering.
 - <local-preference>—Value of LOCAL_PREF path attribute.
 - <log-updown>—Log a message for peer state transitions.
 - <metric-out>—Route metric sent in MED.
 - <multipath>—Configure an EBGP multihop session.
 - <multihop>—Configure an EBGP multihop session.
 - <name>—Group name.
 - <neighbor>—Configure a neighbor.
 - <no-aggregator-id>—Set router ID in aggregator path attribute to 0.
 - <no-client-reflect>—Disable intracluster route redistribution.
 - <out-delay>—How long before exporting routes from routing table.
 - <passive>—Do not send open messages to a peer.
 - <peer-as>—Peer autonomous system number.
 - <preference>—Preference value.

<protocol>—IGP to use to resolve the next hop.

- isis—Use IS-IS to resolve the BGP next hop.
- ospf—Use OSPF to resolve the BGP next hop.
- rip—Use RIP to resolve the BGP next hop.

<remove-private>—Remove well-known private AS numbers.

<traceoptions>—Trace options.

<type>—Type of peer group.

- external—EBGP group.
- internal—IBGP group.

<group> (configuration/protocols/igmp/interface/static)

```
Usage   <configuration>
          <protocols>
            <igmp>
              <interface>
                <static>
                  <group>
                    <name>name</name>    <!-- identifier -->
                    <source>...</source>
                  </group>
                </static>
              </interface>
            </igmp>
          </protocols>
        </configuration>
```

Description IP multicast group address.

Contents <name>—IP multicast group address.

<source>—IP multicast source address.

- <group> (configuration/protocols/msdp)

• **Usage** <configuration>
• <protocols>
• <msdp>
• <group>
• <name>name</name> <!-- identifier -->
• <mode>mode-choice</mode>
• <disable/>
• <export>...</export>
• <import>...</import>
• <local-address>local-address</local-address>
• <traceoptions>...</traceoptions>
• <peer>....</peer>
• </group>
• </msdp>
• </protocols>
• </configuration>

• **Description** Configure MSDP peer groups.

• **Contents** <disable>—Disable MSDP.

• <export>—Export policy.

• <import>—Import policy.

• <local-address>—Local address.

• <mode>—MSDP group source-active flooding mode.

• ■ mesh-group—Group peers are mesh group members.

• ■ standard—Use standard MSDP source-active flooding rules.

• <name>—MSDP peer group name.

• <peer>—Configure an MSDP peer.

• <traceoptions>—Trace options for MSDP.

<group> (configuration/protocols/rip)

Usage

```
<configuration>
  <protocols>
    <rip>
      <group>
        <name>name</name>    <!-- identifier -->
        <preference>preference</preference>
        <metric-out>metric-out</metric-out>
        <export>...</export>
        <neighbor>...</neighbor>
      </group>
    </rip>
  </protocols>
</configuration>
```

Description Instance configuration.

Contents <export>—Export policy.

<metric-out>—Default metric of exported routes.

<name>—Group name.

<neighbor>—Neighbor configuration.

<preference>—Preference of routes learned by this group.

<group> (configuration/protocols/ripng)

Usage

```
<configuration>
  <protocols>
    <ripng>
      <group>
        <name>name</name>    <!-- identifier -->
        <preference>preference</preference>
        <metric-out>metric-out</metric-out>
        <export>...</export>
        <neighbor>...</neighbor>
      </group>
    </ripng>
  </protocols>
</configuration>
```

Description Instance configuration.

Contents <export>—Export policy.

<metric-out>—Default metric of exported routes.

<name>—Group name.

<neighbor>—Neighbor configuration.

<preference>—Preference of routes learned by this group.

- <group> (configuration/routing-instances/instance/protocols/bgp)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <name>name</name>    <!-- identifier -->
            <type>type-choice</type>
            <protocol>protocol-choice</protocol>
            <traceoptions>...</traceoptions>
            <description>description</description>
            <metric-out>...</metric-out>
            <multihop>...</multihop>
            <preference>preference</preference>
            <local-preference>local-preference</local-preference>
            <local-address>local-address</local-address>
            <local-interface>local-interface</local-interface>
            <hold-time>hold-time</hold-time>
            <passive/>
            <advertise-inactive/>
            <keep>keep-choice</keep>
            <no-aggregator-id/>
            <out-delay>out-delay</out-delay>
            <log-updown/>
            <damping/>
            <import>...</import>
            <family>...</family>
            <authentication-key>authentication-key</authentication-key>
            <export>...</export>
            <remove-private/>
            <cluster>cluster</cluster>
            <no-client-reflect/>
            <peer-as>peer-as</peer-as>
            <local-as>...</local-as>
            <ipsec-sa>ipsec-sa</ipsec-sa>
            <graceful-restart>...</graceful-restart>
            <multipath/>
            <as-override/>
            <allow>...</allow>
            <neighbor>...</neighbor>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Define a peer group.

Contents <advertise-inactive>—Advertise non-active routes.

<allow>—Configure peer connections for specific networks.

<as-override>—Replace neighbor AS number with our AS number.

<authentication-key>—MD5 authentication key.

<cluster>—Cluster identifier.

<damping>—Enable route flap damping.

<description>—Text description.

<export>—Export policy.

<family>—Protocol family for NLRI in updates.

<graceful-restart>—BGP graceful restart options.

<hold-time>—Hold time used when negotiating with a peer.

<import>—Import policy.

<ipsec-sa>—IPSec SA name.

<keep>—How to retain routes in the routing table.

- all—Retain all routes.
- none—Retain no routes.

<local-address>—Address of local end of BGP session.

<local-as>—Local autonomous system number.

<local-interface>—Local interface for IPv6 link local EBGP peering.

<local-preference>—Value of LOCAL_PREF path attribute.

<log-updown>—Log a message for peer state transitions.

<metric-out>—Route metric sent in MED.

<multihop>—Configure an EBGP multihop session.

<multipath>—Allow load-sharing among multiple BGP paths.

<name>—Group name.

<neighbor>—Configure a neighbor.

<no-aggregator-id>—Set router ID in aggregator path attribute to 0.

<no-client-reflect>—Disable intracluster route redistribution.

<out-delay>—How long before exporting routes from routing table.

<passive>—Do not send open messages to a peer.

<peer-as>—Peer autonomous system number.

<preference>—Preference value.

<group> (configuration/routing-instances/instance/protocols/rip)

- <protocol>—IGP to use to resolve the next hop.
 - isis—Use IS-IS to resolve the BGP next hop.
 - ospf—Use OSPF to resolve the BGP next hop.
 - rip—Use RIP to resolve the BGP next hop.
- <remove-private>—Remove well-known private AS numbers.
- <traceoptions>—Trace options.
- <type>—Type of peer group.
 - external—EBGP group.
 - internal—IBGP group.

<group> (configuration/routing-instances/instance/protocols/rip)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <rip>
 <group>
 <name>name</name> <!-- identifier -->
 <preference>preference</preference>
 <metric-out>metric-out</metric-out>
 <export>...</export>
 <neighbor>...</neighbor>
 </group>
 </rip>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Instance configuration.

Contents <export>—Export policy.

 <metric-out>—Default metric of exported routes.

 <name>—Group name.

 <neighbor>—Neighbor configuration.

 <preference>—Preference of routes learned by this group.

<group> (configuration/routing-instances/instance/routing-options/fate-sharing)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <fate-sharing>
          <group>
            <name>name</name>    <!-- identifier -->
            <cost>cost</cost>
            <from>...</from>
          </group>
        </fate-sharing>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Group of objects sharing common characteristics.

Contents <cost>—Cost value.

<from>—No documentation is available yet.

<name>—Name of object groups sharing the same fate.

<group> (configuration/routing-options/fate-sharing)

Usage

```

<configuration>
  <routing-options>
    <fate-sharing>
      <group>
        <name>name</name>    <!-- identifier -->
        <cost>cost</cost>
        <from>...</from>
      </group>
    </fate-sharing>
  </routing-options>
</configuration>
```

Description Group of objects sharing common characteristics.

Contents <cost>—Cost value.

<from>—No documentation is available yet.

<name>—Name of object groups sharing the same fate.

- <group> (configuration/snmp/access)

Usage <configuration>
 <snmp>
 <access>
 <group>
 <name>name</name> <!-- identifier -->
 <user>...</user>
 <model>model-choice</model>
 </group>
 </access>
 </snmp>
 </configuration>

Description SNMPv3 USM group information.

Contents <model>—SNMPv3 security model.

■ usm—User-based security model.

<name>—SNMPv3 USM group name.

<user>—SNMPv3 USM user name.

- <group> (configuration/snmp/access/context)

Usage <configuration>
 <snmp>
 <access>
 <context>
 <group>
 <name>name</name> <!-- identifier -->
 <model>model-choice</model>
 <security-level>security-level-choice</security-level>
 <read-view>read-view</read-view>
 <write-view>write-view</write-view>
 </group>
 </context>
 </access>
 </snmp>
 </configuration>

Description Access group.

Contents <model>—SNMPv3 security model.

■ usm—User-based security model.

<name>—SNMPv3 USM group name.

<read-view>—Read view name.

<security-level>—SNMPv3 security level.

- authentication—Authentication: AuthNoPriv.
- none—None: NoAuthNoPriv.
- privacy—Privacy: AuthPriv.

<write-view>—Write view name.

<group-ranges> (configuration/protocols/pim/rp/local)

Usage

```
<configuration>
  <protocols>
    <pim>
      <rp>
        <local>
          <group-ranges>
            <name>name</name>    <!-- identifier -->
          </group-ranges>
        </local>
      </rp>
    </pim>
  </protocols>
</configuration>
```

Description Group address range for which this router can be an RP.

Contents <name>—No documentation is available yet.

<group-ranges> (configuration/protocols/pim/rp/static/address)

Usage

```
<configuration>
  <protocols>
    <pim>
      <rp>
        <static>
          <address>
            <group-ranges>
              <name>name</name>    <!-- identifier -->
            </group-ranges>
          </address>
        </static>
      </rp>
    </pim>
  </protocols>
</configuration>
```

Description Group address range of RP.

Contents <name>—No documentation is available yet.

- <group-ranges> (configuration/routing-instances/instance/protocols/pim/rp/local)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <pim>
          <rp>
            <local>
              <group-ranges>
                <name>name</name>    <!-- identifier -->
              </group-ranges>
            </local>
          </rp>
        </pim>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Group address range for which this router can be an RP.

Contents <name>—No documentation is available yet.

- <group-ranges> (configuration/routing-instances/instance/protocols/pim/rp/static/address)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <pim>
          <rp>
            <static>
              <address>
                <group-ranges>
                  <name>name</name>    <!-- identifier -->
                </group-ranges>
              </address>
            </static>
          </rp>
        </pim>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Group address range of RP.

Contents <name>—No documentation is available yet.

<groups> (configuration)

Usage <configuration>
 <groups>
 <name>name</name> <!-- identifier -->

 </groups>
 </configuration>

Description Configuration groups.

Contents <name>—Group name.

<hash-key> (configuration/forwarding-options)

Usage <configuration>
 <forwarding-options>
 <hash-key>
 <family>...</family>
 </hash-key>
 </forwarding-options>
 </configuration>

Description Select data used in the hash key.

Contents <family>—Protocol family.

<helpers> (configuration/forwarding-options)

Usage <configuration>
 <forwarding-options>
 <helpers>
 <traceoptions>...</traceoptions>
 <domain>...</domain>
 <tftp>...</tftp>
 <bootp>...</bootp>
 </helpers>
 </forwarding-options>
 </configuration>

Description Port forwarding configuration.

Contents <bootp>—Incoming BOOTP/DHCP request forwarding configuration.

<domain>—Incoming DNS request forwarding configuration.

<tftp>—Incoming TFTP request forwarding configuration.

<traceoptions>—Trace options for helper.

- <hold-time> (configuration/interfaces/interface)

Usage

```
<configuration>
  <interfaces>
    <interface>
      <hold-time>
        <up>milliseconds</up>  <!-- mandatory -->
        <down>milliseconds</down>  <!-- mandatory -->
      </hold-time>
    </interface>
  </interfaces>
</configuration>
```

Description Hold time for link up and link down.

Contents <down>—Link down hold time.

<up>—Link up hold time.

- <host> (configuration/system/syslog)

Usage

```
<configuration>
  <system>
    <syslog>
      <host>
        <name>name</name>  <!-- identifier -->
        <contents>...</contents>
        <facility-override>facility-override-choice</facility-override>
        <log-prefix>log-prefix</log-prefix>
      </host>
    </syslog>
  </system>
</configuration>
```

Description Host to be notified.

Contents <contents>—No documentation is available yet.

<facility-override>—Use this facility code for all logging to this host.

- authorization—The authorization system.

- cron—The cron daemon.

- daemon—Various system daemons.

- ftp—The file transfer protocol daemon.

- kernel—Messages generated by the kernel.

- local0—Local logging option number 0.

- local1—Local logging option number 1.

- local2—Local logging option number 2.

- local3—Local logging option number 3.
- local4—Local logging option number 4.
- local5—Local logging option number 5.
- local6—Local logging option number 6.
- local7—Local logging option number 7.
- user—Messages from random user processes.

<log-prefix>—Prefix for all logging to this host.

<name>—Name of host to notify.

<icmp-code> (configuration/firewall/family/inet/filter/term/from)

Usage

```

<configuration>
  <firewall>
    <family>
      <inet>
        <filter>
          <term>
            <from>
              <icmp-code>
                <name>name</name>    <!-- identifier -->
              </icmp-code>
            </from>
          </term>
        </filter>
      </inet>
    </family>
  </firewall>
</configuration>
```

Description Match ICMP message code.

Contents <name>—No documentation is available yet.

- communication-prohibited-by-filtering—Communication prohibited by filtering.
- destination-host-prohibited—Destination host prohibited.
- destination-host-unknown—Destination host unknown.
- destination-network-prohibited—Destination network prohibited.
- destination-network-unknown—Destination network unknown.
- fragmentation-needed—Fragmentation needed.
- host-precedence-violation—Host precedence violation.
- host-unreachable—Host unreachable.

<icmp-code> (configuration/firewall/family/inet6/filter/term/from)

- ■ host-unreachable-for-TOS—Host unreachable for TOS.
- ■ ip-header-bad—IP header bad.
- ■ name—Range of values.
- ■ network-unreachable—Network unreachable.
- ■ network-unreachable-for-TOS—Network unreachable for TOS.
- ■ port-unreachable—Port unreachable.
- ■ precedence-cutoff-in-effect—Precedence cutoff in effect.
- ■ protocol-unreachable—Protocol unreachable.
- ■ redirect-for-host—Redirect for host.
- ■ redirect-for-network—Redirect for network.
- ■ redirect-for-tos-and-host—Redirect for TOS and host.
- ■ redirect-for-tos-and-net—Redirect for TOS and net.
- ■ required-option-missing—Required option missing.
- ■ source-host-isolated—Source host isolated.
- ■ source-route-failed—Source route failed.
- ■ ttl-eq-zero-during-reassembly—TTL eq zero during reassembly.
- ■ ttl-eq-zero-during-transit—TTL eq zero during transit.

<icmp-code> (configuration/firewall/family/inet6/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet6>
 <filter>
 <term>
 <from>
 <icmp-code>
 <name>name</name> <!-- identifier -->
 </icmp-code>
 </from>
 </term>
 </filter>
 </inet6>
 </family>
 </firewall>
</configuration>

Description Match ICMP message code.

Contents <name>—No documentation is available yet.

- communication-prohibited-by-filtering—Communication prohibited by filtering.
- destination-host-prohibited—Destination host prohibited.
- destination-host-unknown—Destination host unknown.
- destination-network-prohibited—Destination network prohibited.
- destination-network-unknown—Destination network unknown.
- fragmentation-needed—Fragmentation needed.
- host-precedence-violation—Host precedence violation.
- host-unreachable—Host unreachable.
- host-unreachable-for-TOS—Host unreachable for TOS.
- ip-header-bad—IP header bad.
- name—Range of values.
- network-unreachable—Network unreachable.
- network-unreachable-for-TOS—Network unreachable for TOS.
- port-unreachable—Port unreachable.
- precedence-cutoff-in-effect—Precedence cutoff in effect.
- protocol-unreachable—Protocol unreachable.
- redirect-for-host—Redirect for host.
- redirect-for-network—Redirect for network.
- redirect-for-tos-and-host—Redirect for TOS and host.
- redirect-for-tos-and-net—Redirect for TOS and net.
- required-option-missing—Required option missing.
- source-host-isolated—Source host isolated.
- source-route-failed—Source route failed.
- ttl-eq-zero-during-reassembly—TTL eq zero during reassembly.
- ttl-eq-zero-during-transit—TTL eq zero during transit.

- <icmp-code-except> (configuration/firewall/family/inet/filter/term/from)

Usage

```
<configuration>
  <firewall>
    <family>
      <inet>
        <filter>
          <term>
            <from>
              <icmp-code-except>
                <name>name</name>    <!-- identifier -->
              </icmp-code-except>
            </from>
          </term>
        </filter>
      </inet>
    </family>
  </firewall>
</configuration>
```

Description Do not match ICMP message code.

Contents <name>—No documentation is available yet.

- communication-prohibited-by-filtering—Communication prohibited by filtering.
- destination-host-prohibited—Destination host prohibited.
- destination-host-unknown—Destination host unknown.
- destination-network-prohibited—Destination network prohibited.
- destination-network-unknown—Destination network unknown.
- fragmentation-needed—Fragmentation needed.
- host-precedence-violation—Host precedence violation.
- host-unreachable—Host unreachable.
- host-unreachable-for-TOS—Host unreachable for TOS.
- ip-header-bad—IP header bad.
- name—Range of values.
- network-unreachable—Network unreachable.
- network-unreachable-for-TOS—Network unreachable for TOS.
- port-unreachable—Port unreachable.
- precedence-cutoff-in-effect—Precedence cutoff in effect.
- protocol-unreachable—Protocol unreachable.
- redirect-for-host—Redirect for host.

- redirect-for-network—Redirect for network.
- redirect-for-tos-and-host—Redirect for TOS and host.
- redirect-for-tos-and-net—Redirect for TOS and net.
- required-option-missing—Required option missing.
- source-host-isolated—Source host isolated.
- source-route-failed—Source route failed.
- ttl-eq-zero-during-reassembly—TTL eq zero during reassembly.
- ttl-eq-zero-during-transit—TTL eq zero during transit.

<icmp-code-except> (configuration/firewall/family/inet6/filter/term/from)

Usage

```

<configuration>
  <firewall>
    <family>
      <inet6>
        <filter>
          <term>
            <from>
              <icmp-code-except>
                <name>name</name>    <!-- identifier -->
              </icmp-code-except>
            </from>
          </term>
        </filter>
      </inet6>
    </family>
  </firewall>
</configuration>
```

Description Do not match ICMP message code.

Contents <name>—No documentation is available yet.

- communication-prohibited-by-filtering—Communication prohibited by filtering.
- destination-host-prohibited—Destination host prohibited.
- destination-host-unknown—Destination host unknown.
- destination-network-prohibited—Destination network prohibited.
- destination-network-unknown—Destination network unknown.
- fragmentation-needed—Fragmentation needed.
- host-precedence-violation—Host precedence violation.
- host-unreachable—Host unreachable.

<icmp-type> (configuration/firewall/family/inet/filter/term/from)

- host-unreachable-for-TOS—Host unreachable for TOS.
- ip-header-bad—IP header bad.
- name—Range of values.
- network-unreachable—Network unreachable.
- network-unreachable-for-TOS—Network unreachable for TOS.
- port-unreachable—Port unreachable.
- precedence-cutoff-in-effect—Precedence cutoff in effect.
- protocol-unreachable—Protocol unreachable.
- redirect-for-host—Redirect for host.
- redirect-for-network—Redirect for network.
- redirect-for-tos-and-host—Redirect for TOS and host.
- redirect-for-tos-and-net—Redirect for TOS and net.
- required-option-missing—Required option missing.
- source-host-isolated—Source host isolated.
- source-route-failed—Source route failed.
- ttl-eq-zero-during-reassembly—TTL eq zero during reassembly.
- ttl-eq-zero-during-transit—TTL eq zero during transit.

<icmp-type> (configuration/firewall/family/inet/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <icmp-type>
 <name>name</name> <!-- identifier -->
 </icmp-type>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
</configuration>

Description Match ICMP message type.

Contents <name>—No documentation is available yet.

- echo-reply—Echo reply.
- echo-request—Echo request.
- info-reply—Info reply.
- info-request—Info request.
- mask-reply—Mask reply.
- mask-request—Mask request.
- name—Range of values.
- parameter-problem—Parameter problem.
- redirect—Redirect.
- router-advertisement—Router advertisement.
- router-solicit—Router solicit.
- source-quench—Source quench.
- time-exceeded—Time exceeded.
- timestamp—Timestamp.
- timestamp-reply—Timestamp reply.
- unreachable—Unreachable.

<icmp-type> (configuration/firewall/family/inet6/filter/term/from)

```
Usage  <configuration>
        <firewall>
            <family>
                <inet6>
                    <filter>
                        <term>
                            <from>
                                <icmp-type>
                                    <name>name</name>    <!-- identifier -->
                                </icmp-type>
                            </from>
                        </term>
                    </filter>
                </inet6>
            </family>
        </firewall>
    </configuration>
```

Description Match ICMP message type.

- **Contents** <name>—No documentation is available yet.
 - echo-reply—Echo reply.
 - echo-request—Echo request.
 - info-reply—Info reply.
 - info-request—Info request.
 - mask-reply—Mask reply.
 - mask-request—Mask request.
 - name—Range of values.
 - parameter-problem—Parameter problem.
 - redirect—Redirect.
 - router-advertisement—Router advertisement.
 - router-solicit—Router solicit.
 - source-quench—Source quench.
 - time-exceeded—Time exceeded.
 - timestamp—Timestamp.
 - timestamp-reply—Timestamp reply.
 - unreachable—Unreachable.
- **<icmp-type-except> (configuration/firewall/family/inet/filter/term/from)**
 - **Usage** <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <icmp-type-except>
 <name>name</name> <!-- identifier -->
 </icmp-type-except>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
</configuration>
 - **Description** Do not match ICMP message type.

Contents <*name*>—No documentation is available yet.

- echo-reply—Echo reply.
- echo-request—Echo request.
- info-reply—Info reply.
- info-request—Info request.
- mask-reply—Mask reply.
- mask-request—Mask request.
- name—Range of values.
- parameter-problem—Parameter problem.
- redirect—Redirect.
- router-advertisement—Router advertisement.
- router-solicit—Router solicit.
- source-quench—Source quench.
- time-exceeded—Time exceeded.
- timestamp—Timestamp.
- timestamp-reply—Timestamp reply.
- unreachable—Unreachable.

- <icmp-type-except> (configuration/firewall/family/inet6/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet6>
 <filter>
 <term>
 <from>
 <icmp-type-except>
 <name>name</name> <!-- identifier -->
 </icmp-type-except>
 </from>
 </term>
 </filter>
 </inet6>
 </family>
 </firewall>
 </configuration>

Description Do not match ICMP message type.

Contents <name>—No documentation is available yet.

- echo-reply—Echo reply.
- echo-request—Echo request.
- info-reply—Info reply.
- info-request—Info request.
- mask-reply—Mask reply.
- mask-request—Mask request.
- name—Range of values.
- parameter-problem—Parameter problem.
- redirect—Redirect.
- router-advertisement—Router advertisement.
- router-solicit—Router solicit.
- source-quench—Source quench.
- time-exceeded—Time exceeded.
- timestamp—Timestamp.
- timestamp-reply—Timestamp reply.
- unreachable—Unreachable.

<idle-timeout> (configuration/protocols/bgp/family/inet/any/prefix-limit/teardown)

```
Usage  <configuration>
        <protocols>
          <bgp>
            <family>
              <inet>
                <any>
                  <prefix-limit>
                    <teardown>
                      <idle-timeout>
                        <forever/>
                        <timeout>timeout</timeout>
                      </idle-timeout>
                    </teardown>
                  </prefix-limit>
                </any>
              </inet>
            </family>
          </bgp>
        </protocols>
      </configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/family/inet/labeled-unicast/prefix-limit/teardown)

```
Usage  <configuration>
        <protocols>
          <bgp>
            <family>
              <inet>
                <labeled-unicast>
                  <prefix-limit>
                    <teardown>
                      <idle-timeout>
                        <forever/>
                        <timeout>timeout</timeout>
                      </idle-timeout>
                    </teardown>
                  </prefix-limit>
                </labeled-unicast>
              </inet>
            </family>
          </bgp>
        </protocols>
      </configuration>
```

Description Timeout before attempting to restart peer.

- **Contents** <forever>—Idle the peer until the user intervenes.
- <timeout>—Timeout value in minutes for restarting peer.

• **<idle-timeout> (configuration/protocols/bgp/family/inet/multicast/prefix-limit/teardown)**

```
• Usage  <configuration>
  •       <protocols>
  •         <bgp>
  •           <family>
  •             <inet>
  •               <multicast>
  •                 <prefix-limit>
  •                   <teardown>
  •                     <idle-timeout>
  •                       <forever/>
  •                         <timeout>timeout</timeout>
  •                     </idle-timeout>
  •                   </teardown>
  •                 </prefix-limit>
  •               </multicast>
  •             </inet>
  •           </family>
  •         </bgp>
  •       </protocols>
  •     </configuration>
```

• **Description** Timeout before attempting to restart peer.

• **Contents** <forever>—Idle the peer until the user intervenes.

• <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/family/inet/unicast/prefix-limit/teardown)

```
Usage  <configuration>
        <protocols>
          <bgp>
            <family>
              <inet>
                <unicast>
                  <prefix-limit>
                    <teardown>
                      <idle-timeout>
                        <forever/>
                        <timeout>timeout</timeout>
                      </idle-timeout>
                    </teardown>
                  </prefix-limit>
                </unicast>
              </inet>
            </family>
          </bgp>
        </protocols>
      </configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/family/inet-vpn/any/prefix-limit/teardown)

```
Usage  <configuration>
        <protocols>
          <bgp>
            <family>
              <inet-vpn>
                <any>
                  <prefix-limit>
                    <teardown>
                      <idle-timeout>
                        <forever/>
                        <timeout>timeout</timeout>
                      </idle-timeout>
                    </teardown>
                  </prefix-limit>
                </any>
              </inet-vpn>
            </family>
          </bgp>
        </protocols>
      </configuration>
```

Description Timeout before attempting to restart peer.

- **Contents** <forever>—Idle the peer until the user intervenes.
- <timeout>—Timeout value in minutes for restarting peer.

• **<idle-timeout> (configuration/protocols/bgp/family/inet-vpn/multicast/prefix-limit/teardown)**

```
• Usage  <configuration>
  •       <protocols>
  •         <bgp>
  •           <family>
  •             <inet-vpn>
  •               <multicast>
  •                 <prefix-limit>
  •                   <teardown>
  •                     <idle-timeout>
  •                       <forever/>
  •                         <timeout>timeout</timeout>
  •                       </idle-timeout>
  •                     </teardown>
  •                   </prefix-limit>
  •                 </multicast>
  •               </inet-vpn>
  •             </family>
  •           </bgp>
  •         </protocols>
  •       </configuration>
```

• **Description** Timeout before attempting to restart peer.

• **Contents** <forever>—Idle the peer until the user intervenes.

• <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/family/inet-vpn/unicast/prefix-limit/teardown)

```
Usage  <configuration>
        <protocols>
          <bgp>
            <family>
              <inet-vpn>
                <unicast>
                  <prefix-limit>
                    <teardown>
                      <idle-timeout>
                        <forever/>
                        <timeout>timeout</timeout>
                      </idle-timeout>
                    </teardown>
                  </prefix-limit>
                </unicast>
              </inet-vpn>
            </family>
          </bgp>
        </protocols>
      </configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/family/inet6/any/prefix-limit/teardown)

```
Usage  <configuration>
        <protocols>
          <bgp>
            <family>
              <inet6>
                <any>
                  <prefix-limit>
                    <teardown>
                      <idle-timeout>
                        <forever/>
                        <timeout>timeout</timeout>
                      </idle-timeout>
                    </teardown>
                  </prefix-limit>
                </any>
              </inet6>
            </family>
          </bgp>
        </protocols>
      </configuration>
```

Description Timeout before attempting to restart peer.

• **Contents** <forever>—Idle the peer until the user intervenes.

• <timeout>—Timeout value in minutes for restarting peer.

• **<idle-timeout> (configuration/protocols/bgp/family/inet6/labeled-unicast/prefix-limit/teardown)**

• **Usage** <configuration>
 <protocols>
 <bpg>
 <family>
 <inet6>
 <labeled-unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet6>
 </family>
 </bpg>
 </protocols>
</configuration>

• **Description** Timeout before attempting to restart peer.

• **Contents** <forever>—Idle the peer until the user intervenes.

• <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/family/inet6/multicast/prefix-limit/teardown)

```
Usage  <configuration>
        <protocols>
            <bgp>
                <family>
                    <inet6>
                        <multicast>
                            <prefix-limit>
                                <teardown>
                                    <idle-timeout>
                                        <forever/>
                                        <timeout>timeout</timeout>
                                    </idle-timeout>
                                </teardown>
                            </prefix-limit>
                        </multicast>
                    </inet6>
                </family>
            </bgp>
        </protocols>
    </configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/family/inet6/unicast/prefix-limit/teardown)

```
Usage  <configuration>
        <protocols>
            <bgp>
                <family>
                    <inet6>
                        <unicast>
                            <prefix-limit>
                                <teardown>
                                    <idle-timeout>
                                        <forever/>
                                        <timeout>timeout</timeout>
                                    </idle-timeout>
                                </teardown>
                            </prefix-limit>
                        </unicast>
                    </inet6>
                </family>
            </bgp>
        </protocols>
    </configuration>
```

Description Timeout before attempting to restart peer.

- | | |
|--|--|
| Contents | <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer. |
|
 | |
| <idle-timeout> (configuration/protocols/bgp/family/l2vpn/unicast/prefix-limit/teardown) | |
|
 | |
| Usage | <configuration>
<protocols>
<bgp>
<family>
<l2vpn>
<unicast>
<prefix-limit>
<teardown>
<idle-timeout>
<forever/>
<timeout> <i>timeout</i> </timeout>
</idle-timeout>
</teardown>
</prefix-limit>
</unicast>
</l2vpn>
</family>
</bgp>
</protocols>
</configuration> |
|
 | |
| Description | Timeout before attempting to restart peer. |
|
 | |
| Contents | <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer. |

<idle-timeout> (configuration/protocols/bgp/group/family/inet/any/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <any>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </any>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/protocols/bgp/group/family/inet/labeled-unicast/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <labeled-unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/group/family/inet/multicast/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <multicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/protocols/bgp/group/family/inet/unicast/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bpg>
 <group>
 <family>
 <inet>
 <unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet>
 </family>
 </group>
 </bpg>
 </protocols>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/group/family/inet-vpn/any/prefix-limit/teardown)

Usage

```

<configuration>
  <protocols>
    <bgp>
      <group>
        <family>
          <inet-vpn>
            <any>
              <prefix-limit>
                <teardown>
                  <idle-timeout>
                    <forever/>
                    <timeout>timeout</timeout>
                  </idle-timeout>
                </teardown>
              </prefix-limit>
            </any>
          </inet-vpn>
        </family>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/protocols/bgp/group/family/inet-vpn/multicast/prefix-limit/teardown)

```
Usage <configuration>
    <protocols>
        <bgp>
            <group>
                <family>
                    <inet-vpn>
                        <multicast>
                            <prefix-limit>
                                <teardown>
                                    <idle-timeout>
                                        <forever/>
                                        <timeout>timeout</timeout>
                                    </idle-timeout>
                                </teardown>
                            </prefix-limit>
                        </multicast>
                    </inet-vpn>
                </family>
            </group>
        </bgp>
    </protocols>
</configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/group/family/inet-vpn/unicast/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bpg>
 <group>
 <family>
 <inet-vpn>
 <unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet-vpn>
 </family>
 </group>
 </bpg>
 </protocols>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/protocols/bgp/group/family/inet6/any/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bpg>
 <group>
 <family>
 <inet6>
 <any>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </any>
 </inet6>
 </family>
 </group>
 </bpg>
 </protocols>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/group/family/inet6/labeled-unicast/prefix-limit/teardown)

Usage

```

<configuration>
  <protocols>
    <bgp>
      <group>
        <family>
          <inet6>
            <labeled-unicast>
              <prefix-limit>
                <teardown>
                  <idle-timeout>
                    <forever/>
                    <timeout>timeout</timeout>
                  </idle-timeout>
                </teardown>
              </prefix-limit>
            </labeled-unicast>
          </inet6>
        </family>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/protocols/bgp/group/family/inet6/multicast/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bpg>
 <group>
 <family>
 <inet6>
 <multicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet6>
 </family>
 </group>
 </bpg>
 </protocols>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/group/family/inet6/unicast/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bpg>
 <group>
 <family>
 <inet6>
 <unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet6>
 </family>
 </group>
 </bpg>
 </protocols>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/protocols/bgp/group/family/l2vpn/unicast/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bpg>
 <group>
 <family>
 <l2vpn>
 <unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </l2vpn>
 </family>
 </group>
 </bpg>
 </protocols>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet/any/prefix-limit/teardown)

Usage

```

<configuration>
  <protocols>
    <bgp>
      <group>
        <neighbor>
          <family>
            <inet>
              <any>
                <prefix-limit>
                  <teardown>
                    <idle-timeout>
                      <forever/>
                      <timeout>timeout</timeout>
                    </idle-timeout>
                  </teardown>
                </prefix-limit>
              </any>
            </inet>
          </family>
        </neighbor>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet/labeled-unicast/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <labeled-unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet/multicast/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <multicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet/unicast/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>*timeout*</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/any/prefix-limit/teardown)

Usage

```

<configuration>
  <protocols>
    <bgp>
      <group>
        <neighbor>
          <family>
            <inet-vpn>
              <any>
                <prefix-limit>
                  <teardown>
                    <idle-timeout>
                      <forever/>
                      <timeout>timeout</timeout>
                    </idle-timeout>
                  </teardown>
                </prefix-limit>
              </any>
            </inet-vpn>
          </family>
        </neighbor>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/multicast/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bpg>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <multicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bpg>
 </protocols>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/unicast/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet6/any/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet6>
 <any>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>*timeout*</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </any>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet6/labeled-unicast/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet6>
 <labeled-unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
</configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet6/multicast/prefix-limit/teardown)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet6>
 <multicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/protocols/bgp/group/neighbor/family/inet6/unicast/prefix-limit/teardown)

Usage

```

<configuration>
  <protocols>
    <bgp>
      <group>
        <neighbor>
          <family>
            <inet6>
              <unicast>
                <prefix-limit>
                  <teardown>
                    <idle-timeout>
                      <forever/>
                      <timeout>timeout</timeout>
                    </idle-timeout>
                  </teardown>
                </prefix-limit>
              </unicast>
            </inet6>
          </family>
        </neighbor>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/protocols/bgp/group/neighbor/family/l2vpn/unicast/prefix-limit/teardown)

```
Usage <configuration>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <family>
                <l2vpn>
                  <unicast>
                    <prefix-limit>
                      <teardown>
                        <idle-timeout>
                          <forever/>
                          <timeout>timeout</timeout>
                        </idle-timeout>
                      </teardown>
                    </prefix-limit>
                  </unicast>
                </l2vpn>
              </family>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/family/inet/any/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet>
 <any>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </any>
 </inet>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/family/inet/labeled-unicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet>
 <labeled-unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/family/inet/multicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet>
 <multicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/family/inet/unicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet>
 <unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn/any/prefix-limit/teardown)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <family>
            <inet-vpn>
              <any>
                <prefix-limit>
                  <teardown>
                    <idle-timeout>
                      <forever/>
                      <timeout>timeout</timeout>
                    </idle-timeout>
                  </teardown>
                </prefix-limit>
              </any>
            </inet-vpn>
          </family>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn/multicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <multicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn/unicast/prefix-limit/teardown)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <family>
            <inet-vpn>
              <unicast>
                <prefix-limit>
                  <teardown>
                    <idle-timeout>
                      <forever/>
                      <timeout>timeout</timeout>
                    </idle-timeout>
                  </teardown>
                </prefix-limit>
              </unicast>
            </inet-vpn>
          </family>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/family/inet6/any/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <any>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </any>
 </inet6>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/family/inet6/labeled-unicast/prefix-limit/teardown)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <family>
            <inet6>
              <labeled-unicast>
                <prefix-limit>
                  <teardown>
                    <idle-timeout>
                      <forever/>
                      <timeout>timeout</timeout>
                    </idle-timeout>
                  </teardown>
                </prefix-limit>
              </labeled-unicast>
            </inet6>
          </family>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/family/inet6/multicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <multicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet6>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/family/inet6/unicast/prefix-limit/teardown)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <family>
            <inet6>
              <unicast>
                <prefix-limit>
                  <teardown>
                    <idle-timeout>
                      <forever/>
                      <timeout>timeout</timeout>
                    </idle-timeout>
                  </teardown>
                </prefix-limit>
              </unicast>
            </inet6>
          </family>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/family/l2vpn/unicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <l2vpn>
 <unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </l2vpn>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/family/inet/any/prefix-limit/teardown)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <family>
              <inet>
                <any>
                  <prefix-limit>
                    <teardown>
                      <idle-timeout>
                        <forever/>
                        <timeout>timeout</timeout>
                      </idle-timeout>
                    </teardown>
                  </prefix-limit>
                </any>
              </inet>
            </family>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/family/inet/labeled-unicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <labeled-unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/family/inet/multicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <multicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/family/inet/unicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn/any/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet-vpn>
 <any>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </any>
 </inet-vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn/multicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet-vpn>
 <multicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet-vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn/unicast/prefix-limit/teardown)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <family>
              <inet-vpn>
                <unicast>
                  <prefix-limit>
                    <teardown>
                      <idle-timeout>
                        <forever/>
                        <timeout>timeout</timeout>
                      </idle-timeout>
                    </teardown>
                  </prefix-limit>
                </unicast>
              </inet-vpn>
            </family>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6/any/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet6>
 <any>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </any>
 </inet6>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6/labeled-unicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet6>
 <labeled-unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet6>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6/multicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet6>
 <multicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet6>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6/unicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet6>
 <unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet6>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/family/l2vpn/unicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <l2vpn>
 <unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </l2vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/any/prefix-limit/teardown)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <family>
                <inet>
                  <any>
                    <prefix-limit>
                      <teardown>
                        <idle-timeout>
                          <forever/>
                          <timeout>timeout</timeout>
                        </idle-timeout>
                      </teardown>
                    </prefix-limit>
                  </any>
                </inet>
              </family>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/labeled-unicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <labeled-unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/multicast/prefix-limit/teardown)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <family>
                <inet>
                  <multicast>
                    <prefix-limit>
                      <teardown>
                        <idle-timeout>
                          <forever/>
                          <timeout>timeout</timeout>
                        </idle-timeout>
                      </teardown>
                    </prefix-limit>
                  </multicast>
                </inet>
              </family>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/unicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn/any/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <any>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </any>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn/multicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <multicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn/unicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/any/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet6>
 <any>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </any>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/labeled-unicast/prefix-limit/teardown)

```
Usage  <configuration>
        <routing-instances>
            <instance>
                <protocols>
                    <bgp>
                        <group>
                            <neighbor>
                                <family>
                                    <inet6>
                                        <labeled-unicast>
                                            <prefix-limit>
                                                <teardown>
                                                    <idle-timeout>
                                                        <forever/>
                                                        <timeout>timeout</timeout>
                                                    </idle-timeout>
                                                </teardown>
                                            </prefix-limit>
                                        </labeled-unicast>
                                    </inet6>
                                </family>
                            </neighbor>
                        </group>
                    </bgp>
                </protocols>
            </instance>
        </routing-instances>
    </configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances(instance/protocols/bgp/group/neighbor/family/inet6/multicast/prefix-limit/teardown)

```
Usage <configuration>
      <routing-instances>
        <instance>
          <protocols>
            <bgp>
              <group>
                <neighbor>
                  <family>
                    <inet6>
                      <multicast>
                        <prefix-limit>
                          <teardown>
                            <idle-timeout>
                              <forever/>
                              <timeout>timeout</timeout>
                            </idle-timeout>
                          </teardown>
                        </prefix-limit>
                      </multicast>
                    </inet6>
                  </family>
                </neighbor>
              </group>
            </bgp>
          </protocols>
        </instance>
      </routing-instances>
    </configuration>
```

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

<idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/unicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet6>
 <unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

<timeout>—Timeout value in minutes for restarting peer.

- <idle-timeout> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/l2vpn/unicast/prefix-limit/teardown)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <l2vpn>
 <unicast>
 <prefix-limit>
 <teardown>
 <idle-timeout>
 <forever/>
 <timeout>timeout</timeout>
 </idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </l2vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Timeout before attempting to restart peer.

Contents <forever>—Idle the peer until the user intervenes.

 <timeout>—Timeout value in minutes for restarting peer.

<ieee-802.1> (configuration/class-of-service/interfaces/unit/classifiers)

Usage

```
<configuration>
  <class-of-service>
    <interfaces>
      <unit>
        <classifiers>
          <ieee-802.1>
            <classifier-name>classifier-name</classifier-name>
          </ieee-802.1>
        </classifiers>
      </unit>
    </interfaces>
  </class-of-service>
</configuration>
```

Description IEEE-802.1 classifier.

Contents <classifier-name>—Name of classifier to be applied.

<ieee-802.1> (configuration/class-of-service/interfaces/unit/rewrite-rules)

Usage

```
<configuration>
  <class-of-service>
    <interfaces>
      <unit>
        <rewrite-rules>
          <ieee-802.1>
            <default/>
          </ieee-802.1>
        </rewrite-rules>
      </unit>
    </interfaces>
  </class-of-service>
</configuration>
```

Description IEEE-802.1 rewrite rule.

Contents <default>—Apply default rewrite rule.

• <ieee-802.1> (configuration/class-of-service/classifiers)

Usage <configuration>
 <class-of-service>
 <classifiers>
 <ieee-802.1>
 <name>name</name> <!-- identifier -->
 <import>import</import>
 <forwarding-class>...</forwarding-class>
 </ieee-802.1>
 </classifiers>
 </class-of-service>
 </configuration>

Description IEEE-802.1 classifier.

Contents <forwarding-class>—Define a classification of code point aliases.

 <import>—Include this classifier in this definition.

 <name>—Classifier name.

• <ieee-802.1> (configuration/class-of-service/code-point-aliases)

Usage <configuration>
 <class-of-service>
 <code-point-aliases>
 <ieee-802.1>
 <name>name</name> <!-- identifier -->
 <bits>bits</bits> <!-- mandatory -->
 </ieee-802.1>
 </code-point-aliases>
 </class-of-service>
 </configuration>

Description IEEE-802.1 code point aliases.

Contents <bits>—IEEE-802.1 3-bit pattern.

 <name>—IEEE-802.1 alias name.

<if-exceeding> (configuration/firewall/family/inet/filter/policer)

```
Usage  <configuration>
        <firewall>
          <family>
            <inet>
              <filter>
                <policer>
                  <if-exceeding>
                    <bandwidth-limit>bits per second</bandwidth-limit> <!-- mandatory -->
                    <burst-size-limit>bytes</burst-size-limit>    <!-- mandatory -->
                  </if-exceeding>
                </policer>
              </filter>
            </inet>
          </family>
        </firewall>
      </configuration>
```

Description Define rate limits.

Contents <bandwidth-limit>—Bandwidth limit.
 <burst-size-limit>—Burst size limit.

<if-exceeding> (configuration/firewall/family/inet6/filter/policer)

```
Usage  <configuration>
        <firewall>
          <family>
            <inet6>
              <filter>
                <policer>
                  <if-exceeding>
                    <bandwidth-limit>bits per second</bandwidth-limit> <!-- mandatory -->
                    <burst-size-limit>bytes</burst-size-limit>    <!-- mandatory -->
                  </if-exceeding>
                </policer>
              </filter>
            </inet6>
          </family>
        </firewall>
      </configuration>
```

Description Define rate limits.

Contents <bandwidth-limit>—Bandwidth limit.
 <burst-size-limit>—Burst size limit.

- <if-exceeding> (configuration/firewall/policer)

Usage <configuration>
 <firewall>
 <policer>
 <if-exceeding>
 <bandwidth-limit>*bits per second*</bandwidth-limit> <!-- mandatory -->
 <burst-size-limit>*bytes*</burst-size-limit> <!-- mandatory -->
 </if-exceeding>
 </policer>
 </firewall>
 </configuration>

Description Define rate limits.

Contents <bandwidth-limit>—Bandwidth limit.

 <burst-size-limit>—Burst size limit.

- <igmp> (configuration/protocols)

Usage <configuration>
 <protocols>
 <igmp>
 <traceoptions>...</traceoptions>
 <query-interval>*seconds*</query-interval>
 <query-response-interval>*seconds*</query-response-interval>
 <query-last-member-interval>*seconds*</query-last-member-interval>
 <robust-count>*robust-count*</robust-count>
 <interface>...</interface>
 </igmp>
 </protocols>
 </configuration>

Description IGMP options.

Contents <interface>—Interface options for IGMP.

 <query-interval>—When to send host-query messages.

 <query-last-member-interval>—When to send group query messages.

 <query-response-interval>—How long to wait for a host-query response.

 <robust-count>—Expected packet loss on a subnet.

 <traceoptions>—Trace options for IGMP.

<igp> (configuration/policy-options/policy-statement/from/route-filter/metric)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <route-filter>
 <metric>
 <igp>
 <metric-offset>metric-offset</metric-offset>
 </igp>
 </metric>
 </route-filter>
 </from>
 </policy-statement>
 </policy-options>
</configuration>

Description Track the IGP metric (BGP only).

Contents <metric-offset>—Metric offset for MED.

<igp> (configuration/policy-options/policy-statement/from/source-address-filter/metric)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <source-address-filter>
 <metric>
 <igp>
 <metric-offset>metric-offset</metric-offset>
 </igp>
 </metric>
 </source-address-filter>
 </from>
 </policy-statement>
 </policy-options>
</configuration>

Description Track the IGP metric (BGP only).

Contents <metric-offset>—Metric offset for MED.

- <igp> (configuration/policy-options/policy-statement/term/from/route-filter/metric)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <route-filter>
 <metric>
 <igp>
 <metric-offset>*metric-offset*</metric-offset>
 </igp>
 </metric>
 </route-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Track the IGP metric (BGP only).

Contents <metric-offset>—Metric offset for MED.

- <igp> (configuration/policy-options/policy-statement/term/from/source-address-filter/metric)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <source-address-filter>
 <metric>
 <igp>
 <metric-offset>*metric-offset*</metric-offset>
 </igp>
 </metric>
 </source-address-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Track the IGP metric (BGP only).

Contents <metric-offset>—Metric offset for MED.

<igp> (configuration/policy-options/policy-statement/term/then/metric)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <then>
 <metric>
 <igp>
 <metric-offset>metric-offset</metric-offset>
 </igp>
 </metric>
 </then>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Track the IGP metric (BGP only).

Contents <metric-offset>—Metric offset for MED.

<igp> (configuration/policy-options/policy-statement/then/metric)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <then>
 <metric>
 <igp>
 <metric-offset>metric-offset</metric-offset>
 </igp>
 </metric>
 </then>
 </policy-statement>
 </policy-options>
 </configuration>

Description Track the IGP metric (BGP only).

Contents <metric-offset>—Metric offset for MED.

- <igp> (configuration/protocols/bgp/group/metric-out)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <metric-out>
 <igp>
 <metric-offset>metric-offset</metric-offset>
 </igp>
 </metric-out>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Track the IGP metric.

Contents <metric-offset>—Metric offset for MED.

- <igp> (configuration/protocols/bgp/group/neighbor/metric-out)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <metric-out>
 <igp>
 <metric-offset>metric-offset</metric-offset>
 </igp>
 </metric-out>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Track the IGP metric.

Contents <metric-offset>—Metric offset for MED.

<igp> (configuration/protocols/bgp/metric-out)

```
Usage  <configuration>
        <protocols>
            <bgp>
                <metric-out>
                    <igp>
                        <metric-offset>metric-offset</metric-offset>
                    </igp>
                </metric-out>
            </bgp>
        </protocols>
    </configuration>
```

Description Track the IGP metric.

Contents <metric-offset>—Metric offset for MED.

<igp> (configuration/routing-instances/instance/protocols/bgp/group/metric-out)

```
Usage  <configuration>
        <routing-instances>
            <instance>
                <protocols>
                    <bgp>
                        <group>
                            <metric-out>
                                <igp>
                                    <metric-offset>metric-offset</metric-offset>
                                </igp>
                            </metric-out>
                        </group>
                    </bgp>
                </protocols>
            </instance>
        </routing-instances>
    </configuration>
```

Description Track the IGP metric.

Contents <metric-offset>—Metric offset for MED.

- <igp> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/metric-out)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <metric-out>
 <igp>
 <metric-offset>*metric-offset*</metric-offset>
 </igp>
 </metric-out>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Track the IGP metric.

Contents <metric-offset>—Metric offset for MED.

<igp> (configuration/routing-instances/instance/protocols/bgp/metric-out)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <metric-out>
 <igp>
 <metric-offset>*metric-offset*</metric-offset>
 </igp>
 </metric-out>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Track the IGP metric.

Contents <metric-offset>—Metric offset for MED.

<ike> (configuration/security)

Usage	<pre> <configuration> <security> <ike> <authentication-method>authentication-method</authentication-method> <dh-group>dh-group-choice</dh-group> <authentication-algorithm>authentication-algorithm</authentication-algorithm> <encryption-algorithm>encryption-algorithm-choice</encryption-algorithm> <lifetime-seconds>seconds</lifetime-seconds> <proposal>...</proposal> <policy>...</policy> </ike> </security> </configuration></pre>
Description	IKE configuration.
Contents	<p><authentication-algorithm>—Define authentication algorithm.</p> <ul style="list-style-type: none"> ■ md5—MD5 authentication algorithm. ■ sha1—SHA1 authentication algorithm. <p><authentication-method>—Define authentication method.</p> <ul style="list-style-type: none"> ■ pre-shared-keys—Preshared keys. <p><dh-group>—Define Diffie-Hellman group.</p> <ul style="list-style-type: none"> ■ group1—Diffie-Hellman Group1. ■ group2—Diffie-Hellman Group2. <p><encryption-algorithm>—Define encryption algorithm.</p> <ul style="list-style-type: none"> ■ 3des-cbc—3DES-CBC encryption algorithm. ■ des-cbc—DES-CBC encryption algorithm. <p><lifetime-seconds>—Lifetime in seconds.</p> <p><policy>—Define an IKE policy.</p> <p><proposal>—Define an IKE proposal for a dynamic SA.</p>

• <import> (configuration/protocols/bgp)

Usage <configuration>
 <protocols>
 <bgp>
 <import>
 <name>name</name> <!-- identifier -->
 </import>
 </bgp>
 </protocols>
</configuration>

Description Import policy.

Contents <name>—Import policy.

• <import> (configuration/protocols/bgp/group)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <import>
 <name>name</name> <!-- identifier -->
 </import>
 </group>
 </bgp>
 </protocols>
</configuration>

Description Import policy.

Contents <name>—Import policy.

• <import> (configuration/protocols/bgp/group/neighbor)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <import>
 <name>name</name> <!-- identifier -->
 </import>
 </neighbor>
 </group>
 </bgp>
 </protocols>
</configuration>

Description Import policy.

Contents <name>—Import policy.

<import> (configuration/protocols/dvmrp)

```
Usage  <configuration>
        <protocols>
            <dvmrp>
                <import>
                    <name>name</name>    <!-- identifier -->
                </import>
            </dvmrp>
        </protocols>
    </configuration>
```

Description Import policy.

Contents <name>—Import policy.

<import> (configuration/protocols/ldp)

```
Usage  <configuration>
        <protocols>
            <ldp>
                <import>
                    <name>name</name>    <!-- identifier -->
                </import>
            </ldp>
        </protocols>
    </configuration>
```

Description Import policy.

Contents <name>—Import policy.

<import> (configuration/protocols/msdp)

```
Usage  <configuration>
        <protocols>
            <msdp>
                <import>
                    <name>name</name>    <!-- identifier -->
                </import>
            </msdp>
        </protocols>
    </configuration>
```

Description Import policy.

Contents <name>—Import policy.

< import> (configuration/protocols/msdp/group)

- <import> (configuration/protocols/msdp/group)

Usage <configuration>
 <protocols>
 <msdp>
 <group>
 <import>
 <name>name</name> <!-- identifier -->
 </import>
 </group>
 </msdp>
 </protocols>
</configuration>

Description Import policy.

Contents <name>—Import policy.

- <import> (configuration/protocols/msdp/group/peer)

Usage <configuration>
 <protocols>
 <msdp>
 <group>
 <peer>
 <import>
 <name>name</name> <!-- identifier -->
 </import>
 </peer>
 </group>
 </msdp>
 </protocols>
</configuration>

Description Import policy.

Contents <name>—Import policy.

- <import> (configuration/protocols/msdp/peer)

Usage <configuration>
 <protocols>
 <msdp>
 <peer>
 <import>
 <name>name</name> <!-- identifier -->
 </import>
 </peer>
 </msdp>
 </protocols>
</configuration>

Description Import policy.

Contents <name>—Import policy.

<import> (configuration/protocols/pim)

Usage

```
<configuration>
  <protocols>
    <pim>
      <import>
        <name>name</name>    <!-- identifier -->
      </import>
    </pim>
  </protocols>
</configuration>
```

Description PIM sparse import join policy.

Contents <name>—PIM sparse import join policy.

<import> (configuration/protocols/rip)

Usage

```
<configuration>
  <protocols>
    <rip>
      <import>
        <name>name</name>    <!-- identifier -->
      </import>
    </rip>
  </protocols>
</configuration>
```

Description Import policy.

Contents <name>—Import policy.

<import> (configuration/protocols/rip/group/neighbor)

Usage

```
<configuration>
  <protocols>
    <rip>
      <group>
        <neighbor>
          <import>
            <name>name</name>    <!-- identifier -->
          </import>
        </neighbor>
      </group>
    </rip>
  </protocols>
</configuration>
```

Description Import policy.

Contents <name>—Import policy.

< import> (configuration/protocols/ripng)

- <import> (configuration/protocols/ripng)

Usage <configuration>
 <protocols>
 <ripng>
 <import>
 <name>name</name> <!-- identifier -->
 </import>
 </ripng>
 </protocols>
</configuration>

Description Import policy.

Contents <name>—Import policy.

- <import> (configuration/protocols/ripng/group/neighbor)

Usage <configuration>
 <protocols>
 <ripng>
 <group>
 <neighbor>
 <import>
 <name>name</name> <!-- identifier -->
 </import>
 </neighbor>
 </group>
 </ripng>
 </protocols>
</configuration>

Description Import policy.

Contents <name>—Import policy.

- <import> (configuration/routing-instances/instance/protocols/bgp)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bpg>
 <import>
 <name>name</name> <!-- identifier -->
 </import>
 </bpg>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Import policy.

Contents <name>—Import policy.

<import> (configuration/routing-instances/instance/protocols/bgp/group)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <import>
              <name>name</name>    <!-- identifier -->
            </import>
          </group>
        </bgp>
        </protocols>
      </instance>
    </routing-instances>
  </configuration>
```

Description Import policy.

Contents <name>—Import policy.

<import> (configuration/routing-instances/instance/protocols/bgp/group/neighbor)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <import>
                <name>name</name>    <!-- identifier -->
              </import>
            </neighbor>
          </group>
        </bgp>
        </protocols>
      </instance>
    </routing-instances>
  </configuration>
```

Description Import policy.

Contents <name>—Import policy.

• <import> (configuration/routing-instances/instance/protocols/ldp)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ldp>
 <import>
 <name>name</name> <!-- identifier -->
 </import>
 </ldp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Import policy.

Contents <name>—Import policy.

• <import> (configuration/routing-instances/instance/protocols/pim)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <pim>
 <import>
 <name>name</name> <!-- identifier -->
 </import>
 </pim>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description PIM sparse import join policy.

Contents <name>—PIM sparse import join policy.

<import> (configuration/routing-instances/instance/protocols/rip)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <rip>
          <import>
            <name>name</name>    <!-- identifier -->
          </import>
        </rip>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Import policy.

Contents <name>—Import policy.

<import> (configuration/routing-instances/instance/protocols/rip/group/neighbor)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <rip>
          <group>
            <neighbor>
              <import>
                <name>name</name>    <!-- identifier -->
              </import>
            </neighbor>
          </group>
        </rip>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Import policy.

Contents <name>—Import policy.

- <import> (configuration/routing-instances/instance/routing-options/interface-routes/family)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <interface-routes>
 <family>
 <import>
 <name>name</name> <!-- identifier -->
 </import>
 </family>
 </interface-routes>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Import policy.

Contents <name>—Import policy.

- <import> (configuration/routing-options/interface-routes/family)

Usage <configuration>
 <routing-options>
 <interface-routes>
 <family>
 <import>
 <name>name</name> <!-- identifier -->
 </import>
 </family>
 </interface-routes>
 </routing-options>
 </configuration>

Description Import policy.

Contents <name>—Import policy.

<import-policy> (configuration/routing-instances/instance/routing-options/rib-groups)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib-groups>
 <import-policy>
 <name>name</name> <!-- identifier -->
 </import-policy>
 </rib-groups>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Import policy.

Contents <name>—Import policy.

<import-policy> (configuration/routing-options/rib-groups)

Usage <configuration>
 <routing-options>
 <rib-groups>
 <import-policy>
 <name>name</name> <!-- identifier -->
 </import-policy>
 </rib-groups>
 </routing-options>
 </configuration>

Description Import policy.

Contents <name>—Import policy.

- <import-rib> (configuration/routing-instances/instance/routing-options/rib-groups)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib-groups>
          <import-rib>
            <name>name</name>    <!-- identifier -->
          </import-rib>
        </rib-groups>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Import routing table.

Contents <name>—Import routing table.

- <import-rib> (configuration/routing-options/rib-groups)

Usage

```
<configuration>
  <routing-options>
    <rib-groups>
      <import-rib>
        <name>name</name>    <!-- identifier -->
      </import-rib>
    </rib-groups>
  </routing-options>
</configuration>
```

Description Import routing table.

Contents <name>—Import routing table.

- <include> (configuration/protocols/mpls/admin-group)

Usage

```
<configuration>
  <protocols>
    <mpls>
      <admin-group>
        <include>
          <name>name</name>    <!-- identifier -->
        </include>
      </admin-group>
    </mpls>
  </protocols>
</configuration>
```

Description Groups to require.

Contents <name>—Groups to require.

<include> (configuration/protocols/mpls/label-switched-path/admin-group)

Usage

```
<configuration>
  <protocols>
    <mpls>
      <label-switched-path>
        <admin-group>
          <include>
            <name>name</name>    <!-- identifier -->
          </include>
        </admin-group>
      </label-switched-path>
    </mpls>
  </protocols>
</configuration>
```

Description Groups to require.

Contents <name>—Groups to require.

<include> (configuration/protocols/mpls/label-switched-path/fast-reroute)

Usage

```
<configuration>
  <protocols>
    <mpls>
      <label-switched-path>
        <fast-reroute>
          <include>
            <name>name</name>    <!-- identifier -->
          </include>
        </fast-reroute>
      </label-switched-path>
    </mpls>
  </protocols>
</configuration>
```

Description Groups to require.

Contents <name>—Groups to require.

- <include> (configuration/protocols/mpls/label-switched-path/primary/admin-group)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <primary>
 <admin-group>
 <include>
 <name>name</name> <!-- identifier -->
 </include>
 </admin-group>
 </primary>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>

Description Groups to require.

Contents <name>—Groups to require.

- <include> (configuration/protocols/mpls/label-switched-path/secondary/admin-group)

Usage <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <secondary>
 <admin-group>
 <include>
 <name>name</name> <!-- identifier -->
 </include>
 </admin-group>
 </secondary>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>

Description Groups to require.

Contents <name>—Groups to require.

<inet> (configuration/firewall/family)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>...</filter>
 </inet>
 </family>
 </firewall>
</configuration>

Description Protocol family IPv4 for firewall filter.

Contents <filter>—No documentation is available yet.

<inet> (configuration/forwarding-options/hash-key/family)

Usage <configuration>
 <forwarding-options>
 <hash-key>
 <family>
 <inet>
 <layer-3/> <!-- mandatory -->
 <layer-4/>
 </inet>
 </family>
 </hash-key>
</forwarding-options>
</configuration>

Description IPv4 protocol family.

Contents <layer-3>—Include Layer 3 (IP) data in the hash key.

<layer-4>—Include Layer 4 (TCP or UDP) data in the hash key.

- <inet> (configuration/forwarding-options/monitoring/family)
 - **Usage** <configuration>
 - <forwarding-options>
 - <monitoring>
 - <family>
 - <inet>
 - <input>...</input> <!-- mandatory -->
 - <output>...</output> <!-- mandatory -->
 - </inet>
 - </family>
 - </monitoring>
 - </forwarding-options>
 - </configuration>
- **Description** Monitor Internet Protocol (IPv4) packets.
- **Contents** <input>—Monitoring data acquisition.
 <output>—Monitoring data disposition.
- <inet> (configuration/forwarding-options/sampling/input/family)
 - **Usage** <configuration>
 - <forwarding-options>
 - <sampling>
 - <input>
 - <family>
 - <inet>
 - <rate>rate</rate>
 - <run-length>run-length</run-length>
 - <max-packets-per-second>max-packets</max-packets-per-second>
 - </inet>
 - </family>
 - </input>
 - </sampling>
 - </forwarding-options>
 - </configuration>
- **Description** Sampling parameters for IPv4.
- **Contents** <max-packets-per-second>—Threshold of samples per second before dropping.
 <rate>—Ratio of packets to be sampled (1 out of N [1..65535]).
 <run-length>—Number of samples after initial trigger [0..20].

<inet> (configuration/interfaces/interface/unit/family)

```

Usage   <configuration>
          <interfaces>
              <interface>
                  <unit>
                      <family>
                          <inet>
                              <accounting>...</accounting>
                              <rpf-check>...</rpf-check>
                              <mtu>mtu</mtu>
                              <no-redirects/>
                              <multicast-only/>
                              <primary/>
                              <ipsec-sa>ipsec-sa</ipsec-sa>
                              <filter>...</filter>
                              <policer>...</policer>
                              <address>...</address>
                          </inet>
                      </family>
                  </unit>
              </interface>
          </interfaces>
      </configuration>
  
```

Description Internet Protocol (IPv4) parameters.

Contents <accounting>—Configure interface-based accounting options.

<address>—Interface address/destination prefix.

<filter>—Packet filtering.

<ipsec-sa>—Name of the security association.

<mtu>—Protocol family MTU.

<multicast-only>—Allow only multicast traffic (tunnels only).

<no-redirects>—Do not redirect traffic.

<policer>—Interface policing.

<primary>—Candidate for primary interface in system.

<rpf-check>—Enable reverse-path forwarding checks on this interface.

- <inet> (configuration/protocols/bgp/family)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <family>
        <inet>
          <unicast>...</unicast>
          <multicast>...</multicast>
          <any>...</any>
          <labeled-unicast>...</labeled-unicast>
        </inet>
      </family>
    </bgp>
  </protocols>
</configuration>
```

Description Internet Protocol (IPv4) NLRI parameters.

Contents <any>—Include unicast or multicast NLRI.

<labeled-unicast>—Include labeled unicast NLRI.

<multicast>—Include multicast NLRI.

<unicast>—Include unicast NLRI.

- <inet> (configuration/protocols/bgp/group/family)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <group>
        <family>
          <inet>
            <unicast>...</unicast>
            <multicast>...</multicast>
            <any>...</any>
            <labeled-unicast>...</labeled-unicast>
          </inet>
        </family>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Internet Protocol (IPv4) NLRI parameters.

Contents <any>—Include unicast or multicast NLRI.

<labeled-unicast>—Include labeled unicast NLRI.

<multicast>—Include multicast NLRI.

<unicast>—Include unicast NLRI.

<inet> (configuration/protocols/bgp/group/neighbor/family)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <group>
        <neighbor>
          <family>
            <inet>
              <unicast>...</unicast>
              <multicast>...</multicast>
              <any>...</any>
              <labeled-unicast>...</labeled-unicast>
            </inet>
          </family>
        </neighbor>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Internet Protocol (IPv4) NLRI parameters.

Contents <any>—Include unicast or multicast NLRI.

<labeled-unicast>—Include labeled unicast NLRI.

<multicast>—Include multicast NLRI.

<unicast>—Include unicast NLRI.

<inet> (configuration/routing-instances/instance/protocols/bgp/family)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <family>
            <inet>
              <unicast>...</unicast>
              <multicast>...</multicast>
              <any>...</any>
              <labeled-unicast>...</labeled-unicast>
            </inet>
          </family>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Internet Protocol (IPv4) NLRI parameters.

• **Contents** <any>—Include unicast or multicast NLRI.

• <labeled-unicast>—Include labeled unicast NLRI.

• <multicast>—Include multicast NLRI.

• <unicast>—Include unicast NLRI.

<inet> (configuration/routing-instances/instance/protocols/bgp/group/family)

• **Usage** <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <unicast>...</unicast>
 <multicast>...</multicast>
 <any>...</any>
 <labeled-unicast>...</labeled-unicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

• **Description** Internet Protocol (IPv4) NLRI parameters.

• **Contents** <any>—Include unicast or multicast NLRI.

• <labeled-unicast>—Include labeled unicast NLRI.

• <multicast>—Include multicast NLRI.

• <unicast>—Include unicast NLRI.

<inet> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <family>
                <inet>
                  <unicast>...</unicast>
                  <multicast>...</multicast>
                  <any>...</any>
                  <labeled-unicast>...</labeled-unicast>
                </inet>
                </family>
              </neighbor>
            </group>
          </bgp>
        </protocols>
      </instance>
    </routing-instances>
</configuration>
```

Description Internet Protocol (IPv4) NLRI parameters.

Contents <any>—Include unicast or multicast NLRI.

<labeled-unicast>—Include labeled unicast NLRI.

<multicast>—Include multicast NLRI.

<unicast>—Include unicast NLRI.

- <inet> (configuration/routing-instances/instance/routing-options/auto-export/family)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <auto-export>
 <family>
 <inet>
 <unicast>...</unicast>
 <multicast>...</multicast>
 </inet>
 </family>
 </auto-export>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Internet protocol (IPv4) parameters.

Contents <multicast>—Multicast routing information.

 <unicast>—Unicast routing information.

- <inet> (configuration/routing-options/auto-export/family)

Usage <configuration>
 <routing-options>
 <auto-export>
 <family>
 <inet>
 <unicast>...</unicast>
 <multicast>...</multicast>
 </inet>
 </family>
 </auto-export>
 </routing-options>
 </configuration>

Description Internet protocol (IPv4) parameters.

Contents <multicast>—Multicast routing information.

 <unicast>—Unicast routing information.

<inet> (configuration/system/static-host-mapping)

Usage

```

<configuration>
  <system>
    <static-host-mapping>
      <inet>
        <name>name</name>    <!-- identifier -->
      </inet>
    </static-host-mapping>
  </system>
</configuration>
```

Description IP address.

Contents <name>—IP address.

<inet-precedence> (configuration/class-of-service/classifiers)

Usage

```

<configuration>
  <class-of-service>
    <classifiers>
      <inet-precedence>
        <name>name</name>    <!-- identifier -->
        <import>import</import>
        <forwarding-class>...</forwarding-class>
      </inet-precedence>
    </classifiers>
  </class-of-service>
</configuration>
```

Description IPv4 precedence classifier.

Contents <forwarding-class>—Define a classification of code point aliases.

<import>—Include this classifier in this definition.

<name>—Classifier name.

- <inet-precedence> (configuration/class-of-service/code-point-aliases)
 - **Usage** <configuration>
 <class-of-service>
 <code-point-aliases>
 <inet-precedence>
 <name>name</name> <!-- identifier -->
 <bits>bits</bits> <!-- mandatory -->
 </inet-precedence>
 </code-point-aliases>
 </class-of-service>
</configuration>
 - **Description** IPv4 precedence code point aliases.
 - **Contents** <bits>—IPv4 precedence 3-bit pattern.
 <name>—IPv4 precedence alias name.
- <inet-precedence> (configuration/class-of-service/interfaces/unit/classifiers)
 - **Usage** <configuration>
 <class-of-service>
 <interfaces>
 <unit>
 <classifiers>
 <inet-precedence>
 <classifier-name>classifier-name</classifier-name>
 </inet-precedence>
 </classifiers>
 </unit>
 </interfaces>
 </class-of-service>
</configuration>
 - **Description** IPv4 precedence classifier.
 - **Contents** <classifier-name>—Name of classifier to be applied.

<inet-precedence> (configuration/class-of-service/interfaces/unit/rewrite-rules)

Usage

```

<configuration>
  <class-of-service>
    <interfaces>
      <unit>
        <rewrite-rules>
          <inet-precedence>
            <rewrite-rule-name>rewrite-rule-name</rewrite-rule-name>
          </inet-precedence>
        </rewrite-rules>
      </unit>
    </interfaces>
  </class-of-service>
</configuration>
```

Description IPv4 precedence rewrite rule.

Contents <rewrite-rule-name>—Name of rewrite rule to be applied.

<inet-precedence> (configuration/class-of-service/rewrite-rules)

Usage

```

<configuration>
  <class-of-service>
    <rewrite-rules>
      <inet-precedence>
        <name>name</name>    <!-- identifier -->
        <import>import</import>
        <forwarding-class>...</forwarding-class>
      </inet-precedence>
    </rewrite-rules>
  </class-of-service>
</configuration>
```

Description IPv4 precedence rewrite rule.

Contents <forwarding-class>—Markings for named forwarding class.

<import>—Include this rewrite rule in this definition.

<name>—Rewrite rule name.

- <inet-vpn> (configuration/protocols/bgp/family)

Usage <configuration>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <unicast>...</unicast>
 <multicast>...</multicast>
 <any>...</any>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
 </configuration>

Description Internet Protocol (IPv4) Layer 3 VPN NLRI parameters.

Contents <any>—Include unicast or multicast NLRI.
 <multicast>—Include multicast NLRI.
 <unicast>—Include unicast NLRI.

- <inet-vpn> (configuration/protocols/bgp/group/family)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet-vpn>
 <unicast>...</unicast>
 <multicast>...</multicast>
 <any>...</any>
 </inet-vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Internet Protocol (IPv4) Layer 3 VPN NLRI parameters.

Contents <any>—Include unicast or multicast NLRI.
 <multicast>—Include multicast NLRI.
 <unicast>—Include unicast NLRI.

<inet-vpn> (configuration/protocols/bgp/group/neighbor/family)

```
Usage  <configuration>
        <protocols>
            <bgp>
                <group>
                    <neighbor>
                        <family>
                            <inet-vpn>
                                <unicast>...</unicast>
                                <multicast>...</multicast>
                                <any>...</any>
                            </inet-vpn>
                        </family>
                    </neighbor>
                </group>
            </bgp>
        </protocols>
    </configuration>
```

Description Internet Protocol (IPv4) Layer 3 VPN NLRI parameters.

Contents <any>—Include unicast or multicast NLRI.

<multicast>—Include multicast NLRI.

<unicast>—Include unicast NLRI.

<inet-vpn> (configuration/routing-instances/instance/protocols/bgp/family)

```
Usage  <configuration>
        <routing-instances>
            <instance>
                <protocols>
                    <bgp>
                        <family>
                            <inet-vpn>
                                <unicast>...</unicast>
                                <multicast>...</multicast>
                                <any>...</any>
                            </inet-vpn>
                        </family>
                    </bgp>
                </protocols>
            </instance>
        </routing-instances>
    </configuration>
```

Description Internet Protocol (IPv4) Layer 3 VPN NLRI parameters.

Contents <any>—Include unicast or multicast NLRI.

<multicast>—Include multicast NLRI.

<unicast>—Include unicast NLRI.

- <inet-vpn> (configuration/routing-instances/instance/protocols/bgp/group/family)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet-vpn>
 <unicast>...</unicast>
 <multicast>...</multicast>
 <any>...</any>
 </inet-vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Internet Protocol (IPv4) Layer 3 VPN NLRI parameters.

Contents <any>—Include unicast or multicast NLRI.

 <multicast>—Include multicast NLRI.

 <unicast>—Include unicast NLRI.

<inet-vpn> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <family>
                <inet-vpn>
                  <unicast>...</unicast>
                  <multicast>...</multicast>
                  <any>...</any>
                </inet-vpn>
              </family>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Internet Protocol (IPv4) Layer 3 VPN NLRI parameters.

Contents <any>—Include unicast or multicast NLRI.

<multicast>—Include multicast NLRI.

<unicast>—Include unicast NLRI.

<inet6> (configuration/firewall/family)

Usage

```

<configuration>
  <firewall>
    <family>
      <inet6>
        <filter>...</filter>
      </inet6>
    </family>
  </firewall>
</configuration>
```

Description Protocol family IPv6 for firewall filter.

Contents <filter>—No documentation is available yet.

- <inet6> (configuration/interfaces/interface/unit/family)

Usage <configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <inet6>
 <rpf-check>...</rpf-check>
 <accounting>...</accounting>
 <mtu>mtu</mtu>
 <filter>...</filter>
 <address>...</address>
 </inet6>
 </family>
 </unit>
 </interface>
 </interfaces>
 </configuration>

Description IPv6 protocol parameters.

Contents <accounting>—Configure interface-based accounting options.
 <address>—Interface address/destination prefix.
 <filter>—Packet filtering.
 <mtu>—Protocol family MTU.
 <rpf-check>—Enable reverse-path forwarding checks on this interface.

- <inet6> (configuration/protocols/bgp/family)

Usage <configuration>
 <protocols>
 <bpg>
 <family>
 <inet6>
 <unicast>...</unicast>
 <multicast>...</multicast>
 <any>...</any>
 <labeled-unicast>...</labeled-unicast>
 </inet6>
 </family>
 </bpg>
 </protocols>
 </configuration>

Description Internet Protocol version 6 (IPv6) NLRI parameters.

Contents <any>—Include unicast or multicast NLRI.
 <labeled-unicast>—Include labeled unicast NLRI.

<multicast>—Include multicast NLRI.

<unicast>—Include unicast NLRI.

<inet6> (configuration/protocols/bgp/group/family)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <group>
        <family>
          <inet6>
            <unicast>...</unicast>
            <multicast>...</multicast>
            <any>...</any>
            <labeled-unicast>...</labeled-unicast>
          </inet6>
        </family>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Internet Protocol version 6 (IPv6) NLRI parameters.

Contents <any>—Include unicast or multicast NLRI.

<labeled-unicast>—Include labeled unicast NLRI.

<multicast>—Include multicast NLRI.

<unicast>—Include unicast NLRI.

<inet6> (configuration/protocols/bgp/group/neighbor/family)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <group>
        <neighbor>
          <family>
            <inet6>
              <unicast>...</unicast>
              <multicast>...</multicast>
              <any>...</any>
              <labeled-unicast>...</labeled-unicast>
            </inet6>
          </family>
        </neighbor>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Internet Protocol version 6 (IPv6) NLRI parameters.

<inet6> (configuration/routing-instances/instance/protocols/bgp/family)

- | | |
|--------------------|---|
| Contents | <any>—Include unicast or multicast NLRI.

<labeled-unicast>—Include labeled unicast NLRI.

<multicast>—Include multicast NLRI.

<unicast>—Include unicast NLRI. |
| Usage | <configuration>
<routing-instances>
<instance>
<protocols>
<bpg>
<family>
<inet6>
<unicast>...</unicast>
<multicast>...</multicast>
<any>...</any>
<labeled-unicast>...</labeled-unicast>
</inet6>
</family>
</bpg>
</protocols>
</instance>
</routing-instances>
</configuration> |
| Description | Internet Protocol version 6 (IPv6) NLRI parameters. |

<inet6> (configuration/routing-instances/instance/protocols/bgp/group/family)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet6>
 <unicast>...</unicast>
 <multicast>...</multicast>
 <any>...</any>
 <labeled-unicast>...</labeled-unicast>
 </inet6>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Internet Protocol version 6 (IPv6) NLRI parameters.

Contents <any>—Include unicast or multicast NLRI.

<labeled-unicast>—Include labeled unicast NLRI.

<multicast>—Include multicast NLRI.

<unicast>—Include unicast NLRI.

- <inet6> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <family>
                <inet6>
                  <unicast>...</unicast>
                  <multicast>...</multicast>
                  <any>...</any>
                  <labeled-unicast>...</labeled-unicast>
                </inet6>
              </family>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Internet Protocol version 6 (IPv6) NLRI parameters.

Contents <any>—Include unicast or multicast NLRI.

<labeled-unicast>—Include labeled unicast NLRI.

<multicast>—Include multicast NLRI.

<unicast>—Include unicast NLRI.

<inet6> (configuration/system/static-host-mapping)

Usage

```

<configuration>
  <system>
    <static-host-mapping>
      <inet6>
        <name>name</name>    <!-- identifier -->
      </inet6>
    </static-host-mapping>
  </system>
</configuration>
```

Description IPv6 address.

Contents <name>—IPv6 address.

<inet6-backup-router> (configuration/system)

Usage <configuration>
 <system>
 <inet6-backup-router>
 <address>address</address> <!-- mandatory -->
 <destination>destination</destination>
 </inet6-backup-router>
 </system>
</configuration>

Description IPv6 router to use while booting.

Contents <address>—Address of router to use while booting.

<destination>—Destination network reachable through the router.

<input> (configuration/forwarding-options/monitoring/family/inet)

Usage <configuration>
 <forwarding-options>
 <monitoring>
 <family>
 <inet>
 <input>
 <interface>...</interface>
 </input>
 </inet>
 </family>
 </monitoring>
 </forwarding-options>
</configuration>

Description Monitoring data acquisition.

Contents <interface>—No documentation is available yet.

<input> (configuration/forwarding-options/sampling)

Usage <configuration>
 <forwarding-options>
 <sampling>
 <input>
 <family>...</family>
 </input>
 </sampling>
 </forwarding-options>
</configuration>

Description Traffic sampling data acquisition.

Contents <family>—Protocol family.

- <install> (configuration/protocols/mpls/label-switched-path)
 - **Usage** <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <install>
 <name>name</name> <!-- identifier -->
 <active/>
 </install>
 </label-switched-path>
 </mpls>
 </protocols>
</configuration>
 - **Description** Install prefix.
 - **Contents** <active>—Install prefix into forwarding table.
 <name>—Destination prefix.
- <install-nexthop> (configuration/policy-options/policy-statement/from/route-filter)
 - **Usage** <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <route-filter>
 <install-nexthop>
 <lsp>lsp</lsp>
 </install-nexthop>
 </route-filter>
 </from>
 </policy-statement>
 </policy-options>
</configuration>
 - **Description** Choose the next hop to be used for forwarding.
 - **Contents** <lsp>—Next-hop LSP.

<install-nexthop> (configuration/policy-options/policy-statement/from/source-address-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <source-address-filter>
 <install-nexthop>
 <lsp>LSP</lsp>
 </install-nexthop>
 </source-address-filter>
 </from>
 </policy-statement>
 </policy-options>
 </configuration>

Description Choose the next hop to be used for forwarding.

Contents <lsp>—Next-hop LSP.

<install-nexthop> (configuration/policy-options/policy-statement/term/from/route-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <route-filter>
 <install-nexthop>
 <lsp>LSP</lsp>
 </install-nexthop>
 </route-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Choose the next hop to be used for forwarding.

Contents <lsp>—Next-hop LSP.

- <install-nexthop> (configuration/policy-options/policy-statement/term/from/source-address-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <source-address-filter>
 <install-nexthop>
 <lsp>LSP</lsp>
 </install-nexthop>
 </source-address-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Choose the next hop to be used for forwarding.

Contents <lsp>—Next-hop LSP.

- <install-nexthop> (configuration/policy-options/policy-statement/term/then)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <then>
 <install-nexthop>
 <lsp>LSP</lsp>
 </install-nexthop>
 </then>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Choose the next hop to be used for forwarding.

Contents <lsp>—Next-hop LSP.

<install-nexthop> (configuration/policy-options/policy-statement/then)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <then>
        <install-nexthop>
          <lsp>/lsp</lsp>
        </install-nexthop>
      </then>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Choose the next hop to be used for forwarding.

Contents <lsp>—Next-hop LSP.

<instance> (configuration/routing-instances)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <name>name</name>    <!-- identifier -->
      <description>description</description>
      <instance-type>instance-type-choice</instance-type>
      <interface>...</interface>
      <route-distinguisher>...</route-distinguisher>
      <vrf-import>...</vrf-import>
      <vrf-export>...</vrf-export>
      <vrf-table-label/>
      <routing-options>...</routing-options>
      <protocols>...</protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description No documentation is available yet.

Contents <description>—Text description of routing instance.

<instance-type>—Type of routing instance.

- forwarding—Forwarding instance.
- l2vpn—Layer 2 VPN routing instance.
- no-forwarding—Non-forwarding instance.
- vrf—Virtual routing forwarding instance.

<interface>—Interface name for this routing instance.

<name>—Routing instance name.

<protocols>—Routing protocol configuration.

- <route-distinguisher>—Route distinguisher for this instance.
- <routing-options>—Protocol-independent routing option configuration.
- <vrf-export>—Export policy for VRF instance RIBs.
- <vrf-import>—Import policy for VRF instance RIBs.
- <vrf-table-label>—Advertise a single VPN label for all routes in the VRF.

<instance-export> (configuration/routing-instances/instance/routing-options)

```
Usage <configuration>
      <routing-instances>
        <instance>
          <routing-options>
            <instance-export>
              <name>name</name>      <!-- identifier -->
            </instance-export>
          </routing-options>
        </instance>
      </routing-instances>
    </configuration>
```

Description Export policy for instance RIBs.

Contents <name>—Export policy for instance RIBs.

<instance-export> (configuration/routing-options)

```
Usage <configuration>
      <routing-options>
        <instance-export>
          <name>name</name>    <!-- identifier -->
        </instance-export>
      </routing-options>
    </configuration>
```

Description Export policy for instance RIBs.

Contents <name>—Export policy for instance RIBs.

<instance-import> (configuration/routing-instances/instance/routing-options)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <instance-import>
 <name>name</name> <!-- identifier -->
 </instance-import>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Import policy for instance RIBs.

Contents <name>—Import policy for instance RIBs.

<instance-import> (configuration/routing-options)

Usage <configuration>
 <routing-options>
 <instance-import>
 <name>name</name> <!-- identifier -->
 </instance-import>
 </routing-options>
</configuration>

Description Import policy for instance RIBs.

Contents <name>—Import policy for instance RIBs.

<interface> (configuration/forwarding-options/helpers/bootp)

Usage <configuration>
 <forwarding-options>
 <helpers>
 <bootp>
 <interface>
 <description>description</description>
 <no-listen/>
 <name>name</name> <!-- identifier -->
 <server>...</server>
 <maximum-hop-count>maximum-hop-count</maximum-hop-count>
 <minimum-wait-time>minimum-wait-time</minimum-wait-time>
 </interface>
 </bootp>
 </helpers>
 </forwarding-options>
</configuration>

Description Incoming BOOTP/DHCP request forwarding interface configuration.

- **Contents** <description>—Text description of interface.
- <maximum-hop-count>—Maximum number of hops per packet.
- <minimum-wait-time>—Minimum number of seconds client must wait.
- <name>—Interface name.
- <no-listen>—Don't listen on this interface.
- <server>—Name or address of BOOTP/DHCP server to which to forward.

<interface> (configuration/forwarding-options/helpers/domain)

Usage <configuration>
 <forwarding-options>
 <helpers>
 <domain>
 <interface>
 <description>*description*</description>
 <no-listen/>
 <name>*name*</name> <!-- identifier -->
 <server>*server*</server>
 </interface>
 </domain>
 </helpers>
 </forwarding-options>
 </configuration>

Description Incoming DNS request forwarding interface configuration.

- Contents** <description>—Text description of interface.
- <name>—Interface name.
 - <no-listen>—Do not listen on this interface.
 - <server>—Name or address of DNS server to which to forward.

<interface> (configuration/forwarding-options/helpers/tftp)

```
Usage  <configuration>
        <forwarding-options>
            <helpers>
                <tftp>
                    <interface>
                        <description>description</description>
                        <no-listen/>
                        <name>name</name>    <!-- identifier -->
                        <server>server</server>
                    </interface>
                </tftp>
            </helpers>
        </forwarding-options>
    </configuration>
```

Description Incoming TFTP request forwarding interface configuration.

Contents <description>—Text description of interface.

<name>—Interface name.

<no-listen>—Do not listen on this interface.

<server>—Name or address of TFTP server to which to forward.

<interface> (configuration/forwarding-options/monitoring/family/inet/input)

```
Usage  <configuration>
        <forwarding-options>
            <monitoring>
                <family>
                    <inet>
                        <input>
                            <interface>
                                <name>name</name>    <!-- identifier -->
                            </interface>
                        </input>
                    </inet>
                </family>
            </monitoring>
        </forwarding-options>
    </configuration>
```

Description No documentation is available yet.

Contents <name>—Interface which will be monitored.

- <interface> (configuration/forwarding-options/monitoring/family/inet/output)

•

• **Usage** <configuration>
• <forwarding-options>
• <monitoring>
• <family>
• <inet>
• <output>
• **<interface>**
• <name>name</name> <!-- identifier -->
• <engine-id>engine-id</engine-id> <!-- mandatory -->
• <engine-type>engine-type</engine-type>
• **</interface>**
• </output>
• </inet>
• </family>
• </monitoring>
• </forwarding-options>
• </configuration>

• **Description** Interfaces used to send monitored information.

• **Contents** <engine-id>—Identity (number) of this monitoring interface.

• <engine-type>—Type (number) of this monitoring interface.

• <name>—Interface to be used for sending monitored information.

<interface> (configuration/interfaces)

```

Usage   <configuration>
          <interfaces>
              <interface>
                  <name> name</name>    <!-- identifier -->
                  <description> description</description>
                  <disable/>
                  <traceoptions>...</traceoptions>
                  <keepalives>...</keepalives>
                  <no-keepalives/>
                  <traps/>
                  <accounting-profile> accounting-profile </accounting-profile>
                  <dce/>
                  <vlan-tagging/>
                  <speed> speed </speed>
                  <mtu> mtu </mtu>
                  <hold-time>...</hold-time>
                  <clocking> clocking-choice </clocking>
                  <link-mode> link-mode-choice </link-mode>
                  <encapsulation> encapsulation-choice </encapsulation>
                  <lmi>...</lmi>
                  <mac> mac </mac>
                  <receive-bucket>...</receive-bucket>
                  <transmit-bucket>...</transmit-bucket>
                  <sonet-options>...</sonet-options>
                  <aggregated-sonet-options>...</aggregated-sonet-options>
                  <atm-options>...</atm-options>
                  <multiservice-options>...</multiservice-options>
                  <ppp-options>...</ppp-options>
                  <t3-options>...</t3-options>
                  <e3-options>...</e3-options>
                  <e1-options>...</e1-options>
                  <t1-options>...</t1-options>
                  <ds0-options>...</ds0-options>
                  <gigether-options>...</gigether-options>
                  <fastether-options>...</fastether-options>
                  <aggregated-ether-options>...</aggregated-ether-options>
                  <unit>...</unit>
              </interface>
          </interfaces>
      </configuration>

```

Description No documentation is available yet.

Contents <accounting-profile>—Accounting profile name.

<aggregated-ether-options>—Aggregated Ethernet interface-specific options.

<aggregated-sonet-options>—Aggregated SONET interface-specific options.

<atm-options>—ATM interface-specific options.

- <clocking>—Interface clock source.
 - external—Clocking provided by DCE (loop timing).
 - internal—Clocking provided by local system.
 - <dce>—Respond to Frame Relay status enquiry messages.
 - <description>—Text description of interface.
 - <disable>—Disable this interface.
 - <ds0-options>—DS-0 interface-specific options.
 - <e1-options>—E1 interface-specific options.
 - <e3-options>—E3 interface-specific options.
 - <encapsulation>—Physical link-layer encapsulation.
 - atm-ccc-cell-relay—ATM Cell Relay encapsulation for cross connection.
 - atm-pvc—ATM permanent virtual circuits.
 - cisco-hdlc—Cisco-compatible HDLC framing.
 - cisco-hdlc-ccc—Cisco-compatible HDLC framing for a cross connection.
 - cisco-hdlc-tcc—Cisco-compatible HDLC framing for a translational cross connection.
 - ethernet-ccc—Ethernet cross connection.
 - ethernet-over-atm—Ethernet over ATM encapsulation.
 - ethernet-tcc—Ethernet translational cross connection.
 - extended-vlan-ccc—Non-standard TPID tagging for a cross connection.
 - extended-vlan-tcc—Non-standard TPID tagging for a translational cross connection.
 - frame-relay—Frame Relay encapsulation.
 - frame-relay-ccc—Frame Relay encapsulation for cross connection.
 - frame-relay-tcc—Frame Relay encapsulation for translational cross connection.
 - ppp—Serial PPP device.
 - ppp-ccc—Serial PPP device for a cross connection.
 - ppp-tcc—Serial PPP device for a translational cross connection.
 - vlan-ccc—802.1Q tagging for a cross connection.
 - <fastether-options>—Fast Ethernet interface-specific options.
 - <gigether-options>—Gigabit Ethernet interface-specific options.

<hold-time>—Hold time for link up and link down.

`<keepalives>`—Send/demand keepalive messages.

<link-mode>—Link operational mode.

- full-duplex—Full-duplex operation.
 - half-duplex—Half-duplex operation.

<Imi>—Local Management Interface settings.

<mac>—Hardware MAC address.

<mtu>—Maximum transmit packet size.

<multiservice-options>—Multiservice interface-specific options.

<name>—Interface name.

`<no-keepalives>`—Do not send or demand keepalive messages.

<ppp-options>—Point-to-Point Protocol (PPP) interface-specific options.

<receive-bucket>—Set receive bucket parameters.

<sonet-options>—SONET interface-specific options

<speed>—Link speed.

<t1-options>—T1 interface-specific options.

<t3-options>—T3 interface-specific options.

<traceoptions>—Interface trace options.

<transmit-bucket>—Set transmit bucket parameters.

<traps>—Enable SNMP notifications on state changes.

<unit>—Logical interface.

<vlan-tagging>—802.1Q VLAN tagging support.

- <interface> (configuration/interfaces/interface/unit/family/inet/address/vrrp-group/track)

```

Usage   <configuration>
          <interfaces>
            <interface>
              <unit>
                <family>
                  <inet>
                    <address>
                      <vrrp-group>
                        <track>
                          <interface>
                            <name>name</name>    <!-- identifier -->
                            <priority-cost>priority-cost</priority-cost>
                          </interface>
                        </track>
                      </vrrp-group>
                    </address>
                  </inet>
                </family>
              </unit>
            </interface>
          </interfaces>
        </configuration>

```

Description Interface to track in this VRRP group.

Contents <name>—Interface name.

<priority-cost>—Value to subtract from priority when interface is down.

- <interface> (configuration/policy-options/policy-statement/from)

```

Usage   <configuration>
          <policy-options>
            <policy-statement>
              <from>
                <interface>
                  <name>name</name>    <!-- identifier -->
                </interface>
              </from>
            </policy-statement>
          </policy-options>
        </configuration>

```

Description Interface name or address.

Contents <name>—Interface name or address.

<interface> (configuration/policy-options/policy-statement/term/from)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <interface>
 <name>name</name> <!-- identifier -->
 </interface>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Interface name or address.

Contents <name>—Interface name or address.

<interface> (configuration/policy-options/policy-statement/term/to)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <to>
 <interface>
 <name>name</name> <!-- identifier -->
 </interface>
 </to>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Interface name or address.

Contents <name>—Interface name or address.

- <interface> (configuration/policy-options/policy-statement/to)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <to>
        <interface>
          <name>name</name>    <!-- identifier -->
        </interface>
      </to>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Interface name or address.

Contents <name>—Interface name or address.

- <interface> (configuration/protocols/connections/interface-switch)

Usage

```
<configuration>
  <protocols>
    <connections>
      <interface-switch>
        <interface>
          <name>name</name>    <!-- identifier -->
        </interface>
      </interface-switch>
    </connections>
  </protocols>
</configuration>
```

Description Interface to be switched.

Contents <name>—Interface name.

- <interface> (configuration/protocols/dvmrp)

Usage

```
<configuration>
  <protocols>
    <dvmrp>
      <interface>
        <name>name</name>    <!-- identifier -->
        <disable/>
        <mode>mode-choice</mode>
        <metric>metric</metric>
        <hold-time>seconds</hold-time>
      </interface>
    </dvmrp>
  </protocols>
</configuration>
```

Description DVMRP interface options.

Contents <disable>—Disable DVMRP on this interface.

<hold-time>—When neighbors think we are down.

<metric>—DVMRP metric value.

<mode>—Mode of interface.

- **forwarding**—Use DVMRP for multicast forwarding.

- **unicast-routing**—Use DVMRP for unicast routing only.

<name>—Interface name.

<interface> (configuration/protocols/igmp)

Usage <configuration>
 <protocols>
 <igmp>
 <interface>
 <name>name</name> <!-- identifier -->
 <disable/>
 <version>version</version>
 <static>...</static>
 </interface>
 </igmp>
 </protocols>
</configuration>

Description Interface options for IGMP.

Contents <disable>—Disable IGMP on this interface.

<name>—Interface name.

<static>—Static group or source membership.

<version>—Set IGMP version number on this interface.

- <interface> (configuration/protocols/isis)

Usage

```

<configuration>
  <protocols>
    <isis>
      <interface>
        <name>name</name>    <!-- identifier -->
        <disable/>
        <authentication-key>authentication-key</authentication-key>
        <authentication-type>authentication-type-choice</authentication-type>
        <hello-authentication-key>hello-authentication-key</hello-authentication-key>
        <hello-authentication-type>authentication-type</hello-authentication-type>
        <lsp-interval>milliseconds</lsp-interval>
        <csnp-interval>...</csnp-interval>
        <mesh-group>...</mesh-group>
        <passive/>
        <checksum/>
        <no-multicast/>
        <level>...</level>
      </interface>
    </isis>
  </protocols>
</configuration>
```

Description Interface configuration.

Contents <authentication-key>—Authentication key (password).

<authentication-type>—Authentication type.

- md5—MD5 authentication.

- simple—Simple password authentication.

<checksum>—Enable checksum for packets on this interface.

<csnp-interval>—Rate of CSN packets.

<disable>—Disable IS-IS on this interface.

<hello-authentication-key>—Authentication key (password) for hello packets.

<hello-authentication-type>—Authentication type for hello packets.

- md5—MD5 authentication.

- simple—Simple password authentication.

<level>—Configure levels on this interface.

<lsp-interval>—Interval between LSP transmissions.

<mesh-group>—Add the interface to a mesh group.

<name>—Interface name.

<no-multicast>—Do not include this interface in the multicast topology.

<passive>—Do not run IS-IS, but advertise it.

<interface> (configuration/protocols/l2circuit/neighbor)

```
Usage  <configuration>
        <protocols>
            <l2circuit>
                <neighbor>
                    <interface>
                        <name>name</name>    <!-- identifier -->
                        <virtual-circuit-id>virtual-circuit-id</virtual-circuit-id>    <!-- mandatory -->
                        <interface-description>interface-description</interface-description>
                    </interface>
                </neighbor>
            </l2circuit>
        </protocols>
    </configuration>
```

Description Interface forming the Layer 2 circuit.

Contents <interface-description>—Interface description.

<name>—Interface name.

<virtual-circuit-id>—Identifier for this Layer 2 circuit.

<interface> (configuration/protocols/ldp)

```
Usage  <configuration>
        <protocols>
            <ldp>
                <interface>
                    <name>name</name>    <!-- identifier -->
                    <disable/>
                    <hello-interval>hello-interval</hello-interval>
                    <hold-time>hold-time</hold-time>
                    <transport-address>transport-address-choice</transport-address>
                </interface>
            </ldp>
        </protocols>
    </configuration>
```

Description Enable LDP on this interface.

Contents <disable>—Disable LDP on this interface.

<hello-interval>—Hello interval (seconds).

<hold-time>—Hello hold time (seconds).

<name>—Interface name.

- <transport-address>—Address used for TCP sessions.
 - interface—Use interface address for TCP connections.
 - loopback—Use loopback address for TCP connections.

<interface> (configuration/protocols/link-management/te-link)

Usage

```
<configuration>
  <protocols>
    <link-management>
      <te-link>
        <interface>
          <name>name</name>    <!-- identifier -->
          <local-address>local-address</local-address>
          <remote-address>remote-address</remote-address>
          <remote-id>remote-id</remote-id>
        </interface>
      </te-link>
    </link-management>
  </protocols>
</configuration>
```

Description Member interface of TE link.

Contents <local-address>—Address of the local end of the interface.

<name>—Interface name.

<remote-address>—Address of the remote end of the interface.

<remote-id>—Interface ID for the remote end of the interface.

<interface> (configuration/protocols/mpls)

Usage

```
<configuration>
  <protocols>
    <mpls>
      <interface>
        <name>name</name>    <!-- identifier -->
        <disable/>
        <label-map>...</label-map>
        <admin-group>...</admin-group>
      </interface>
    </mpls>
  </protocols>
</configuration>
```

Description MPLS interface options.

Contents <admin-group>—Administrative groups.

<disable>—Disable MPLS on this interface.

<label-map>—Label to match.

<name>—Interface name.

<interface> (configuration/protocols/ospf/area)

```
Usage   <configuration>
          <protocols>
            <ospf>
              <area>
                <interface>
                  <name>name</name>    <!-- identifier -->
                  <disable/>
                  <interface-type>interface-type-choice</interface-type>
                  <passive/>
                  <metric>metric</metric>
                  <priority>priority</priority>
                  <retransmit-interval>retransmit-interval</retransmit-interval>
                  <transit-delay>transit-delay</transit-delay>
                  <hello-interval>hello-interval</hello-interval>
                  <dead-interval>dead-interval</dead-interval>
                  <authentication-key>...</authentication-key>
                  <transmit-interval>transmit-interval</transmit-interval>
                  <neighbor>...</neighbor>
                  <poll-interval>poll-interval</poll-interval>
                </interface>
              </area>
            </ospf>
          </protocols>
        </configuration>
```

Description Include an interface in this area.

Contents <authentication-key>—Authentication key.

<dead-interval>—Dead interval (seconds).

<disable>—Disable OSPF on this interface.

<hello-interval>—Hello interval (seconds).

<interface-type>—Type of interface.

- nbma—Nonbroadcast multiaccess.

- p2mp—Point-to-multipoint NBMA.

<metric>—Interface metric.

<name>—Interface name or IP address.

<neighbor>—NBMA neighbor.

<passive>—Do not run OSPF, but advertise it.

<poll-interval>—Poll interval for NBMA interfaces.

- <priority>—Designated router priority.
- <retransmit-interval>—Retransmission interval (seconds).
- <transit-delay>—Transit delay (seconds).
- <transmit-interval>—OSPF packet transmit interval (milliseconds).

<interface> (configuration/protocols/pim)

Usage <configuration>
 <protocols>
 <pim>
 <interface>
 <name>name</name> <!-- identifier -->
 <disable/>
 <mode>mode-choice</mode>
 <priority>priority</priority>
 <version>version</version>
 <hello-interval>seconds</hello-interval>
 </interface>
 </pim>
 </protocols>
 </configuration>

Description PIM interface options.

Contents <disable>—Disable PIM on this interface.

 <hello-interval>—Hello interval.

 <mode>—Mode of interface.

 ■ dense—Dense mode.

 ■ sparse—Sparse mode.

 ■ sparse-dense—Sparse-dense mode.

 <name>—Interface name.

 <priority>—Hello option DR priority.

 <version>—Force PIM version.

<interface> (configuration/protocols/router-advertisement)

```

Usage   <configuration>
          <protocols>
              <router-advertisement>
                  <interface>
                      <name>name</name>    <!-- identifier -->
                      <max-advertisement-interval>seconds</max-advertisement-interval>
                      <min-advertisement-interval>seconds</min-advertisement-interval>
                      <managed-configuration/>
                      <other-stateful-configuration/>
                      <reachable-time>milliseconds</reachable-time>
                      <retransmit-timer>milliseconds</retransmit-timer>
                      <current-hop-limit>current-hop-limit</current-hop-limit>
                      <default-lifetime>seconds</default-lifetime>
                      <prefix>...</prefix>
                  </interface>
              </router-advertisement>
          </protocols>
      </configuration>
  
```

Description Interfaces on which to configure router advertisement.

Contents <current-hop-limit>—Current hop limit.

<default-lifetime>—Router lifetime.

<managed-configuration>—Set managed address configuration.

<max-advertisement-interval>—Maximum advertisement interval.

<min-advertisement-interval>—Minimum advertisement interval.

<name>—Interface name.

<other-stateful-configuration>—Set other stateful configuration.

<prefix>—Prefix configuration.

<reachable-time>—Reachable time.

<retransmit-timer>—Retransmit timer.

- <interface> (configuration/protocols/router-discovery)

Usage

```
<configuration>
  <protocols>
    <router-discovery>
      <interface>
        <name>name</name>    <!-- identifier -->
        <max-advertisement-interval>seconds</max-advertisement-interval>
        <min-advertisement-interval>seconds</min-advertisement-interval>
        <lifetime>seconds</lifetime>
      </interface>
    </router-discovery>
  </protocols>
</configuration>
```

Description Interfaces on which to configure router discovery.

Contents <lifetime>—How long addresses in advertisements are valid.

<max-advertisement-interval>—Maximum time before sending advertisements.

<min-advertisement-interval>—Minimum time before sending advertisements.

<name>—Interface name.

- <interface> (configuration/protocols/rsvp)

Usage

```
<configuration>
  <protocols>
    <rsvp>
      <interface>
        <name>name</name>    <!-- identifier -->
        <disable/>
        <authentication-key>authentication-key</authentication-key>
        <subscription>subscription</subscription>
        <aggregate/>
        <reliable/>
        <bandwidth>bandwidth</bandwidth>
        <hello-interval>seconds</hello-interval>
        <update-threshold>percent</update-threshold>
        <link-protection>...</link-protection>
      </interface>
    </rsvp>
  </protocols>
</configuration>
```

Description RSVP interface options.

Contents <aggregate>—Permit refresh reduction extensions on the interface.

<authentication-key>—Authentication password.

<bandwidth>—Available bandwidth (bps) for the interface.

<disable>—Disable RSVP on this interface.

<hello-interval>—Hello interval.

<link-protection>—Protect traffic with a label-stacked LSP.

<name>—Interface name.

<reliable>—Permit reliable message delivery on the interface.

<subscription>—Link bandwidth percentage for RSVP reservation.

<update-threshold>—Percentage change in reserved bandwidth to trigger IGP update.

<interface> (configuration/routing-instances/instance)

Usage <configuration>
 <routing-instances>
 <instance>
 <interface>
 <name>name</name> <!-- identifier -->
 </interface>
 </instance>
 </routing-instances>
</configuration>

Description Interface name for this routing instance.

Contents <name>—Interface name.

- <interface> (configuration/routing-instances/instance/protocols/isis)
 - **Usage** <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <isis>
 <interface>
 <name>name</name> <!-- identifier -->
 <disable/>
 <authentication-key>authentication-key</authentication-key>
 <authentication-type>authentication-type-choice</authentication-type>
 <hello-authentication-key>authentication-key</hello-authentication-key>
 <hello-authentication-type>type</hello-authentication-type>
 <lsp-interval>milliseconds</lsp-interval>
 <csnp-interval>...</csnp-interval>
 <mesh-group>...</mesh-group>
 <passive/>
 <checksum/>
 <no-multicast/>
 <level>...</level>
 </interface>
 </isis>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>
 - **Description** Interface configuration.
 - **Contents**
 - <authentication-key>—Authentication key (password).
 - <authentication-type>—Authentication type.
 - md5—MD5 authentication.
 - simple—Simple password authentication.
 - <checksum>—Enable checksum for packets on this interface.
 - <csnp-interval>—Rate of CSN packets.
 - <disable>—Disable IS-IS on this interface.
 - <hello-authentication-key>—Authentication key (password) for hello packets.
 - <hello-authentication-type>—Authentication type for hello packets.
 - md5—MD5 authentication.
 - simple—Simple password authentication.
 - <level>—Configure levels on this interface.
 - <lsp-interval>—Interval between LSP transmissions.
 - <mesh-group>—Add the interface to a mesh group.

<name>—Interface name.

<no-multicast>—Do not include this interface in the multicast topology.

<passive>—Do not run IS-IS, but advertise it.

<interface> (configuration/routing-instances/instance/protocols/l2vpn/site)

```
Usage  <configuration>
        <routing-instances>
            <instance>
                <protocols>
                    <l2vpn>
                        <site>
                            <interface>
                                <name>name</name>    <!-- identifier -->
                                <remote-site-id>remote-site-id</remote-site-id>
                                <interface-description>interface-description</interface-description>
                            </interface>
                        </site>
                    </l2vpn>
                    </protocols>
                </instance>
            </routing-instances>
        </configuration>
```

Description Interface connecting this site to the VPN.

Contents <interface-description>—Interface description.

<name>—Interface name.

<remote-site-id>—Site identifier associated with this interface.

<interface> (configuration/routing-instances/instance/protocols/ldp)

```
Usage  <configuration>
        <routing-instances>
            <instance>
                <protocols>
                    <ldp>
                        <interface>
                            <name>name</name>    <!-- identifier -->
                            <disable/>
                            <hello-interval>hello-interval</hello-interval>
                            <hold-time>hold-time</hold-time>
                            <transport-address>transport-address-choice</transport-address>
                        </interface>
                    </ldp>
                    </protocols>
                </instance>
            </routing-instances>
        </configuration>
```

Description Enable LDP on this interface.

- **Contents** <disable>—Disable LDP on this interface.
- <hello-interval>—Hello interval (seconds).
- <hold-time>—Hello hold time (seconds).
- <name>—Interface name.
- <transport-address>—Address used for TCP sessions.
 - interface—Use interface address for TCP connections.
 - loopback—Use loopback address for TCP connections.

<interface> (configuration/routing-instances/instance/protocols/ospf/area)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <ospf>
          <area>
            <interface>
              <name>name</name>    <!-- identifier -->
              <disable/>
              <interface-type>interface-type-choice</interface-type>
              <passive/>
              <metric>metric</metric>
              <priority>priority</priority>
              <retransmit-interval>retransmit-interval</retransmit-interval>
              <transit-delay>transit-delay</transit-delay>
              <hello-interval>hello-interval</hello-interval>
              <dead-interval>dead-interval</dead-interval>
              <authentication-key>...</authentication-key>
              <transmit-interval>transmit-interval</transmit-interval>
              <neighbor>...</neighbor>
              <poll-interval>poll-interval</poll-interval>
            </interface>
          </area>
        </ospf>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

- Description** Include an interface in this area.

- Contents** <authentication-key>—Authentication key.
- <dead-interval>—Dead interval (seconds).
- <disable>—Disable OSPF on this interface.
- <hello-interval>—Hello interval (seconds).

<interface-type>—Type of interface.

- nbma—Nonbroadcast multiaccess.
- p2mp—Point-to-multipoint NBMA.

<metric>—Interface metric.

<name>—Interface name or IP address.

<neighbor>—NBMA neighbor.

<passive>—Do not run OSPF, but advertise it.

<poll-interval>—Poll interval for NBMA interfaces.

<priority>—Designated router priority.

<retransmit-interval>—Retransmission interval (seconds).

<transit-delay>—Transit delay (seconds).

<transmit-interval>—OSPF packet transmit interval (milliseconds).

<interface> (configuration/routing-instances/instance/protocols/pim)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <pim>
          <interface>
            <name>name</name>    <!-- identifier -->
            <disable/>
            <mode>mode-choice</mode>
            <priority>priority</priority>
            <version>version</version>
            <hello-interval>seconds</hello-interval>
          </interface>
        </pim>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description PIM interface options.

Contents

- <disable>—Disable PIM on this interface.
- <hello-interval>—Hello interval.

- *<mode>*—Mode of interface.
 - dense—Dense mode.
 - sparse—Sparse mode.
 - sparse-dense—Sparse-dense mode.
- *<name>*—Interface name.
- *<priority>*—Hello option DR priority.
- *<version>*—Force PIM version.

• <interface> (configuration/routing-instances/instance/protocols/router-discovery)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <router-discovery>
 <interface>
 <name>*name*</name> <!-- identifier -->
 <max-advertisement-interval>*seconds*</max-advertisement-interval>
 <min-advertisement-interval>*seconds*</min-advertisement-interval>
 <lifetime>*seconds*</lifetime>
 </interface>
 </router-discovery>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Interfaces on which to configure router discovery.

Contents <lifetime>—How long addresses in advertisements are valid.

 <max-advertisement-interval>—Maximum time before sending advertisements.

 <min-advertisement-interval>—Minimum time before sending advertisements.

 <name>—Interface name.

<interface> (configuration/routing-instances/instance/routing-options/multicast/scope)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <multicast>
          <scope>
            <interface>
              <name>name</name>    <!-- identifier -->
            </interface>
          </scope>
        </multicast>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Interface on which to configure scoping.

Contents <name>—Interface on which to configure scoping.

<interface> (configuration/routing-options/multicast/scope)

Usage

```

<configuration>
  <routing-options>
    <multicast>
      <scope>
        <interface>
          <name>name</name>    <!-- identifier -->
        </interface>
      </scope>
    </multicast>
  </routing-options>
</configuration>
```

Description Interface on which to configure scoping.

Contents <name>—Interface on which to configure scoping.

<interface> (configuration/snmp)

Usage

```

<configuration>
  <snmp>
    <interface>
      <name>name</name>    <!-- identifier -->
    </interface>
  </snmp>
</configuration>
```

Description Restrict SNMP requests to interfaces.

Contents <name>—Restrict SNMP requests to interfaces.

- <interface-group> (configuration/firewall/family/inet/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <interface-group>
 <name>name</name> <!-- identifier -->
 </interface-group>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
</configuration>

Description Match interface group.

Contents <name>—Range of values.

- <interface-group> (configuration/firewall/family/inet6/filter/term/from)

Usage <configuration>
 <firewall>
 <family>
 <inet6>
 <filter>
 <term>
 <from>
 <interface-group>
 <name>name</name> <!-- identifier -->
 </interface-group>
 </from>
 </term>
 </filter>
 </inet6>
 </family>
 </firewall>
</configuration>

Description Match interface group.

Contents <name>—Range of values.

<interface-group-except> (configuration/firewall/family/inet/filter/term/from)

```

Usage  <configuration>
        <firewall>
          <family>
            <inet>
              <filter>
                <term>
                  <from>
                    <interface-group-except>
                      <name>name</name>    <!-- identifier -->
                    </interface-group-except>
                  </from>
                </term>
              </filter>
            </inet>
          </family>
        </firewall>
      </configuration>

```

Description Do not match interface group.

Contents <name>—Range of values.

<interface-group-except> (configuration/firewall/family/inet6/filter/term/from)

```

Usage  <configuration>
        <firewall>
          <family>
            <inet6>
              <filter>
                <term>
                  <from>
                    <interface-group-except>
                      <name>name</name>    <!-- identifier -->
                    </interface-group-except>
                  </from>
                </term>
              </filter>
            </inet6>
          </family>
        </firewall>
      </configuration>

```

Description Do not match interface group.

Contents <name>—Range of values.

- <interface-profile> (configuration/accounting-options)

```
Usage <configuration>
      <accounting-options>
        <interface-profile>
          <name>name</name>    <!-- identifier -->
          <file>file</file>
          <interval>minutes</interval>
          <fields>...</fields>   <!-- mandatory -->
        </interface-profile>
      </accounting-options>
    </configuration>
```

Description Interface profile for accounting data.

Contents <fields>—Statistics to log to file.

<file>—Name of file for accounting data.

<interval>—Polling interval.

<name>—Name of profile.

<interface-routes> (configuration/routing-instances(instance/routing-options))

```
Usage <configuration>
    <routing-instances>
        <instance>
            <routing-options>
                <interface-routes>
                    <rib-group>...</rib-group>
                    <family>...</family>
                </interface-routes>
            </routing-options>
        </instance>
    </routing-instances>
</configuration>
```

Description Define routing table groups for interface routes.

Contents <family>—Address family.

<rib-group>—Routing table group.

<interface-routes> (configuration/routing-options)

Usage

```
<configuration>
  <routing-options>
    <interface-routes>
      <rib-group>...</rib-group>
      <family>...</family>
    </interface-routes>
  </routing-options>
</configuration>
```

- Description** Define routing table groups for interface routes.
- Contents**
- <family>—Address family.
 - <rib-group>—Routing table group.

<interface-switch> (configuration/protocols/connections)

Usage

```
<configuration>
  <protocols>
    <connections>
      <interface-switch>
        <name>name</name>    <!-- identifier -->
        <interface>...</interface>
      </interface-switch>
    </connections>
  </protocols>
</configuration>
```

- Description** Bidirectional switch between interfaces.
- Contents**
- <interface>—Interface to be switched.
 - <name>—Name of interface switch.

<interfaces> (configuration)

Usage

```
<configuration>
  <interfaces>
    <traceoptions>...</traceoptions>
    <interface>...</interface>
  </interfaces>
</configuration>
```

- Description** Interface configuration.
- Contents**
- <interface>—No documentation is available yet.
 - <traceoptions>—Interface trace options.

- <interfaces> (configuration/class-of-service)

Usage <configuration>
 <class-of-service>
 <interfaces>
 <name>name</name> <!-- identifier -->
 <scheduler-map>scheduler-map</scheduler-map>
 <unit>...</unit>
 </interfaces>
 </class-of-service>
 </configuration>

Description Apply class of service options to interfaces.

Contents <name>—Interface name, wildcards accepted.

 <scheduler-map>—Scheduler map applied to this interface.

 <unit>—Logical interface unit or wildcard.

- <interpolate> (configuration/class-of-service/drop-profiles)

Usage <configuration>
 <class-of-service>
 <drop-profiles>
 <interpolate>
 <fill-level>...</fill-level> <!-- mandatory -->
 <drop-probability>...</drop-probability> <!-- mandatory -->
 </interpolate>
 </drop-profiles>
 </class-of-service>
 </configuration>

Description Data points interpolated.

Contents <drop-probability>—Data points for packet drop probability.

 <fill-level>—Data points for queue full percentage.

<ipsec> (configuration/security)

Usage <configuration>
 <security>
 <ipsec>
 <protocol>protocol-choice</protocol>
 <authentication-algorithm>authentication-algorithm</authentication-algorithm>
 <encryption-algorithm>encryption-algorithm-choice</encryption-algorithm>
 <lifetime-seconds>seconds</lifetime-seconds>
 <proposal>...</proposal>
 <policy>...</policy>
 <security-association>...</security-association>
 </ipsec>
 </security>
</configuration>

Description IPSec configuration.

Contents <authentication-algorithm>—Define authentication algorithm.

- hmac-md5-96—HMAC-MD5-96 authentication algorithm.
- hmac-sha1-96—HMAC-SHA1-96 authentication algorithm.

<encryption-algorithm>—Define encryption algorithm.

- 3des-cbc—3DES-CBC encryption algorithm.
- des-cbc—DES-CBC encryption algorithm.

<lifetime-seconds>—Lifetime in seconds.

<policy>—Define an IPSec policy.

<proposal>—Define an IPSec proposal for a dynamic SA.

<protocol>—Define an IPSec protocol for the proposal.

- esp—Encapsulated Security Payload header.

<security-association>—Define an IPSec security association.

- <isis> (configuration/protocols)

Usage

```
<configuration>
  <protocols>
    <isis>
      <disable/>
      <traceoptions>...</traceoptions>
      <export>...</export>
      <reference-bandwidth>reference-bandwidth</reference-bandwidth>
      <lsp-lifetime>seconds</lsp-lifetime>
      <spf-delay>milliseconds</spf-delay>
      <authentication-key>authentication-key</authentication-key>
      <authentication-type>authentication-type-choice</authentication-type>
      <no-authentication-check/>
      <multicast-topology/>
      <ignore-attached-bit/>
      <rib-group>rib-group</rib-group>
      <overload>...</overload>
      <traffic-engineering>...</traffic-engineering>
      <graceful-restart>...</graceful-restart>
      <level>...</level>
      <interface>...</interface>
      <label-switched-path>...</label-switched-path>
    </isis>
  </protocols>
</configuration>
```

Description IS-IS options.

Contents <authentication-key>—Authentication key (password).

<authentication-type>—Authentication type.

- md5—MD5 authentication.

- simple—Simple password authentication.

<disable>—Disable IS-IS.

<export>—Export policy.

<graceful-restart>—IS-IS graceful restart options.

<ignore-attached-bit>—Ignore the attached bit in level 1 LSPs.

<interface>—Interface configuration.

<label-switched-path>—Configuration for advertisement of a label-switched path.

<level>—Configure global level attributes.

<lsp-lifetime>—Lifetime of LSPs.

<multicast-topology>—Enable multicast topology.

<no-authentication-check>—Disable authentication checking.

<overload>—Set the overload bit (no transit traffic).

<reference-bandwidth>—Bandwidth for calculating metric defaults.

<rib-group>—Routing table group for importing IS-IS routes.

<spf-delay>—Time to wait before running an SPF.

<traceoptions>—Trace options for IS-IS.

<traffic-engineering>—Configure traffic engineering attributes.

<isis> (configuration/routing-instances/instance/protocols)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <isis>
          <disable/>
          <traceoptions>...</traceoptions>
          <export>...</export>
          <reference-bandwidth>reference-bandwidth</reference-bandwidth>
          <lsp-lifetime>seconds</lsp-lifetime>
          <spf-delay>milliseconds</spf-delay>
          <authentication-key>authentication-key</authentication-key>
          <authentication-type>authentication-type-choice</authentication-type>
          <no-authentication-check/>
          <multicast-topology/>
          <ignore-attached-bit/>
          <rib-group>rib-group</rib-group>
          <overload>...</overload>
          <traffic-engineering>...</traffic-engineering>
          <graceful-restart>...</graceful-restart>
          <level>...</level>
          <interface>...</interface>
          <label-switched-path>...</label-switched-path>
        </isis>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description IS-IS configuration.

Contents <authentication-key>—Authentication key (password).

<authentication-type>—Authentication type.

- md5—MD5 authentication.

- simple—Simple password authentication.

<disable>—Disable IS-IS.

<export>—Export policy.

- <graceful-restart>—IS-IS graceful restart options.
- <ignore-attached-bit>—Ignore the attached bit in level 1 LSPs.
- <interface>—Interface configuration.
- <label-switched-path>—Configuration for advertisement of a label-switched path.
- <level>—Configure global level attributes.
- <lsp-lifetime>—Lifetime of LSPs.
- <multicast-topology>—Enable multicast topology.
- <no-authentication-check>—Disable authentication checking.
- <overload>—Set the overload bit (no transit traffic).
- <reference-bandwidth>—Bandwidth for calculating metric defaults.
- <rib-group>—Routing table group for importing IS-IS routes.
- <spf-delay>—Time to wait before running an SPF.
- <traceoptions>—Trace options for IS-IS.
- <traffic-engineering>—Configure traffic engineering attributes.

<iso> (configuration/interfaces/interface/unit/family)

Usage

```
<configuration>
  <interfaces>
    <interface>
      <unit>
        <family>
          <iso>
```

Description OSI ISO protocol parameters.

Contents

- <address>—Interface address.
- <mtu>—Protocol family MTU.

<keepalives> (configuration/interfaces/interface)

Usage	<pre><configuration> <interfaces> <interface> <keepalives> <interval>seconds</interval> <up-count>up-count</up-count> <down-count>down-count</down-count> </keepalives> </interface> </interfaces> </configuration></pre>
Description	Send/demand keepalive messages.
Contents	<p><down-count>—Keepalive missed to bring link down.</p> <p><interval>—Keepalive period.</p> <p><up-count>—Keepalive received to bring link up.</p>

<key> (configuration/security/ipsec/security-association/manual/direction/authentication)

Usage	<pre><configuration> <security> <ipsec> <security-association> <manual> <direction> <authentication> <key> <ascii-text>ascii-text</ascii-text> <hexadecimal>hexadecimal</hexadecimal> </key> </authentication> </direction> </manual> </security-association> </ipsec> </security> </configuration></pre>
Description	Define an authentication key.
Contents	<p><ascii-text>—In text format.</p> <p><hexadecimal>—In hexadecimal format.</p>

- <key> (configuration/security/ipsec/security-association/manual/direction/encryption)

Usage <configuration>
 <security>
 <ipsec>
 <security-association>
 <manual>
 <direction>
 <encryption>
 <key>
 <ascii-text>ascii-text</ascii-text>
 <hexadecimal>hexadecimal</hexadecimal>
 </key>
 </encryption>
 </direction>
 </manual>
 </security-association>
 </ipsec>
 </security>
 </configuration>

Description Define an encryption key.

Contents <ascii-text>—In text format.

 <hexadecimal>—In hexadecimal format.

- <l2circuit> (configuration/protocols)

Usage <configuration>
 <protocols>
 <l2circuit>
 <traceoptions>...</traceoptions>
 <neighbor>...</neighbor>
 </l2circuit>
 </protocols>
 </configuration>

Description Configuration for Layer 2 circuits over MPLS.

Contents <neighbor>—List of Layer 2 circuits to this neighbor.

 <traceoptions>—Trace options for l2circuit.

<l2vpn> (configuration/protocols/bgp/family)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <family>
        <l2vpn>
          <unicast>...</unicast>
        </l2vpn>
      </family>
    </bgp>
  </protocols>
</configuration>
```

Description MPLS-based Layer 2 VPN (L2VPN) NLRI parameters.

Contents <unicast>—Include Layer 2 VPN NLRI.

<l2vpn> (configuration/protocols/bgp/group/family)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <group>
        <family>
          <l2vpn>
            <unicast>...</unicast>
          </l2vpn>
        </family>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description MPLS-based Layer 2 VPN (L2VPN) NLRI parameters.

Contents <unicast>—Include Layer 2 VPN NLRI.

• <l2vpn> (configuration/protocols/bgp/group/neighbor/family)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <l2vpn>
 <unicast>...</unicast>
 </l2vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description MPLS-based Layer 2 VPN (L2VPN) NLRI parameters.

Contents <unicast>—Include Layer 2 VPN NLRI.

• <l2vpn> (configuration/routing-instances(instance/protocols)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <l2vpn>
 <traceoptions>...</traceoptions>
 <encapsulation-type>type</encapsulation-type> <!-- mandatory -->
 <site>...</site>
 </l2vpn>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Layer 2 VPN configuration.

Contents <encapsulation-type>—No documentation is available yet.

- atm-aal5—ATM AAL/5-based Layer 2 VPN.
- atm-cell—ATM Cell-based Layer 2 VPN.
- cisco-hdlc—Cisco-compatible HDLC-based Layer 2 VPN.
- ethernet—Ethernet-based Layer 2 VPN.
- ethernet-vlan—Ethernet VLAN-based Layer 2 VPN.
- frame-relay—Frame Relay-based Layer 2 VPN.

- interworking—Layer 2.5 interworking VPN.

- ppp—PPP-based Layer 2 VPN.

<site>—Layer 2 VPN sites connected to this Provider Equipment.

<traceoptions>—Trace options for Layer 2 VPN.

<l2vpn> (configuration/routing-instances/instance/protocols/bgp/family)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <family>
            <l2vpn>
              <unicast>...</unicast>
            </l2vpn>
          </family>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description MPLS-based Layer 2 VPN (L2VPN) NLRI parameters.

Contents <unicast>—Include Layer 2 VPN NLRI.

<l2vpn> (configuration/routing-instances/instance/protocols/bgp/group/family)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <family>
              <l2vpn>
                <unicast>...</unicast>
              </l2vpn>
            </family>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description MPLS-based Layer 2 VPN (L2VPN) NLRI parameters.

Contents <unicast>—Include Layer 2 VPN NLRI.

- <l2vpn> (configuration/routing-instances(instance/protocols/bgp/group/neighbor/family)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <l2vpn>
 <unicast>...</unicast>
 </l2vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description MPLS-based Layer 2 VPN (L2VPN) NLRI parameters.

Contents <unicast>—Include Layer 2 VPN NLRI.

<label-map> (configuration/protocols/mpls/interface)

Usage <configuration>
 <protocols>
 <mpls>
 <interface>
 <label-map>
 <name>name</name> <!-- identifier -->
 <next-hop>next-hop</next-hop>
 <reject/>
 <discard/>
 <swap>swap</swap>
 <swap-label>swap-label</swap-label>
 <push-label>push-label</push-label>
 <pop/>
 <type>type-choice</type>
 <preference>preference</preference>
 <class-of-service>class-of-service</class-of-service>
 </label-map>
 </interface>
 </mpls>
 </protocols>
 </configuration>

Description Label to match.

Contents <class-of-service>—Class-of-service value.

 <discard>—Silently discard the packet.

<name>—Label to match.

<next-hop>—Address or interface of next-hop router.

<pop>—Remove the label from the top of the label stack.

<preference>—Preference value.

<reject>—Reject the packet.

<swap>—Remove and replace label from the top of the label stack.

<type>—Traffic type.

- inet—IP version 4.

<label-switched-path> (configuration/protocols/isis)

Usage

```
<configuration>
  <protocols>
    <isis>
      <label-switched-path>
        <name>name</name>    <!-- identifier -->
        <level>...</level>
      </label-switched-path>
    </isis>
  </protocols>
</configuration>
```

Description Configuration for advertisement of a label-switched path.

Contents <level>—Level to advertise this label-switched path.

<name>—Name of label-switched path to be advertised.

- <label-switched-path> (configuration/protocols/mpls)

Usage

```

<configuration>
  <protocols>
    <mpls>
      <label-switched-path>
        <name>name</name>    <!-- identifier -->
        <disable/>
        <from>from</from>
        <to>to</to>    <!-- mandatory -->
        <ldp-tunneling/>
        <metric>metric</metric>
        <install>...</install>
        <retry-timer>seconds</retry-timer>
        <retry-limit>retry-limit</retry-limit>
        <bandwidth>bandwidth</bandwidth>
        <class-of-service>class-of-service</class-of-service>
        <no-decrement-ttl/>
        <hop-limit>hop-limit</hop-limit>
        <no-cspf/>
        <optimize-timer>seconds</optimize-timer>
        <preference>preference</preference>
        <setup-priority>setup-priority</setup-priority>
        <reservation-priority>reservation-priority</reservation-priority>
        <record/>
        <standby/>
        <admin-group>...</admin-group>
        <random/>
        <least-fill/>
        <most-fill/>
        <description>description</description>
        <link-protection/>
        <adaptive/>
        <fast-reroute>...</fast-reroute>
        <auto-bandwidth>...</auto-bandwidth>
        <lsp-attributes>...</lsp-attributes>
        <primary>...</primary>
        <secondary>...</secondary>
      </label-switched-path>
    </mpls>
  </protocols>
</configuration>
```

Description Label-switched path.

Contents <adaptive>—Have the LSP smoothly cut over to new routes.

<admin-group>—Administrative group policy.

<auto-bandwidth>—Do auto bandwidth allocation for this LSP.

<bandwidth>—Bandwidth to reserve (bps).

<class-of-service>—Class-of-service value.

<description>—Text description of label switched path.

<disable>—Disable MPLS label-switched path.

<fast-reroute>—Fast reroute.

<from>—Address of ingress router.

<hop-limit>—Maximum allowed router hops.

<install>—Install prefix.

<ldp-tunneling>—Allow LDP to use this LSP for tunneling.

<least-fill>—Select the least-filled among equal-cost paths.

<link-protection>—Protect links with RSVP-TE fast-reroute.

<lsp-attributes>—Attributes for generalized LSP.

<metric>—Metric value.

<most-fill>—Select the most-filled among equal-cost paths.

<name>—Name of path.

<no-cspf>—Disable automatic path computation.

<no-decrement-ttl>—Do not decrement the TTL within an LSP.

<optimize-timer>—Periodical path reoptimizations.

<preference>—Preference value.

<primary>—Preferred path.

<random>—Randomly select among equal-cost paths.

<record>—Record transit routers.

<retry-limit>—Maximum number of times to retry primary path.

<retry-timer>—Time before retrying the primary path.

<secondary>—Backup path.

<standby>—Keep backup paths in continuous standby.

<to>—Address of egress router.

- <label-switched-path> (configuration/protocols/ospf/area)
 - **Usage** <configuration>
 <protocols>
 <ospf>
 <area>
 <label-switched-path>
 <name>name</name> <!-- identifier -->
 <disable/>
 <metric>metric</metric>
 </label-switched-path>
 </area>
 </ospf>
 </protocols>
</configuration>
 - **Description** Configuration for advertisement of a label-switched path.
 - **Contents** <disable>—Disable OSPF on this label-switched path.

<metric>—Interface metric.

<name>—Name of label-switched path to be advertised.
- <label-switched-path> (configuration/routing-instances/instance/protocols/isis)
 - **Usage** <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <isis>
 <label-switched-path>
 <name>name</name> <!-- identifier -->
 <level>...</level>
 </label-switched-path>
 </isis>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
 - **Description** Configuration for advertisement of a label-switched path.
 - **Contents** <level>—Level to advertise this label-switched path.

<name>—Name of label-switched path to be advertised.

<label-switched-path> (configuration/routing-instances/instance/protocols/ospf/area)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <ospf>
          <area>
            <label-switched-path>
              <name>name</name>    <!-- identifier -->
              <disable/>
              <metric>metric</metric>
            </label-switched-path>
          </area>
        </ospf>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Configuration for advertisement of a label-switched path.

Contents <disable>—Disable OSPF on this label-switched path.

<metric>—Interface metric.

<name>—Name of label-switched path to be advertised.

<labeled-unicast> (configuration/protocols/bgp/family/inet)

Usage

```

<configuration>
  <protocols>
    <bpg>
      <family>
        <inet>
          <labeled-unicast>
            <prefix-limit>...</prefix-limit>
            <rib-group>...</rib-group>
            <resolve-vpn/>
          </labeled-unicast>
        </inet>
      </family>
    </bpg>
  </protocols>
</configuration>
```

Description Include labeled unicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<resolve-vpn>—Install received NLRI in inet.3 also.

<rib-group>—Routing table group.

- <*labeled-unicast*> (configuration/protocols/bgp/family/inet6)

Usage

```

<configuration>
  <protocols>
    <bgp>
      <family>
        <inet6>
          <labeled-unicast>
            <prefix-limit>...</prefix-limit>
            <rib-group>...</rib-group>
            <explicit-null/>  <!-- mandatory -->
          </labeled-unicast>
        </inet6>
      </family>
    </bgp>
  </protocols>
</configuration>
```

Description Include labeled unicast NLRI.

Contents <explicit-null>—Advertise explicit NULL for all routes.

<prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

- <*labeled-unicast*> (configuration/protocols/bgp/group/family/inet)

Usage

```

<configuration>
  <protocols>
    <bgp>
      <group>
        <family>
          <inet>
            <labeled-unicast>
              <prefix-limit>...</prefix-limit>
              <rib-group>...</rib-group>
              <resolve-vpn/>
            </labeled-unicast>
          </inet>
        </family>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Include labeled unicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<resolve-vpn>—Install received NLRI in inet.3 also.

<rib-group>—Routing table group.

<*labeled-unicast*> (configuration/protocols/bgp/group/family/inet6)

Usage

```

<configuration>
  <protocols>
    <bgp>
      <group>
        <family>
          <inet6>
            <labeled-unicast>
              <prefix-limit>...</prefix-limit>
              <rib-group>...</rib-group>
              <explicit-null/>  <!-- mandatory -->
            </labeled-unicast>
          </inet6>
        </family>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Include labeled unicast NLRI.

Contents <explicit-null>—Advertise explicit NULL for all routes.

<prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

<*labeled-unicast*> (configuration/protocols/bgp/group/neighbor/family/inet)

Usage

```

<configuration>
  <protocols>
    <bgp>
      <group>
        <neighbor>
          <family>
            <inet>
              <labeled-unicast>
                <prefix-limit>...</prefix-limit>
                <rib-group>...</rib-group>
                <resolve-vpn/>
              </labeled-unicast>
            </inet>
          </family>
        </neighbor>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Include labeled unicast NLRI.

```
Usage <configuration>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <family>
                <inet6>
                  <labeled-unicast>
                    <prefix-limit>...</prefix-limit>
                    <rib-group>...</rib-group>
                    <explicit-null/>    <!-- mandatory -->
                  </labeled-unicast>
                </inet6>
              </family>
            </neighbor>
          </group>
        </bgp>
      </protocols>
</configuration>
```

Description Include labeled unicast NLRI.

Contents <explicit-null>—Advertise explicit NULL for all routes.

<prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

<*labeled-unicast*> (configuration/routing-instances/instance/protocols/bgp/family/inet)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <family>
            <inet>
              <labeled-unicast>
                <prefix-limit>...</prefix-limit>
                <rib-group>...</rib-group>
                <resolve-vpn/>
              </labeled-unicast>
            </inet>
          </family>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Include labeled unicast NLRI.

Contents

- <prefix-limit>—Limit maximum number of prefixes from a peer.
- <resolve-vpn>—Install received NLRI in inet.3 also.
- <rib-group>—Routing table group.

<*labeled-unicast*> (configuration/routing-instances/instance/protocols/bgp/family/inet6)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <family>
            <inet6>
              <labeled-unicast>
                <prefix-limit>...</prefix-limit>
                <rib-group>...</rib-group>
                <explicit-null/>  <!-- mandatory -->
              </labeled-unicast>
            </inet6>
          </family>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Include labeled unicast NLRI.

- **Contents** <explicit-null>—Advertise explicit NULL for all routes.
 - <prefix-limit>—Limit maximum number of prefixes from a peer.
 - <rib-group>—Routing table group.

<labeled-unicast> (configuration/routing-instances/instance/protocols/bgp/group/family/inet)

```
Usage <configuration>
      <routing-instances>
        <instance>
          <protocols>
            <bgp>
              <group>
                <family>
                  <inet>
                    <labeled-unicast>
                      <prefix-limit>...</prefix-limit>
                      <rib-group>...</rib-group>
                      <resolve-vpn/>
                    </labeled-unicast>
                  </inet>
                </family>
              </group>
            </bgp>
          <protocols>
        </instance>
      </routing-instances>
    </configuration>
```

Description Include labeled unicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<resolve-vpn>—Install received NLRI in inet.3 also.

<rib-group>—Routing table group.

<*labeled-unicast*> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6)

```
Usage  <configuration>
        <routing-instances>
            <instance>
                <protocols>
                    <bgp>
                        <group>
                            <family>
                                <inet6>
                                    <labeled-unicast>
                                        <prefix-limit>...</prefix-limit>
                                        <rib-group>...</rib-group>
                                        <explicit-null/>    <!-- mandatory -->
                                    </labeled-unicast>
                                </inet6>
                            </family>
                        </group>
                    </bgp>
                </protocols>
            </instance>
        </routing-instances>
    </configuration>
```

Description Include labeled unicast NLRI.

Contents <explicit-null>—Advertise explicit NULL for all routes.

<prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

- <*labeled-unicast*> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <labeled-unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 <resolve-vpn/>
 </labeled-unicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Include labeled unicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

 <resolve-vpn>—Install received NLRI in inet.3 also.

 <rib-group>—Routing table group.

<*labeled-unicast*> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <family>
                <inet6>
                  <labeled-unicast>
                    <prefix-limit>...</prefix-limit>
                    <rib-group>...</rib-group>
                    <explicit-null/>  <!-- mandatory -->
                  </labeled-unicast>
                </inet6>
              </family>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Include labeled unicast NLRI.

Contents <explicit-null>—Advertise explicit NULL for all routes.

<prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

<*larscom*> (configuration/interfaces/interface/t3-options/compatibility-mode)

Usage

```

<configuration>
  <interfaces>
    <interface>
      <t3-options>
        <compatibility-mode>
          <larscom>
            <substrate>substrate</substrate>
          </larscom>
        </compatibility-mode>
      </t3-options>
    </interface>
  </interfaces>
</configuration>
```

Description Compatible with Larscom CSU.

Contents <substrate>—Set substrate value.

- <last-as> (configuration/policy-options/policy-statement/from/route-filter/as-path-expand)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <route-filter>
 <as-path-expand>
 <last-as>
 <count>count</count>
 </last-as>
 </as-path-expand>
 </route-filter>
 </from>
 </policy-statement>
 </policy-options>
 </configuration>

Description Prepend last AS.

Contents <count>—Repeat count.

- <last-as> (configuration/policy-options/policy-statement/from/source-address-filter/as-path-expand)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <source-address-filter>
 <as-path-expand>
 <last-as>
 <count>count</count>
 </last-as>
 </as-path-expand>
 </source-address-filter>
 </from>
 </policy-statement>
 </policy-options>
 </configuration>

Description Prepend last AS.

Contents <count>—Repeat count.

<last-as> (configuration/policy-options/policy-statement/term/from/route-filter/as-path-expand)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <route-filter>
 <as-path-expand>
 <last-as>
 <count>count</count>
 </last-as>
 </as-path-expand>
 </route-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
</configuration>

Description Prepend last AS.

Contents <count>—Repeat count.

<last-as> (configuration/policy-options/policy-statement/term/from/source-address-filter/as-path-expand)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <source-address-filter>
 <as-path-expand>
 <last-as>
 <count>count</count>
 </last-as>
 </as-path-expand>
 </source-address-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
</configuration>

Description Prepend last AS.

Contents <count>—Repeat count.

- <last-as> (configuration/policy-options/policy-statement/term/then/as-path-expand)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <then>
 <as-path-expand>
 <last-as>
 <count>count</count>
 </last-as>
 </as-path-expand>
 </then>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Prepend last AS.

Contents <count>—Repeat count.

- <last-as> (configuration/policy-options/policy-statement/then/as-path-expand)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <then>
 <as-path-expand>
 <last-as>
 <count>count</count>
 </last-as>
 </as-path-expand>
 </then>
 </policy-statement>
 </policy-options>
 </configuration>

Description Prepend last AS.

Contents <count>—Repeat count.

<ldp> (configuration/protocols)

Usage

```

<configuration>
  <protocols>
    <ldp>
      <traceoptions>...</traceoptions>
      <traffic-statistics>...</traffic-statistics>
      <preference>preference</preference>
      <no-forwarding/>
      <track-igp-metric/>
      <import>...</import>
      <export>...</export>
      <egress-policy>...</egress-policy>
      <deaggregate/>
      <explicit-null/>
      <transport-address>transport-address-choice</transport-address>
      <keepalive-interval>keepalive-interval</keepalive-interval>
      <keepalive-timeout>keepalive-timeout</keepalive-timeout>
      <interface>...</interface>
    </ldp>
  </protocols>
</configuration>
```

Description LDP options.

Contents

- <deaggregate>—Deaggregate FECs into separate labels.
- <egress-policy>—Configure LSP egress policy.
- <explicit-null>—Advertise the EXPLICIT_NULL label when we are the egress.
- <export>—Export policy.
- <import>—Import policy.
- <interface>—Enable LDP on this interface.
- <keepalive-interval>—Keepalive interval (seconds).
- <keepalive-timeout>—Keepalive timeout (seconds).
- <no-forwarding>—Do not use LDP ingress routes for forwarding.
- <preference>—Route preference.
- <traceoptions>—Trace options for LDP.
- <track-igp-metric>—Track the igp metric.
- <traffic-statistics>—Collect statistics for LDP label-switched paths.
- <transport-address>—Address used for TCP sessions.
 - interface—Use interface address for TCP connections.
 - loopback—Use loopback address for TCP connections.

- <ldp> (configuration/routing-instances/instance/protocols)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ldp>
 <traceoptions>...</traceoptions>
 <traffic-statistics>...</traffic-statistics>
 <preference>preference</preference>
 <no-forwarding/>
 <track-igp-metric/>
 <import>...</import>
 <export>...</export>
 <egress-policy>...</egress-policy>
 <deaggregate/>
 <explicit-null/>
 <transport-address>transport-address-choice</transport-address>
 <keepalive-interval>keepalive-interval</keepalive-interval>
 <keepalive-timeout>keepalive-timeout</keepalive-timeout>
 <interface>...</interface>
 </ldp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description LDP configuration.

Contents <deaggregate>—Deaggregate FECs into separate labels.

 <egress-policy>—Configure LSP egress policy.

 <explicit-null>—Advertise the EXPLICIT_NULL label when we are the egress.

 <export>—Export policy.

 <import>—Import policy.

 <interface>—Enable LDP on this interface.

 <keepalive-interval>—Keepalive interval (seconds).

 <keepalive-timeout>—Keepalive timeout (seconds).

 <no-forwarding>—Do not use LDP ingress routes for forwarding.

 <preference>—Route preference.

 <traceoptions>—Trace options for LDP.

 <track-igp-metric>—Track the igp metric.

 <traffic-statistics>—Collect statistics for LDP label-switched paths.

<transport-address>—Address used for TCP sessions.

- interface—Use interface address for TCP connections.
- loopback—Use loopback address for TCP connections.

<level> (configuration/protocols/isis)

Usage

```

<configuration>
  <protocols>
    <isis>
      <level>
        <name>name</name>    <!-- identifier -->
        <disable/>
        <authentication-key>authentication-key</authentication-key>
        <authentication-type>authentication-type-choice</authentication-type>
        <no-hello-authentication/>
        <no-csnp-authentication/>
        <no-psnp-authentication/>
        <wide-metrics-only/>
        <preference>preference</preference>
        <external-preference>external-preference</external-preference>
      </level>
    </isis>
  </protocols>
</configuration>
```

Description Configure global level attributes.

Contents <authentication-key>—Authentication key (password).

<authentication-type>—Authentication type.

- md5—MD5 authentication.
- simple—Simple password authentication.

<disable>—Disable IS-IS on this level.

<external-preference>—Preference of external routes.

<name>—IS-IS level number.

<no-csnp-authentication>—Disable authentication for CSN packets.

<no-hello-authentication>—Disable authentication for hello packets.

<no-psnp-authentication>—Disable authentication for PSN packets.

<preference>—Preference of internal routes.

<wide-metrics-only>—Generate wide metrics only.

- <level> (configuration/protocols/isis/interface)
 - **Usage** <configuration>
 - <protocols>
 - <isis>
 - <interface>
 - <level>
 - <name>*name*</name> <!-- identifier -->
 - <disable/>
 - <metric>*metric*</metric>
 - <multicast-metric>*multicast-metric*</multicast-metric>
 - <te-metric>*te-metric*</te-metric>
 - <authentication-key>*authentication-key*</authentication-key>
 - <authentication-type>*authentication-type-choice*</authentication-type>
 - <hello-authentication-key>*authentication-key*</hello-authentication-key>
 - <hello-authentication-type>*authentication-type*</hello-authentication-type>
 - <hello-interval>*seconds*</hello-interval>
 - <hold-time>*seconds*</hold-time>
 - <priority>*priority*</priority>
 - <passive/>
 - </level>
 - </interface>
 - </isis>
 - </protocols>
 - </configuration>
- Description** Configure levels on this interface.
- Contents** <authentication-key>—Authentication key (password).
- <authentication-type>—Authentication type.
- md5—MD5 authentication.
 - simple—Simple password authentication.
- <disable>—Disable IS-IS for this level.
- <hello-authentication-key>—Authentication key (password) for hello packets.
- <hello-authentication-type>—Authentication type for hello packets.
- md5—MD5 authentication.
 - simple—Simple password authentication.
- <hello-interval>—Interval between hello packet transmissions.
- <hold-time>—Time after which neighbors think we are down.
- <metric>—Metric for this level.
- <multicast-metric>—Multicast metric for this level.
- <name>—IS-IS level number.
- <passive>—Don't run IS-IS at this level, but advertise the interface.

<priority>—Designated router election priority.

<te-metric>—Traffic engineering metric.

<level> (configuration/protocols/isis/label-switched-path)

Usage <configuration>
 <protocols>
 <isis>
 <label-switched-path>
 <level>
 <name>name</name> <!-- identifier -->
 <disable/>
 <metric>metric</metric>
 </level>
 </label-switched-path>
 </isis>
 </protocols>
</configuration>

Description Level to advertise this label-switched path.

Contents <disable>—Disable advertisements to this level.

<metric>—SPF metric for this level.

<name>—IS-IS level number.

<level> (configuration/routing-instances/instance/protocols/isis)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <isis>
 <level>
 <name>name</name> <!-- identifier -->
 <disable/>
 <authentication-key>authentication-key</authentication-key>
 <authentication-type>authentication-type-choice</authentication-type>
 <no-hello-authentication/>
 <no-csnp-authentication/>
 <no-psnp-authentication/>
 <wide-metrics-only/>
 <preference>preference</preference>
 <external-preference>external-preference</external-preference>
 </level>
 </isis>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Configure global level attributes.

Contents	<authentication-key>—Authentication key (password). <authentication-type>—Authentication type. <ul style="list-style-type: none"> ■ md5—MD5 authentication. ■ simple—Simple password authentication. <disable>—Disable IS-IS on this level. <external-preference>—Preference of external routes. <name>—IS-IS level number. <no-csnp-authentication>—Disable authentication for CSN packets. <no-hello-authentication>—Disable authentication for hello packets. <no-psnp-authentication>—Disable authentication for PSN packets. <preference>—Preference of internal routes. <wide-metrics-only>—Generate wide metrics only.
Usage	<configuration> <routing-instances> <instance> <protocols> <isis> <interface> <level> <name>name</name> <!-- identifier --> <disable/> <metric>metric</metric> <multicast-metric>multicast-metric</multicast-metric> <te-metric>te-metric</te-metric> <authentication-key>authentication-key</authentication-key> <authentication-type>authentication-type-choice</authentication-type> <hello-authentication-key>key</hello-authentication-key> <hello-authentication-type>type</hello-authentication-type> <hello-interval>seconds</hello-interval> <hold-time>seconds</hold-time> <priority>priority</priority> <passive/> </level> </interface> </isis> </protocols> </instance> </routing-instances> </configuration>
Description	Configure levels on this interface.

Contents	<authentication-key>—Authentication key (password).
	<authentication-type>—Authentication type.
	■ md5—MD5 authentication.
	■ simple—Simple password authentication.
	<disable>—Disable IS-IS for this level.
	<hello-authentication-key>—Authentication key (password) for hello packets.
	<hello-authentication-type>—Authentication type for hello packets.
	■ md5—MD5 authentication.
	■ simple—Simple password authentication.
	<hello-interval>—Interval between hello packet transmissions.
	<hold-time>—Time after which neighbors think we are down.
	<metric>—Metric for this level.
	<multicast-metric>—Multicast metric for this level.
	<name>—IS-IS level number.
	<passive>—Don't run IS-IS at this level, but advertise the interface.
	<priority>—Designated router election priority.
	<te-metric>—Traffic engineering metric.

<level> (configuration/routing-instances/instance/protocols/isis/label-switched-path)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <isis>
          <label-switched-path>
            <level>
              <name>name</name>    <!-- identifier -->
              <disable/>
              <metric>metric</metric>
            </level>
          </label-switched-path>
        </isis>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Level to advertise this label-switched path.

- | | |
|--|--|
| Contents | <disable>—Disable advertisements to this level.

<metric>—SPF metric for this level.

<name>—IS-IS level number. |
|
<level> (configuration/routing-instances/instance/routing-options/options/syslog) | |
| Usage | <configuration>
<routing-instances>
<instance>
<routing-options>
<options>
<syslog>
<level>
<emergency/>
<alert/>
<critical/>
<error/>
<warning/>
<notice/>
<info/>
<debug/>
</level>
</syslog>
</options>
</routing-options>
</instance>
</routing-instances>
</configuration> |
| Description | Logging level. |
| Contents | <alert>—Alert level.

<critical>—Critical level.

<debug>—Debugging level.

<emergency>—Emergency level.

<error>—Error level.

<info>—Informational level.

<notice>—Notice level.

<warning>—Warning level. |

<level> (configuration/routing-options/options/syslog)

Usage <configuration>
 <routing-options>
 <options>
 <syslog>
 <level>
 <emergency/>
 <alert/>
 <critical/>
 <error/>
 <warning/>
 <notice/>
 <info/>
 <debug/>
 </level>
 </syslog>
 </options>
 </routing-options>
 </configuration>

Description Logging level.

Contents <alert>—Alert level.

 <critical>—Critical level.

 <debug>—Debugging level.

 <emergency>—Emergency level.

 <error>—Error level.

 <info>—Informational level.

 <notice>—Notice level.

 <warning>—Warning level.

- <link-management> (configuration/protocols)

Usage <configuration>
 <protocols>
 <link-management>
 <te-link>...</te-link>
 <peer>...</peer>
 <traceoptions>...</traceoptions>
 </link-management>
 </protocols>
 </configuration>

Description LMP options.

Contents <peer>—Define a network or LMP peer.
 <te-link>—Traffic engineering link.
 <traceoptions>—LMP trace options.

- <link-protection> (configuration/protocols/rsvp/interface)

Usage <configuration>
 <protocols>
 <rsvp>
 <interface>
 <link-protection>
 <disable/>
 <class-of-service>class-of-service</class-of-service>
 <bandwidth>bandwidth</bandwidth>
 </link-protection>
 </interface>
 </rsvp>
 </protocols>
 </configuration>

Description Protect traffic with a label-stacked LSP.

Contents <bandwidth>—Bandwidth (bps) for the protection LSP.
 <class-of-service>—Class of service for the protection LSP.
 <disable>—Disable link protection on this interface.

<listen> (configuration/protocols/sap)

```
Usage   <configuration>
          <protocols>
              <sap>
                  <listen>
                      <name>name</name>    <!-- identifier -->
                      <port>port</port>
                  </listen>
              </sap>
          </protocols>
      </configuration>
```

Description Address for SAP and SDP to listen on.

Contents <name>—IP address.

<port>—Port to listen for session advertisements.

<lmi> (configuration/interfaces/interface)

```
Usage   <configuration>
          <interfaces>
              <interface>
                  <lmi>
                      <n391dte>n391dte</n391dte>
                      <n392dce>n392dce</n392dce>
                      <n392dte>n392dte</n392dte>
                      <n393dce>n393dce</n393dce>
                      <n393dte>n393dte</n393dte>
                      <t391dte>seconds</t391dte>
                      <t392dce>seconds</t392dce>
                      <lmi-type>lmi-type-choice</lmi-type>
                  </lmi>
              </interface>
          </interfaces>
      </configuration>
```

Description Local Management Interface settings.

Contents <lmi-type>—Specify the Frame Relay LMI type.

- ansi—Use ANSI Annex D LMI.

- itu—Use ITU Q933a Annex A LMI.

<n391dte>—DTE full status polling interval.

<n392dce>—DCE error threshold.

<n392dte>—DTE error threshold.

<n393dce>—DCE monitored event count.

<n393dte>—DTE monitored event count.

- <t391dte>—DTE polling timer.
- <t392dce>—DCE polling verification timer.

• <load-balance> (configuration/policy-options/policy-statement/from/route-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <route-filter>
 <load-balance>
 <per-packet/>
 </load-balance>
 </route-filter>
 </from>
 </policy-statement>
 </policy-options>
 </configuration>

Description Type of load balancing in forwarding table.

Contents <per-packet>—Load balance on a per-packet basis.

• <load-balance> (configuration/policy-options/policy-statement/from/source-address-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <source-address-filter>
 <load-balance>
 <per-packet/>
 </load-balance>
 </source-address-filter>
 </from>
 </policy-statement>
 </policy-options>
 </configuration>

Description Type of load balancing in forwarding table.

Contents <per-packet>—Load balance on a per-packet basis.

<load-balance> (configuration/policy-options/policy-statement/term/from/route-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <route-filter>
 <load-balance>
 <per-packet/>
 </load-balance>
 </route-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
</configuration>

Description Type of load balancing in forwarding table.

Contents <per-packet>—Load balance on a per-packet basis.

<load-balance> (configuration/policy-options/policy-statement/term/from/source-address-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <source-address-filter>
 <load-balance>
 <per-packet/>
 </load-balance>
 </source-address-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
</configuration>

Description Type of load balancing in forwarding table.

Contents <per-packet>—Load balance on a per-packet basis.

• <load-balance> (configuration/policy-options/policy-statement/term/then)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <then>
 <load-balance>
 <per-packet/>
 </load-balance>
 </then>
 </term>
 </policy-statement>
 </policy-options>
</configuration>

Description Type of load balancing in forwarding table.

Contents <per-packet>—Load balance on a per-packet basis.

• <load-balance> (configuration/policy-options/policy-statement/then)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <then>
 <load-balance>
 <per-packet/>
 </load-balance>
 </then>
 </policy-statement>
 </policy-options>
</configuration>

Description Type of load balancing in forwarding table.

Contents <per-packet>—Load balance on a per-packet basis.

<local> (configuration/protocols/pim/rp)

```
Usage  <configuration>
        <protocols>
            <pim>
                <rp>
                    <local>
                        <address>address</address>
                        <disable/>
                        <priority>priority</priority>
                        <hold-time>hold-time</hold-time>
                        <group-ranges>...</group-ranges>
                    </local>
                </rp>
            </pim>
        </protocols>
    </configuration>
```

Description Router's local RP properties.

Contents <address>—Local RP address.

<disable>—Disable this RP.

<group-ranges>—Group address range for which this router can be an RP.

<hold-time>—When we think an RP is down (seconds).

<priority>—Router's priority for becoming an RP.

<local> (configuration/routing-instances(instance/protocols/pim/rp)

```
Usage  <configuration>
        <routing-instances>
            <instance>
                <protocols>
                    <pim>
                        <rp>
                            <local>
                                <address>address</address>
                                <disable/>
                                <priority>priority</priority>
                                <hold-time>hold-time</hold-time>
                                <group-ranges>...</group-ranges>
                            </local>
                        </rp>
                    </pim>
                </protocols>
            </instance>
        </routing-instances>
    </configuration>
```

Description Router's local RP properties.

- **Contents** <address>—Local RP address.
- <disable>—Disable this RP.
- <group-ranges>—Group address range for which this router can be an RP.
- <hold-time>—When we think an RP is down (seconds).
- <priority>—Router's priority for becoming an RP.

<local> (configuration/security/certificates)

```
Usage  <configuration>
       <security>
         <certificates>
           <local>
             <name>name</name>    <!-- identifier -->
             <load-key-file>load-key-file</load-key-file>
           </local>
         </certificates>
       </security>
     </configuration>
```

Description Local X.509 certificate configuration.

- Contents** <load-key-file>—File (URL) containing an SSL certificate and private key in PEM format.
- <name>—Simple name to identify this certificate.

<local-as> (configuration/protocols/bgp)

```
Usage  <configuration>
       <protocols>
         <bgp>
           <local-as>
             <as-number>as-number</as-number>  <!-- mandatory -->
             <loops>loops</loops>
             <private/>
           </local-as>
         </bgp>
       </protocols>
     </configuration>
```

Description Local autonomous system number.

- Contents** <as-number>—Local autonomous system number.
- <loops>—Maximum number of times this AS can be in an AS path.
- <private>—Hide this local AS in paths learned from this peering.

<local-as> (configuration/protocols/bgp/group)

```

Usage   <configuration>
          <protocols>
            <bgp>
              <group>
                <local-as>
                  <as-number>as-number</as-number>    <!-- mandatory -->
                  <loops>loops</loops>
                  <private/>
                </local-as>
              </group>
            </bgp>
          </protocols>
        </configuration>

```

Description Local autonomous system number.

Contents <as-number>—Local autonomous system number.

<loops>—Maximum number of times this AS can be in an AS path.

<private>—Hide this local AS in paths learned from this peering.

<local-as> (configuration/protocols/bgp/group/neighbor)

```

Usage   <configuration>
          <protocols>
            <bgp>
              <group>
                <neighbor>
                  <local-as>
                    <as-number>as-number</as-number>    <!-- mandatory -->
                    <loops>loops</loops>
                    <private/>
                  </local-as>
                </neighbor>
              </group>
            </bgp>
          </protocols>
        </configuration>

```

Description Local autonomous system number.

Contents <as-number>—Local autonomous system number.

<loops>—Maximum number of times this AS can be in an AS path.

<private>—Hide this local AS in paths learned from this peering.

• <local-as> (configuration/routing-instances(instance/protocols/bgp))

```
Usage  <configuration>
       <routing-instances>
           <instance>
               <protocols>
                   <bgp>
                       <local-as>
                           <as-number>as-number</as-number>    <!-- mandatory -->
                           <loops>loops</loops>
                           <private/>
                       </local-as>
                   </bgp>
                   </protocols>
               </instance>
           </routing-instances>
       </configuration>
```

Description Local autonomous system number.

Contents <as-number>—Local autonomous system number.

<loops>—Maximum number of times this AS can be in an AS path.

<private>—Hide this local AS in paths learned from this peering.

• <local-as> (configuration/routing-instances(instance/protocols/bgp/group))

```
Usage  <configuration>
       <routing-instances>
           <instance>
               <protocols>
                   <bgp>
                       <group>
                           <local-as>
                               <as-number>as-number</as-number>    <!-- mandatory -->
                               <loops>loops</loops>
                               <private/>
                           </local-as>
                       </group>
                   </bgp>
                   </protocols>
               </instance>
           </routing-instances>
       </configuration>
```

Description Local autonomous system number.

Contents <as-number>—Local autonomous system number.

<loops>—Maximum number of times this AS can be in an AS path.

<private>—Hide this local AS in paths learned from this peering.

<local-as> (configuration/routing-instances/instance/protocols/bgp/group/neighbor)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <local-as>
                <as-number>as-number</as-number>    <!-- mandatory -->
                <loops>loops</loops>
                <private/>
              </local-as>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Local autonomous system number.

Contents <as-number>—Local autonomous system number.

<loops>—Maximum number of times this AS can be in an AS path.

<private>—Hide this local AS in paths learned from this peering.

<local-preference> (configuration/policy-options/policy-statement/from/route-filter)

Usage

```

<configuration>
  <policy-options>
    <policy-statement>
      <from>
        <route-filter>
          <local-preference>
            <local-preference>local-preference</local-preference>
            <add>add</add>
            <subtract>subtract</subtract>
          </local-preference>
        </route-filter>
      </from>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Local preference associated with a route.

- **Contents** <add>—Add constant to attribute.
• <local-preference>—No documentation is available yet.
• <subtract>—Subtract constant from attribute.
-
- <local-preference> (configuration/policy-options/policy-statement/from/source-address-filter)
- **Usage** <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <source-address-filter>
 <local-preference>
 <local-preference>local-preference</local-preference>
 <add>add</add>
 <subtract>subtract</subtract>
 </local-preference>
 </source-address-filter>
 </from>
 </policy-statement>
 </policy-options>
</configuration>
- **Description** Local preference associated with a route.
- **Contents** <add>—Add constant to attribute.
• <local-preference>—No documentation is available yet.
• <subtract>—Subtract constant from attribute.
-
- <local-preference> (configuration/policy-options/policy-statement/term/from/route-filter)
- **Usage** <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <route-filter>
 <local-preference>
 <local-preference>local-preference</local-preference>
 <add>add</add>
 <subtract>subtract</subtract>
 </local-preference>
 </route-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
</configuration>
- **Description** Local preference associated with a route.

Contents <add>—Add constant to attribute.

<local-preference>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

<local-preference> (configuration/policy-options/policy-statement/term/from/source-address-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <source-address-filter>
 <local-preference>
 <local-preference>local-preference</local-preference>
 <add>add</add>
 <subtract>subtract</subtract>
 </local-preference>
 </source-address-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Local preference associated with a route.

Contents <add>—Add constant to attribute.

<local-preference>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

<local-preference> (configuration/policy-options/policy-statement/term/then)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <then>
 <local-preference>
 <local-preference>local-preference</local-preference>
 <add>add</add>
 <subtract>subtract</subtract>
 </local-preference>
 </then>
 </term>
 </policy-statement>
 </policy-options>
</configuration>

Description Local preference associated with a route.

< local-preference> (*configuration/policy-options/policy-statement/then*)

- **Contents**
 - <add>—Add constant to attribute.
 - <local-preference>—No documentation is available yet.
 - <subtract>—Subtract constant from attribute.
 - **<local-preference> (configuration/policy-options/policy-statement/then)**

<local-preference> (configuration/policy-options/policy-statement/then)

```
Usage <configuration>
      <policy-options>
        <policy-statement>
          <then>
            <local-preference>
              <local-preference>local-preference</local-preference>
              <add>add</add>
              <subtract>subtract</subtract>
            </local-preference>
          </then>
        </policy-statement>
      </policy-options>
    </configuration>
```

Description Local preference associated with a route.

Contents <add>—Add constant to attribute.

<local-preference>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

<location> (configuration/system)

```
Usage <configuration>
      <system>
          <location>
              <country-code>country-code</country-code>
              <postal-code>postal-code</postal-code>
              <npo-nxx>npo-nxx</npo-nxx>
              <latitude>latitude</latitude>
              <longitude>longitude</longitude>
              <altitude>altitude</altitude>
              <lata>lata</lata>
              <vcoord>vcoord</vcoord>
              <hcoord>hcoord</hcoord>
          </location>
      </system>
  </configuration>
```

Description Location of the system, in various forms.

Contents <altitude>—Feet above (or below) sea level.

<country-code>—Two-letter country code.

<hcoord>—Bellcore horizontal coordinate.

<lata>—Long-distance service area.
 <latitude>—Latitude in degree format.
 <longitude>—Longitude in degree format.
 <npa-nxx>—First six digits of phone number (area code plus exchange).
 <postal-code>—Zip code or postal code.
 <vcoord>—Bellcore vertical coordinate.

<log-updown> (configuration/protocols/mpls)

Usage	<configuration> <protocols> <mpls> <log-updown> <syslog/> <trap/> </log-updown> </mpls> </protocols> </configuration>
Description	Logging actions for LSP up/down events.
Contents	<syslog>—Send syslog messages. <trap>—Send SNMP traps.

<login> (configuration/system)

Usage	<configuration> <system> <login> <message>message</message> <class>...</class> <user>...</user> </login> </system> </configuration>
Description	Users, their classes and passwords.
Contents	<class>—Login class. <message>—System login message. <user>—Username.

- <loss-priority> (configuration/class-of-service/classifiers/dscp/forwarding-class)

Usage <configuration>
 <class-of-service>
 <classifiers>
 <dscp>
 <forwarding-class>
 <loss-priority>
 <name>name</name> <!-- identifier -->
 <code-points>...</code-points> <!-- mandatory -->
 </loss-priority>
 </forwarding-class>
 </dscp>
 </classifiers>
 </class-of-service>
 </configuration>

Description Classify code points to a loss priority.

Contents <code-points>—List of code point aliases and/or bit strings.

<name>—No documentation is available yet.

■ high—Code points to classify to loss priority high.

■ low—Code points to classify to loss priority low.

- <loss-priority> (configuration/class-of-service/classifiers/exp/forwarding-class)

Usage <configuration>
 <class-of-service>
 <classifiers>
 <exp>
 <forwarding-class>
 <loss-priority>
 <name>name</name> <!-- identifier -->
 <code-points>...</code-points> <!-- mandatory -->
 </loss-priority>
 </forwarding-class>
 </exp>
 </classifiers>
 </class-of-service>
 </configuration>

Description Classify code points to a loss priority.

Contents <code-points>—List of code point aliases and/or bit strings.

<name>—No documentation is available yet.

■ high—Code points to classify to loss priority high.

■ low—Code points to classify to loss priority low.

<loss-priority> (configuration/class-of-service/classifiers/ieee-802.1/forwarding-class)

Usage

```

<configuration>
  <class-of-service>
    <classifiers>
      <ieee-802.1>
        <forwarding-class>
          <loss-priority>
            <name>name</name>    <!-- identifier -->
            <code-points>...</code-points>  <!-- mandatory -->
          </loss-priority>
        </forwarding-class>
      </ieee-802.1>
    </classifiers>
  </class-of-service>
</configuration>
```

Description Classify code points to a loss priority.

Contents <code-points>—List of code point aliases and/or bit strings.

<name>—No documentation is available yet.

- high—Code points to classify to loss priority high.
- low—Code points to classify to loss priority low.

<loss-priority> (configuration/class-of-service/classifiers/inet-precedence/forwarding-class)

Usage

```

<configuration>
  <class-of-service>
    <classifiers>
      <inet-precedence>
        <forwarding-class>
          <loss-priority>
            <name>name</name>    <!-- identifier -->
            <code-points>...</code-points>  <!-- mandatory -->
          </loss-priority>
        </forwarding-class>
      </inet-precedence>
    </classifiers>
  </class-of-service>
</configuration>
```

Description Classify code points to a loss priority.

Contents <code-points>—List of code point aliases and/or bit strings.

<name>—No documentation is available yet.

- high—Code points to classify to loss priority high.
- low—Code points to classify to loss priority low.

- <loss-priority> (configuration/class-of-service/rewrite-rules/dscp/forwarding-class)

Usage

```
<configuration>
  <class-of-service>
    <rewrite-rules>
      <dscp>
        <forwarding-class>
          <loss-priority>
            <name>name</name>    <!-- identifier -->
            <code-point>code-point</code-point>  <!-- mandatory -->
          </loss-priority>
        </forwarding-class>
      </dscp>
    </rewrite-rules>
  </class-of-service>
</configuration>
```

Description Code point marking based on loss priority.

Contents <code-point>—Code point aliases or bit string.

<name>—No documentation is available yet.

■ high—Marking when loss priority is high.

■ low—Marking when loss priority is low.

- <loss-priority> (configuration/class-of-service/rewrite-rules/exp/forwarding-class)

Usage

```
<configuration>
  <class-of-service>
    <rewrite-rules>
      <exp>
        <forwarding-class>
          <loss-priority>
            <name>name</name>    <!-- identifier -->
            <code-point>code-point</code-point>  <!-- mandatory -->
          </loss-priority>
        </forwarding-class>
      </exp>
    </rewrite-rules>
  </class-of-service>
</configuration>
```

Description Code point marking based on loss priority.

Contents <code-point>—Code point aliases or bit string.

<name>—No documentation is available yet.

■ high—Marking when loss priority is high.

■ low—Marking when loss priority is low.

<loss-priority> (configuration/class-of-service/rewrite-rules/inet-precedence/forwarding-class)

Usage

```

<configuration>
  <class-of-service>
    <rewrite-rules>
      <inet-precedence>
        <forwarding-class>
          <loss-priority>
            <name>name</name>    <!-- identifier -->
            <code-point>code-point</code-point>  <!-- mandatory -->
          </loss-priority>
        </forwarding-class>
      </inet-precedence>
    </rewrite-rules>
  </class-of-service>
</configuration>
```

Description Code point marking based on loss priority.

Contents <code-point>—Code point aliases or bit string.

<name>—No documentation is available yet.

- high—Marking when loss priority is high.
- low—Marking when loss priority is low.

<lsp-attributes> (configuration/protocols/mpls/label-switched-path)

Usage

```

<configuration>
  <protocols>
    <mpls>
      <label-switched-path>
        <lsp-attributes>
          <signal-type>signal-type-choice</signal-type>
          <switching-type>switching-type-choice</switching-type> <!-- mandatory -->
          <gpid>gpid-choice</gpid>
        </lsp-attributes>
      </label-switched-path>
    </mpls>
  </protocols>
</configuration>
```

Description Attributes for generalized LSP.

Contents <gpid>—Generalized PID.

- ethernet—No documentation is available yet.
- hdlc—No documentation is available yet.
- ipv4—No documentation is available yet.
- ppp—No documentation is available yet.

• *<signal-type>*—Signal type for the LSP.

- ■ 10gigE—10000.00 Mbps.
- ■ ds1—1.544 Mbps.
- ■ ds3—44.736 Mbps.
- ■ e1—2.048 Mbps.
- ■ e3—34.368 Mbps.
- ■ ethernet—10 Mbps.
- ■ fastE—100.00 Mbps.
- ■ gigE—1000.00 Mbps.
- ■ stm-1—155.52 Mbps.
- ■ stm-16—2488.32 Mbps.
- ■ stm-4—622.08 Mbps.
- ■ stm-64—9953.28 Mbps.
- ■ sts-1—51.84 Mbps.

• *<switching-type>*—LSP switching capability.

- ■ fiber—No documentation is available yet.
- ■ lambda—No documentation is available yet.
- ■ psc-1—No documentation is available yet.
- ■ tdm—No documentation is available yet.

<lsp-next-hop> (configuration/class-of-service/forwarding-policy/next-hop-map/forwarding-class)

Usage <configuration>
 <class-of-service>
 <forwarding-policy>
 <next-hop-map>
 <forwarding-class>
 <lsp-next-hop>
 <name>name</name> <!-- identifier -->
 </lsp-next-hop>
 </forwarding-class>
 </next-hop-map>
 </forwarding-policy>
 </class-of-service>
 </configuration>

Description Regular expression for LSP next hop.

Contents <name>—Regular expression for LSP next hop.

<lsp-next-hop> (configuration/routing-instances/instance/routing-options/rib/static/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <static>
 <route>
 <lsp-next-hop>
 <name>name</name> <!-- identifier -->
 <preference>preference</preference>
 <metric>metric</metric>
 </lsp-next-hop>
 </route>
 </static>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description LSP next hop.

Contents <metric>—Metric of LSP next hop.

<name>—LSP to use to reach destination.

<preference>—Preference of LSP next hop.

- <*lsp-next-hop*> (configuration/routing-instances/instance/routing-options/static/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <static>
 <route>
 <i>lsp-next-hop>
 <name>*name*</name> <!-- identifier -->
 <preference>*preference*</preference>
 <metric>*metric*</metric>
 </i>lsp-next-hop>
 </route>
 </static>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description LSP next hop.

Contents <metric>—Metric of LSP next hop.

 <name>—LSP to use to reach destination.

 <preference>—Preference of LSP next hop.

- <*lsp-next-hop*> (configuration/routing-options/rib/static/route)

Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <route>
 <i>lsp-next-hop>
 <name>*name*</name> <!-- identifier -->
 <preference>*preference*</preference>
 <metric>*metric*</metric>
 </i>lsp-next-hop>
 </route>
 </static>
 </rib>
 </routing-options>
 </configuration>

Description LSP next hop.

Contents <metric>—Metric of LSP next hop.

 <name>—LSP to use to reach destination.

 <preference>—Preference of LSP next hop.

<*lsp-next-hop*> (configuration/routing-options/static/route)

Usage

```

<configuration>
  <routing-options>
    <static>
      <route>
        <lsp-next-hop>
          <name>name</name>    <!-- identifier -->
          <preference>preference</preference>
          <metric>metric</metric>
        </lsp-next-hop>
      </route>
    </static>
  </routing-options>
</configuration>
```

Description LSP next hop.

Contents <metric>—Metric of LSP next hop.

<name>—LSP to use to reach destination.

<preference>—Preference of LSP next hop.

<*lsp-switch*> (configuration/protocols/connections)

Usage

```

<configuration>
  <protocols>
    <connections>
      <lsp-switch>
        <name>name</name>    <!-- identifier -->
        <transmit-lsp>transmit-lsp</transmit-lsp>  <!-- mandatory -->
        <receive-lsp>receive-lsp</receive-lsp>  <!-- mandatory -->
      </lsp-switch>
    </connections>
  </protocols>
</configuration>
```

Description Unidirectional switch between two label-switched paths.

Contents <name>—Name of label-switched-path switch.

<receive-lsp>—Name of incoming label-switched path.

<transmit-lsp>—Name of outgoing label-switched path.

• <management-ethernet> (configuration/chassis/alarm)

• **Usage** <configuration>
• <chassis>
• <alarm>
• <management-ethernet>
• <link-down>link-down-choice</link-down>
• </management-ethernet>
• </alarm>
• </chassis>
• </configuration>

• **Description** Management Ethernet alarms.

• **Contents** <link-down>—Link has gone down.

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

• <manual> (configuration/security/ipsec/security-association)

• **Usage** <configuration>
• <security>
• <ipsec>
• <security-association>
• <manual>
• <direction>...</direction>
• </manual>
• </security-association>
• </ipsec>
• </security>
• </configuration>

• **Description** Define a manual IPSec security association.

• **Contents** <direction>—Define the direction of the security association.

<martians> (configuration/routing-instances/instance/routing-options)

```

Usage   <configuration>
          <routing-instances>
              <instance>
                  <routing-options>
                      <martians>
                          <address>address</address>    <!-- identifier -->
                          <exact/>    <!-- identifier -->
                          <longer/>    <!-- identifier -->
                          <orlonger/>  <!-- identifier -->
                          <upto>upto</upto>  <!-- identifier -->
                          <through>through</through>  <!-- identifier -->
                          <prefix-length-range>range</prefix-length-range> <!-- identifier -->
                          <allow/>
                      </martians>
                  </routing-options>
              </instance>
          </routing-instances>
      </configuration>
  
```

Description Invalid routes.

Contents <address>—IP address or host name.

<allow>—No documentation is available yet.

<exact>—Exactly match the prefix length.

<longer>—Mask is greater than the prefix length.

<orlonger>—Mask is greater than or equal to the prefix length.

<prefix-length-range>—Mask falls between two prefix lengths.

<through>—Route falls between two prefixes.

<upto>—Mask falls between two prefix lengths.

- <martians> (configuration/routing-instances/instance/routing-options/rib)

•

• **Usage** <configuration>
• <routing-instances>
• <instance>
• <routing-options>
• <rib>
• **<martians>**
• <address>address</address> <!-- identifier -->
• <exact/> <!-- identifier -->
• <longer/> <!-- identifier -->
• <orlonger/> <!-- identifier -->
• <upto>upto</upto> <!-- identifier -->
• <through>through</through> <!-- identifier -->
• <prefix-length-range>range</prefix-length-range> <!-- identifier -->
• <allow/>
• **</martians>**
• </rib>
• </routing-options>
• </instance>
• </routing-instances>
• </configuration>

•

• **Description** Invalid routes.

• **Contents** <address>—IP address or host name.

• <allow>—No documentation is available yet.

• <exact>—Exactly match the prefix length.

• <longer>—Mask is greater than the prefix length.

• <orlonger>—Mask is greater than or equal to the prefix length.

• <prefix-length-range>—Mask falls between two prefix lengths.

• <through>—Route falls between two prefixes.

• <upto>—Mask falls between two prefix lengths.

<martians> (configuration/routing-options)

```
Usage  <configuration>
        <routing-options>
            <martians>
                <address>address</address>    <!-- identifier -->
                <exact/>   <!-- identifier -->
                <longer/>  <!-- identifier -->
                <orlonger/> <!-- identifier -->
                <upto>upto</upto>  <!-- identifier -->
                <through>through</through>  <!-- identifier -->
                <prefix-length-range>prefix-length-range</prefix-length-range>  <!-- identifier -->
                <allow/>
            </martians>
        </routing-options>
    </configuration>
```

Description Invalid routes.

Contents

- <address>—IP address or host name.
- <allow>—No documentation is available yet.
- <exact>—Exactly match the prefix length.
- <longer>—Mask is greater than the prefix length.
- <orlonger>—Mask is greater than or equal to the prefix length.
- <prefix-length-range>—Mask falls between two prefix lengths.
- <through>—Route falls between two prefixes.
- <upto>—Mask falls between two prefix lengths.

<martians> (configuration/routing-options/rib)

```
Usage  <configuration>
        <routing-options>
            <rib>
                <martians>
                    <address>address</address>    <!-- identifier -->
                    <exact/>   <!-- identifier -->
                    <longer/>  <!-- identifier -->
                    <orlonger/> <!-- identifier -->
                    <upto>upto</upto>  <!-- identifier -->
                    <through>through</through>  <!-- identifier -->
                    <prefix-length-range>range</prefix-length-range>  <!-- identifier -->
                    <allow/>
                </martians>
            </rib>
        </routing-options>
    </configuration>
```

Description Invalid routes.

- | | |
|--------------------|--|
| Contents | <address>—IP address or host name.

<allow>—No documentation is available yet.

<exact>—Exactly match the prefix length.

<longer>—Mask is greater than the prefix length.

<orlonger>—Mask is greater than or equal to the prefix length.

<prefix-length-range>—Mask falls between two prefix lengths.

<through>—Route falls between two prefixes.

<upto>—Mask falls between two prefix lengths. |
| Usage | <configuration>
<routing-instances>
<instance>
<routing-options>
<maximum-routes>
<limit>/limit</limit> <!-- mandatory -->
 <threshold>threshold</threshold>
<log-only/>
</maximum-routes>
</routing-options>
</instance>
</routing-instances>
</configuration> |
| Description | Maximum number of routes. |
| Contents | <limit>—Maximum number of routes.

<log-only>—Generate warning messages only.

<threshold>—Percentage of limit to start warnings. |

<maximum-routes> (configuration/routing-instances/instance/routing-options/rib)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <maximum-routes>
            <limit>limit</limit>    <!-- mandatory -->
            <threshold>threshold</threshold>
            <log-only/>
          </maximum-routes>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Maximum number of routes.

Contents <limit>—Maximum number of routes.

<log-only>—Generate warning messages only.

<threshold>—Percentage of limit to start warnings.

<maximum-routes> (configuration/routing-options)

Usage

```
<configuration>
  <routing-options>
    <maximum-routes>
      <limit>limit</limit>    <!-- mandatory -->
      <threshold>threshold</threshold>
      <log-only/>
    </maximum-routes>
  </routing-options>
</configuration>
```

Description Maximum number of routes.

Contents <limit>—Maximum number of routes.

<log-only>—Generate warning messages only.

<threshold>—Percentage of limit to start warnings.

• <maximum-routes> (configuration/routing-options/rib)

Usage <configuration>
 <routing-options>
 <rib>
 <maximum-routes>
 <limit>*limit*</limit> <!-- mandatory -->
 <threshold>*threshold*</threshold>
 <log-only/>
 </maximum-routes>
 </rib>
 </routing-options>
 </configuration>

Description Maximum number of routes.

Contents <limit>—Maximum number of routes.

 <log-only>—Generate warning messages only.

 <threshold>—Percentage of limit to start warnings.

• <members> (configuration/policy-options/community)

Usage <configuration>
 <policy-options>
 <community>
 <members>
 <name>*name*</name> <!-- identifier -->
 </members>
 </community>
 </policy-options>
 </configuration>

Description Community members.

Contents <name>—Community members.

<members> (configuration/routing-instances/instance/routing-options/confederation)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <confederation>
          <members>
            <name>name</name>    <!-- identifier -->
          </members>
        </confederation>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Autonomous system numbers of confederation members.

Contents <name>—Autonomous system numbers of confederation members.

<members> (configuration/routing-options/confederation)

Usage

```
<configuration>
  <routing-options>
    <confederation>
      <members>
        <name>name</name>    <!-- identifier -->
      </members>
    </confederation>
  </routing-options>
</configuration>
```

Description Autonomous system numbers of confederation members.

Contents <name>—Autonomous system numbers of confederation members.

<mesh-group> (configuration/protocols/isis/interface)

Usage

```
<configuration>
  <protocols>
    <isis>
      <interface>
        <mesh-group>
          <mesh-group-number>mesh-group-number</mesh-group-number>
          <blocked/>
        </mesh-group>
      </interface>
    </isis>
  </protocols>
</configuration>
```

Description Add the interface to a mesh group.

- Contents** <blocked>—Do not flood new LSPs on this interface.
- <mesh-group-number>—Mesh group number for this interface.

• **<mesh-group> (configuration/routing-instances/instance/protocols/isis/interface)**

```

Usage  <configuration>
       <routing-instances>
         <instance>
           <protocols>
             <isis>
               <interface>
                 <mesh-group>
                   <mesh-group-number>mesh-group-number</mesh-group-number>
                   <blocked/>
                 </mesh-group>
               </interface>
             </isis>
           </protocols>
         </instance>
       </routing-instances>
     </configuration>

```

Description Add the interface to a mesh group.

Contents <blocked>—Do not flood new LSPs on this interface.

<mesh-group-number>—Mesh group number for this interface.

• **<metric> (configuration/policy-options/policy-statement/from/route-filter)**

```

Usage  <configuration>
       <policy-options>
         <policy-statement>
           <from>
             <route-filter>
               <metric>
                 <metric>metric</metric>
                 <add>add</add>
                 <subtract>subtract</subtract>
                 <igp>...</igp>
                 <minimum-igp>...</minimum-igp>
               </metric>
             </route-filter>
           </from>
         </policy-statement>
       </policy-options>
     </configuration>

```

Description Metric value.

Contents <add>—Add constant to attribute.

<igp>—Track the IGP metric (BGP only).

<metric>—No documentation is available yet.

<minimum-igp>—Track the minimum IGP metric (BGP only).

<subtract>—Subtract constant from attribute.

<metric> (configuration/policy-options/policy-statement/from/source-address-filter)

Usage

```

<configuration>
  <policy-options>
    <policy-statement>
      <from>
        <source-address-filter>
          <metric>
            <metric>metric</metric>
            <add>add</add>
            <subtract>subtract</subtract>
            <igp>...</igp>
            <minimum-igp>...</minimum-igp>
          </metric>
        </source-address-filter>
      </from>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Metric value.

Contents <add>—Add constant to attribute.

<igp>—Track the IGP metric (BGP only).

<metric>—No documentation is available yet.

<minimum-igp>—Track the minimum IGP metric (BGP only).

<subtract>—Subtract constant from attribute.

- <metric> (configuration/policy-options/policy-statement/term/from/route-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <route-filter>
 <metric>
 <metric>*metric*</metric>
 <add>*add*</add>
 <subtract>*subtract*</subtract>
 <igp>...</igp>
 <minimum-igp>...</minimum-igp>
 </metric>
 </route-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Metric value.

Contents <add>—Add constant to attribute.

 <igp>—Track the IGP metric (BGP only).

 <metric>—No documentation is available yet.

 <minimum-igp>—Track the minimum IGP metric (BGP only).

 <subtract>—Subtract constant from attribute.

<metric> (configuration/policy-options/policy-statement/term/from/source-address-filter)

Usage

```

<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <from>
          <source-address-filter>
            <metric>
              <metric>metric</metric>
              <add>add</add>
              <subtract>subtract</subtract>
              <igp>...</igp>
              <minimum-igp>...</minimum-igp>
            </metric>
          </source-address-filter>
        </from>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Metric value.

Contents <add>—Add constant to attribute.

<igp>—Track the IGP metric (BGP only).

<metric>—No documentation is available yet.

<minimum-igp>—Track the minimum IGP metric (BGP only).

<subtract>—Subtract constant from attribute.

<metric> (configuration/policy-options/policy-statement/term/then)

Usage

```

<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <then>
          <metric>
            <metric>metric</metric>
            <add>add</add>
            <subtract>subtract</subtract>
            <igp>...</igp>
            <minimum-igp>...</minimum-igp>
          </metric>
        </then>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Metric value.

- | | |
|--------------------|--|
| Contents | <add>—Add constant to attribute.

<igp>—Track the IGP metric (BGP only).

<metric>—No documentation is available yet.

<minimum-igp>—Track the minimum IGP metric (BGP only).

<subtract>—Subtract constant from attribute. |
| Usage | <configuration>
<policy-options>
<policy-statement>
<then>
<metric>
<metric> <i>metric</i> </metric>
<add> <i>add</i> </add>
<subtract> <i>subtract</i> </subtract>
<igp>...</igp>
<minimum-igp>...</minimum-igp>
</metric>
</then>
</policy-statement>
</policy-options>
</configuration> |
| Description | Metric value. |

<metric> (configuration/routing-instances/instance/routing-options/aggregate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <defaults>
 <metric>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric>
 </defaults>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric> (configuration/routing-instances/instance/routing-options/aggregate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <route>
 <metric>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric>
 </route>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <metric> (configuration/routing-instances/instance/routing-options/generate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <defaults>
 <metric>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric>
 </defaults>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value.

Contents <metric-value>—Metric value.

 <type>—Metric type.

- <metric> (configuration/routing-instances/instance/routing-options/generate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <route>
 <metric>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric>
 </route>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <aggregate>
 <defaults>
 <metric>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric>
 </defaults>
 </aggregate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <aggregate>
 <route>
 <metric>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric>
 </route>
 </aggregate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <metric> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <generate>
 <defaults>
 <metric>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </metric>
 </defaults>
 </generate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Metric value.

Contents <metric-value>—Metric value.

 <type>—Metric type.

- <metric> (configuration/routing-instances/instance/routing-options/rib/generate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <generate>
 <route>
 <metric>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </metric>
 </route>
 </generate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Metric value.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric> (configuration/routing-instances/instance/routing-options/rib/static/defaults)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <static>
            <defaults>
              <metric>
                <metric-value>metric-value</metric-value>    <!-- mandatory -->
                <type>type</type>
              </metric>
            </defaults>
          </static>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric> (configuration/routing-instances/instance/routing-options/rib/static/route)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <static>
            <route>
              <metric>
                <metric-value>metric-value</metric-value>    <!-- mandatory -->
                <type>type</type>
              </metric>
            </route>
          </static>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <metric> (configuration/routing-instances/instance/routing-options/static/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <static>
 <defaults>
 <metric>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric>
 </defaults>
 </static>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value.

Contents <metric-value>—Metric value.

 <type>—Metric type.

- <metric> (configuration/routing-instances/instance/routing-options/static/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <static>
 <route>
 <metric>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric>
 </route>
 </static>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric> (configuration/routing-options/aggregate/defaults)

Usage <configuration>
 <routing-options>
 <aggregate>
 <defaults>
 <metric>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric>
 </defaults>
 </aggregate>
 </routing-options>
</configuration>

Description Metric value.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric> (configuration/routing-options/aggregate/route)

Usage <configuration>
 <routing-options>
 <aggregate>
 <route>
 <metric>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric>
 </route>
 </aggregate>
 </routing-options>
</configuration>

Description Metric value.

Contents <metric-value>—Metric value.

<type>—Metric type.

• <metric> (configuration/routing-options/generate/defaults)

• **Usage** <configuration>
• <routing-options>
• <generate>
• <defaults>
• **<metric>**
• <metric-value>metric-value</metric-value> <!-- mandatory -->
• <type>type</type>
• **</metric>**
• </defaults>
• </generate>
• </routing-options>
• </configuration>

• **Description** Metric value.

• **Contents** <metric-value>—Metric value.

• <type>—Metric type.

• <metric> (configuration/routing-options/generate/route)

• **Usage** <configuration>
• <routing-options>
• <generate>
• <route>
• **<metric>**
• <metric-value>metric-value</metric-value> <!-- mandatory -->
• <type>type</type>
• **</metric>**
• </route>
• </generate>
• </routing-options>
• </configuration>

• **Description** Metric value.

• **Contents** <metric-value>—Metric value.

• <type>—Metric type.

<metric> (configuration/routing-options/rib/aggregate/defaults)

Usage

```
<configuration>
  <routing-options>
    <rib>
      <aggregate>
        <defaults>
          <metric>
            <metric-value>metric-value</metric-value>    <!-- mandatory -->
            <type>type</type>
          </metric>
        </defaults>
      </aggregate>
    </rib>
  </routing-options>
</configuration>
```

Description Metric value.

Contents <metric-value>—Metric value.
<type>—Metric type.

<metric> (configuration/routing-options/rib/aggregate/route)

Usage

```
<configuration>
  <routing-options>
    <rib>
      <aggregate>
        <route>
          <metric>
            <metric-value>metric-value</metric-value>    <!-- mandatory -->
            <type>type</type>
          </metric>
        </route>
      </aggregate>
    </rib>
  </routing-options>
</configuration>
```

Description Metric value.

Contents <metric-value>—Metric value.
<type>—Metric type.

- <metric> (configuration/routing-options/rib/generate/defaults)

Usage <configuration>
 <routing-options>
 <rib>
 <generate>
 <defaults>
 <metric>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric>
 </defaults>
 </generate>
 </rib>
 </routing-options>
 </configuration>

Description Metric value.

Contents <metric-value>—Metric value.

 <type>—Metric type.

- <metric> (configuration/routing-options/rib/generate/route)

Usage <configuration>
 <routing-options>
 <rib>
 <generate>
 <route>
 <metric>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric>
 </route>
 </generate>
 </rib>
 </routing-options>
 </configuration>

Description Metric value.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric> (configuration/routing-options/rib/static/defaults)

Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <defaults>
 <metric>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric>
 </defaults>
 </static>
 </rib>
 </routing-options>
</configuration>

Description Metric value.

Contents <metric-value>—Metric value.
 <type>—Metric type.

<metric> (configuration/routing-options/rib/static/route)

Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <route>
 <metric>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric>
 </route>
 </static>
 </rib>
 </routing-options>
</configuration>

Description Metric value.

Contents <metric-value>—Metric value.
 <type>—Metric type.

- <metric> (configuration/routing-options/static/defaults)

Usage <configuration>
 <routing-options>
 <static>
 <defaults>
 <metric>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric>
 </defaults>
 </static>
 </routing-options>
 </configuration>

Description Metric value.

Contents <metric-value>—Metric value.

 <type>—Metric type.

- <metric> (configuration/routing-options/static/route)

Usage <configuration>
 <routing-options>
 <static>
 <route>
 <metric>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric>
 </route>
 </static>
 </routing-options>
 </configuration>

Description Metric value.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric-out> (configuration/protocols/bgp)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <metric-out>
        <metric-value>metric-value</metric-value>
        <minimum-igp>...</minimum-igp>
        <igp>...</igp>
      </metric-out>
    </bgp>
  </protocols>
</configuration>
```

Description Route metric sent in MED.

Contents <igp>—Track the IGP metric.

<metric-value>—Metric value.

<minimum-igp>—Track the minimum IGP metric.

<metric-out> (configuration/protocols/bgp/group)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <group>
        <metric-out>
          <metric-value>metric-value</metric-value>
          <minimum-igp>...</minimum-igp>
          <igp>...</igp>
        </metric-out>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Route metric sent in MED.

Contents <igp>—Track the IGP metric.

<metric-value>—Metric value.

<minimum-igp>—Track the minimum IGP metric.

- <metric-out> (configuration/protocols/bgp/group/neighbor)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <group>
        <neighbor>
          <metric-out>
            <metric-value>metric-value</metric-value>
            <minimum-igp>...</minimum-igp>
            <igp>...</igp>
          </metric-out>
        </neighbor>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Route metric sent in MED.

Contents <igp>—Track the IGP metric.

<metric-value>—Metric value.

<minimum-igp>—Track the minimum IGP metric.

- <metric-out> (configuration/routing-instances/instance/protocols/bgp)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <metric-out>
            <metric-value>metric-value</metric-value>
            <minimum-igp>...</minimum-igp>
            <igp>...</igp>
          </metric-out>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Route metric sent in MED.

Contents <igp>—Track the IGP metric.

<metric-value>—Metric value.

<minimum-igp>—Track the minimum IGP metric.

<metric-out> (configuration/routing-instances/instance/protocols/bgp/group)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bpg>
          <group>
            <metric-out>
              <metric-value>metric-value</metric-value>
              <minimum-igp>...</minimum-igp>
              <igp>...</igp>
            </metric-out>
          </group>
        </bpg>
        </protocols>
      </instance>
    </routing-instances>
  </configuration>
```

Description Route metric sent in MED.

Contents <igp>—Track the IGP metric.

<metric-value>—Metric value.

<minimum-igp>—Track the minimum IGP metric.

<metric-out> (configuration/routing-instances/instance/protocols/bgp/group/neighbor)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bpg>
          <group>
            <neighbor>
              <metric-out>
                <metric-value>metric-value</metric-value>
                <minimum-igp>...</minimum-igp>
                <igp>...</igp>
              </metric-out>
            </neighbor>
          </group>
        </bpg>
        </protocols>
      </instance>
    </routing-instances>
  </configuration>
```

Description Route metric sent in MED.

• **Contents** <igp>—Track the IGP metric.

• <metric-value>—Metric value.

• <minimum-igp>—Track the minimum IGP metric.

• **<metric2> (configuration/policy-options/policy-statement/from/route-filter)**

• **Usage** <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <route-filter>
 <metric2>
 <metric2>metric2</metric2>
 <add>add</add>
 <subtract>subtract</subtract>
 </metric2>
 </route-filter>
 </from>
 </policy-statement>
 </policy-options>
</configuration>

• **Description** Metric value 2.

• **Contents** <add>—Add constant to attribute.

• <metric2>—No documentation is available yet.

• <subtract>—Subtract constant from attribute.

• **<metric2> (configuration/policy-options/policy-statement/from/source-address-filter)**

• **Usage** <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <source-address-filter>
 <metric2>
 <metric2>metric2</metric2>
 <add>add</add>
 <subtract>subtract</subtract>
 </metric2>
 </source-address-filter>
 </from>
 </policy-statement>
 </policy-options>
</configuration>

• **Description** Metric value 2.

- Contents** <add>—Add constant to attribute.
 <metric2>—No documentation is available yet.
 <subtract>—Subtract constant from attribute.

<metric2> (configuration/policy-options/policy-statement/term/from/route-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <route-filter>
 <metric2>
 <metric2>metric2</metric2>
 <add>add</add>
 <subtract>subtract</subtract>
 </metric2>
 </route-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Metric value 2.

- Contents** <add>—Add constant to attribute.
 <metric2>—No documentation is available yet.
 <subtract>—Subtract constant from attribute.

- <metric2> (configuration/policy-options/policy-statement/term/from/source-address-filter)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <source-address-filter>
 <metric2>
 <metric2>metric2</metric2>
 <add>add</add>
 <subtract>subtract</subtract>
 </metric2>
 </source-address-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
</configuration>

Description Metric value 2.

Contents <add>—Add constant to attribute.

<metric2>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

- <metric2> (configuration/policy-options/policy-statement/term/then)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <then>
 <metric2>
 <metric2>metric2</metric2>
 <add>add</add>
 <subtract>subtract</subtract>
 </metric2>
 </then>
 </term>
 </policy-statement>
 </policy-options>
</configuration>

Description Metric value 2.

Contents <add>—Add constant to attribute.

<metric2>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

<metric2> (configuration/policy-options/policy-statement/then)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <then>
 <metric2>
 <metric2>metric2</metric2>
 <add>add</add>
 <subtract>subtract</subtract>
 </metric2>
 </then>
 </policy-statement>
 </policy-options>
</configuration>

Description Metric value 2.

Contents <add>—Add constant to attribute.
 <metric2>—No documentation is available yet.
 <subtract>—Subtract constant from attribute.

<metric2> (configuration/routing-instances/instance/routing-options/aggregate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <defaults>
 <metric2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric2>
 </defaults>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Metric value 2.

Contents <metric-value>—Metric value.
 <type>—Metric type.

- <metric2> (configuration/routing-instances/instance/routing-options/aggregate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <route>
 <metric2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric2>
 </route>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value 2.

Contents <metric-value>—Metric value.

 <type>—Metric type.

- <metric2> (configuration/routing-instances/instance/routing-options/generate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <defaults>
 <metric2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric2>
 </defaults>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value 2.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric2> (configuration/routing-instances/instance/routing-options/generate/route)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <generate>
          <route>
            <metric2>
              <metric-value>metric-value</metric-value>    <!-- mandatory -->
              <type>type</type>
            </metric2>
          </route>
        </generate>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric2> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <aggregate>
            <defaults>
              <metric2>
                <metric-value>metric-value</metric-value>    <!-- mandatory -->
                <type>type</type>
              </metric2>
            </defaults>
          </aggregate>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <metric2> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <aggregate>
 <route>
 <metric2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->

 <type>type</type>
 </metric2>
 </route>
 </aggregate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value 2.

Contents <metric-value>—Metric value.

 <type>—Metric type.

- <metric2> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <generate>
 <defaults>
 <metric2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->

 <type>type</type>
 </metric2>
 </defaults>
 </generate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value 2.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric2> (configuration/routing-instances/instance/routing-options/rib/generate/route)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <generate>
            <route>
              <metric2>
                <metric-value>metric-value</metric-value>    <!-- mandatory -->
                <type>type</type>
              </metric2>
            </route>
          </generate>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric2> (configuration/routing-instances/instance/routing-options/rib/static/defaults)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <static>
            <defaults>
              <metric2>
                <metric-value>metric-value</metric-value>    <!-- mandatory -->
                <type>type</type>
              </metric2>
            </defaults>
          </static>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <metric2> (configuration/routing-instances/instance/routing-options/rib/static/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <static>
 <route>
 <metric2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric2>
 </route>
 </static>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value 2.

Contents <metric-value>—Metric value.

 <type>—Metric type.

- <metric2> (configuration/routing-instances/instance/routing-options/static/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <static>
 <defaults>
 <metric2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric2>
 </defaults>
 </static>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value 2.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric2> (configuration/routing-instances/instance/routing-options/static/route)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <static>
          <route>
            <metric2>
              <metric-value>metric-value</metric-value>    <!-- mandatory -->
              <type>type</type>
            </metric2>
          </route>
        </static>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric2> (configuration/routing-options/aggregate/defaults)

Usage

```

<configuration>
  <routing-options>
    <aggregate>
      <defaults>
        <metric2>
          <metric-value>metric-value</metric-value>    <!-- mandatory -->
          <type>type</type>
        </metric2>
      </defaults>
    </aggregate>
  </routing-options>
</configuration>
```

Description Metric value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

• <metric2> (configuration/routing-options/aggregate/route)

Usage <configuration>
 <routing-options>
 <aggregate>
 <route>
 <metric2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric2>
 </route>
 </aggregate>
 </routing-options>
</configuration>

Description Metric value 2.

Contents <metric-value>—Metric value.

 <type>—Metric type.

• <metric2> (configuration/routing-options/generate/defaults)

Usage <configuration>
 <routing-options>
 <generate>
 <defaults>
 <metric2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric2>
 </defaults>
 </generate>
 </routing-options>
</configuration>

Description Metric value 2.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric2> (configuration/routing-options/generate/route)

Usage <configuration>
 <routing-options>
 <generate>
 <route>
 <metric2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric2>
 </route>
 </generate>
 </routing-options>
</configuration>

Description Metric value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric2> (configuration/routing-options/rib/aggregate/defaults)

Usage <configuration>
 <routing-options>
 <rib>
 <aggregate>
 <defaults>
 <metric2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric2>
 </defaults>
 </aggregate>
 </rib>
 </routing-options>
</configuration>

Description Metric value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <metric2> (configuration/routing-options/rib/aggregate/route)

•

• **Usage** <configuration>
• <routing-options>
• <rib>
• <aggregate>
• <route>
• **<metric2>**
• <metric-value>metric-value</metric-value> <!-- mandatory -->
• <type>type</type>
• **</metric2>**
• </route>
• </aggregate>
• </rib>
• </routing-options>
• </configuration>

• **Description** Metric value 2.

• **Contents** <metric-value>—Metric value.

• <type>—Metric type.

- <metric2> (configuration/routing-options/rib/generate/defaults)

•

• **Usage** <configuration>
• <routing-options>
• <rib>
• <generate>
• <defaults>
• **<metric2>**
• <metric-value>metric-value</metric-value> <!-- mandatory -->
• <type>type</type>
• **</metric2>**
• </defaults>
• </generate>
• </rib>
• </routing-options>
• </configuration>

• **Description** Metric value 2.

• **Contents** <metric-value>—Metric value.

• <type>—Metric type.

<metric2> (configuration/routing-options/rib/generate/route)

Usage <configuration>
 <routing-options>
 <rib>
 <generate>
 <route>
 <metric2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric2>
 </route>
 </generate>
 </rib>
 </routing-options>
</configuration>

Description Metric value 2.

Contents <metric-value>—Metric value.
 <type>—Metric type.

<metric2> (configuration/routing-options/rib/static/defaults)

Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <defaults>
 <metric2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric2>
 </defaults>
 </static>
 </rib>
 </routing-options>
</configuration>

Description Metric value 2.

Contents <metric-value>—Metric value.
 <type>—Metric type.

- <metric2> (configuration/routing-options/rib/static/route)

•

• **Usage** <configuration>
• <routing-options>
• <rib>
• <static>
• <route>
• **<metric2>**
• <metric-value>metric-value</metric-value> <!-- mandatory -->
• <type>type</type>
• **</metric2>**
• </route>
• </static>
• </rib>
• </routing-options>
• </configuration>

• **Description** Metric value 2.

• **Contents** <metric-value>—Metric value.

• <type>—Metric type.

- <metric2> (configuration/routing-options/static/defaults)

•

• **Usage** <configuration>
• <routing-options>
• <static>
• <defaults>
• **<metric2>**
• <metric-value>metric-value</metric-value> <!-- mandatory -->
• <type>type</type>
• **</metric2>**
• </defaults>
• </static>
• </routing-options>
• </configuration>

• **Description** Metric value 2.

• **Contents** <metric-value>—Metric value.

• <type>—Metric type.

<metric2> (configuration/routing-options/static/route)

```
Usage  <configuration>
        <routing-options>
            <static>
                <route>
                    <metric2>
                        <metric-value>metric-value</metric-value>    <!-- mandatory -->
                        <type>type</type>
                    </metric2>
                </route>
            </static>
        </routing-options>
    </configuration>
```

Description Metric value 2.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric3> (configuration/policy-options/policy-statement/from/route-filter)

```
Usage  <configuration>
        <policy-options>
            <policy-statement>
                <from>
                    <route-filter>
                        <metric3>
                            <metric3>metric3</metric3>
                            <add>add</add>
                            <subtract>subtract</subtract>
                        </metric3>
                    </route-filter>
                </from>
            </policy-statement>
        </policy-options>
    </configuration>
```

Description Metric value 3.

Contents <add>—Add constant to attribute.

<metric3>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

- <metric3> (configuration/policy-options/policy-statement/from/source-address-filter)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <from>
        <source-address-filter>
          <metric3>
            <metric3>metric3</metric3>
            <add>add</add>
            <subtract>subtract</subtract>
          </metric3>
        </source-address-filter>
      </from>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Metric value 3.

Contents <add>—Add constant to attribute.

<metric3>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

- <metric3> (configuration/policy-options/policy-statement/term/from/route-filter)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <from>
          <route-filter>
            <metric3>
              <metric3>metric3</metric3>
              <add>add</add>
              <subtract>subtract</subtract>
            </metric3>
          </route-filter>
        </from>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Metric value 3.

Contents <add>—Add constant to attribute.

<metric3>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

<metric3> (configuration/policy-options/policy-statement/term/from/source-address-filter)

Usage

```

<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <from>
          <source-address-filter>
            <metric3>
              <metric3>metric3</metric3>
              <add>add</add>
              <subtract>subtract</subtract>
            </metric3>
          </source-address-filter>
        </from>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Metric value 3.

Contents <add>—Add constant to attribute.

<metric3>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

<metric3> (configuration/policy-options/policy-statement/term/then)

Usage

```

<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <then>
          <metric3>
            <metric3>metric3</metric3>
            <add>add</add>
            <subtract>subtract</subtract>
          </metric3>
        </then>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Metric value 3.

Contents <add>—Add constant to attribute.

<metric3>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

• <metric3> (configuration/policy-options/policy-statement/then)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <then>
 <metric3>
 <metric3>metric3</metric3>
 <add>add</add>
 <subtract>subtract</subtract>
 </metric3>
 </then>
 </policy-statement>
 </policy-options>
 </configuration>

Description Metric value 3.

Contents <add>—Add constant to attribute.

<metric3>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

• <metric3> (configuration/routing-instances/instance/routing-options/aggregate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <defaults>
 <metric3>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric3>
 </defaults>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value 3.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric3> (configuration/routing-instances/instance/routing-options/aggregate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <route>
 <metric3>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric3>
 </route>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Metric value 3.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric3> (configuration/routing-instances/instance/routing-options/generate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <defaults>
 <metric3>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric3>
 </defaults>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Metric value 3.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <metric3> (configuration/routing-instances/instance/routing-options/generate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <route>
 <metric3>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric3>
 </route>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value 3.

Contents <metric-value>—Metric value.

 <type>—Metric type.

- <metric3> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <aggregate>
 <defaults>
 <metric3>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric3>
 </defaults>
 </aggregate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value 3.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric3> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <aggregate>
            <route>
              <metric3>
                <metric-value>metric-value</metric-value>    <!-- mandatory -->
                <type>type</type>
              </metric3>
            </route>
          </aggregate>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 3.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric3> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <generate>
            <defaults>
              <metric3>
                <metric-value>metric-value</metric-value>    <!-- mandatory -->
                <type>type</type>
              </metric3>
            </defaults>
          </generate>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 3.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <metric3> (configuration/routing-instances/instance/routing-options/rib/generate/route)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <generate>
            <route>
              <metric3>
                <metric-value>metric-value</metric-value>    <!-- mandatory -->
                <type>type</type>
              </metric3>
            </route>
          </generate>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 3.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <metric3> (configuration/routing-instances/instance/routing-options/rib/static/defaults)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <static>
            <defaults>
              <metric3>
                <metric-value>metric-value</metric-value>    <!-- mandatory -->
                <type>type</type>
              </metric3>
            </defaults>
          </static>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 3.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric3> (configuration/routing-instances/instance/routing-options/rib/static/route)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <static>
            <route>
              <metric3>
                <metric-value>metric-value</metric-value>    <!-- mandatory -->
                <type>type</type>
              </metric3>
            </route>
          </static>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 3.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric3> (configuration/routing-instances/instance/routing-options/static/defaults)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <static>
          <defaults>
            <metric3>
              <metric-value>metric-value</metric-value>    <!-- mandatory -->
              <type>type</type>
            </metric3>
          </defaults>
        </static>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 3.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <metric3> (configuration/routing-instances(instance/routing-options/static/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <static>
 <route>
 <metric3>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric3>
 </route>
 </static>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value 3.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric3> (configuration/routing-options/aggregate/defaults)

Usage <configuration>
 <routing-options>
 <aggregate>
 <defaults>
 <metric3>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric3>
 </defaults>
 </aggregate>
 </routing-options>
 </configuration>

Description Metric value 3.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric3> (configuration/routing-options/aggregate/route)

Usage <configuration>
 <routing-options>
 <aggregate>
 <route>
 <metric3>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric3>
 </route>
 </aggregate>
 </routing-options>
</configuration>

Description Metric value 3.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric3> (configuration/routing-options/generate/defaults)

Usage <configuration>
 <routing-options>
 <generate>
 <defaults>
 <metric3>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric3>
 </defaults>
 </generate>
 </routing-options>
</configuration>

Description Metric value 3.

Contents <metric-value>—Metric value.

<type>—Metric type.

• <metric3> (configuration/routing-options/generate/route)

Usage <configuration>
 <routing-options>
 <generate>
 <route>
 <metric3>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric3>
 </route>
 </generate>
 </routing-options>
 </configuration>

Description Metric value 3.

Contents <metric-value>—Metric value.

 <type>—Metric type.

• <metric3> (configuration/routing-options/rib/aggregate/defaults)

Usage <configuration>
 <routing-options>
 <rib>
 <aggregate>
 <defaults>
 <metric3>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric3>
 </defaults>
 </aggregate>
 </rib>
 </routing-options>
 </configuration>

Description Metric value 3.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric3> (configuration/routing-options/rib/aggregate/route)

Usage

```
<configuration>
  <routing-options>
    <rib>
      <aggregate>
        <route>
          <metric3>
            <metric-value>metric-value</metric-value>    <!-- mandatory -->
            <type>type</type>
          </metric3>
        </route>
      </aggregate>
    </rib>
  </routing-options>
</configuration>
```

Description Metric value 3.

Contents <metric-value>—Metric value.
<type>—Metric type.

<metric3> (configuration/routing-options/rib/generate/defaults)

Usage

```
<configuration>
  <routing-options>
    <rib>
      <generate>
        <defaults>
          <metric3>
            <metric-value>metric-value</metric-value>    <!-- mandatory -->
            <type>type</type>
          </metric3>
        </defaults>
      </generate>
    </rib>
  </routing-options>
</configuration>
```

Description Metric value 3.

Contents <metric-value>—Metric value.
<type>—Metric type.

- <metric3> (configuration/routing-options/rib/generate/route)
 - **Usage** <configuration>
 <routing-options>
 <rib>
 <generate>
 <route>
 <metric3>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric3>
 </route>
 </generate>
 </rib>
 </routing-options>
 </configuration>

Description Metric value 3.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric3> (configuration/routing-options/rib/static/defaults)

- **Usage** <configuration>
 <routing-options>
 <rib>
 <static>
 <defaults>
 <metric3>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric3>
 </defaults>
 </static>
 </rib>
 </routing-options>
 </configuration>

Description Metric value 3.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric3> (configuration/routing-options/rib/static/route)

Usage

```
<configuration>
  <routing-options>
    <rib>
      <static>
        <route>
          <metric3>
            <metric-value>metric-value</metric-value>    <!-- mandatory -->
            <type>type</type>
          </metric3>
        </route>
      </static>
    </rib>
  </routing-options>
</configuration>
```

Description Metric value 3.

Contents

- <metric-value>—Metric value.
- <type>—Metric type.

<metric3> (configuration/routing-options/static/defaults)

Usage

```
<configuration>
  <routing-options>
    <static>
      <defaults>
        <metric3>
          <metric-value>metric-value</metric-value>    <!-- mandatory -->
          <type>type</type>
        </metric3>
      </defaults>
    </static>
  </routing-options>
</configuration>
```

Description Metric value 3.

Contents

- <metric-value>—Metric value.
- <type>—Metric type.

- <metric3> (configuration/routing-options/static/route)
 - **Usage** <configuration>
 <routing-options>
 <static>
 <route>
 <metric3>
 <metric-value>*metric-value*</metric-value> <!-- mandatory -->
 <type>*type*</type>
 </metric3>
 </route>
 </static>
 </routing-options>
 </configuration>
 - **Description** Metric value 3.
 - **Contents** <metric-value>—Metric value.
 - <type>—Metric type.
- <metric4> (configuration/policy-options/policy-statement/from/route-filter)
 - **Usage** <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <route-filter>
 <metric4>
 <metric4>*metric4*</metric4>
 <add>*add*</add>
 <subtract>*subtract*</subtract>
 </metric4>
 </route-filter>
 </from>
 </policy-statement>
 </policy-options>
 </configuration>
 - **Description** Metric value 4.
 - **Contents** <add>—Add constant to attribute.
 - <metric4>—No documentation is available yet.
 - <subtract>—Subtract constant from attribute.

<metric4> (configuration/policy-options/policy-statement/from/source-address-filter)

Usage

```

<configuration>
  <policy-options>
    <policy-statement>
      <from>
        <source-address-filter>
          <metric4>
            <metric4>metric4</metric4>
            <add>add</add>
            <subtract>subtract</subtract>
          </metric4>
        </source-address-filter>
      </from>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Metric value 4.

Contents <add>—Add constant to attribute.

<metric4>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

<metric4> (configuration/policy-options/policy-statement/term/from/route-filter)

Usage

```

<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <from>
          <route-filter>
            <metric4>
              <metric4>metric4</metric4>
              <add>add</add>
              <subtract>subtract</subtract>
            </metric4>
          </route-filter>
        </from>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Metric value 4.

Contents <add>—Add constant to attribute.

<metric4>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

- <metric4> (configuration/policy-options/policy-statement/term/from/source-address-filter)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <from>
          <source-address-filter>
            <metric4>
              <metric4>metric4</metric4>
              <add>add</add>
              <subtract>subtract</subtract>
            </metric4>
          </source-address-filter>
        </from>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Metric value 4.

Contents <add>—Add constant to attribute.

<metric4>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

- <metric4> (configuration/policy-options/policy-statement/term/then)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <then>
          <metric4>
            <metric4>metric4</metric4>
            <add>add</add>
            <subtract>subtract</subtract>
          </metric4>
        </then>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Metric value 4.

Contents <add>—Add constant to attribute.

<metric4>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

<metric4> (configuration/policy-options/policy-statement/then)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <then>
        <metric4>
          <metric4>metric4</metric4>
          <add>add</add>
          <subtract>subtract</subtract>
        </metric4>
      </then>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Metric value 4.

Contents <add>—Add constant to attribute.

<metric4>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

<metric4> (configuration/routing-instances/instance/routing-options/aggregate/defaults)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <aggregate>
          <defaults>
            <metric4>
              <metric-value>metric-value</metric-value>    <!-- mandatory -->
              <type>type</type>
            </metric4>
          </defaults>
        </aggregate>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 4.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <metric4> (configuration/routing-instances/instance/routing-options/aggregate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <route>
 <metric4>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric4>
 </route>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value 4.

Contents <metric-value>—Metric value.

 <type>—Metric type.

- <metric4> (configuration/routing-instances/instance/routing-options/generate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <defaults>
 <metric4>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric4>
 </defaults>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value 4.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric4> (configuration/routing-instances/instance/routing-options/generate/route)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <generate>
          <route>
            <metric4>
              <metric-value>metric-value</metric-value>    <!-- mandatory -->
              <type>type</type>
            </metric4>
          </route>
        </generate>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 4.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric4> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <aggregate>
            <defaults>
              <metric4>
                <metric-value>metric-value</metric-value>    <!-- mandatory -->
                <type>type</type>
              </metric4>
            </defaults>
          </aggregate>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 4.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <metric4> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <aggregate>
 <route>
 <metric4>
 <metric-value>metric-value</metric-value> <!-- mandatory -->

 <type>type</type>
 </metric4>
 </route>
 </aggregate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value 4.

Contents <metric-value>—Metric value.

 <type>—Metric type.

- <metric4> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <generate>
 <defaults>
 <metric4>
 <metric-value>metric-value</metric-value> <!-- mandatory -->

 <type>type</type>
 </metric4>
 </defaults>
 </generate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value 4.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric4> (configuration/routing-instances/instance/routing-options/rib/generate/route)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <generate>
 <route>
 <metric4>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric4>
 </route>
 </generate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value 4.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric4> (configuration/routing-instances/instance/routing-options/rib/static/defaults)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <static>
 <defaults>
 <metric4>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric4>
 </defaults>
 </static>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

Description Metric value 4.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <metric4> (configuration/routing-instances/instance/routing-options/rib/static/route)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <rib>
          <static>
            <route>
              <metric4>
                <metric-value>metric-value</metric-value>    <!-- mandatory -->
                <type>type</type>
              </metric4>
            </route>
          </static>
        </rib>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 4.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <metric4> (configuration/routing-instances/instance/routing-options/static/defaults)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <static>
          <defaults>
            <metric4>
              <metric-value>metric-value</metric-value>    <!-- mandatory -->
              <type>type</type>
            </metric4>
          </defaults>
        </static>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 4.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric4> (configuration/routing-instances/instance/routing-options/static/route)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <static>
          <route>
            <metric4>
              <metric-value>metric-value</metric-value>    <!-- mandatory -->
              <type>type</type>
            </metric4>
          </route>
        </static>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Metric value 4.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric4> (configuration/routing-options/aggregate/defaults)

Usage

```

<configuration>
  <routing-options>
    <aggregate>
      <defaults>
        <metric4>
          <metric-value>metric-value</metric-value>    <!-- mandatory -->
          <type>type</type>
        </metric4>
      </defaults>
    </aggregate>
  </routing-options>
</configuration>
```

Description Metric value 4.

Contents <metric-value>—Metric value.

<type>—Metric type.

• <metric4> (configuration/routing-options/aggregate/route)

Usage <configuration>
 <routing-options>
 <aggregate>
 <route>
 <metric4>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric4>
 </route>
 </aggregate>
 </routing-options>
 </configuration>

Description Metric value 4.

Contents <metric-value>—Metric value.

 <type>—Metric type.

• <metric4> (configuration/routing-options/generate/defaults)

Usage <configuration>
 <routing-options>
 <generate>
 <defaults>
 <metric4>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric4>
 </defaults>
 </generate>
 </routing-options>
 </configuration>

Description Metric value 4.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric4> (configuration/routing-options/generate/route)

Usage <configuration>
 <routing-options>
 <generate>
 <route>
 <metric4>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric4>
 </route>
 </generate>
 </routing-options>
</configuration>

Description Metric value 4.

Contents <metric-value>—Metric value.

<type>—Metric type.

<metric4> (configuration/routing-options/rib/aggregate/defaults)

Usage <configuration>
 <routing-options>
 <rib>
 <aggregate>
 <defaults>
 <metric4>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric4>
 </defaults>
 </aggregate>
 </rib>
 </routing-options>
</configuration>

Description Metric value 4.

Contents <metric-value>—Metric value.

<type>—Metric type.

- <metric4> (configuration/routing-options/rib/aggregate/route)
 - **Usage** <configuration>
 - <routing-options>
 - <rib>
 - <aggregate>
 - <route>
 - <**metric4**>
 - <metric-value>metric-value</metric-value> <!-- mandatory -->
 - <type>type</type>
 - </**metric4**>
 - </route>
 - </aggregate>
 - </rib>
 - </routing-options>
 - </configuration>
 - **Description** Metric value 4.
 - **Contents** <metric-value>—Metric value.
 <type>—Metric type.
-
- <metric4> (configuration/routing-options/rib/generate/defaults)
 - **Usage** <configuration>
 - <routing-options>
 - <rib>
 - <generate>
 - <defaults>
 - <**metric4**>
 - <metric-value>metric-value</metric-value> <!-- mandatory -->
 - <type>type</type>
 - </**metric4**>
 - </defaults>
 - </generate>
 - </rib>
 - </routing-options>
 - </configuration>
 - **Description** Metric value 4.
 - **Contents** <metric-value>—Metric value.
 <type>—Metric type.

<metric4> (configuration/routing-options/rib/generate/route)

Usage <configuration>
 <routing-options>
 <rib>
 <generate>
 <route>
 <metric4>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric4>
 </route>
 </generate>
 </rib>
 </routing-options>
</configuration>

Description Metric value 4.

Contents <metric-value>—Metric value.
 <type>—Metric type.

<metric4> (configuration/routing-options/rib/static/defaults)

Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <defaults>
 <metric4>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric4>
 </defaults>
 </static>
 </rib>
 </routing-options>
</configuration>

Description Metric value 4.

Contents <metric-value>—Metric value.
 <type>—Metric type.

• <metric4> (configuration/routing-options/rib/static/route)

Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <route>
 <metric4>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric4>
 </route>
 </static>
 </rib>
 </routing-options>
 </configuration>

Description Metric value 4.

Contents <metric-value>—Metric value.

 <type>—Metric type.

• <metric4> (configuration/routing-options/static/defaults)

Usage <configuration>
 <routing-options>
 <static>
 <defaults>
 <metric4>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </metric4>
 </defaults>
 </static>
 </routing-options>
 </configuration>

Description Metric value 4.

Contents <metric-value>—Metric value.

 <type>—Metric type.

<metric4> (configuration/routing-options/static/route)

```
Usage  <configuration>
        <routing-options>
            <static>
                <route>
                    <metric4>
                        <metric-value>metric-value</metric-value>    <!-- mandatory -->
                        <type>type</type>
                    </metric4>
                </route>
            </static>
        </routing-options>
    </configuration>
```

Description Metric value 4.

Contents <metric-value>—Metric value.

<type>—Metric type.

<minimum-igp> (configuration/policy-options/policy-statement/from/route-filter/metric)

```
Usage  <configuration>
        <policy-options>
            <policy-statement>
                <from>
                    <route-filter>
                        <metric>
                            <minimum-igp>
                                <metric-offset>metric-offset</metric-offset>
                            </minimum-igp>
                        </metric>
                    </route-filter>
                </from>
            </policy-statement>
        </policy-options>
    </configuration>
```

Description Track the minimum IGP metric (BGP only).

Contents <metric-offset>—Metric offset for MED.

- <minimum-igp> (configuration/policy-options/policy-statement/from/source-address-filter/metric)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <source-address-filter>
 <metric>
 <minimum-igp>
 <metric-offset>metric-offset</metric-offset>
 </minimum-igp>
 </metric>
 </source-address-filter>
 </from>
 </policy-statement>
 </policy-options>
 </configuration>

Description Track the minimum IGP metric (BGP only).

Contents <metric-offset>—Metric offset for MED.

- <minimum-igp> (configuration/policy-options/policy-statement/term/from/route-filter/metric)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <route-filter>
 <metric>
 <minimum-igp>
 <metric-offset>metric-offset</metric-offset>
 </minimum-igp>
 </metric>
 </route-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Track the minimum IGP metric (BGP only).

Contents <metric-offset>—Metric offset for MED.

<minimum-igp> (configuration/policy-options/policy-statement/term/from/source-address-filter/metric)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <source-address-filter>
 <metric>
 <minimum-igp>
 <metric-offset>metric-offset</metric-offset>
 </minimum-igp>
 </metric>
 </source-address-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
</configuration>

Description Track the minimum IGP metric (BGP only).

Contents <metric-offset>—Metric offset for MED.

<minimum-igp> (configuration/policy-options/policy-statement/term/then/metric)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <then>
 <metric>
 <minimum-igp>
 <metric-offset>metric-offset</metric-offset>
 </minimum-igp>
 </metric>
 </then>
 </term>
 </policy-statement>
 </policy-options>
</configuration>

Description Track the minimum IGP metric (BGP only).

Contents <metric-offset>—Metric offset for MED.

- <minimum-igp> (configuration/policy-options/policy-statement/then/metric)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <then>
 <metric>
 <minimum-igp>
 <metric-offset>metric-offset</metric-offset>
 </minimum-igp>
 </metric>
 </then>
 </policy-statement>
 </policy-options>
 </configuration>

Description Track the minimum IGP metric (BGP only).

Contents <metric-offset>—Metric offset for MED.

- <minimum-igp> (configuration/protocols/bgp/group/metric-out)

Usage <configuration>
 <protocols>
 <bpg>
 <group>
 <metric-out>
 <minimum-igp>
 <metric-offset>metric-offset</metric-offset>
 </minimum-igp>
 </metric-out>
 </group>
 </bpg>
 </protocols>
 </configuration>

Description Track the minimum IGP metric.

Contents <metric-offset>—Metric offset for MED.

<minimum-igp> (configuration/protocols/bgp/group/neighbor/metric-out)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <metric-out>
 <minimum-igp>
 <metric-offset>metric-offset</metric-offset>
 </minimum-igp>
 </metric-out>
 </neighbor>
 </group>
 </bgp>
 </protocols>
</configuration>

Description Track the minimum IGP metric.

Contents <metric-offset>—Metric offset for MED.

<minimum-igp> (configuration/protocols/bgp/metric-out)

Usage <configuration>
 <protocols>
 <bgp>
 <metric-out>
 <minimum-igp>
 <metric-offset>metric-offset</metric-offset>
 </minimum-igp>
 </metric-out>
 </bgp>
 </protocols>
</configuration>

Description Track the minimum IGP metric.

Contents <metric-offset>—Metric offset for MED.

- <minimum-igp> (configuration/routing-instances/instance/protocols/bgp/group/metric-out)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <metric-out>
 <minimum-igp>
 <metric-offset>metric-offset</metric-offset>
 </minimum-igp>
 </metric-out>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Track the minimum IGP metric.

Contents <metric-offset>—Metric offset for MED.

- <minimum-igp> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/metric-out)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <metric-out>
 <minimum-igp>
 <metric-offset>metric-offset</metric-offset>
 </minimum-igp>
 </metric-out>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>

Description Track the minimum IGP metric.

Contents <metric-offset>—Metric offset for MED.

<minimum-igp> (configuration/routing-instances/instance/protocols/bgp/metric-out)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <metric-out>
            <minimum-igp>
              <metric-offset>metric-offset</metric-offset>
            </minimum-igp>
          </metric-out>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Track the minimum IGP metric.

Contents <metric-offset>—Metric offset for MED.

<mlfr> (configuration/interfaces/interface/unit/family)

Usage

```

<configuration>
  <interfaces>
    <interface>
      <unit>
        <family>
          <mlfr>
            <bundle>bundle</bundle>    <!-- mandatory -->
          </mlfr>
        </family>
      </unit>
    </interface>
  </interfaces>
</configuration>
```

Description Multilink Frame Relay protocol parameters.

Contents <bundle>—Logical interface name this link will join.

- <mlPPP> (configuration/interfaces/interface/unit/family)

•

• **Usage** <configuration>
• <interfaces>
• <interface>
• <unit>
• <family>
• **<mlPPP>**
• <bundle>*bundle*</bundle> <!-- mandatory -->
• **</mlPPP>**
• </family>
• </unit>
• </interface>
• </interfaces>
• </configuration>

• **Description** Multilink PPP protocol parameters.

• **Contents** <bundle>—Logical interface name this link will join.

- <monitoring> (configuration/forwarding-options)

•

• **Usage** <configuration>
• <forwarding-options>
• **<monitoring>**
• <name>*name*</name> <!-- identifier -->
• <family>...</family>
• **</monitoring>**
• </forwarding-options>
• </configuration>

• **Description** Configure lawful interception of traffic.

• **Contents** <family>—Address family of packets to monitor.

• <name>—No documentation is available yet.

<mpls> (configuration/forwarding-options/hash-key/family)

Usage <configuration>
 <forwarding-options>
 <hash-key>
 <family>
 <mpls>
 <label-1/> <!-- mandatory -->
 <label-2/>
 </mpls>
 </family>
 </hash-key>
 </forwarding-options>
 </configuration>

Description MPLS protocol family.

Contents <label-1>—Include the first MPLS label in the hash key.

<label-2>—Include the second MPLS label in the hash key.

<mpls> (configuration/interfaces/interface/unit/family)

Usage <configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <mpls>
 <mtu>mtu</mtu>
 </mpls>
 </family>
 </unit>
 </interface>
 </interfaces>
 </configuration>

Description MPLS protocol parameters.

Contents <mtu>—Protocol family MTU.

- <mpls> (configuration/protocols)

Usage

```
<configuration>
  <protocols>
    <mpls>
      <disable/>
      <statistics>...</statistics>
      <log-updown>...</log-updown>
      <traffic-engineering>traffic-engineering-choice</traffic-engineering>
      <traceoptions>...</traceoptions>
      <admin-groups>...</admin-groups>
      <advertisement-hold-time>seconds</advertisement-hold-time>
      <rsvp-error-hold-time>seconds</rsvp-error-hold-time>
      <optimize-aggressive/>
      <no-propagate-ttl/>
      <explicit-null/>
      <ipv6-tunneling/>
      <bandwidth>bandwidth</bandwidth>
      <class-of-service>class-of-service</class-of-service>
      <no-decrement-ttl/>
      <hop-limit>hop-limit</hop-limit>
      <no-cspf/>
      <optimize-timer>seconds</optimize-timer>
      <preference>preference</preference>
      <setup-priority>setup-priority</setup-priority>
      <reservation-priority>reservation-priority</reservation-priority>
      <record/>
      <standby/>
      <admin-group>...</admin-group>
      <label-switched-path>...</label-switched-path>
      <path>...</path>
      <static-path>...</static-path>
      <interface>...</interface>
    </mpls>
  </protocols>
</configuration>
```

Description Multiprotocol Label Switching options.

Contents <admin-group>—Administrative group policy.

<admin-groups>—Administrative groups.

<advertisement-hold-time>—Time that an 'LSP down' advertisement will be delayed.

<bandwidth>—Bandwidth to reserve (bps).

<class-of-service>—Class-of-service value.

<disable>—Disable MPLS.

<explicit-null>—Advertise the EXPLICIT_NULL label when we are the egress.

<hop-limit>—Maximum allowed router hops.

<interface>—MPLS interface options.

- <ipv6-tunneling>—Allow MPLS LSPs to be used for tunneling IPv6 traffic.
- <label-switched-path>—Label-switched path.
- <log-updown>—Logging actions for LSP up/down events.
- <no-cspf>—Disable automatic path computation.
- <no-decrement-ttl>—Do not decrement the TTL within an LSP.
- <no-propagate-ttl>—Disable TTL propagation from IP to MPLS (on push) and MPLS to IP (on pop).
- <optimize-aggressive>—Run aggressive optimization algorithm based on IGP metric only.
- <optimize-timer>—Periodical path reoptimizations.
- <path>—Route of a label-switched path.
- <preference>—Preference value.
- <record>—Record transit routers.
- <rsvp-error-hold-time>—Time that RSVP PathErr events will be remembered.
- <standby>—Keep backup paths in continuous standby.
- <static-path>—Static label-switched path.
- <statistics>—Collect statistics for signaled label-switched paths.
- <traceoptions>—Trace options for MPLS.
- <traffic-engineering>—Protocols to perform traffic engineering.
 - **bgp**—BGP destinations only.
 - **bgp-igp**—BGP and IGP destinations.
 - **bgp-igp-both-ribs**—BGP and IGP destinations with routes in both RIBs.

- <msdp> (configuration/protocols)

Usage <configuration>
 <protocols>
 <msdp>
 <rib-group>...</rib-group>
 <disable/>
 <export>...</export>
 <import>...</import>
 <local-address>local-address</local-address>
 <traceoptions>...</traceoptions>
 <peer>...</peer>
 <group>...</group>
 </msdp>
 </protocols>
 </configuration>

Description MSDP options.

Contents <disable>—Disable MSDP.

<export>—Export policy.

<group>—Configure MSDP peer groups.

<import>—Import policy.

<local-address>—Local address.

<peer>—Configure an MSDP peer.

<rib-group>—Routing table group.

<traceoptions>—Trace options for MSDP.

- <multicast> (configuration/protocols/bgp/family/inet)

Usage <configuration>
 <protocols>
 <bpg>
 <family>
 <inet>
 <multicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </multicast>
 </inet>
 </family>
 </bpg>
 </protocols>
 </configuration>

Description Include multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

<multicast> (configuration/protocols/bgp/family/inet-vpn)

```
Usage  <configuration>
        <protocols>
          <bgp>
            <family>
              <inet-vpn>
                <multicast>
                  <prefix-limit>...</prefix-limit>
                  <rib-group>...</rib-group>
                </multicast>
              </inet-vpn>
            </family>
          </bgp>
        </protocols>
      </configuration>
```

Description Include multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

<multicast> (configuration/protocols/bgp/family/inet6)

```
Usage  <configuration>
        <protocols>
          <bgp>
            <family>
              <inet6>
                <multicast>
                  <prefix-limit>...</prefix-limit>
                  <rib-group>...</rib-group>
                </multicast>
              </inet6>
            </family>
          </bgp>
        </protocols>
      </configuration>
```

Description Include multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

- <multicast> (configuration/protocols/bgp/group/family/inet)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <group>
        <family>
          <inet>
            <multicast>
              <prefix-limit>...</prefix-limit>
              <rib-group>...</rib-group>
            </multicast>
          </inet>
        </family>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Include multicast NLRI.

Contents

- <prefix-limit>—Limit maximum number of prefixes from a peer.
- <rib-group>—Routing table group.

- <multicast> (configuration/protocols/bgp/group/family/inet-vpn)

Usage

```
<configuration>
  <protocols>
    <bgp>
      <group>
        <family>
          <inet-vpn>
            <multicast>
              <prefix-limit>...</prefix-limit>
              <rib-group>...</rib-group>
            </multicast>
          </inet-vpn>
        </family>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Include multicast NLRI.

Contents

- <prefix-limit>—Limit maximum number of prefixes from a peer.
- <rib-group>—Routing table group.

<multicast> (configuration/protocols/bgp/group/family/inet6)

```
Usage  <configuration>
        <protocols>
            <bgp>
                <group>
                    <family>
                        <inet6>
                            <multicast>
                                <prefix-limit>...</prefix-limit>
                                <rib-group>...</rib-group>
                            </multicast>
                        </inet6>
                    </family>
                </group>
            </bgp>
        </protocols>
    </configuration>
```

Description Include multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.
<rib-group>—Routing table group.

<multicast> (configuration/protocols/bgp/group/neighbor/family/inet)

```
Usage  <configuration>
        <protocols>
            <bgp>
                <group>
                    <neighbor>
                        <family>
                            <inet>
                                <multicast>
                                    <prefix-limit>...</prefix-limit>
                                    <rib-group>...</rib-group>
                                </multicast>
                            </inet>
                        </family>
                    </neighbor>
                </group>
            </bgp>
        </protocols>
    </configuration>
```

Description Include multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.
<rib-group>—Routing table group.

- <multicast> (configuration/protocols/bgp/group/neighbor/family/inet-vpn)

Usage

```

<configuration>
  <protocols>
    <bgp>
      <group>
        <neighbor>
          <family>
            <inet-vpn>
              <multicast>
                <prefix-limit>...</prefix-limit>
                <rib-group>...</rib-group>
              </multicast>
            </inet-vpn>
          </family>
        </neighbor>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Include multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

- <multicast> (configuration/protocols/bgp/group/neighbor/family/inet6)

Usage

```

<configuration>
  <protocols>
    <bgp>
      <group>
        <neighbor>
          <family>
            <inet6>
              <multicast>
                <prefix-limit>...</prefix-limit>
                <rib-group>...</rib-group>
              </multicast>
            </inet6>
          </family>
        </neighbor>
      </group>
    </bgp>
  </protocols>
</configuration>
```

Description Include multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

<multicast> (configuration/routing-instances/instance/protocols/bgp/family/inet)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <family>
            <inet>
              <multicast>
                <prefix-limit>...</prefix-limit>
                <rib-group>...</rib-group>
              </multicast>
            </inet>
          </family>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Include multicast NLRI.

Contents

- <prefix-limit>—Limit maximum number of prefixes from a peer.
- <rib-group>—Routing table group.

<multicast> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <family>
            <inet-vpn>
              <multicast>
                <prefix-limit>...</prefix-limit>
                <rib-group>...</rib-group>
              </multicast>
            </inet-vpn>
          </family>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Include multicast NLRI.

Contents

- <prefix-limit>—Limit maximum number of prefixes from a peer.
- <rib-group>—Routing table group.

- <multicast> (configuration/routing-instances/instance/protocols/bgp/family/inet6)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <family>
            <inet6>
              <multicast>
                <prefix-limit>...</prefix-limit>
                <rib-group>...</rib-group>
              </multicast>
            </inet6>
          </family>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Include multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.
 <rib-group>—Routing table group.

- <multicast> (configuration/routing-instances/instance/protocols/bgp/group/family/inet)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <family>
              <inet>
                <multicast>
                  <prefix-limit>...</prefix-limit>
                  <rib-group>...</rib-group>
                </multicast>
              </inet>
            </family>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Include multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

<multicast> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bpg>
 <group>
 <family>
 <inet-vpn>
 <multicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </multicast>
 </inet-vpn>
 </family>
 </group>
 </bpg>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Include multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

- <multicast> (configuration/routing-instances(instance/protocols/bgp/group/family/inet6)

```
Usage <configuration>
      <routing-instances>
        <instance>
          <protocols>
            <bgp>
              <group>
                <family>
                  <inet6>
                    <multicast>
                      <prefix-limit>...</prefix-limit>
                      <rib-group>...</rib-group>
                    </multicast>
                  </inet6>
                </family>
              </group>
            </bgp>
          </protocols>
        </instance>
      </routing-instances>
    </configuration>
```

Description Include multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

<multicast> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <multicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </multicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Include multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

- <multicast> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn)

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <multicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </multicast>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

Description Include multicast NLRI.

Contents <prefix-limit>—Limit maximum number of prefixes from a peer.

 <rib-group>—Routing table group.

<multicast> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <family>
                <inet6>
                  <multicast>
                    <prefix-limit>...</prefix-limit>
                    <rib-group>...</rib-group>
                  </multicast>
                </inet6>
              </family>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Include multicast NLRI.

Contents

- <prefix-limit>—Limit maximum number of prefixes from a peer.
- <rib-group>—Routing table group.

<multicast> (configuration/routing-instances/instance/routing-options)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <routing-options>
        <multicast>
          <scope>...</scope>
          <ssm-groups>...</ssm-groups>
        </multicast>
      </routing-options>
    </instance>
  </routing-instances>
</configuration>
```

Description Global multicast options.

Contents

- <scope>—Multicast address scope.
- <ssm-groups>—Source-specific multicast group ranges.

- <multicast> (configuration/routing-instances/instance/routing-options/auto-export/family/inet)

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <auto-export>
 <family>
 <inet>
 <multicast>
 <disable/>
 <rib-group>rib-group</rib-group>
 </multicast>
 </inet>
 </family>
 </auto-export>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>

Description Multicast routing information.

Contents <disable>—Disable instance export.

<rib-group>—Auxiliary routing table group of additional routing tables to consider.

- <multicast> (configuration/routing-options)

Usage <configuration>
 <routing-options>
 <multicast>
 <scope>...</scope>
 <ssm-groups>...</ssm-groups>
 </multicast>
 </routing-options>
</configuration>

Description Global multicast options.

Contents <scope>—Multicast address scope.

<ssm-groups>—Source-specific multicast group ranges.

<multicast> (configuration/routing-options/auto-export/family/inet)

Usage <configuration>
 <routing-options>
 <auto-export>
 <family>
 <inet>
 <multicast>
 <disable/>
 <rib-group>rib-group</rib-group>
 </multicast>
 </inet>
 </family>
 </auto-export>
 </routing-options>
</configuration>

Description Multicast routing information.

Contents <disable>—Disable instance export.

<rib-group>—Auxiliary rib-group of additional ribs to consider.

<multihop> (configuration/protocols/bgp)

Usage <configuration>
 <protocols>
 <bpg>
 <multihop>
 <ttl>tt</ttl>
 <no-nexthop-change/>
 </multihop>
 </bpg>
 </protocols>
</configuration>

Description Configure an EBGP multihop session.

Contents <no-nexthop-change>—Do not change next hop to self in advertisements.

<ttl>—TTL value for the session.

- <multihop> (configuration/protocols/bgp/group)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <multihop>
 <ttl>ttl</ttl>
 <no-nexthop-change/>
 </multihop>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Configure an EBGP multihop session.

Contents <no-nexthop-change>—Do not change next hop to self in advertisements.

<ttl>—TTL value for the session.

- <multihop> (configuration/protocols/bgp/group/neighbor)

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <multihop>
 <ttl>ttl</ttl>
 <no-nexthop-change/>
 </multihop>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

Description Configure an EBGP multihop session.

Contents <no-nexthop-change>—Do not change next hop to self in advertisements.

<ttl>—TTL value for the session.

<multihop> (configuration/routing-instances/instance/protocols/bgp)

```
Usage  <configuration>
        <routing-instances>
            <instance>
                <protocols>
                    <bgp>
                        <multihop>
                            <ttl>ttl</ttl>
                            <no-nexthop-change/>
                        </multihop>
                    </bgp>
                </protocols>
            </instance>
        </routing-instances>
    </configuration>
```

Description Configure an EBGP multihop session.

Contents <no-nexthop-change>—Do not change next hop to self in advertisements.
<ttl>—TTL value for the session.

<multihop> (configuration/routing-instances/instance/protocols/bgp/group)

```
Usage  <configuration>
        <routing-instances>
            <instance>
                <protocols>
                    <bgp>
                        <group>
                            <multihop>
                                <ttl>ttl</ttl>
                                <no-nexthop-change/>
                            </multihop>
                        </group>
                    </bgp>
                </protocols>
            </instance>
        </routing-instances>
    </configuration>
```

Description Configure an EBGP multihop session.

Contents <no-nexthop-change>—Do not change next hop to self in advertisements.
<ttl>—TTL value for the session.

- <multihop> (configuration/routing-instances/instance/protocols/bgp/group/neighbor)

Usage

```

<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <bgp>
          <group>
            <neighbor>
              <multihop>
                <ttl>ttl</ttl>
                <no-nexthop-change/>
              </multihop>
            </neighbor>
          </group>
        </bgp>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Configure an EBGP multihop session.

Contents <no-nexthop-change>—Do not change next hop to self in advertisements.

<ttl>—TTL value for the session.

- <multipoint-destination> (configuration/interfaces/interface/unit/family/inet/address)

Usage

```

<configuration>
  <interfaces>
    <interface>
      <unit>
        <family>
          <inet>
            <address>
              <multipoint-destination>
                <name>name</name>    <!-- identifier -->
                <dlci>dlci</dlci>
                <vci>vci</vci>
                <shaping>...</shaping>
                <oam-period>...</oam-period>
                <oam-liveness>...</oam-liveness>
                <inverse-arp/>
              </multipoint-destination>
            </address>
          </inet>
        </family>
      </unit>
    </interface>
  </interfaces>
</configuration>
```

Description Multipoint NBMA destination.

Contents	<dlci>—Frame Relay link control identifier.	•
	<inverse-arp>—Enable inverse ARP reply messages.	•
	<name>—Destination address.	•
	<oam-liveness>—OAM virtual circuit liveness parameters.	•
	<oam-period>—OAM cell period.	•
	<shaping>—Virtual circuit traffic shaping options.	•
	<vci>—ATM virtual circuit identifier ([vpi.]vci).	•

<multiservice-options> (configuration/interfaces/interface)

```

Usage   <configuration>
          <interfaces>
            <interface>
              <multiservice-options>
                <boot-command>boot-command</boot-command>
                <syslog/>
                <core-dump/>
              </multiservice-options>
            </interface>
          </interfaces>
        </configuration>
    
```

Description Multiservice interface-specific options.

Contents	<boot-command>—Boot command (filename) for Multiservice PIC.	•
	<core-dump>—Enable core dumping on this interface.	•
	<syslog>—Enable system logging on this interface.	•

<name-server> (configuration/system)

```

Usage   <configuration>
          <system>
            <name-server>
              <name>name</name>    <!-- identifier -->
            </name-server>
          </system>
        </configuration>
    
```

Description DNS name servers.

Contents	<name>—DNS name server address.	•
-----------------	---------------------------------	---

• <neighbor> (configuration/policy-options/policy-statement/from)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <neighbor>
 <name>name</name> <!-- identifier -->
 </neighbor>
 </from>
 </policy-statement>
 </policy-options>
 </configuration>

Description Neighboring router.

Contents <name>—Neighboring router.

• <neighbor> (configuration/policy-options/policy-statement/term/from)

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <neighbor>
 <name>name</name> <!-- identifier -->
 </neighbor>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

Description Neighboring router.

Contents <name>—Neighboring router.

<neighbor> (configuration/policy-options/policy-statement/term/to)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <term>
        <to>
          <neighbor>
            <name>name</name>    <!-- identifier -->
          </neighbor>
        </to>
      </term>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Neighboring router.

Contents <name>—Neighboring router.

<neighbor> (configuration/policy-options/policy-statement/to)

Usage

```
<configuration>
  <policy-options>
    <policy-statement>
      <to>
        <neighbor>
          <name>name</name>    <!-- identifier -->
        </neighbor>
      </to>
    </policy-statement>
  </policy-options>
</configuration>
```

Description Neighboring router.

Contents <name>—Neighboring router.

- <neighbor> (configuration/protocols/bgp/group)

```

Usage   <configuration>
          <protocols>
              <bgp>
                  <group>
                      <neighbor>
                          <name>name</name>    <!-- identifier -->
                          <traceoptions>...</traceoptions>
                          <description>description</description>
                          <metric-out>...</metric-out>
                          <multihop>...</multihop>
                          <preference>preference</preference>
                          <local-preference>local-preference</local-preference>
                          <local-address>local-address</local-address>
                          <local-interface>local-interface</local-interface>
                          <hold-time>hold-time</hold-time>
                          <passive/>
                          <advertise-inactive/>
                          <keep>keep-choice</keep>
                          <no-aggregator-id/>
                          <out-delay>out-delay</out-delay>
                          <log-updown/>
                          <damping/>
                          <import>...</import>
                          <family>...</family>
                          <authentication-key>authentication-key</authentication-key>
                          <export>...</export>
                          <remove-private/>
                          <cluster>cluster</cluster>
                          <no-client-reflect/>
                          <peer-as>peer-as</peer-as>
                          <local-as>...</local-as>
                          <ipsec-sa>ipsec-sa</ipsec-sa>
                          <graceful-restart>...</graceful-restart>
                          <multipath/>
                          <as-override/>
                      </neighbor>
                  </group>
              </bgp>
          </protocols>
      </configuration>
  
```

Description Configure a neighbor.

Contents <advertise-inactive>—Advertise non-active routes.

<as-override>—Replace neighbor AS number with our AS number.

<authentication-key>—MD5 authentication key.

<cluster>—Cluster identifier.

<damping>—Enable route flap damping.

<description>—Text description.

- <export>—Export policy.
- <family>—Protocol family for NLRI in updates.
- <graceful-restart>—BGP graceful restart options.
- <hold-time>—Hold time used when negotiating with a peer.
- <import>—Import policy.
- <ipsec-sa>—IPSec SA name.
- <keep>—How to retain routes in the routing table.
 - all—Retain all routes.
 - none—Retain no routes.
- <local-address>—Address of local end of BGP session.
- <local-as>—Local autonomous system number.
- <local-interface>—Local interface for IPv6 link local EBGP peering.
- <local-preference>—Value of LOCAL_PREF path attribute.
- <log-updown>—Log a message for peer state transitions.
- <metric-out>—Route metric sent in MED.
- <multipath>—Configure an EBGP multihop session.
- <multipath>—Allow load-sharing among multiple BGP paths.
- <name>—No documentation is available yet.
- <no-aggregator-id>—Set router ID in aggregator path attribute to 0.
- <no-client-reflect>—Disable intracluster route redistribution.
- <out-delay>—How long before exporting routes from routing table.
- <passive>—Do not send open messages to a peer.
- <peer-as>—Peer autonomous system number.
- <preference>—Preference value.
- <remove-private>—Remove well-known private AS numbers.
- <traceoptions>—Trace options.

- <neighbor> (configuration/protocols/l2circuit)

Usage

```
<configuration>
  <protocols>
    <l2circuit>
      <neighbor>
        <name>name</name>    <!-- identifier -->
        <interface>...</interface>
      </neighbor>
    </l2circuit>
  </protocols>
</configuration>
```

Description List of Layer 2 circuits to this neighbor.

Contents <interface>—Interface forming the Layer 2 circuit.

<name>—Neighbor ID.

- <neighbor> (configuration/protocols/ospf/area/interface)

Usage

```
<configuration>
  <protocols>
    <ospf>
      <area>
        <interface>
          <neighbor>
            <name>name</name>    <!-- identifier -->
            <eligible/>
          </neighbor>
        </interface>
      </area>
    </ospf>
  </protocols>
</configuration>
```

Description NBMA neighbor.

Contents <eligible>—Eligible to be DR on an NBMA network.

<name>—Address of neighbor.

<neighbor> (configuration/protocols/rip/group)

Usage

```

<configuration>
  <protocols>
    <rip>
      <group>
        <neighbor>
          <name>name</name>    <!-- identifier -->
          <metric-in>metric-in</metric-in>
          <send>...</send>
          <receive>...</receive>
          <check-zero/>
          <message-size>message-size</message-size>
          <import>...</import>
          <authentication-type>authentication-type-choice</authentication-type>
          <authentication-key>authentication-key</authentication-key>
        </neighbor>
      </group>
    </rip>
  </protocols>
</configuration>
```

Description Neighbor configuration.

Contents <authentication-key>—Authentication key (password).

<authentication-type>—Authentication type.

- md5—MD5 authentication.

- none—No authentication.

- simple—Simple password authentication.

<check-zero>—Check reserved fields on incoming RIPv1 packets.

<import>—Import policy.

<message-size>—Number of route entries per update message.

<metric-in>—Metric value to add to incoming routes.

<name>—Interface name.

<receive>—Configure RIP receive options.

<send>—Configure RIP send options.

- <neighbor> (configuration/protocols/ripng/group)

Usage <configuration>
 <protocols>
 <ripng>
 <group>
 <neighbor>
 <name>name</name> <!-- identifier -->
 <metric-in>metric-in</metric-in>
 <send>...</send>
 <receive>...</receive>
 <import>...</import>
 </neighbor>
 </group>
 </ripng>
 </protocols>
 </configuration>

Description Neighbor configuration.

Contents <import>—Import policy.

 <metric-in>—Metric value to add to incoming routes.

 <name>—Interface name.

 <receive>—Configure RIPng receive options.

 <send>—Configure RIPng send options.

<neighbor> (configuration/routing-instances/instance/protocols/bgp/group)

```

Usage   <configuration>
          <routing-instances>
              <instance>
                  <protocols>
                      <bgp>
                          <group>
                              <neighbor>
                                  <name>name</name>      <!-- identifier -->
                                  <traceoptions>...</traceoptions>
                                  <description>description</description>
                                  <metric-out>...</metric-out>
                                  <multihop>...</multihop>
                                  <preference>preference</preference>
                                  <local-preference>local-preference</local-preference>
                                  <local-address>local-address</local-address>
                                  <local-interface>local-interface</local-interface>
                                  <hold-time>hold-time</hold-time>
                                  <passive/>
                                  <advertise-inactive/>
                                  <keep>keep-choice</keep>
                                  <no-aggregator-id/>
                                  <out-delay>out-delay</out-delay>
                                  <log-updown/>
                                  <damping/>
                                  <import>...</import>
                                  <family>...</family>
                                  <authentication-key>authentication-key</authentication-key>
                                  <export>...</export>
                                  <remove-private/>
                                  <cluster>cluster</cluster>
                                  <no-client-reflect/>
                                  <peer-as>peer-as</peer-as>
                                  <local-as>...</local-as>
                                  <ipsec-sa>ipsec-sa</ipsec-sa>
                                  <graceful-restart>...</graceful-restart>
                                  <multipath/>
                                  <as-override/>
                              </neighbor>
                          </group>
                      </bgp>
                  </protocols>
              </instance>
          </routing-instances>
      </configuration>

```

Description Configure a neighbor.

Contents <advertise-inactive>—Advertise non-active routes.

<as-override>—Replace neighbor AS number with our AS number.

<authentication-key>—MD5 authentication key.

<cluster>—Cluster identifier.

- <damping>—Enable route flap damping.

<description>—Text description.

<export>—Export policy.

<family>—Protocol family for NLRIs in updates.

<graceful-restart>—BGP graceful restart options.

<hold-time>—Hold time used when negotiating with a peer.

<import>—Import policy.

<ipsec-sa>—IPSec SA name.

<keep>—How to retain routes in the routing table.

 - all—Retain all routes.
 - none—Retain no routes.

<local-address>—Address of local end of BGP session.

<local-as>—Local autonomous system number.

<local-interface>—Local interface for IPv6 link local EBGP peering.

<local-preference>—Value of LOCAL_PREF path attribute.

<log-updown>—Log a message for peer state transitions.

<metric-out>—Route metric sent in MED.

<multipath>—Allow load-sharing among multiple BGP paths.

<name>—No documentation is available yet.

<no-aggregator-id>—Set router ID in aggregator path attribute to 0.

<no-client-reflect>—Disable intracluster route redistribution.

<out-delay>—How long before exporting routes from routing table.

<passive>—Do not send open messages to a peer.

<peer-as>—Peer autonomous system number.

<preference>—Preference value.

<remove-private>—Remove well-known private AS numbers.

<traceoptions>—Trace options.

<neighbor> (configuration/routing-instances/instance/protocols/ospf/area/interface)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <ospf>
          <area>
            <interface>
              <neighbor>
                <name>name</name>    <!-- identifier -->
                <eligible/>
              </neighbor>
            </interface>
          </area>
        </ospf>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description NBMA neighbor.

Contents <eligible>—Eligible to be DR on an NBMA network.

<name>—Address of neighbor.

<neighbor> (configuration/routing-instances/instance/protocols/rip/group)

Usage

```
<configuration>
  <routing-instances>
    <instance>
      <protocols>
        <rip>
          <group>
            <neighbor>
              <name>name</name>    <!-- identifier -->
              <metric-in>metric-in</metric-in>
              <send>...</send>
              <receive>...</receive>
              <check-zero/>
              <message-size>message-size</message-size>
              <import>...</import>
              <authentication-type>authentication-type-choice</authentication-type>
              <authentication-key>authentication-key</authentication-key>
            </neighbor>
          </group>
        </rip>
      </protocols>
    </instance>
  </routing-instances>
</configuration>
```

Description Neighbor configuration.

`< next-header> (configuration/firewall/family/inet6/filter/term/from)`

- | | |
|-----------------|--|
| Contents | <authentication-key>—Authentication key (password).

<authentication-type>—Authentication type. <ul style="list-style-type: none">■ md5—MD5 authentication.■ none—No authentication.■ simple—Simple password authentication. <check-zero>—Check reserved fields on incoming RIPv1 packets.

<import>—Import policy.

<message-size>—Number of route entries per update message.

<metric-in>—Metric value to add to incoming routes.

<name>—Interface name.

<receive>—Configure RIP receive options.

<send>—Configure RIP send options. |
| <next-header> | (configuration/firewall/family/inet6/filter/term/from) |

<next-header> (configuration/firewall/family/inet6/filter/term/from)

- ```
Usage <configuration>
 <firewall>
 <family>
 <inet6>
 <filter>
 <term>
 <from>
 <next-header>
 <name>name</name> <!-- identifier -->
 </next-header>
 </from>
 </term>
 </filter>
 </inet6>
 </family>
 </firewall>
</configuration>
```

**Description** Match IP protocol type.

- Contents** <name>—No documentation is available yet.

  - ah—IPSec AH.
  - dstopts—IPv6 destination options.
  - egp—EGP.
  - esp—IPSec ESP.

- fragment—IPv6 fragment header.
- gre—GRE.
- hop-by-hop—IPv6 hop-by-hop options.
- icmp—ICMP.
- icmpv6—ICMP V6.
- igmp—IGMP.
- ipip—IP in IP.
- ipv6—IPv6 in IP.
- name—Range of values.
- no-next-header—IPv6 no next header.
- ospf—OSPF.
- pim—PIM.
- routing—IPv6 routing header.
- rsvp—RSVP.
- tcp—TCP.
- udp—UDP.

## &lt;next-header-except&gt; (configuration/firewall/family/inet6/filter/term/from)

```

Usage <configuration>
 <firewall>
 <family>
 <inet6>
 <filter>
 <term>
 <from>
 <next-header-except>
 <name>name</name> <!-- identifier -->
 </next-header-except>
 </from>
 </term>
 </filter>
 </inet6>
 </family>
 </firewall>
 </configuration>
```

**Description** Do not match IP protocol type.

- Contents** <name>—No documentation is available yet.

  - ah—IPSec AH.
  - dstopts—IPv6 destination options.
  - egp—EGP.
  - esp—IPSec ESP.
  - fragment—IPv6 fragment header.
  - gre—GRE.
  - hop-by-hop—IPv6 hop-by-hop options.
  - icmp—ICMP.
  - icmpv6—ICMP V6.
  - igmp—IGMP.
  - ipip—IP in IP.
  - ipv6—IPv6 in IP.
  - name—Range of values.
  - no-next-header—IPv6 no next header.
  - ospf—OSPF.
  - pim—PIM.
  - routing—IPv6 routing header.
  - rsvp—RSVP.
  - tcp—TCP.
  - udp—UDP.

<next-hop> (configuration/class-of-service/forwarding-policy/next-hop-map/forwarding-class)

**Usage** <configuration>  
    <class-of-service>  
        <forwarding-policy>  
            <next-hop-map>  
                <forwarding-class>  
                    **<next-hop>**  
                        <name>name</name>    <!-- identifier --&gt;<br/>                    **</next-hop>**  
                        </forwarding-class>  
                    </next-hop-map>  
                    </forwarding-policy>  
                </class-of-service>  
    </configuration>

**Description** Next-hop identifier to which to map.

**Contents** <name>—Next-hop identifier to which to map.

<next-hop> (configuration/policy-options/policy-statement/from)

**Usage** <configuration>  
    <policy-options>  
        <policy-statement>  
            <from>  
                **<next-hop>**  
                        <name>name</name>    <!-- identifier --&gt;<br/>                **</next-hop>**  
                    </from>  
                </policy-statement>  
    </policy-options>  
</configuration>

**Description** Next-hop router.

**Contents** <name>—Next-hop router.

- <next-hop> (configuration/policy-options/policy-statement/from/route-filter)

**Usage**   <configuration>  
          <policy-options>  
            <policy-statement>  
              <from>  
                <route-filter>  
                  <next-hop>  
                    <self/>  
                    <peer-address/>  
                    <address>address</address>  
                  </next-hop>  
                </route-filter>  
              </from>  
            </policy-statement>  
          </policy-options>  
        </configuration>

**Description**   Set the address of the next-hop router.

**Contents**   <address>—Next-hop address.

                  <peer-address>—Use the remote peer address as the next-hop address.

                  <self>—Use a local address as the next-hop address.

- <next-hop> (configuration/policy-options/policy-statement/from/source-address-filter)

**Usage**   <configuration>  
          <policy-options>  
            <policy-statement>  
              <from>  
                <source-address-filter>  
                  <next-hop>  
                    <self/>  
                    <peer-address/>  
                    <address>address</address>  
                  </next-hop>  
                </source-address-filter>  
              </from>  
            </policy-statement>  
          </policy-options>  
        </configuration>

**Description**   Set the address of the next-hop router.

**Contents**   <address>—Next-hop address.

                  <peer-address>—Use the remote peer address as the next-hop address.

                  <self>—Use a local address as the next-hop address.

<next-hop> (configuration/policy-options/policy-statement/term/from)

**Usage** <configuration>  
    <policy-options>  
        <policy-statement>  
            <term>  
                <from>  
                    <next-hop>  
                        <name>name</name>    <!-- identifier --&gt;<br/>                    </next-hop>  
                </from>  
                </term>  
                </policy-statement>  
            </policy-options>  
        </configuration>

**Description** Next-hop router.

**Contents** <name>—Next-hop router.

<next-hop> (configuration/policy-options/policy-statement/term/from/route-filter)

**Usage** <configuration>  
    <policy-options>  
        <policy-statement>  
            <term>  
                <from>  
                    <route-filter>  
                        <next-hop>  
                            <self/>  
                            <peer-address/>  
                            <address>address</address>  
                        </next-hop>  
                </route-filter>  
                </from>  
                </term>  
            </policy-statement>  
        </policy-options>  
    </configuration>

**Description** Set the address of the next-hop router.

**Contents** <address>—Next-hop address.

<peer-address>—Use the remote peer address as the next-hop address.

<self>—Use a local address as the next-hop address.

- <next-hop> (configuration/policy-options/policy-statement/term/from/source-address-filter)

**Usage**   <configuration>  
           <policy-options>  
           <policy-statement>  
           <term>  
           <from>  
           <source-address-filter>  
             <next-hop>  
               <self/>  
               <peer-address/>  
               <address>address</address>  
             </next-hop>  
           </source-address-filter>  
         </from>  
       </term>  
     </policy-statement>  
   </policy-options>  
</configuration>

**Description** Set the address of the next-hop router.

**Contents** <address>—Next-hop address.

<peer-address>—Use the remote peer address as the next-hop address.

<self>—Use a local address as the next-hop address.

- <next-hop> (configuration/policy-options/policy-statement/term/then)

**Usage**   <configuration>  
           <policy-options>  
           <policy-statement>  
           <term>  
           <then>  
             <next-hop>  
               <self/>  
               <peer-address/>  
               <address>address</address>  
             </next-hop>  
           </then>  
         </term>  
       </policy-statement>  
   </policy-options>  
</configuration>

**Description** Set the address of the next-hop router.

**Contents** <address>—Next-hop address.

<peer-address>—Use the remote peer address as the next-hop address.

<self>—Use a local address as the next-hop address.

## &lt;next-hop&gt; (configuration/policy-options/policy-statement/term/to)

**Usage**

```
<configuration>
 <policy-options>
 <policy-statement>
 <term>
 <to>
 <next-hop>
 <name>name</name> <!-- identifier -->
 </next-hop>
 </to>
 </term>
 </policy-statement>
 </policy-options>
</configuration>
```

**Description** Next-hop router.

**Contents** <name>—Next-hop router.

## &lt;next-hop&gt; (configuration/policy-options/policy-statement/then)

**Usage**

```
<configuration>
 <policy-options>
 <policy-statement>
 <then>
 <next-hop>
 <self/>
 <peer-address/>
 <address>address</address>
 </next-hop>
 </then>
 </policy-statement>
 </policy-options>
</configuration>
```

**Description** Set the address of the next-hop router.

**Contents** <address>—Next-hop address.

<peer-address>—Use the remote peer address as the next-hop address.

<self>—Use a local address as the next-hop address.

- <next-hop> (configuration/policy-options/policy-statement/to)

**Usage**   <configuration>  
          <policy-options>  
            <policy-statement>  
              <to>  
                <next-hop>  
                  <name>name</name>    <!-- identifier -->  
                </next-hop>  
              </to>  
            </policy-statement>  
          </policy-options>  
        </configuration>

**Description**   Next-hop router.

**Contents**   <name>—Next-hop router.

- <next-hop> (configuration/routing-instances/instance/routing-options/rib/static/route)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <routing-options>  
                <rib>  
                  <static>  
                    <route>  
                      <next-hop>  
                        <name>name</name>    <!-- identifier -->  
                      </next-hop>  
                    </route>  
                  </static>  
                </rib>  
              </routing-options>  
            </instance>  
          </routing-instances>  
        </configuration>

**Description**   Next hop to destination.

**Contents**   <name>—Next hop to destination.

<next-hop> (configuration/routing-instances/instance/routing-options/static/route)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <routing-options>  
                <static>  
                    <route>  
                        <next-hop>  
                            <name>name</name>    <!-- identifier -->  
                        </next-hop>  
                    </route>  
                    </static>  
                    </routing-options>  
                </instance>  
            </routing-instances>  
    </configuration>

**Description** Next hop to destination.

**Contents** <name>—Next hop to destination.

<next-hop> (configuration/routing-options/rib/static/route)

**Usage** <configuration>  
    <routing-options>  
        <rib>  
            <static>  
                <route>  
                    <next-hop>  
                            <name>name</name>    <!-- identifier -->  
                        </next-hop>  
                    </route>  
                    </static>  
                </rib>  
            </routing-options>  
    </configuration>

**Description** Next hop to destination.

**Contents** <name>—Next hop to destination.

- <next-hop> (configuration/routing-options/static/route)

**Usage**

```
<configuration>
 <routing-options>
 <static>
 <croute>
 <next-hop>
 <name>name</name> <!-- identifier -->
 </next-hop>
 </croute>
 </static>
 </routing-options>
</configuration>
```

**Description** Next hop to destination.

**Contents** <name>—Next hop to destination.

- <next-hop-map> (configuration/class-of-service/forwarding-policy)

**Usage**

```
<configuration>
 <class-of-service>
 <forwarding-policy>
 <next-hop-map>
 <name>name</name> <!-- identifier -->
 <forwarding-class>...</forwarding-class>
 </next-hop-map>
 </forwarding-policy>
 </class-of-service>
</configuration>
```

**Description** Class-of-service next-hop map.

**Contents** <forwarding-class>—Forwarding class from which to map.

<name>—Name to identify next-hop map.

- <nssa> (configuration/protocols/ospf/area)

**Usage**

```
<configuration>
 <protocols>
 <ospf>
 <area>
 <nssa>
 <default-lsa>...</default-lsa>
 <summaries/>
 <area-range>...</area-range>
 </nssa>
 </area>
 </ospf>
 </protocols>
</configuration>
```

**Description** Configure a not-so-stubby area.

**Contents** <area-range>—Configure NSSA area ranges.  
                   <default-lsa>—Configure a default LSA.  
                   <summaries>—Flood summary LSAs into this NSSA area.

## <nssa> (configuration/routing-instances/instance/protocols/ospf/area)

**Usage** <configuration>  
           <routing-instances>  
             <instance>  
               <protocols>  
                 <ospf>  
                   <area>  
                     <nssa>  
                       <default-lsa>...</default-lsa>  
                       <summaries/>  
                       <area-range>...</area-range>  
                     </nssa>  
                   </area>  
                 </ospf>  
                 </protocols>  
               </instance>  
             </routing-instances>  
       </configuration>

**Description** Configure a not-so-stubby area.  
  
**Contents** <area-range>—Configure NSSA area ranges.  
                   <default-lsa>—Configure a default LSA.  
                   <summaries>—Flood summary LSAs into this NSSA area.

## <oam-liveness> (configuration/interfaces/interface/unit)

**Usage** <configuration>  
           <interfaces>  
             <interface>  
               <unit>  
                 <oam-liveness>  
                   <up-count>up-count</up-count>  
                   <down-count>down-count</down-count>  
                 </oam-liveness>  
               </unit>  
             </interface>  
           </interfaces>  
       </configuration>

**Description** OAM virtual circuit liveness parameters.  
  
**Contents** <down-count>—Number of OAM cells to consider VC down.  
                   <up-count>—Number of OAM cells to consider VC up.

- <oam-liveness> (configuration/interfaces/interface/unit/family/inet/address/multipoint-destination)

**Usage**   <configuration>  
           <interfaces>  
             <interface>  
               <unit>  
                 <family>  
                   <inet>  
                     <address>  
                       <multipoint-destination>  
                         <oam-liveness>  
                           <up-count>up-count</up-count>  
                           <down-count>down-count</down-count>  
                         </oam-liveness>  
                       </multipoint-destination>  
                     </address>  
                   </inet>  
                   </family>  
                   </unit>  
                   </interface>  
                   </interfaces>  
                 </configuration>

**Description**   OAM virtual circuit liveness parameters.

**Contents**   <down-count>—Number of OAM cells to consider VC down.

                  <up-count>—Number of OAM cells to consider VC up.

- <oam-period> (configuration/interfaces/interface/unit)

**Usage**   <configuration>  
           <interfaces>  
             <interface>  
               <unit>  
                 <oam-period>  
                   <oam-period>seconds</oam-period>  
                   <disable>disable</disable>  
                 </oam-period>  
               </unit>  
             </interface>  
           </interfaces>  
         </configuration>

**Description**   OAM cell period.

**Contents**   <disable>—Disable OAM loopback.

                  <oam-period>—OAM cell period.

<oam-period> (configuration/interfaces/interface/unit/family/inet/address/multipoint-destination)

**Usage** <configuration>  
    <interfaces>  
        <interface>  
            <unit>  
                <family>  
                    <inet>  
                        <address>  
                            <multipoint-destination>  
                                <oam-period>  
                                    <oam-period>seconds</oam-period>  
                                    <disable>disable</disable>  
                                </oam-period>  
                                    </multipoint-destination>  
                                    </address>  
                                    </inet>  
                                    </family>  
                                    </unit>  
                                    </interface>  
                                    </interfaces>  
    </configuration>

**Description** OAM cell period.

**Contents** <disable>—Disable OAM loopback.  
<oam-period>—OAM cell period.

<oid> (configuration/snmp/view)

**Usage** <configuration>  
    <snmp>  
        <view>  
            <oid>  
                <name>name</name>    <!-- identifier -->  
                <include/>  
                <exclude/>  
            </oid>  
        </view>  
    </snmp>  
</configuration>

**Description** OID include/exclude list.

**Contents** <exclude>—Exclude this OID from the view.  
<include>—Include this OID in the view.  
<name>—OID to include/exclude from view.

• <options> (configuration/routing-instances/instance/routing-options)

**Usage** <configuration>  
  <routing-instances>  
    <instance>  
      <routing-options>  
        <options>  
          <syslog>...</syslog>  
          <mark>seconds</mark>  
        </options>  
      </routing-options>  
    </instance>  
  </routing-instances>  
</configuration>

**Description** Miscellaneous options.

**Contents** <mark>—Periodically mark the trace file.

<syslog>—Set system logging level.

• <options> (configuration/routing-options)

**Usage** <configuration>  
  <routing-options>  
    <options>  
      <syslog>...</syslog>  
      <mark>seconds</mark>  
    </options>  
  </routing-options>  
</configuration>

**Description** Miscellaneous options.

**Contents** <mark>—Periodically mark the trace file.

<syslog>—Set system logging level.

## <ospf> (configuration/protocols)

**Usage**    <configuration>  
           <protocols>  
               <ospf>  
                   <disable/>  
                   <traceoptions>...</traceoptions>  
                   <rib-group>rib-group</rib-group>  
                   <overload>...</overload>  
                   <graceful-restart>...</graceful-restart>  
                   <traffic-engineering>...</traffic-engineering>  
                   <route-type-community>route-type-community-choice</route-type-community>  
                   <domain-id>...</domain-id>  
                   <domain-vpn-tag>domain-vpn-tag</domain-vpn-tag>  
                   <preference>preference</preference>  
                   <external-preference>external-preference</external-preference>  
                   <export>...</export>  
                   <reference-bandwidth>reference-bandwidth</reference-bandwidth>  
                   <area>...</area>  
               </ospf>  
           </protocols>  
       </configuration>

**Description**    OSPF configuration.

**Contents**    <area>—Configure an OSPF area.  
                   <disable>—Disable OSPF.  
                   <domain-id>—Configure domain ID.  
                   <domain-vpn-tag>—Domain VPN tag for type 5 LSA.  
                   <export>—Export policy.  
                   <external-preference>—Preference of external routes.  
                   <graceful-restart>—Configure graceful restart attributes.  
                   <overload>—Set the overload mode (repel transit traffic).  
                   <preference>—Preference of internal routes.  
                   <reference-bandwidth>—Bandwidth for calculating metric defaults.  
                   <rib-group>—Routing table group for importing OSPF routes.  
                   <route-type-community>—Specify BGP extended community value to encode OSPF route type.  
                      ■ iana—BGP extended community value used is 0x0306.  
                      ■ vendor—Vendor BGP extended community value used is 0x8000.  
                   <traceoptions>—Trace options for OSPF.  
                   <traffic-engineering>—Configure traffic engineering attributes.

- <ospf> (configuration/routing-instances/instance/protocols)
  - **Usage**   <configuration>
    - <routing-instances>
    - <instance>
    - <protocols>
    - <ospf>
      - <disable/>
      - <traceoptions>...</traceoptions>
      - <rib-group>rib-group</rib-group>
      - <overload>...</overload>
      - <graceful-restart>...</graceful-restart>
      - <traffic-engineering>...</traffic-engineering>
      - <route-type-community>route-type-community</route-type-community>
      - <domain-id>...</domain-id>
      - <domain-vpn-tag>domain-vpn-tag</domain-vpn-tag>
      - <preference>preference</preference>
      - <external-preference>external-preference</external-preference>
      - <export>...</export>
      - <reference-bandwidth>reference-bandwidth</reference-bandwidth>
      - <area>...</area>
    - </ospf>
    - </protocols>
    - </instance>
    - </routing-instances>
  - </configuration>
- **Description**   OSPF configuration.
- **Contents**
  - <area>—Configure an OSPF area.
  - <disable>—Disable OSPF.
  - <domain-id>—Configure domain ID.
  - <domain-vpn-tag>—Domain VPN tag for type 5 LSA.
  - <export>—Export policy.
  - <external-preference>—Preference of external routes.
  - <graceful-restart>—Configure graceful restart attributes.
  - <overload>—Set the overload mode (repel transit traffic).
  - <preference>—Preference of internal routes.
  - <reference-bandwidth>—Bandwidth for calculating metric defaults.
  - <rib-group>—Routing table group for importing OSPF routes.
  - <route-type-community>—Specify BGP extended community value to encode OSPF route type.
    - iana—BGP extended community value used is 0x0306.
    - vendor—Vendor BGP extended community value used is 0x8000.

<traceoptions>—Trace options for OSPF.

<traffic-engineering>—Configure traffic engineering attributes.

## <output> (configuration/forwarding-options/monitoring/family/inet)

**Usage**

```
<configuration>
 <forwarding-options>
 <monitoring>
 <family>
 <inet>
 <output>
 <export-format>export-format-choice</export-format> <!-- mandatory -->
 <export-interval>seconds</export-interval>
 <destination-address>address</destination-address> <!-- mandatory -->
 <destination-port>destination-port</destination-port> <!-- mandatory -->
 <source-address>source-address</source-address> <!-- mandatory -->
 <interface>...</interface> <!-- mandatory -->
 </output>
 </inet>
 </family>
 </monitoring>
 </forwarding-options>
</configuration>
```

**Description** Monitoring data disposition.

**Contents** <destination-address>—Address to which monitored packets will be sent.

<destination-port>—Port to which monitored packets will be sent.

<export-format>—Format for sending monitoring information.

- cflowd-version-5—Export in cflowd version 5 format.

<export-interval>—Interval of distributing monitoring information.

<interface>—Interfaces used to send monitored information.

<source-address>—Address to use for generating monitored packets.

- <output> (configuration/forwarding-options/sampling)

**Usage**

```
<configuration>
 <forwarding-options>
 <sampling>
 <output>
 <file>...</file>
 <cflowd>...</cflowd>
 <port-mirroring>...</port-mirroring>
 </output>
 </sampling>
 </forwarding-options>
</configuration>
```

**Description** Traffic sampling data disposition.

**Contents** <cflowd>—Configure sending traffic aggregates in cflowd format.

<file>—Configure parameters for dumping sampled packets.

<port-mirroring>—Configure sending sampled traffic out through an interface.

- <overload> (configuration/protocols/isis)

**Usage**

```
<configuration>
 <protocols>
 <isis>
 <overload>
 <timeout>seconds</timeout>
 </overload>
 </isis>
 </protocols>
</configuration>
```

**Description** Set the overload bit (no transit traffic).

**Contents** <timeout>—Time after which overload bit is reset.

- <overload> (configuration/protocols/ospf)

**Usage**

```
<configuration>
 <protocols>
 <ospf>
 <overload>
 <timeout>seconds</timeout>
 </overload>
 </ospf>
 </protocols>
</configuration>
```

**Description** Set the overload mode (repel transit traffic).

**Contents** <timeout>—Time after which overload mode is reset.

## &lt;overload&gt; (configuration/routing-instances/instance/protocols/isis)

**Usage** <configuration>  
   <routing-instances>  
     <instance>  
       <protocols>  
         <isis>  
           <overload>  
             <timeout>seconds</timeout>  
           </overload>  
         </isis>  
       </protocols>  
     </instance>  
   </routing-instances>  
</configuration>

**Description** Set the overload bit (no transit traffic).

**Contents** <timeout>—Time after which overload bit is reset.

## &lt;overload&gt; (configuration/routing-instances/instance/protocols/ospf)

**Usage** <configuration>  
   <routing-instances>  
     <instance>  
       <protocols>  
         <ospf>  
           <overload>  
             <timeout>seconds</timeout>  
           </overload>  
         </ospf>  
       </protocols>  
     </instance>  
   </routing-instances>  
</configuration>

**Description** Set the overload mode (repel transit traffic).

**Contents** <timeout>—Time after which overload mode is reset.

- <packet-length> (configuration/firewall/family/inet/filter/term/from)

•

•     **Usage**   <configuration>  
•        <firewall>  
•           <family>  
•              <inet>  
•               <filter>  
•                <term>  
•                 <from>  
•                 **<packet-length>**  
•                 <name>name</name>    <!-- identifier -->  
•                 **</packet-length>**  
•                 </from>  
•                 </term>  
•                 </filter>  
•                 </inet>  
•                 </family>  
•                 </firewall>  
•        </configuration>

•     **Description**   Match packet length.

•     **Contents**   <name>—Range of values.

- <packet-length> (configuration/firewall/family/inet6/filter/term/from)

•

•     **Usage**   <configuration>  
•        <firewall>  
•           <family>  
•              <inet6>  
•               <filter>  
•                <term>  
•                <from>  
•                **<packet-length>**  
•                <name>name</name>    <!-- identifier -->  
•                **</packet-length>**  
•                </from>  
•                </term>  
•                </filter>  
•                </inet6>  
•                </family>  
•                </firewall>  
•        </configuration>

•     **Description**   Match packet length.

•     **Contents**   <name>—Range of values.

## &lt;packet-length-except&gt; (configuration/firewall/family/inet/filter/term/from) . . .

**Usage** <configuration>  
   <firewall>  
     <family>  
       <inet>  
         <filter>  
           <term>  
             <from>  
               **<packet-length-except>**  
               <name>name</name>   <!-- identifier -->  
               **</packet-length-except>**  
             </from>  
           </term>  
         </filter>  
       </inet>  
     </family>  
   </firewall>  
</configuration>

**Description** Do not match packet length.

**Contents** <name>—Range of values.

## &lt;packet-length-except&gt; (configuration/firewall/family/inet6/filter/term/from) . . .

**Usage** <configuration>  
   <firewall>  
     <family>  
       <inet6>  
         <filter>  
           <term>  
             <from>  
               **<packet-length-except>**  
               <name>name</name>   <!-- identifier -->  
               **</packet-length-except>**  
             </from>  
           </term>  
         </filter>  
       </inet6>  
     </family>  
   </firewall>  
</configuration>

**Description** Do not match packet length.

**Contents** <name>—Range of values.

- <path> (configuration/protocols/mpls)

**Usage**

```
<configuration>
 <protocols>
 <mpls>
 <path>
 <name>name</name> <!-- identifier -->
 <path-list>...</path-list>
 </path>
 </mpls>
 </protocols>
</configuration>
```

**Description** Route of a label-switched path.

**Contents** <name>—Name of label-switched path.

<path-list>—List of routers in the label-switched path.

- <path> (configuration/protocols/mpls/static-path)

**Usage**

```
<configuration>
 <protocols>
 <mpls>
 <static-path>
 <path>
 <name>name</name> <!-- identifier -->
 <next-hop>next-hop</next-hop> <!-- mandatory -->
 <push>push</push>
 <double-push-bottom>double-push-bottom</double-push-bottom>
 <double-push-top>double-push-top</double-push-top>
 <triple-push-bottom>triple-push-bottom</triple-push-bottom>
 <triple-push-middle>triple-push-middle</triple-push-middle>
 <triple-push-top>triple-push-top</triple-push-top>
 <preference>preference</preference>
 <class-of-service>class-of-service</class-of-service>
 </path>
 </static-path>
 </mpls>
 </protocols>
</configuration>
```

**Description** Name of static label-switched path.

**Contents** <class-of-service>—Class-of-service value.

<name>—Destination prefix.

<next-hop>—Next hop to destination.

<preference>—Preference value.

<push>—Label to push.

## &lt;path-list&gt; (configuration/protocols/mpls/path)

```
Usage <configuration>
 <protocols>
 <mpls>
 <path>
 <path-list>
 <name>name</name> <!-- identifier -->
 <loose/>
 <strict/>
 </path-list>
 </path>
 </mpls>
 </protocols>
 </configuration>
```

**Description** List of routers in the label-switched path.

**Contents** <loose>—Next hop might not be adjacent.

<name>—Address of next system in path.

<strict>—Next hop must be adjacent.

## &lt;payload-scrambler&gt; (configuration/interfaces/interface/sonet-options)

```
Usage <configuration>
 <interfaces>
 <interface>
 <sonet-options>
 <payload-scrambler/>
 </sonet-options>
 </interface>
 </interfaces>
 </configuration>
```

**Description** Enable payload scrambling.

## &lt;peer&gt; (configuration/protocols/link-management)

```
Usage <configuration>
 <protocols>
 <link-management>
 <peer>
 <name>name</name> <!-- identifier -->
 <address>address</address> <!-- mandatory -->
 <te-link>...</te-link> <!-- mandatory -->
 </peer>
 </link-management>
 </protocols>
 </configuration>
```

**Description** Define a network or LMP peer.



## &lt;peer&gt; (configuration/protocols/msdp/group)

```

Usage <configuration>
 <protocols>
 <msdp>
 <group>
 <peer>
 <name>name</name> <!-- identifier -->
 <disable/>
 <export>...</export>
 <import>...</import>
 <local-address>local-address</local-address>
 <traceoptions>...</traceoptions>
 <default-peer/>
 </peer>
 </group>
 </msdp>
 </protocols>
 </configuration>

```

**Description** Configure an MSDP peer.

**Contents**

- <default-peer>—Default RPF peer.
- <disable>—Disable MSDP.
- <export>—Export policy.
- <import>—Import policy.
- <local-address>—Local address.
- <name>—Peer address.
- <traceoptions>—Trace options for MSDP.

## &lt;perfect-forward-secrecy&gt; (configuration/security/ipsec/policy)

```

Usage <configuration>
 <security>
 <ipsec>
 <policy>
 <perfect-forward-secrecy>
 <keys>keys-choice</keys>
 </perfect-forward-secrecy>
 </policy>
 </ipsec>
 </security>
 </configuration>

```

**Description** Define perfect forward secrecy for a dynamic SA.

• **Contents** <keys>—Define Diffie-Hellman group.

- group1—Diffie-Hellman Group1.
- group2—Diffie-Hellman Group2.

## <permissions> (configuration/system/login/class)

```
• Usage <configuration>
 <system>
 <login>
 <class>
 <permissions>
 <name>name</name> <!-- identifier -->
 </permissions>
 </class>
 </login>
 </system>
</configuration>
```

• **Description** Set of permitted operation categories.

• **Contents** <name>—Set of permitted operation categories.

- access—Can view network access configuration.
- access-control—Can modify network access configuration.
- admin—Can view user accounts.
- admin-control—Can modify user accounts.
- all—All permission bits turned on.
- clear—Can clear learned network information.
- configure—Can enter configuration mode.
- control—Can modify any configuration values.
- field—Special for field (debug) support.
- firewall—Can view firewall configuration.
- firewall-control—Can modify firewall configuration.
- floppy—Can read and write the floppy drive.
- interface—Can view interface configuration.
- interface-control—Can modify interface configuration.
- maintenance—Can perform system maintenance (as wheel).
- network—Can access the network.

- reset—Can reset and restart interfaces and processes.
- rollback—Can rollback for depth greater than zero.
- routing—Can view routing configuration.
- routing-control—Can modify routing configuration.
- secret—Can view secret configuration.
- secret-control—Can modify secret configuration.
- security—Can view security configuration.
- security-control—Can modify security configuration.
- shell—Can start a local shell.
- snmp—Can view SNMP configuration.
- snmp-control—Can modify SNMP configuration.
- system—Can view system configuration.
- system-control—Can modify system configuration.
- trace—Can view trace file settings.
- trace-control—Can modify trace file settings.
- view—Can view current values and statistics.

## <pic> (configuration/chassis/fpc)

**Usage** <configuration>  
   <chassis>  
     <fpc>  
       <pic>  
         <name>name</name>   <!-- identifier -->  
         <framing>framing-choice</framing>  
         <vtmapping>vtmapping-choice</vtmapping>  
         <no-concatenate/>  
         <sparse-dlcis/>  
         <atm-cell-relay-accumulation/>  
         <ct3>...</ct3>  
         <ce1>...</ce1>  
       </pic>  
     </fpc>  
   </chassis>  
</configuration>

**Description** Physical Interface Card (PIC) number.

**Contents** <atm-cell-relay-accumulation>—Enable ATM cell relay accumulation mode.  
           <ce1>—CE1 NxDS0 PIC configuration.

<pic-console-authentication> (configuration/system)

- <ct3>—CT3 NxDSO PIC configuration.
- <framing>—Framing mode.
  - sdh—SONET/SDH mode.
  - sonet—SONET mode.
- <name>—PIC slot number.
- <no-concatenate>—Do not concatenate channels.
- <sparse-dlcis>—Run in sparse DLCI mode.
- <vtmapping>—VT mapping mode.
  - itu-t—ITU-T mode.
  - klm—KLM mode.

• <pic-console-authentication> (configuration/system)

**Usage**   <configuration>  
          <system>  
            <pic-console-authentication>  
              <plain-text-password-value>*plain-text-password*</plain-text-password-value>  
              <encrypted-password>*encrypted-password*</encrypted-password>  
            </pic-console-authentication>  
          </system>  
        </configuration>

**Description**   Authentication for the console port on PICs.

**Contents**   <encrypted-password>—Crypted password string.

          <plain-text-password-value>—Plain text password.

• <pim> (configuration/protocols)

**Usage**   <configuration>  
          <protocols>  
            <pim>  
              <disable/>  
              <traceoptions>...</traceoptions>  
              <dense-groups>...</dense-groups>  
              <vpn-group-address>*vpn-group-address*</vpn-group-address>  
              <rib-group>...</rib-group>  
              <import>...</import>  
              <rp>...</rp>  
              <interface>...</interface>  
            </pim>  
          </protocols>  
        </configuration>

**Description**   PIM configuration.

<b>Contents</b>	<dense-groups>—Dense mode groups for sparse-dense mode.
	<disable>—Disable PIM.
	<import>—PIM sparse import join policy.
	<interface>—PIM interface options.
	<rib-group>—Routing table group.
	<rp>—Router's rendezvous point properties.
	<traceoptions>—Trace options for PIM.
	<vpn-group-address>—Group address for the VPN in provider space.

## <pim> (configuration/routing-instances(instance/protocols))

```

Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <pim>
 <disable/>
 <traceoptions>...</traceoptions>
 <dense-groups>...</dense-groups>
 <vpn-group-address>vpn-group-address</vpn-group-address>
 <rib-group>...</rib-group>
 <import>...</import>
 <rp>...</rp>
 <interface>...</interface>
 </pim>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>

```

**Description** PIM configuration.

<b>Contents</b>	<dense-groups>—Dense mode groups for sparse-dense mode.
	<disable>—Disable PIM.
	<import>—PIM sparse import join policy.
	<interface>—PIM interface options.
	<rib-group>—Routing table group.
	<rp>—Router's rendezvous point properties.
	<traceoptions>—Trace options for PIM.
	<vpn-group-address>—Group address for the VPN in provider space.

- <policer> (configuration/firewall)

**Usage**   <configuration>  
          <firewall>  
            <policer>  
              <name>name</name>    <!-- identifier -->  
              <if-exceeding>...</if-exceeding>  
              <then>...</then>  
            </policer>  
          </firewall>  
        </configuration>

**Description**   Policer template definition.

**Contents**   <if-exceeding>—Define rate limits.

                  <name>—Policer name.

                  <then>—Action to take if the rate limits are exceeded.

- <policer> (configuration/firewall/family/inet/filter)

**Usage**   <configuration>  
          <firewall>  
            <family>  
              <inet>  
                <filter>  
                  <policer>  
                    <name>name</name>    <!-- identifier -->  
                    <if-exceeding>...</if-exceeding>  
                    <then>...</then>  
                </policer>  
                </filter>  
              </inet>  
            </family>  
          </firewall>  
        </configuration>

**Description**   Define a policer.

**Contents**   <if-exceeding>—Define rate limits.

                  <name>—Policer name.

                  <then>—Action to take if the rate limits are exceeded.

## &lt;policer&gt; (configuration/firewall/family/inet6/filter)

**Usage**   <configuration>  
           <firewall>  
           <family>  
           <inet6>  
           <filter>  
           <policer>  
             <name>name</name>    <!-- identifier -->  
             <if-exceeding>...</if-exceeding>  
             <then>...</then>  
           </policer>  
           </filter>  
           </inet6>  
           </family>  
           </firewall>  
         </configuration>

**Description** Define a policer.

**Contents** <if-exceeding>—Define rate limits.

<name>—Policer name.

<then>—Action to take if the rate limits are exceeded.

## &lt;policer&gt; (configuration/interfaces/interface/unit/family/ccc)

**Usage**   <configuration>  
           <interfaces>  
           <interface>  
           <unit>  
           <family>  
           <ccc>  
             <policer>  
               <input>input</input>  
               <output>output</output>  
             </policer>  
           </ccc>  
           </family>  
           </unit>  
           </interface>  
         </interfaces>  
       </configuration>

**Description** Interface policing.

**Contents** <input>—Name of policer applied to received packets.

<output>—Name of policer applied to transmitted packets.

- <policer> (configuration/interfaces/interface/unit/family/inet)

**Usage**   <configuration>  
          <interfaces>  
            <interface>  
              <unit>  
                <family>  
                  <inet>  
                    **<policer>**  
                      <input>*input*</input>  
                      <output>*output*</output>  
                    **</policer>**  
                  </inet>  
                </family>  
              </unit>  
            </interface>  
          </interfaces>  
    </configuration>

**Description**   Interface policing.

**Contents**   <input>—Name of policer applied to received packets.  
                  <output>—Name of policer applied to transmitted packets.

- <policer> (configuration/interfaces/interface/unit/family/tcc)

**Usage**   <configuration>  
          <interfaces>  
            <interface>  
              <unit>  
                <family>  
                  <tcc>  
                    **<policer>**  
                      <input>*input*</input>  
                      <output>*output*</output>  
                    **</policer>**  
                  </tcc>  
                </family>  
              </unit>  
            </interface>  
          </interfaces>  
    </configuration>

**Description**   Interface policing.

**Contents**   <input>—Name of policer applied to received packets.  
                  <output>—Name of policer applied to transmitted packets.

<policy> (configuration/policy-options/policy-statement/from)

**Usage** <configuration>  
    <policy-options>  
        <policy-statement>  
            <from>  
                **<policy>**  
                    <name>name</name>    <!-- identifier --&gt;<br/>                **</policy>**  
            </from>  
            </policy-statement>  
        </policy-options>  
    </configuration>

**Description** Name of policy to evaluate.

**Contents** <name>—Name of policy to evaluate.

<policy> (configuration/policy-options/policy-statement/term/from)

**Usage** <configuration>  
    <policy-options>  
        <policy-statement>  
            <term>  
                <from>  
                    **<policy>**  
                        <name>name</name>    <!-- identifier --&gt;<br/>                    **</policy>**  
                </from>  
                </term>  
            </policy-statement>  
        </policy-options>  
    </configuration>

**Description** Name of policy to evaluate.

**Contents** <name>—Name of policy to evaluate.

• <policy> (configuration/policy-options/policy-statement/term/to)

```
Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <to>
 <policy>
 <name>name</name> <!-- identifier -->
 </policy>
 </to>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>
```

**Description** Name of policy to evaluate.

**Contents** <name>—Name of policy to evaluate.

• <policy> (configuration/policy-options/policy-statement/to)

```
Usage <configuration>
 <policy-options>
 <policy-statement>
 <to>
 <policy>
 <name>name</name> <!-- identifier -->
 </policy>
 </to>
 </policy-statement>
 </policy-options>
 </configuration>
```

**Description** Name of policy to evaluate.

**Contents** <name>—Name of policy to evaluate.

<policy> (configuration/protocols/bgp/group/neighbor/traceoptions/flag/filter)

**Usage** <configuration>  
    <protocols>  
        <bpg>  
            <group>  
                <neighbor>  
                    <traceoptions>  
                        <flag>  
                            <filter>  
                                **<policy>**  
                                    <name>name</name>    <!-- identifier --&gt;<br/>                                **</policy>**  
                                    </filter>  
                                </flag>  
                                </traceoptions>  
                                </neighbor>  
                                </group>  
                                </bpg>  
                                </protocols>  
    </configuration>

**Description** Filter policy.

**Contents** <name>—Filter policy.

<policy> (configuration/protocols/bgp/group/traceoptions/flag/filter)

**Usage** <configuration>  
    <protocols>  
        <bpg>  
            <group>  
                <traceoptions>  
                    <flag>  
                        <filter>  
                            **<policy>**  
                                    <name>name</name>    <!-- identifier --&gt;<br/>                                **</policy>**  
                                    </filter>  
                                </flag>  
                                </traceoptions>  
                                </group>  
                                </bpg>  
                                </protocols>  
    </configuration>

**Description** Filter policy.

**Contents** <name>—Filter policy.

• <policy> (configuration/protocols/bgp/traceoptions/flag/filter)

**Usage**   <configuration>  
          <protocols>  
            <bgp>  
              <traceoptions>  
                <flag>  
                  <filter>  
                    **<policy>**  
                      <name>name</name>    <!-- identifier --&gt;<br/>                    **</policy>**  
                  </filter>  
                </flag>  
              </traceoptions>  
            </bgp>  
          </protocols>  
    </configuration>

**Description**   Filter policy.

**Contents**   <name>—Filter policy.

• <policy> (configuration/protocols/rip/traceoptions/flag/filter)

**Usage**   <configuration>  
          <protocols>  
            <rip>  
              <traceoptions>  
                <flag>  
                  <filter>  
                    **<policy>**  
                      <name>name</name>    <!-- identifier --&gt;<br/>                    **</policy>**  
                  </filter>  
                </flag>  
              </traceoptions>  
            </rip>  
          </protocols>  
    </configuration>

**Description**   Filter policy.

**Contents**   <name>—Filter policy.

<policy> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/traceoptions/flag/filter)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <neighbor>  
                            <traceoptions>  
                                <flag>  
                                <filter>  
                                    **<policy>**  
                                        <name>name</name>    <!-- identifier --&gt;<br/>                                    **</policy>**  
                                        </filter>  
                                        </flag>  
                                        </traceoptions>  
                                        </neighbor>  
                                        </group>  
                                        </bgp>  
                                        </protocols>  
                                        </instance>  
                                        </routing-instances>  
    </configuration>

**Description** Filter policy.

**Contents** <name>—Filter policy.

- <policy> (configuration/routing-instances/instance/protocols/bgp/group/traceoptions/flag/filter)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <traceoptions>
 <flag>
 <filter>
 <policy>
 <name>name</name> <!-- identifier -->
 </policy>
 </filter>
 </flag>
 </traceoptions>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Filter policy.

**Contents** <name>—Filter policy.

- <policy> (configuration/routing-instances/instance/protocols/bgp/traceoptions/flag/filter)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <traceoptions>
 <flag>
 <filter>
 <policy>
 <name>name</name> <!-- identifier -->
 </policy>
 </filter>
 </flag>
 </traceoptions>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Filter policy.

**Contents** <name>—Filter policy.

<policy> (configuration/routing-instances/instance/protocols/rip/traceoptions/flag/filter)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <rip>  
                    <traceoptions>  
                        <flag>  
                            <filter>  
                                **<policy>**  
                                    <name>name</name>    <!-- identifier --&gt;<br/>                                **</policy>**  
                                    </filter>  
                                </flag>  
                                </traceoptions>  
                            </rip>  
                            </protocols>  
                            </instance>  
                            </routing-instances>  
    </configuration>

**Description** Filter policy.

**Contents** <name>—Filter policy.

<policy> (configuration/routing-instances/instance/routing-options/aggregate/route)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <routing-options>  
                <aggregate>  
                    <route>  
                        **<policy>**  
                            <name>name</name>    <!-- identifier --&gt;<br/>                                **</policy>**  
                            </route>  
                            </aggregate>  
                            </routing-options>  
                            </instance>  
                            </routing-instances>  
    </configuration>

**Description** Policy filter.

**Contents** <name>—Policy filter.

- <policy> (configuration/routing-instances/instance/routing-options/generate/route)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <routing-options>  
                <generate>  
                  <route>  
                    <policy>  
                      <name>name</name>   <!-- identifier -->  
                    </policy>  
                  </route>  
                </generate>  
                </routing-options>  
            </instance>  
          </routing-instances>  
    </configuration>

**Description**   Policy filter.

**Contents**   <name>—Policy filter.

- <policy> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <routing-options>  
                <rib>  
                  <aggregate>  
                    <route>  
                      <policy>  
                      <name>name</name>   <!-- identifier -->  
                      </policy>  
                    </route>  
                  </aggregate>  
                </rib>  
                </routing-options>  
            </instance>  
          </routing-instances>  
    </configuration>

**Description**   Policy filter.

**Contents**   <name>—Policy filter.

<policy> (configuration/routing-instances/instance/routing-options/rib/generate/route)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <routing-options>  
                <rib>  
                    <generate>  
                        <route>  
                            **<policy>**  
                                <name>name</name>    <!-- identifier --&gt;<br/>                            **</policy>**  
                        </route>  
                    </generate>  
                </rib>  
                </routing-options>  
            </instance>  
        </routing-instances>  
    </configuration>

**Description** Policy filter.

**Contents** <name>—Policy filter.

<policy> (configuration/routing-options/aggregate/route)

**Usage** <configuration>  
    <routing-options>  
        <aggregate>  
            <route>  
                **<policy>**  
                    <name>name</name>    <!-- identifier --&gt;<br/>                **</policy>**  
            </route>  
            </aggregate>  
        </routing-options>  
    </configuration>

**Description** Policy filter.

**Contents** <name>—Policy filter.

• <policy> (configuration/routing-options/generate/route)

**Usage** <configuration>  
    <routing-options>  
        <generate>  
            <croute>  
                **<policy>**  
                    <name>name</name>   <!-- identifier -->  
                **</policy>**  
            </croute>  
        </generate>  
    </routing-options>  
</configuration>

**Description** Policy filter.

**Contents** <name>—Policy filter.

• <policy> (configuration/routing-options/rib/aggregate/route)

**Usage** <configuration>  
    <routing-options>  
        <rib>  
            <aggregate>  
                <route>  
                    **<policy>**  
                        <name>name</name>   <!- identifier -->  
                    **</policy>**  
                </route>  
                </aggregate>  
            </rib>  
        </routing-options>  
</configuration>

**Description** Policy filter.

**Contents** <name>—Policy filter.

## &lt;policy&gt; (configuration/routing-options/rib/generate/route)

**Usage** <configuration>  
   <routing-options>  
     <rib>  
       <generate>  
         <route>  
           **<policy>**  
             <name>name</name>   <!-- identifier -->  
           **</policy>**  
         </route>  
       </generate>  
     </rib>  
   </routing-options>  
</configuration>

**Description** Policy filter.

**Contents** <name>—Policy filter.

## &lt;policy&gt; (configuration/security/ike)

**Usage** <configuration>  
   <security>  
     <ike>  
       **<policy>**  
        <name>name</name>   <!-- identifier -->  
        <mode>mode-choice</mode>  
        <proposals>...</proposals>  
        <pre-shared-key>...</pre-shared-key>  
       **</policy>**  
     </ike>  
   </security>  
</configuration>

**Description** Define an IKE policy.

**Contents** <mode>—Define the first phase mode.

- aggressive—Aggressive mode.

- main—Main mode.

<name>—IKE peer address.

<pre-shared-key>—Define a preshared key.

<proposals>—Define the set of IKE proposals.

- <policy> (configuration/security/ipsec)

**Usage**   <configuration>  
           <security>  
           <ipsec>  
           <policy>  
             <name>name</name>    <!-- identifier -->  
             <perfect-forward-secrecy>...</perfect-forward-secrecy>  
             <proposals>...</proposals>  
           </policy>  
           </ipsec>  
           </security>  
         </configuration>

**Description** Define an IPSec policy.

**Contents** <name>—Name of the policy.

<perfect-forward-secrecy>—Define perfect forward secrecy for a dynamic SA.

<proposals>—Define the set of IPSec proposals.

- <policy-options> (configuration)

**Usage**   <configuration>  
           <policy-options>  
             <prefix-list>...</prefix-list>  
             <policy-statement>...</policy-statement>  
             <community>...</community>  
             <as-path>...</as-path>  
             <damping>...</damping>  
           </policy-options>  
         </configuration>

**Description** Routing policy option configuration.

**Contents** <as-path>—BGP autonomous system path regular expression.

<community>—BGP community information.

<damping>—BGP route flap damping properties.

<policy-statement>—Routing policy.

<prefix-list>—Define a named set of address prefixes.

## &lt;policy-statement&gt; (configuration/policy-options)

**Usage**

```
<configuration>
 <policy-options>
 <policy-statement>
 <name>name</name> <!-- identifier -->
 <term>...</term>
 <from>...</from>
 <to>...</to>
 <then>...</then>
 </policy-statement>
 </policy-options>
</configuration>
```

**Description** Routing policy.

**Contents** <from>—Conditions to match a route's source.

<name>—Name to identify a policy filter.

<term>—Policy term.

<then>—Actions to take if 'from' and 'to' conditions match.

<to>—Conditions to match a route's destination.

## &lt;port&gt; (configuration/chassis/fpc/pic/ct3)

**Usage**

```
<configuration>
 <chassis>
 <fpc>
 <pic>
 <ct3>
 <port>
 <name>name</name> <!-- identifier -->
 <t1>...</t1>
 </port>
 </ct3>
 </pic>
 </fpc>
 </chassis>
</configuration>
```

**Description** Ct3 port.

**Contents** <name>—Ct3 port number.

<t1>—T1 link.

- <port> (configuration/firewall/family/inet/filter/term/from)

**Usage**   <configuration>  
          <firewall>  
            <family>  
              <inet>  
                <filter>  
                  <term>  
                    <from>  
                      **<port>**  
                      <name>name</name>    <!-- identifier -->  
                    **</port>**  
                    </from>  
                  </term>  
                  </filter>  
                </inet>  
            </family>  
          </firewall>  
  </configuration>

**Description**   Match TCP/UDP source or destination port.

**Contents**   <name>—No documentation is available yet.

- afs—Andrew File System.
- bgp—BGP.
- biff—Biff/Comsat.
- bootpc—BOOTP Client.
- bootps—BOOTP Server.
- cmd—UNIX rsh.
- cvspserver—CVS pserver.
- dhcp—DHCP.
- domain—Domain Name System (DNS).
- eklogin—Encrypted Kerberos rlogin.
- ekshell—Encrypted Kerberos rsh.
- exec—UNIX rexec.
- finger—Finger
- ftp—FTP.
- ftp-data—FTP data.
- http—HTTP.
- https—Secure HTTP.

- ident—Ident.
- imap—IMAP.
- kerberos-sec—Kerberos Sec.
- klogin—Kerberos rlogin.
- kpasswd—Kerberos passwd.
- krb-prop—Kerberos db propagation.
- krbupdate—Kerberos db update.
- kshell—Kerberos rsh.
- ldap—LDAP.
- ldp—Label Distribution Protocol.
- login—UNIX rlogin.
- mobileip-agent—Mobile IP agent.
- mobilip-mn—Mobile IP MN.
- msdp—Multicast Source Discovery Protocol.
- name—Range of values.
- netbios-dgm—NETBIOS DGM.
- netbios-ns—NETBIOS NS.
- netbios-ssn—NETBIOS SSN.
- nfsd—NFS.
- nntp—NNTP.
- ntalk—New Talk.
- ntp—NTP.
- pop3—POP3.
- pptp—Point-to-Point Tunneling.
- printer—Printer.
- radacct—RADIUS accounting.
- radius—RADIUS authentication.
- rip—Routing Information Protocol.
- rkinit—Kerberos remote kinit.

<port> (configuration/firewall/family/inet6/filter/term/from)

- smtp—SMTP.
- snmp—SNMP.
- snmptrap—SNMP traps.
- snpp—Simple paging protocol.
- socks—Socks.
- ssh—Secure shell (ssh).
- sunrpc—SUN RPC.
- syslog—Syslog.
- tacacs—TACACS (original, not TACACS+ ).
- talk—UNIX Talk.
- telnet—Telnet.
- tftp—TFTP.
- timed—UNIX Time Daemon.
- who—UNIX rwho.
- xdmcp—XDMCP.

<port> (configuration/firewall/family/inet6/filter/term/from)

**Usage** <configuration>  
    <firewall>  
        <family>  
            <inet6>  
                <filter>  
                    <term>  
                        <from>  
                            <port>  
                                <name>name</name>    <!-- identifier -->  
                            </port>  
                        </from>  
                        </term>  
                    </filter>  
                </inet6>  
            </family>  
        </firewall>  
    </configuration>

**Description** Match TCP/UDP source or destination port.

**Contents** <name>—No documentation is available yet.

- afs—Andrew File System.
- bgp—BGP.
- biff—Biff/Comsat.
- bootpc—BOOTP Client.
- bootps—BOOTP Server.
- cmd—UNIX rsh.
- cvspserver—CVS pserver.
- dhcp—DHCP.
- domain—Domain Name System (DNS).
- eklogin—Encrypted Kerberos rlogin.
- ekshell—Encrypted Kerberos rsh.
- exec—UNIX rexec.
- finger—Finger.
- ftp—FTP.
- ftp-data—FTP data.
- http—HTTP.
- https—Secure HTTP.
- ident—Ident.
- imap—IMAP.
- kerberos-sec—Kerberos Sec.
- klogin—Kerberos rlogin.
- kpasswd—Kerberos passwd.
- krb-prop—Kerberos db propagation.
- krbupdate—Kerberos db update.
- kshell—Kerberos rsh.
- ldap—LDAP.
- ldp—Label Distribution Protocol.
- login—UNIX rlogin.

- ■ mobileip-agent—Mobile IP agent.
- ■ mobilip-mn—Mobile IP MN.
- ■ msdp—Multicast Source Discovery Protocol.
- ■ name—Range of values.
- ■ netbios-dgm—NETBIOS DGM.
- ■ netbios-ns—NETBIOS NS.
- ■ netbios-ssn—NETBIOS SSN.
- ■ nfsd—NFS.
- ■ nntp—NNTP.
- ■ ntalk—New Talk.
- ■ ntp—NTP.
- ■ pop3—POP3.
- ■ pptp—Point-to-Point Tunneling.
- ■ printer—Printer.
- ■ radacct—RADIUS accounting.
- ■ radius—RADIUS authentication.
- ■ rip—Routing Information Protocol.
- ■ rkinit—Kerberos remote kinit.
- ■ smtp—SMTP.
- ■ snmp—SNMP.
- ■ snmptrap—SNMP traps.
- ■ snpp—Simple paging protocol.
- ■ socks—Socks.
- ■ ssh—Secure shell (ssh).
- ■ sunrpc—SUN RPC.
- ■ syslog—Syslog.
- ■ tacacs—TACACS (original, not TACACS+ ).
- ■ talk—UNIX Talk.
- ■ telnet—Telnet.

- tftp—TFTP.
- timed—UNIX Time Daemon.
- who—UNIX rwho.
- xdmcp—XDMCP.

## <port-except> (configuration/firewall/family/inet/filter/term/from)

**Usage**

```

<configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <port-except>
 <name>name</name> <!-- identifier -->
 </port-except>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
</configuration>
```

**Description** Do not match TCP/UDP source or destination port.

**Contents** <name>—No documentation is available yet.

- afs—Andrew File System.
- bgp—BGP.
- biff—Biff/Comsat.
- bootpc—BOOTP Client.
- bootps—BOOTP Server.
- cmd—UNIX rsh.
- cvspserver—CVS pserver.
- dhcp—DHCP.
- domain—Domain Name System (DNS).
- eklogin—Encrypted Kerberos rlogin.
- ekshell—Encrypted Kerberos rsh.
- exec—UNIX rexec.

- finger—Finger.
- ftp—FTP.
- ftp-data—FTP data.
- http—HTTP.
- https—Secure HTTP.
- ident—Ident.
- imap—IMAP.
- kerberos-sec—Kerberos Sec.
- klogin—Kerberos rlogin.
- kpasswd—Kerberos passwd.
- krb-prop—Kerberos db propagation.
- krbupdate—Kerberos db update.
- kshell—Kerberos rsh.
- ldap—LDAP.
- ldp—Label Distribution Protocol.
- login—UNIX rlogin.
- mobileip-agent—Mobile IP agent.
- mobilip-mn—Mobile IP MN.
- msdp—Multicast Source Discovery Protocol.
- name—Range of values.
- netbios-dgm—NETBIOS DGM.
- netbios-ns—NETBIOS NS.
- netbios-ssn—NETBIOS SSN.
- nfsd—NFS.
- nntp—NNTP.
- ntalk—New Talk.
- ntp—NTP.
- pop3—POP3.
- pptp—Point-to-Point Tunneling.

- printer—Printer.
- radacct—RADIUS accounting.
- radius—RADIUS authentication.
- rip—Routing Information Protocol.
- rkinit—Kerberos remote kinit.
- smtp—SMTP.
- snmp—SNMP.
- snmptrap—SNMP traps.
- snpp—Simple paging protocol.
- socks—Socks.
- ssh—Secure shell (ssh).
- sunrpc—SUN RPC.
- syslog—Syslog.
- tacacs—TACACS (original, not TACACS+ ).
- talk—UNIX Talk.
- telnet—Telnet.
- tftp—TFTP.
- timed—UNIX Time Daemon.
- who—UNIX rwho.
- xdmcp—XDMCP.

- <port-except> (configuration/firewall/family/inet6/filter/term/from)

```

Usage <configuration>
 <firewall>
 <family>
 <inet6>
 <filter>
 <term>
 <from>
 <port-except>
 <name>name</name> <!-- identifier -->
 </port-except>
 </from>
 </term>
 </filter>
 </inet6>
 </family>
 </firewall>
 </configuration>

```

**Description** Do not match TCP/UDP source or destination port.

**Contents** <name>—No documentation is available yet.

- afs—Andrew File System.
- bgp—BGP.
- biff—Biff/Comsat.
- bootpc—BOOTP Client.
- bootps—BOOTP Server.
- cmd—UNIX rsh.
- cvspserver—CVS pserver.
- dhcp—DHCP.
- domain—Domain Name System (DNS).
- eklogin—Encrypted Kerberos rlogin.
- ekshell—Encrypted Kerberos rsh.
- exec—UNIX rexec.
- finger—Finger
- ftp—FTP.
- ftp-data—FTP data.
- http—HTTP.
- https—Secure HTTP.

- ident—Ident.
- imap—IMAP.
- kerberos-sec—Kerberos Sec.
- klogin—Kerberos rlogin.
- kpasswd—Kerberos passwd.
- krb-prop—Kerberos db propagation.
- krbupdate—Kerberos db update.
- kshell—Kerberos rsh.
- ldap—LDAP.
- ldp—Label Distribution Protocol.
- login—UNIX rlogin.
- mobileip-agent—Mobile IP agent.
- mobilip-mn—Mobile IP MN.
- msdp—Multicast Source Discovery Protocol.
- name—Range of values.
- netbios-dgm—NETBIOS DGM.
- netbios-ns—NETBIOS NS.
- netbios-ssn—NETBIOS SSN.
- nfsd—NFS.
- nntp—NNTP.
- ntalk—New Talk.
- ntp—NTP.
- pop3—POP3.
- pptp—Point-to-Point Tunneling.
- printer—Printer.
- radacct—RADIUS accounting.
- radius—RADIUS authentication.
- rip—Routing Information Protocol.
- rkinit—Kerberos remote kinit.

<port-mirroring> (configuration/forwarding-options/sampling/output)

- ■ smtp—SMTP.
- ■ snmp—SNMP.
- ■ snmptrap—SNMP traps.
- ■ snpp—Simple paging protocol.
- ■ socks—Socks.
- ■ ssh—Secure shell (ssh).
- ■ sunrpc—SUN RPC.
- ■ syslog—Syslog.
- ■ tacacs—TACACS (original, not TACACS+ ).
- ■ talk—UNIX Talk.
- ■ telnet—Telnet.
- ■ tftp—TFTP.
- ■ timed—UNIX Time Daemon.
- ■ who—UNIX rwho.
- ■ xdmcp—XDMCP.

<port-mirroring> (configuration/forwarding-options/sampling/output)

**Usage** <configuration>  
    <forwarding-options>  
        <sampling>  
            <output>  
                <port-mirroring>  
                    <interface>interface</interface>  
                    <next-hop>next-hop</next-hop>  
                    <no-filter-check/>  
                </port-mirroring>  
            </output>  
            </sampling>  
        </forwarding-options>  
    </configuration>

**Description** Configure sending sampled traffic out through an interface.

**Contents** <interface>—Interface through which to send sampled traffic.

<next-hop>—Address of next hop through which to send sampled traffic.

<no-filter-check>—Check for filters on port-mirroring interface.

## <ports> (configuration/system)

<b>Usage</b>	<configuration> <system> <ports> <console>...</console> <auxiliary>...</auxiliary> </ports> </system> </configuration>
<b>Description</b>	Craft interface RS-232 ports.
<b>Contents</b>	<auxiliary>—Auxiliary port.  <console>—Console port.

## <ppp-options> (configuration/interfaces/interface)

<b>Usage</b>	<configuration> <interfaces> <interface> <ppp-options> <chap>...</chap> </ppp-options> </interface> </interfaces> </configuration>
<b>Description</b>	Point-to-Point Protocol (PPP) interface-specific options.
<b>Contents</b>	<chap>—Challenge Handshake Authentication Protocol options.

## <pre-shared-key> (configuration/security/ike/policy)

<b>Usage</b>	<configuration> <security> <ike> <policy> <pre-shared-key> <ascii-text>ascii-text</ascii-text> <hexadecimal>hexadecimal</hexadecimal> </pre-shared-key> </policy> </ike> </security> </configuration>
<b>Description</b>	Define a preshared key.
<b>Contents</b>	<ascii-text>—In text format.  <hexadecimal>—In hexadecimal format.

- <precedence> (configuration/firewall/family/inet/filter/term/from)

**Usage**   <configuration>  
          <firewall>  
            <family>  
              <inet>  
                <filter>  
                  <term>  
                    <from>  
                      <precedence>  
                        <name>name</name>    <!-- identifier -->  
                      </precedence>  
                    </from>  
                  </term>  
                </filter>  
              </inet>  
            </family>  
          </firewall>  
  </configuration>

**Description**   Match IP precedence value.

**Contents**   <name>—No documentation is available yet.

- critical-ecp—Critical/ECP.
- flash—Flash.
- flash-override—Flash override.
- immediate—Immediate.
- internet-control—Internet control.
- name—Range of values.
- net-control—Network control.
- priority—Priority.
- routine—Routine.

## &lt;precedence-except&gt; (configuration/firewall/family/inet/filter/term/from)

```

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <precedence-except>
 <name>name</name> <!-- identifier -->
 </precedence-except>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
 </configuration>

```

**Description** Do not match IP precedence value.

**Contents** <name>—No documentation is available yet.

- critical-ecp—Critical/ECP.
- flash—Flash.
- flash-override—Flash override.
- immediate—Immediate.
- internet-control—Internet control.
- name—Range of values.
- net-control—Network control.
- priority—Priority.
- routine—Routine.

- <preference> (configuration/policy-options/policy-statement/from/route-filter)

**Usage**   <configuration>  
          <policy-options>  
            <policy-statement>  
              <from>  
                <route-filter>  
                  <preference>  
                    <preference>preference</preference>  
                    <add>add</add>  
                    <subtract>subtract</subtract>  
                  </preference>  
                </route-filter>  
              </from>  
            </policy-statement>  
          </policy-options>  
        </configuration>

**Description**   Preference value.

**Contents**   <add>—Add constant to attribute.

<preference>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

- <preference> (configuration/policy-options/policy-statement/from/source-address-filter)

**Usage**   <configuration>  
          <policy-options>  
            <policy-statement>  
              <from>  
                <source-address-filter>  
                  <preference>  
                    <preference>preference</preference>  
                    <add>add</add>  
                    <subtract>subtract</subtract>  
                  </preference>  
                </source-address-filter>  
              </from>  
            </policy-statement>  
          </policy-options>  
        </configuration>

**Description**   Preference value.

**Contents**   <add>—Add constant to attribute.

<preference>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

<preference> (configuration/policy-options/policy-statement/term/from/route-filter)

**Usage**

```

<configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <route-filter>
 <preference>
 <preference>preference</preference>
 <add>add</add>
 <subtract>subtract</subtract>
 </preference>
 </route-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
</configuration>
```

**Description** Preference value.

**Contents** <add>—Add constant to attribute.

<preference>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

<preference> (configuration/policy-options/policy-statement/term/from/source-address-filter)

**Usage**

```

<configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <source-address-filter>
 <preference>
 <preference>preference</preference>
 <add>add</add>
 <subtract>subtract</subtract>
 </preference>
 </source-address-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
</configuration>
```

**Description** Preference value.

• **Contents** <add>—Add constant to attribute.

• <preference>—No documentation is available yet.

• <subtract>—Subtract constant from attribute.

• <preference> (configuration/policy-options/policy-statement/term/then)

• **Usage** <configuration>  
  <policy-options>  
    <policy-statement>  
      <term>  
        <then>  
          <preference>  
            <preference>preference</preference>  
            <add>add</add>  
            <subtract>subtract</subtract>  
          </preference>  
        </then>  
      </term>  
    </policy-statement>  
  </policy-options>  
</configuration>

• **Description** Preference value.

• **Contents** <add>—Add constant to attribute.

• <preference>—No documentation is available yet.

• <subtract>—Subtract constant from attribute.

• <preference> (configuration/policy-options/policy-statement/then)

• **Usage** <configuration>  
  <policy-options>  
    <policy-statement>  
      <then>  
        <preference>  
          <preference>preference</preference>  
          <add>add</add>  
          <subtract>subtract</subtract>  
        </preference>  
      </then>  
    </policy-statement>  
  </policy-options>  
</configuration>

• **Description** Preference value.

• **Contents** <add>—Add constant to attribute.

• <preference>—No documentation is available yet.

• <subtract>—Subtract constant from attribute.

<preference> (configuration/routing-instances/instance/routing-options/aggregate/defaults)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <defaults>
 <preference>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference>
 </defaults>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Preference value.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<preference> (configuration/routing-instances/instance/routing-options/aggregate/route)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <route>
 <preference>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference>
 </route>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Preference value.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <preference> (configuration/routing-instances/instance/routing-options/generate/defaults)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <routing-options>  
                <generate>  
                  <defaults>  
                    <preference>  
                      <metric-value>metric-value</metric-value>   <!-- mandatory -->  
                      <type>type</type>  
                    </preference>  
                  </defaults>  
                </generate>  
              </routing-options>  
            </instance>  
          </routing-instances>  
        </configuration>

**Description**   Preference value.

**Contents**   <metric-value>—Metric value.

                  <type>—Metric type.

- <preference> (configuration/routing-instances/instance/routing-options/generate/route)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <routing-options>  
                <generate>  
                  <route>  
                    <preference>  
                      <metric-value>metric-value</metric-value>   <!-- mandatory -->  
                      <type>type</type>  
                    </preference>  
                  </route>  
                </generate>  
              </routing-options>  
            </instance>  
          </routing-instances>  
        </configuration>

**Description**   Preference value.

**Contents**   <metric-value>—Metric value.

                  <type>—Metric type.

<preference> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <routing-options>  
                <rib>  
                    <aggregate>  
                        <defaults>  
                            **<preference>**  
                                <metric-value>metric-value</metric-value>    <!-- mandatory --&gt;<br/>                                <type>type</type>  
                            **</preference>**  
                        </defaults>  
                    </aggregate>  
                </rib>  
                </routing-options>  
        </instance>  
    </routing-instances>  
</configuration>

**Description** Preference value.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<preference> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <routing-options>  
                <rib>  
                    <aggregate>  
                        <route>  
                            **<preference>**  
                                <metric-value>metric-value</metric-value>    <!-- mandatory --&gt;<br/>                                <type>type</type>  
                            **</preference>**  
                        </route>  
                    </aggregate>  
                </rib>  
                </routing-options>  
        </instance>  
    </routing-instances>  
</configuration>

**Description** Preference value.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <preference> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <routing-options>  
                <rib>  
                  <generate>  
                    <defaults>  
                      <preference>  
                        <metric-value>metric-value</metric-value>    <!-- mandatory --&gt;<br/>                        <type>type</type>  
                      </preference>  
                    </defaults>  
                  </generate>  
                </rib>  
                </routing-options>  
            </instance>  
          </routing-instances>  
  </configuration>

**Description**   Preference value.

**Contents**   <metric-value>—Metric value.

          <type>—Metric type.

- <preference> (configuration/routing-instances/instance/routing-options/rib/generate/route)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <routing-options>  
                <rib>  
                  <generate>  
                    <route>  
                      <preference>  
                        <metric-value>metric-value</metric-value>    <!-- mandatory --&gt;<br/>                        <type>type</type>  
                      </preference>  
                    </route>  
                  </generate>  
                </rib>  
                </routing-options>  
            </instance>  
          </routing-instances>  
  </configuration>

**Description**   Preference value.

**Contents**   <metric-value>—Metric value.

          <type>—Metric type.

< preference> (configuration/routing-instances/instance/routing-options/rib/static/defaults)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <static>
 <defaults>
 <preference>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference>
 </defaults>
 </static>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Preference value.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

< preference> (configuration/routing-instances/instance/routing-options/rib/static/route)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <static>
 <route>
 <preference>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference>
 </route>
 </static>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Preference value.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <preference> (configuration/routing-instances/instance/routing-options/static/defaults)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <routing-options>  
                <static>  
                  <defaults>  
                    <preference>  
                      <metric-value>metric-value</metric-value>   <!-- mandatory -->  
                      <type>type</type>  
                    </preference>  
                  </defaults>  
                  </static>  
                </routing-options>  
            </instance>  
          </routing-instances>  
        </configuration>

**Description**   Preference value.

**Contents**   <metric-value>—Metric value.

                  <type>—Metric type.

- <preference> (configuration/routing-instances/instance/routing-options/static/route)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <routing-options>  
                <static>  
                  <route>  
                    <preference>  
                      <metric-value>metric-value</metric-value>   <!-- mandatory -->  
                      <type>type</type>  
                    </preference>  
                  </route>  
                  </static>  
                </routing-options>  
            </instance>  
          </routing-instances>  
        </configuration>

**Description**   Preference value.

**Contents**   <metric-value>—Metric value.

                  <type>—Metric type.

## &lt;preference&gt; (configuration/routing-options/aggregate/defaults)

**Usage**

```
<configuration>
 <routing-options>
 <aggregate>
 <defaults>
 <preference>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference>
 </defaults>
 </aggregate>
 </routing-options>
</configuration>
```

**Description** Preference value.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

## &lt;preference&gt; (configuration/routing-options/aggregate/route)

**Usage**

```
<configuration>
 <routing-options>
 <aggregate>
 <route>
 <preference>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference>
 </route>
 </aggregate>
 </routing-options>
</configuration>
```

**Description** Preference value.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

• <preference> (configuration/routing-options/generate/defaults)

**Usage**   <configuration>  
          <routing-options>  
          <generate>  
          <defaults>  
            <preference>  
              <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
              <type>*type*</type>  
            </preference>  
            </defaults>  
          </generate>  
        </routing-options>  
      </configuration>

**Description**   Preference value.

**Contents**   <metric-value>—Metric value.

                  <type>—Metric type.

• <preference> (configuration/routing-options/generate/route)

**Usage**   <configuration>  
          <routing-options>  
          <generate>  
          <route>  
            <preference>  
              <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
              <type>*type*</type>  
            </preference>  
            </route>  
          </generate>  
        </routing-options>  
      </configuration>

**Description**   Preference value.

**Contents**   <metric-value>—Metric value.

                  <type>—Metric type.

<preference> (configuration/routing-options/rib/aggregate/defaults)

**Usage** <configuration>  
    <routing-options>  
        <rib>  
            <aggregate>  
                <defaults>  
                    **<preference>**  
                        <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
                        <type>*type*</type>  
                    **</preference>**  
                </defaults>  
                </aggregate>  
            </rib>  
        </routing-options>  
    </configuration>

**Description** Preference value.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<preference> (configuration/routing-options/rib/aggregate/route)

**Usage** <configuration>  
    <routing-options>  
        <rib>  
            <aggregate>  
                <route>  
                    **<preference>**  
                        <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
                        <type>*type*</type>  
                    **</preference>**  
                </route>  
                </aggregate>  
            </rib>  
        </routing-options>  
    </configuration>

**Description** Preference value.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <preference> (configuration/routing-options/rib/generate/defaults)

•

•   **Usage**   <configuration>  
•        <routing-options>  
•        <rib>  
•        <generate>  
•        <defaults>  
•            **<preference>**  
•              <metric-value>*metric-value*</metric-value>    <!-- mandatory --&gt;<br/>•              <type>*type*</type>  
•            **</preference>**  
•        </defaults>  
•        </generate>  
•        </rib>  
•        </routing-options>  
•    </configuration>

•   **Description**   Preference value.

•   **Contents**   <metric-value>—Metric value.

•        <type>—Metric type.

- <preference> (configuration/routing-options/rib/generate/route)

•

•   **Usage**   <configuration>  
•        <routing-options>  
•        <rib>  
•        <generate>  
•        <route>  
•            **<preference>**  
•              <metric-value>*metric-value*</metric-value>    <!-- mandatory --&gt;<br/>•              <type>*type*</type>  
•            **</preference>**  
•        </route>  
•        </generate>  
•        </rib>  
•        </routing-options>  
•    </configuration>

•   **Description**   Preference value.

•   **Contents**   <metric-value>—Metric value.

•        <type>—Metric type.

## &lt;preference&gt; (configuration/routing-options/rib/static/defaults)

```
Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <defaults>
 <preference>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference>
 </defaults>
 </static>
 </rib>
 </routing-options>
 </configuration>
```

**Description** Preference value.

**Contents** <metric-value>—Metric value.  
               <type>—Metric type.

## &lt;preference&gt; (configuration/routing-options/rib/static/route)

```
Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <route>
 <preference>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference>
 </route>
 </static>
 </rib>
 </routing-options>
 </configuration>
```

**Description** Preference value.

**Contents** <metric-value>—Metric value.  
               <type>—Metric type.

- <preference> (configuration/routing-options/static/defaults)
  - **Usage**   <configuration>  
    <routing-options>  
        <static>  
            <defaults>  
                <preference>  
                    <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
                    <type>*type*</type>  
                </preference>  
                </defaults>  
            </static>  
        </routing-options>  
    </configuration>

**Description**   Preference value.

**Contents**   <metric-value>—Metric value.

                  <type>—Metric type.

## <preference> (configuration/routing-options/static/route)

- **Usage**   <configuration>  
    <routing-options>  
        <static>  
            <route>  
                <preference>  
                    <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
                    <type>*type*</type>  
                </preference>  
                </route>  
            </static>  
        </routing-options>  
    </configuration>

**Description**   Preference value.

**Contents**   <metric-value>—Metric value.

                  <type>—Metric type.

<preference2> (configuration/policy-options/policy-statement/from/route-filter)

**Usage** <configuration>  
   <policy-options>  
     <policy-statement>  
       <from>  
       <route-filter>  
         <preference2>  
           <preference2>preference2</preference2>  
           <add>add</add>  
           <subtract>subtract</subtract>  
         </preference2>  
       </route-filter>  
     </from>  
     </policy-statement>  
   </policy-options>  
</configuration>

**Description** Preference value 2.

**Contents** <add>—Add constant to attribute.

<preference2>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

<preference2> (configuration/policy-options/policy-statement/from/source-address-filter)

**Usage** <configuration>  
   <policy-options>  
     <policy-statement>  
       <from>  
       <source-address-filter>  
         <preference2>  
           <preference2>preference2</preference2>  
           <add>add</add>  
           <subtract>subtract</subtract>  
         </preference2>  
       </source-address-filter>  
     </from>  
     </policy-statement>  
   </policy-options>  
</configuration>

**Description** Preference value 2.

**Contents** <add>—Add constant to attribute.

<preference2>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

- <preference2> (configuration/policy-options/policy-statement/term/from/route-filter)

**Usage**   <configuration>  
           <policy-options>  
             <policy-statement>  
               <term>  
                 <from>  
                   <route-filter>  
                     <preference2>  
                       <preference2>preference2</preference2>  
                       <add>add</add>  
                       <subtract>subtract</subtract>  
                     </preference2>  
                   </route-filter>  
                 </from>  
               </term>  
             </policy-statement>  
           </policy-options>  
   </configuration>

**Description**   Preference value 2.

**Contents**   <add>—Add constant to attribute.

<preference2>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

- <preference2> (configuration/policy-options/policy-statement/term/from/source-address-filter)

**Usage**   <configuration>  
           <policy-options>  
             <policy-statement>  
               <term>  
                 <from>  
                   <source-address-filter>  
                     <preference2>  
                       <preference2>preference2</preference2>  
                       <add>add</add>  
                       <subtract>subtract</subtract>  
                     </preference2>  
                   </source-address-filter>  
                 </from>  
               </term>  
             </policy-statement>  
           </policy-options>  
   </configuration>

**Description**   Preference value 2.

**Contents** <add>—Add constant to attribute.

<preference2>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

## <preference2> (configuration/policy-options/policy-statement/term/then)

```
Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <then>
 <preference2>
 <preference2>preference2</preference2>
 <add>add</add>
 <subtract>subtract</subtract>
 </preference2>
 </then>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>
```

**Description** Preference value 2.

**Contents** <add>—Add constant to attribute.

<preference2>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

## <preference2> (configuration/policy-options/policy-statement/then)

```
Usage <configuration>
 <policy-options>
 <policy-statement>
 <then>
 <preference2>
 <preference2>preference2</preference2>
 <add>add</add>
 <subtract>subtract</subtract>
 </preference2>
 </then>
 </policy-statement>
 </policy-options>
 </configuration>
```

**Description** Preference value 2.

**Contents** <add>—Add constant to attribute.

<preference2>—No documentation is available yet.

<subtract>—Subtract constant from attribute.

- <preference2> (configuration/routing-instances/instance/routing-options/aggregate/defaults)

**Usage**   <configuration>  
           <routing-instances>  
           <instance>  
           <routing-options>  
           <aggregate>  
           <defaults>  
           <preference2>  
             <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
             <type>*type*</type>  
           </preference2>  
           </defaults>  
           </aggregate>  
           </routing-options>  
         </instance>  
       </routing-instances>  
   </configuration>

**Description**   Preference value 2.

**Contents**   <metric-value>—Metric value.

          <type>—Metric type.

- <preference2> (configuration/routing-instances/instance/routing-options/aggregate/route)

**Usage**   <configuration>  
           <routing-instances>  
           <instance>  
           <routing-options>  
           <aggregate>  
           <route>  
           <preference2>  
             <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
             <type>*type*</type>  
           </preference2>  
           </route>  
           </aggregate>  
           </routing-options>  
         </instance>  
       </routing-instances>  
   </configuration>

**Description**   Preference value 2.

**Contents**   <metric-value>—Metric value.

          <type>—Metric type.

<preference2> (configuration/routing-instances/instance/routing-options/generate/defaults)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <defaults>
 <preference2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference2>
 </defaults>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Preference value 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<preference2> (configuration/routing-instances/instance/routing-options/generate/route)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <route>
 <preference2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference2>
 </route>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Preference value 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- < preference2 > (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <aggregate>
 <defaults>
 <preference2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference2>
 </defaults>
 </aggregate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Preference value 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- < preference2 > (configuration/routing-instances/instance/routing-options/rib/aggregate/route)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <aggregate>
 <route>
 <preference2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference2>
 </route>
 </aggregate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Preference value 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<preference2> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)

**Usage** <configuration>  
   <routing-instances>  
     <instance>  
       <routing-options>  
         <rib>  
           <generate>  
             <defaults>  
               **<preference2>**  
               <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
               <type>*type*</type>  
             **</preference2>**  
             </defaults>  
           </generate>  
         </rib>  
       </routing-options>  
     </instance>  
   </routing-instances>  
</configuration>

**Description** Preference value 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<preference2> (configuration/routing-instances/instance/routing-options/rib/generate/route)

**Usage** <configuration>  
   <routing-instances>  
     <instance>  
       <routing-options>  
         <rib>  
           <generate>  
             <route>  
               **<preference2>**  
               <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
               <type>*type*</type>  
             **</preference2>**  
             </route>  
           </generate>  
         </rib>  
       </routing-options>  
     </instance>  
   </routing-instances>  
</configuration>

**Description** Preference value 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <preference2> (configuration/routing-instances/instance/routing-options/rib/static/defaults)

**Usage**   <configuration>  
           <routing-instances>  
           <instance>  
           <routing-options>  
           <rib>  
           <static>  
           <defaults>  
             <preference2>  
               <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
               <type>*type*</type>  
             </preference2>  
           </defaults>  
           </static>  
         </rib>  
         </routing-options>  
       </instance>  
     </routing-instances>  
 </configuration>

**Description**   Preference value 2.

**Contents**   <metric-value>—Metric value.

          <type>—Metric type.

- <preference2> (configuration/routing-instances/instance/routing-options/rib/static/route)

**Usage**   <configuration>  
           <routing-instances>  
           <instance>  
           <routing-options>  
           <rib>  
           <static>  
           <route>  
             <preference2>  
               <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
               <type>*type*</type>  
             </preference2>  
           </route>  
           </static>  
         </rib>  
         </routing-options>  
       </instance>  
     </routing-instances>  
 </configuration>

**Description**   Preference value 2.

**Contents**   <metric-value>—Metric value.

          <type>—Metric type.

<preference2> (configuration/routing-instances/instance/routing-options/static/defaults)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <static>
 <defaults>
 <preference2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference2>
 </defaults>
 </static>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Preference value 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<preference2> (configuration/routing-instances/instance/routing-options/static/route)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <static>
 <route>
 <preference2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference2>
 </route>
 </static>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Preference value 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <preference2> (configuration/routing-options/aggregate/defaults)

•

•     **Usage**   <configuration>  
•        <routing-options>  
•           <aggregate>  
•              <defaults>  
•                **<preference2>**  
•                <metric-value>*metric-value*</metric-value>    <!-- mandatory -->  
•                <type>*type*</type>  
•                **</preference2>**  
•              </defaults>  
•              </aggregate>  
•        </routing-options>  
•    </configuration>

•

•     **Description**   Preference value 2.

•     **Contents**    <metric-value>—Metric value.

•                  <type>—Metric type.

- <preference2> (configuration/routing-options/aggregate/route)

•

•     **Usage**   <configuration>  
•        <routing-options>  
•           <aggregate>  
•              <route>  
•                **<preference2>**  
•                <metric-value>*metric-value*</metric-value>    <!-- mandatory -->  
•                <type>*type*</type>  
•                **</preference2>**  
•              </route>  
•              </aggregate>  
•        </routing-options>  
•    </configuration>

•

•     **Description**   Preference value 2.

•     **Contents**    <metric-value>—Metric value.

•                  <type>—Metric type.

## &lt;preference2&gt; (configuration/routing-options/generate/defaults)

**Usage** <configuration>  
   <routing-options>  
     <generate>  
       <defaults>  
         **<preference2>**  
           <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
           <type>*type*</type>  
         **</preference2>**  
       </defaults>  
     </generate>  
   </routing-options>  
</configuration>

**Description** Preference value 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

## &lt;preference2&gt; (configuration/routing-options/generate/route)

**Usage** <configuration>  
   <routing-options>  
     <generate>  
       <route>  
         **<preference2>**  
           <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
           <type>*type*</type>  
         **</preference2>**  
       </route>  
     </generate>  
   </routing-options>  
</configuration>

**Description** Preference value 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <preference2> (configuration/routing-options/rib/aggregate/defaults)

```
Usage <configuration>
 <routing-options>
 <rib>
 <aggregate>
 <defaults>
 <preference2>
 <metric-value>metric-value</metric-value> <!-- mandatory ...
 <type>type</type>
 </preference2>
 </defaults>
 </aggregate>
 </rib>
 </routing-options>
</configuration>
```

**Description** Preference value 2

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <preference2> (configuration/routing-options/rib/aggregate/route)

```
Usage <configuration>
 <routing-options>
 <rib>
 <aggregate>
 <route>
 <preference2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference2>
 </route>
 </aggregate>
 </rib>
 </routing-options>
 </configuration>
```

**Description** Preference value 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

## &lt;preference2&gt; (configuration/routing-options/rib/generate/defaults)

**Usage**

```
<configuration>
 <routing-options>
 <rib>
 <generate>
 <defaults>
 <preference2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference2>
 </defaults>
 </generate>
 </rib>
 </routing-options>
</configuration>
```

**Description** Preference value 2.

**Contents** <metric-value>—Metric value.  
                   <type>—Metric type.

## &lt;preference2&gt; (configuration/routing-options/rib/generate/route)

**Usage**

```
<configuration>
 <routing-options>
 <rib>
 <generate>
 <route>
 <preference2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </preference2>
 </route>
 </generate>
 </rib>
 </routing-options>
</configuration>
```

**Description** Preference value 2.

**Contents** <metric-value>—Metric value.  
                   <type>—Metric type.

- <preference2> (configuration/routing-options/rib/static/defaults)

```
Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <defaults>
 <preference2>
 <metric-value>metric-value</metric-value> <!-- mandatory ...
 <type>type</type>
 </preference2>
 </defaults>
 </static>
 </rib>
 </routing-options>
 </configuration>
```

**Description** Preference value 2

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <preference2> (configuration/routing-options/rib/static/route)

```
Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <route>
 <preference2>
 <metric-value>metric-value</metric-value> <!-- mandatory ...
 <type>type</type>
 </preference2>
 </route>
 </static>
 </rib>
 </routing-options>
 </configuration>
```

**Description** Preference value 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

## &lt;preference2&gt; (configuration/routing-options/static/defaults)

**Usage** <configuration>  
   <routing-options>  
     <static>  
       <defaults>  
         **<preference2>**  
           <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
           <type>*type*</type>  
         **</preference2>**  
       </defaults>  
     </static>  
   </routing-options>  
</configuration>

**Description** Preference value 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

## &lt;preference2&gt; (configuration/routing-options/static/route)

**Usage** <configuration>  
   <routing-options>  
     <static>  
       <route>  
         **<preference2>**  
           <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
           <type>*type*</type>  
         **</preference2>**  
       </route>  
     </static>  
   </routing-options>  
</configuration>

**Description** Preference value 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <prefix> (configuration/protocols/router-advertisement/interface)

**Usage**   <configuration>  
           <protocols>  
             <router-advertisement>  
               <interface>  
                 **<prefix>**  
                   <name>name</name>   <!-- identifier -->  
                   <valid-lifetime>seconds</valid-lifetime>  
                   <on-link/>  
                   <preferred-lifetime>seconds</preferred-lifetime>  
                   <autonomous/>  
                 **</prefix>**  
                 </interface>  
               </router-advertisement>  
             </protocols>  
       </configuration>

**Description**   Prefix configuration.

**Contents**   <autonomous>—Set autonomous flag.  
  
                   <name>—Prefix to be advertised.  
  
                   <on-link>—Set on-link flag.  
  
                   <preferred-lifetime>—Preferred lifetime (fixed).  
  
                   <valid-lifetime>—Valid lifetime (fixed).

- <prefix-limit> (configuration/protocols/bgp/family/inet/any)

**Usage**   <configuration>  
           <protocols>  
             <bpg>  
               <family>  
                 <inet>  
                   <any>  
                     **<prefix-limit>**  
                       <maximum>maximum</maximum>   <!-- mandatory -->  
                       <teardown>...</teardown>  
                     **</prefix-limit>**  
                     </any>  
                 </inet>  
               </family>  
             </bpg>  
           </protocols>  
       </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.  
  
                   <teardown>—Clear peer connection on reaching limit.

## &lt;prefix-limit&gt; (configuration/protocols/bgp/family/inet/labeled-unicast)

```
Usage <configuration>
 <protocols>
 <bgp>
 <family>
 <inet>
 <labeled-unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet>
 </family>
 </bgp>
 </protocols>
 </configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

## &lt;prefix-limit&gt; (configuration/protocols/bgp/family/inet/multicast)

```
Usage <configuration>
 <protocols>
 <bgp>
 <family>
 <inet>
 <multicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </multicast>
 </inet>
 </family>
 </bgp>
 </protocols>
 </configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/protocols/bgp/family/inet/unicast)

**Usage**   <configuration>  
           <protocols>  
             <bgp>  
               <family>  
                 <inet>  
                   <unicast>  
                     <prefix-limit>  
                       <maximum>maximum</maximum>    <!-- mandatory -->  
                       <teardown>...</teardown>  
                     </prefix-limit>  
                   </unicast>  
                 </inet>  
               </family>  
             </bgp>  
           </protocols>  
         </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/protocols/bgp/family/inet-vpn/any)

**Usage**   <configuration>  
           <protocols>  
             <bgp>  
               <family>  
                 <inet-vpn>  
                   <any>  
                     <prefix-limit>  
                       <maximum>maximum</maximum>    <!-- mandatory -->  
                       <teardown>...</teardown>  
                     </prefix-limit>  
                   </any>  
                 </inet-vpn>  
               </family>  
             </bgp>  
           </protocols>  
         </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

## &lt;prefix-limit&gt; (configuration/protocols/bgp/family/inet-vpn/multicast)

```
Usage <configuration>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <multicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </multicast>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
 </configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

## &lt;prefix-limit&gt; (configuration/protocols/bgp/family/inet-vpn/unicast)

```
Usage <configuration>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </unicast>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
 </configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/protocols/bgp/family/inet6/any)
  - **Usage**   <configuration>
    - <protocols>
    - <bgp>
    - <family>
    - <inet6>
    - <any>
    - <**prefix-limit**>
      - <maximum>maximum</maximum>   <!-- mandatory -->
      - <teardown>...</teardown>
    - </**prefix-limit**>
    - </any>
    - </inet6>
    - </family>
    - </bgp>
    - </protocols>
  - </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/protocols/bgp/family/inet6/labeled-unicast)

- <prefix-limit>
  - **Usage**   <configuration>
    - <protocols>
    - <bgp>
    - <family>
    - <inet6>
    - <labeled-unicast>
    - <**prefix-limit**>
      - <maximum>maximum</maximum>   <!-- mandatory -->
      - <teardown>...</teardown>
    - </**prefix-limit**>
    - </labeled-unicast>
    - </inet6>
    - </family>
    - </bgp>
    - </protocols>
  - </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

## &lt;prefix-limit&gt; (configuration/protocols/bgp/family/inet6/multicast)

```
Usage <configuration>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <multicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </multicast>
 </inet6>
 </family>
 </bgp>
 </protocols>
 </configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

## &lt;prefix-limit&gt; (configuration/protocols/bgp/family/inet6/unicast)

```
Usage <configuration>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </unicast>
 </inet6>
 </family>
 </bgp>
 </protocols>
 </configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/protocols/bgp/family/l2vpn/unicast)

**Usage**   <configuration>  
           <protocols>  
             <bgp>  
               <family>  
                 <l2vpn>  
                   <unicast>  
                     **<prefix-limit>**  
                       <maximum>maximum</maximum>    <!-- mandatory -->  
                       <teardown>...</teardown>  
                     **</prefix-limit>**  
                   </unicast>  
                 </l2vpn>  
               </family>  
             </bgp>  
           </protocols>  
         </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/protocols/bgp/group/family/inet/any)

**Usage**   <configuration>  
           <protocols>  
             <bgp>  
               <group>  
                 <family>  
                   <inet>  
                     <any>  
                      **<prefix-limit>**  
                       <maximum>maximum</maximum>    <!-- mandatory -->  
                       <teardown>...</teardown>  
                     **</prefix-limit>**  
                   </any>  
                 </inet>  
               </family>  
             </group>  
           </bgp>  
           </protocols>  
         </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

## &lt;prefix-limit&gt; (configuration/protocols/bgp/group/family/inet/labeled-unicast)

**Usage**

```

<configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <labeled-unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

## &lt;prefix-limit&gt; (configuration/protocols/bgp/group/family/inet/multicast)

**Usage**

```

<configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <multicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </multicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/protocols/bgp/group/family/inet/unicast)

**Usage**   <configuration>  
           <protocols>  
             <bpg>  
               <group>  
               <family>  
                 <inet>  
                   <unicast>  
                     **<prefix-limit>**  
                       <maximum>maximum</maximum>    <!-- mandatory -->  
                       <teardown>...</teardown>  
                     **</prefix-limit>**  
                   </unicast>  
                 </inet>  
                 </family>  
                 </group>  
               </bpg>  
           </protocols>  
</configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/protocols/bgp/group/family/inet-vpn/any)

**Usage**   <configuration>  
           <protocols>  
             <bpg>  
               <group>  
               <family>  
                 <inet-vpn>  
                   <any>  
                     **<prefix-limit>**  
                       <maximum>maximum</maximum>    <!-- mandatory -->  
                       <teardown>...</teardown>  
                     **</prefix-limit>**  
                   </any>  
                 </inet-vpn>  
                 </family>  
                 </group>  
               </bpg>  
           </protocols>  
</configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

## &lt;prefix-limit&gt; (configuration/protocols/bgp/group/family/inet-vpn/multicast)

```
Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet-vpn>
 <multicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </multicast>
 </inet-vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

## &lt;prefix-limit&gt; (configuration/protocols/bgp/group/family/inet-vpn/unicast)

```
Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet-vpn>
 <unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </unicast>
 </inet-vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/protocols/bgp/group/family/inet6/any)

**Usage**   <configuration>  
           <protocols>  
             <bgp>  
               <group>  
               <family>  
                 <inet6>  
                 <any>  
                   **<prefix-limit>**  
                     <maximum>maximum</maximum>   <!-- mandatory -->  
                     <teardown>...</teardown>  
                   **</prefix-limit>**  
                 </any>  
                 </inet6>  
               </family>  
               </group>  
             </bgp>  
           </protocols>  
   </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/protocols/bgp/group/family/inet6/labeled-unicast)

**Usage**   <configuration>  
           <protocols>  
             <bgp>  
               <group>  
               <family>  
                 <inet6>  
                 <labeled-unicast>  
                   **<prefix-limit>**  
                     <maximum>maximum</maximum>   <!-- mandatory -->  
                     <teardown>...</teardown>  
                   **</prefix-limit>**  
                 </labeled-unicast>  
                 </inet6>  
               </family>  
               </group>  
             </bgp>  
           </protocols>  
   </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

## &lt;prefix-limit&gt; (configuration/protocols/bgp/group/family/inet6/multicast)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet6>
 <multicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </multicast>
 </inet6>
 </family>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

## &lt;prefix-limit&gt; (configuration/protocols/bgp/group/family/inet6/unicast)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet6>
 <unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </unicast>
 </inet6>
 </family>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/protocols/bgp/group/family/l2vpn/unicast)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <l2vpn>
 <unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </unicast>
 </l2vpn>
 </family>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet/any)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <any>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </any>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet/labeled-unicast)

**Usage**

```

<configuration>
 <protocols>
 <bpg>
 <group>
 <neighbor>
 <family>
 <inet>
 <labeled-unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bpg>
 </protocols>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet/multicast)

**Usage**

```

<configuration>
 <protocols>
 <bpg>
 <group>
 <neighbor>
 <family>
 <inet>
 <multicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </multicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bpg>
 </protocols>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

• **Contents** <maximum>—Maximum number of prefixes from a peer.

• <teardown>—Clear peer connection on reaching limit.

• **<prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet/unicast)**

• **Usage** <configuration>  
  <protocols>  
    <bpg>  
      <group>  
        <neighbor>  
          <family>  
            <inet>  
              <unicast>  
                **<prefix-limit>**  
                  <maximum>maximum</maximum>   <!-- mandatory -->  
                  <teardown>...</teardown>  
                **</prefix-limit>**  
              </unicast>  
            </inet>  
            </family>  
          </neighbor>  
        </group>  
      </bpg>  
    </protocols>  
</configuration>

• **Description** Limit maximum number of prefixes from a peer.

• **Contents** <maximum>—Maximum number of prefixes from a peer.

• <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/any)

**Usage**

```

<configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <any>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </any>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents**

- <maximum>—Maximum number of prefixes from a peer.
- <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/multicast)

**Usage**

```

<configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <multicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </multicast>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

• **Contents** <maximum>—Maximum number of prefixes from a peer.

• <teardown>—Clear peer connection on reaching limit.

• **<prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/unicast)**

• **Usage** <configuration>  
  <protocols>  
    <bpg>  
      <group>  
        <neighbor>  
          <family>  
            <inet-vpn>  
              <unicast>  
                **<prefix-limit>**  
                  <maximum>maximum</maximum>   <!-- mandatory -->  
                  <teardown>...</teardown>  
                **</prefix-limit>**  
              </unicast>  
            </inet-vpn>  
          </family>  
        </neighbor>  
      </group>  
    </bpg>  
  </protocols>  
</configuration>

• **Description** Limit maximum number of prefixes from a peer.

• **Contents** <maximum>—Maximum number of prefixes from a peer.

• <teardown>—Clear peer connection on reaching limit.

## &lt;prefix-limit&gt; (configuration/protocols/bgp/group/neighbor/family/inet6/any)

```

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet6>
 <any>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </any>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

## &lt;prefix-limit&gt; (configuration/protocols/bgp/group/neighbor/family/inet6/labeled-unicast)

```

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet6>
 <labeled-unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>

```

**Description** Limit maximum number of prefixes from a peer.

• **Contents** <maximum>—Maximum number of prefixes from a peer.

• <teardown>—Clear peer connection on reaching limit.

• **<prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet6/multicast)**

• **Usage** <configuration>  
  <protocols>  
    <bpg>  
      <group>  
        <neighbor>  
          <family>  
            <inet6>  
              <multicast>  
                **<prefix-limit>**  
                  <maximum>maximum</maximum>   <!-- mandatory -->  
                <teardown>...</teardown>  
                **</prefix-limit>**  
              </multicast>  
            </inet6>  
            </family>  
          </neighbor>  
        </group>  
      </bpg>  
    </protocols>  
</configuration>

• **Description** Limit maximum number of prefixes from a peer.

• **Contents** <maximum>—Maximum number of prefixes from a peer.

• <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/protocols/bgp/group/neighbor/family/inet6/unicast)

```
Usage <configuration>
 <protocols>
 <bpg>
 <group>
 <neighbor>
 <family>
 <inet6>
 <unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </unicast>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bpg>
 </protocols>
 </configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.  
               <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/protocols/bgp/group/neighbor/family/l2vpn/unicast)

```
Usage <configuration>
 <protocols>
 <bpg>
 <group>
 <neighbor>
 <family>
 <l2vpn>
 <unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </unicast>
 </l2vpn>
 </family>
 </neighbor>
 </group>
 </bpg>
 </protocols>
 </configuration>
```

**Description** Limit maximum number of prefixes from a peer.

• **Contents** <maximum>—Maximum number of prefixes from a peer.

• <teardown>—Clear peer connection on reaching limit.

• **<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/family/inet/any)**

• **Usage** <configuration>  
  <routing-instances>  
    <instance>  
      <protocols>  
        <bgp>  
          <family>  
            <inet>  
              <any>  
                **<prefix-limit>**  
                  <maximum>maximum</maximum>   <!-- mandatory -->  
                <teardown>...</teardown>  
                **</prefix-limit>**  
              </any>  
            </inet>  
          </family>  
        </bgp>  
      </protocols>  
    </instance>  
  </routing-instances>  
</configuration>

• **Description** Limit maximum number of prefixes from a peer.

• **Contents** <maximum>—Maximum number of prefixes from a peer.

• <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/family/inet/labeled-unicast)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet>
 <labeled-unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/family/inet/multicast)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet>
 <multicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </multicast>
 </inet>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

- **Contents** <maximum>—Maximum number of prefixes from a peer.  
• <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/family/inet/unicast)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet>
 <unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </unicast>
 </inet>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn/any)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <any>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </any>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents**

- <maximum>—Maximum number of prefixes from a peer.
- <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn/multicast)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <multicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </multicast>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

- **Contents** <maximum>—Maximum number of prefixes from a peer.
  - <teardown>—Clear peer connection on reaching limit.
  - **<prefix-limit>** (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn/unicast)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </unicast>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/family/inet6/any)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <any>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </any>
 </inet6>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents**

- <maximum>—Maximum number of prefixes from a peer.
- <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/family/inet6/labeled-unicast)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <labeled-unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet6>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

• **Contents** <maximum>—Maximum number of prefixes from a peer.

• <teardown>—Clear peer connection on reaching limit.

• <prefix-limit> (configuration/routing-instances(instance/protocols/bgp/family/inet6/multicast)

• **Usage** <configuration>  
  <routing-instances>  
    <instance>  
      <protocols>  
        <bgp>  
          <family>  
            <inet6>  
              <multicast>  
              **<prefix-limit>**  
                <maximum>maximum</maximum>   <!-- mandatory -->  
                <teardown>...</teardown>  
              **</prefix-limit>**  
            </multicast>  
            </inet6>  
            </family>  
          </bgp>  
          </protocols>  
        </instance>  
      </routing-instances>  
    </configuration>

• **Description** Limit maximum number of prefixes from a peer.

• **Contents** <maximum>—Maximum number of prefixes from a peer.

• <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/family/inet6/unicast)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </unicast>
 </inet6>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents**

- <maximum>—Maximum number of prefixes from a peer.
- <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/family/l2vpn/unicast)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <l2vpn>
 <unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </unicast>
 </l2vpn>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

• **Contents** <maximum>—Maximum number of prefixes from a peer.

• <teardown>—Clear peer connection on reaching limit.

• **<prefix-limit>** (configuration/routing-instances/instance/protocols/bgp/group/family/inet/any)

• **Usage** <configuration>  
  <routing-instances>  
    <instance>  
      <protocols>  
        <bgp>  
          <group>  
            <family>  
              <inet>  
              <any>  
                **<prefix-limit>**  
                  <maximum>maximum</maximum>   <!-- mandatory --&gt;<br/>                <teardown>...</teardown>  
                **</prefix-limit>**  
                </any>  
              </inet>  
            </family>  
          </group>  
          </bgp>  
          </protocols>  
        </instance>  
      </routing-instances>  
    </configuration>

• **Description** Limit maximum number of prefixes from a peer.

• **Contents** <maximum>—Maximum number of prefixes from a peer.

• <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/family/inet/labeled-unicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <family>  
                            <inet>  
                                <labeled-unicast>  
                                    **<prefix-limit>**  
                                        <maximum>maximum</maximum>    <!-- mandatory --&gt;<br/>                                        <teardown>...</teardown>  
                                            **</prefix-limit>**  
                                        </labeled-unicast>  
                                        </inet>  
                                        </family>  
                                        </group>  
                                        </bgp>  
                                        </protocols>  
                                        </instance>  
                                        </routing-instances>  
    </configuration>

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/family/inet/multicast)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <family>  
                      <inet>  
                      <multicast>  
                        **<prefix-limit>**  
                          <maximum>maximum</maximum>    <!-- mandatory --&gt;<br/>                          <teardown>...</teardown>  
                        **</prefix-limit>**  
                      </multicast>  
                      </inet>  
                      </family>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/family/inet/unicast)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </unicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn/any)

**Usage**   <configuration>  
          <routing-instances>  
          <instance>  
          <protocols>  
          <bgp>  
          <group>  
          <family>  
          <inet-vpn>  
          <any>  
          <prefix-limit>  
            <maximum>maximum</maximum>    <!-- mandatory -->  
            <teardown>...</teardown>  
          </prefix-limit>  
          </any>  
          </inet-vpn>  
          </family>  
          </group>  
          </bgp>  
          </protocols>  
          </instance>  
          </routing-instances>  
      </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn/multicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <family>  
                            <inet-vpn>  
                                <multicast>  
                                    **<prefix-limit>**  
                                        <maximum>maximum</maximum>    <!-- mandatory --&gt;<br/>                                        <teardown>...</teardown>  
                                            **</prefix-limit>**  
                                        </multicast>  
                                        </inet-vpn>  
                                        </family>  
                                        </group>  
                                        </bgp>  
                                        </protocols>  
                                        </instance>  
                                        </routing-instances>  
    </configuration>

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn/unicast)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <family>  
                      <inet-vpn>  
                      <unicast>  
                        **<prefix-limit>**  
                          <maximum>maximum</maximum>    <!-- mandatory --&gt;<br/>                          <teardown>...</teardown>  
                        **</prefix-limit>**  
                      </unicast>  
                      </inet-vpn>  
                      </family>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6/any)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <family>  
                            <inet6>  
                                <any>  
                                    **<prefix-limit>**  
                                        <maximum>maximum</maximum>    <!-- mandatory --&gt;<br/>                                        <teardown>...</teardown>  
                                            **</prefix-limit>**  
                                        </any>  
                                        </inet6>  
                                        </family>  
                                        </group>  
                                        </bgp>  
                                        </protocols>  
                                        </instance>  
                                        </routing-instances>  
    </configuration>

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/routing-instances(instance/protocols/bgp/group/family/inet6/labeled-unicast)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <family>  
                      <inet6>  
                      <labeled-unicast>  
                        **<prefix-limit>**  
                          <maximum>maximum</maximum>    <!-- mandatory --&gt;<br/>                          <teardown>...</teardown>  
                        **</prefix-limit>**  
                      </labeled-unicast>  
                      </inet6>  
                    </family>  
                    </group>  
                  </bgp>  
                  </protocols>  
                  </instance>  
                  </routing-instances>  
                </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6/multicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <family>  
                            <inet6>  
                                <multicast>  
                                    **<prefix-limit>**  
                                        <maximum>maximum</maximum>    <!-- mandatory --&gt;<br/>                                        <teardown>...</teardown>  
                                            **</prefix-limit>**  
                                        </multicast>  
                                        </inet6>  
                                        </family>  
                                        </group>  
                                        </bgp>  
                                        </protocols>  
                                        </instance>  
                                        </routing-instances>  
    </configuration>

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/routing-instances(instance/protocols/bgp/group/family/inet6/unicast)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <family>  
                      <inet6>  
                      <unicast>  
                        **<prefix-limit>**  
                          <maximum>maximum</maximum>    <!-- mandatory --&gt;<br/>                          <teardown>...</teardown>  
                        **</prefix-limit>**  
                      </unicast>  
                      </inet6>  
                      </family>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/family/l2vpn/unicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <family>  
                            <l2vpn>  
                                <unicast>  
                                    **<prefix-limit>**  
                                        <maximum>maximum</maximum>    <!-- mandatory --&gt;<br/>                                        <teardown>...</teardown>  
                                            **</prefix-limit>**  
                                        </unicast>  
                                        </l2vpn>  
                                        </family>  
                                        </group>  
                                        </bgp>  
                                        </protocols>  
                                        </instance>  
                                        </routing-instances>  
    </configuration>

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/any)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <neighbor>  
                      <family>  
                      <inet>  
                      <any>  
                        <prefix-limit>  
                          <maximum>maximum</maximum>    <!-- mandatory -->  
                          <teardown>...</teardown>  
                        </prefix-limit>  
                      </any>  
                      </inet>  
                      </family>  
                      </neighbor>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
                </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/labeled-unicast)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <labeled-unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/routing-instances(instance/protocols/bgp/group/neighbor/family/inet/multicast)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <neighbor>  
                      <family>  
                      <inet>  
                      <multicast>  
                        <prefix-limit>  
                          <maximum>maximum</maximum>    <!-- mandatory --&gt;<br/>                          <teardown>...</teardown>  
                        </prefix-limit>  
                      </multicast>  
                      </inet>  
                      </family>  
                      </neighbor>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

          <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/unicast)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </unicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn/any)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <any>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </any>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn/multicast)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <multicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </multicast>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn/unicast)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <neighbor>  
                      <family>  
                      <inet-vpn>  
                      <unicast>  
                      <prefix-limit>  
                      <maximum>maximum</maximum>    <!-- mandatory --&gt;<br/>                      <teardown>...</teardown>  
                      </prefix-limit>  
                      </unicast>  
                      </inet-vpn>  
                      </family>  
                      </neighbor>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/any)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet6>
 <any>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </any>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/routing-instances(instance/protocols/bgp/group/neighbor/family/inet6/labeled-unicast)

Usage   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <neighbor>  
                      <family>  
                      <inet6>  
                        <labeled-unicast>  
                        <prefix-limit>  
                          <maximum>maximum</maximum>   <!-- mandatory -->  
                          <teardown>...</teardown>  
                        </prefix-limit>  
                        </labeled-unicast>  
                        </inet6>  
                      </family>  
                      </neighbor>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
                </configuration>

Description   Limit maximum number of prefixes from a peer.

Contents   <maximum>—Maximum number of prefixes from a peer.

              <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/multicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <neighbor>  
                            <family>  
                                <inet6>  
                                    <multicast>  
                                        **<prefix-limit>**  
                                            <maximum>maximum</maximum>    <!-- mandatory --&gt;<br/>                                            <teardown>...</teardown>  
                                                **</prefix-limit>**  
                                            </multicast>  
                                            </inet6>  
                                            </family>  
                                            </neighbor>  
                                            </group>  
                                            </bgp>  
                                            </protocols>  
                                            </instance>  
                                            </routing-instances>  
    </configuration>

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-limit> (configuration/routing-instances(instance/protocols/bgp/group/neighbor/family/inet6/unicast)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <neighbor>  
                      <family>  
                      <inet6>  
                      <unicast>  
                      <prefix-limit>  
                      <maximum>maximum</maximum>    <!-- mandatory --&gt;<br/>                      <teardown>...</teardown>  
                      </prefix-limit>  
                      </unicast>  
                      </inet6>  
                      </family>  
                      </neighbor>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Limit maximum number of prefixes from a peer.

**Contents**   <maximum>—Maximum number of prefixes from a peer.

                  <teardown>—Clear peer connection on reaching limit.

<prefix-limit> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/l2vpn/unicast)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <l2vpn>
 <unicast>
 <prefix-limit>
 <maximum>maximum</maximum> <!-- mandatory -->
 <teardown>...</teardown>
 </prefix-limit>
 </unicast>
 </l2vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Limit maximum number of prefixes from a peer.

**Contents** <maximum>—Maximum number of prefixes from a peer.

<teardown>—Clear peer connection on reaching limit.

- <prefix-list> (configuration/firewall/family/inet/filter/term/from)

**Usage**   <configuration>  
           <firewall>  
           <family>  
           <inet>  
           <filter>  
           <term>  
           <from>  
           <prefix-list>  
             <name>name</name>    <!-- identifier -->  
             <except/>  
           </prefix-list>  
           </from>  
           </term>  
           </filter>  
           </inet>  
           </family>  
           </firewall>  
       </configuration>

**Description**   Match IP source or destination prefix list.

**Contents**   <except>—Match addresses not in this prefix list.

                <name>—Prefix list to match.

- <prefix-list> (configuration/policy-options)

**Usage**   <configuration>  
           <policy-options>  
           <prefix-list>  
             <name>name</name>    <!-- identifier -->  
             <prefix-list-item>...</prefix-list-item>  
             <apply-path>apply-path</apply-path>  
           </prefix-list>  
           </policy-options>  
       </configuration>

**Description**   Define a named set of address prefixes.

**Contents**   <apply-path>—Apply IP prefixes from a configuration statement.

                <name>—Prefix list name.

                <prefix-list-item>—No documentation is available yet.

## &lt;prefix-list&gt; (configuration/policy-options/policy-statement/from)

**Usage**

```
<configuration>
 <policy-options>
 <policy-statement>
 <from>
 <prefix-list>
 <name>name</name> <!-- identifier -->
 </prefix-list>
 </from>
 </policy-statement>
 </policy-options>
</configuration>
```

**Description** List of prefix lists of routes to match.

**Contents** <name>—Name of prefix list of routes to match.

## &lt;prefix-list&gt; (configuration/policy-options/policy-statement/term/from)

**Usage**

```
<configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <prefix-list>
 <name>name</name> <!-- identifier -->
 </prefix-list>
 </from>
 </term>
 </policy-statement>
 </policy-options>
</configuration>
```

**Description** List of prefix lists of routes to match.

**Contents** <name>—Name of prefix list of routes to match.

## &lt;prefix-list-item&gt; (configuration/policy-options/prefix-list)

**Usage**

```
<configuration>
 <policy-options>
 <prefix-list>
 <prefix-list-item>
 <name>name</name> <!-- identifier -->
 </prefix-list-item>
 </prefix-list>
 </policy-options>
</configuration>
```

**Description** No documentation is available yet.

**Contents** <name>—Address prefix.

- <primary> (configuration/protocols/mpls/label-switched-path)
  - **Usage**   <configuration>
 <protocols>
 <mpls>
 <label-switched-path>
 <**primary**>
 <name>*name*</name>   <!-- identifier -->
 <bandwidth>*bandwidth*</bandwidth>
 <class-of-service>*class-of-service*</class-of-service>
 <no-decrement-ttl/>
 <hop-limit>*hop-limit*</hop-limit>
 <no-cspf/>
 <optimize-timer>*seconds*</optimize-timer>
 <preference>*preference*</preference>
 <setup-priority>*setup-priority*</setup-priority>
 <reservation-priority>*reservation-priority*</reservation-priority>
 <record/>
 <standby/>
 <admin-group>...</admin-group>
 <adaptive/>
 </**primary**>
 </label-switched-path>
 </mpls>
 </protocols>
 </configuration>
  - **Description**   Preferred path.
  - **Contents**   <adaptive>—Have the LSP smoothly cut over to new routes.  
                   <admin-group>—Administrative group policy.  
                   <bandwidth>—Bandwidth to reserve (bps).  
                   <class-of-service>—Class-of-service value.  
                   <hop-limit>—Maximum allowed router hops.  
                   <name>—Name of path.  
                   <no-cspf>—Disable automatic path computation.  
                   <no-decrement-ttl>—Do not decrement the TTL within an LSP.  
                   <optimize-timer>—Periodical path reoptimizations.  
                   <preference>—Preference value.  
                   <record>—Record transit routers.  
                   <standby>—Keep backup paths in continuous standby.

## <profile> (configuration/access)

**Usage**

```
<configuration>
 <access>
 <profile>
 <name>name</name> <!-- identifier -->
 <client>...</client>
 <authentication-order>...</authentication-order>
 </profile>
 </access>
</configuration>
```

**Description** Set of attributes that define access.

**Contents** <authentication-order>—Order in which authentication mechanisms are used.

<client>—Entity requesting access.

<name>—Profile name.

## <promiscuous-mode> (configuration/interfaces/interface/atm-options)

**Usage**

```
<configuration>
 <interfaces>
 <interface>
 <atm-options>
 <promiscuous-mode>
 <vpi>...</vpi>
 </promiscuous-mode>
 </atm-options>
 </interface>
 </interfaces>
</configuration>
```

**Description** Set ATM interface to promiscuous mode.

**Contents** <vpi>—Open this VPI in promiscuous mode.

- <proposal> (configuration/security/ike)
  - **Usage**   <configuration>  
    <security>  
      <ike>  
        <proposal>  
          <name>name</name>   <!-- identifier -->  
          <authentication-method>authentication-method</authentication-method>  
          <dh-group>dh-group-choice</dh-group>  
          <authentication-algorithm>algorithm</authentication-algorithm>  
          <encryption-algorithm>encryption-algorithm-choice</encryption-algorithm>  
          <lifetime-seconds>seconds</lifetime-seconds>  
        </proposal>  
      </ike>  
    </security>  
  </configuration>
  - **Description**   Define an IKE proposal for a dynamic SA.
  - **Contents**   <authentication-algorithm>—Define authentication algorithm.
    - md5—MD5 authentication algorithm.
    - sha1—SHA1 authentication algorithm.<authentication-method>—Define authentication method.
    - pre-shared-keys—Preshared keys.<dh-group>—Define Diffie-Hellman group.
    - group1—Diffie-Hellman Group1.
    - group2—Diffie-Hellman Group2.<encryption-algorithm>—Define encryption algorithm.
    - 3des-cbc—3DES-CBC encryption algorithm.
    - des-cbc—DES-CBC encryption algorithm.<lifetime-seconds>—Lifetime in seconds.  
<name>—Proposal name.

## &lt;proposal&gt; (configuration/security/ipsec)

```
Usage <configuration>
 <security>
 <ipsec>
 <proposal>
 <name>name</name> <!-- identifier -->
 <protocol>protocol-choice</protocol>
 <authentication-algorithm>algorithm</authentication-algorithm>
 <encryption-algorithm>encryption-algorithm-choice</encryption-algorithm>
 <lifetime-seconds>seconds</lifetime-seconds>
 </proposal>
 </ipsec>
 </security>
 </configuration>
```

**Description** Define an IPSec proposal for a dynamic SA.

**Contents** <authentication-algorithm>—Define authentication algorithm.

- hmac-md5-96—HMAC-MD5-96 authentication algorithm.
- hmac-sha1-96—HMAC-SHA1-96 authentication algorithm.

<encryption-algorithm>—Define encryption algorithm.

- 3des-cbc—3DES-CBC encryption algorithm.
- des-cbc—DES-CBC encryption algorithm.

<lifetime-seconds>—Lifetime in seconds.

<name>—Name of the IPSec proposal.

<protocol>—Define an IPSec protocol for the proposal.

- esp—Encapsulated Security Payload header.

## &lt;proposals&gt; (configuration/security/ike/policy)

```
Usage <configuration>
 <security>
 <ike>
 <policy>
 <proposals>
 <name>name</name> <!-- identifier -->
 </proposals>
 </policy>
 </ike>
 </security>
 </configuration>
```

**Description** Define the set of IKE proposals.

**Contents** <name>—No documentation is available yet.

- <proposals> (configuration/security/ipsec/policy)

**Usage**

```
<configuration>
 <security>
 <ipsec>
 <policy>
 <proposals>
 <name>name</name> <!-- identifier -->
 </proposals>
 </policy>
 </ipsec>
 </security>
</configuration>
```

**Description** Define the set of IPSec proposals.

**Contents** <name>—No documentation is available yet.

- <protocol> (configuration/firewall/family/inet/filter/term/from)

**Usage**

```
<configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <protocol>
 <name>name</name> <!-- identifier -->
 </protocol>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
</configuration>
```

**Description** Match IP protocol type.

**Contents** <name>—No documentation is available yet.

- ah—IPSec AH.
- dstopts—IPv6 destination options.
- egp—EGP.
- esp—IPSec ESP.
- fragment—IPv6 fragment header.
- gre—GRE.
- hop-by-hop—IPv6 hop-by-hop options.

- icmp—ICMP.
- icmpv6—ICMP V6.
- igmp—IGMP.
- ipip—IP in IP.
- ipv6—IPv6 in IP.
- name—Range of values.
- no-next-header—IPv6 no next header.
- ospf—OSPF.
- pim—PIM.
- routing—IPv6 routing header.
- rsvp—RSVP.
- tcp—TCP.
- udp—UDP.

## <protocol> (configuration/policy-options/policy-statement/from)

**Usage**

```

<configuration>
 <policy-options>
 <policy-statement>
 <from>
 <protocol>
 <name>name</name> <!-- identifier -->
 </protocol>
 </from>
 </policy-statement>
 </policy-options>
</configuration>
```

**Description** Protocol from which route was learned.

**Contents** <name>—Protocol from which route was learned.

- aggregate—Aggregate routes.
- bgp—BGP.
- direct—Directly connected routes.
- dvmrp—DVMRP.
- isis—IS-IS.
- ldp—LDP.

- ■ local—Local system addresses.
- ■ msdp—Multicast Source Discovery.
- ■ ospf—OSPF.
- ■ pim—PIM.
- ■ rip—RIP.
- ■ ripng—RIPng.
- ■ rsvp—RSVP.
- ■ static—Statically defined addresses.

<protocol> (configuration/policy-options/policy-statement/term/from)

**Usage** <configuration>  
    <policy-options>  
        <policy-statement>  
            <term>  
                <from>  
                    <protocol>  
                        <name>name</name>    <!-- identifier --&gt;<br/>                    </protocol>  
                </from>  
                </term>  
            </policy-statement>  
        </policy-options>  
    </configuration>

**Description** Protocol from which route was learned.

**Contents** <name>—Protocol from which route was learned.

- aggregate—Aggregate routes.
- bgp—BGP.
- direct—Directly connected routes.
- dvmrp—DVMRP.
- isis—IS-IS.
- ldp—LDP.
- local—Local system addresses.
- msdp—Multicast Source Discovery.
- ospf—OSPF.
- pim—PIM.

- rip—RIP.
- ripng—RIPng.
- rsvp—RSVP.
- static—Statically defined addresses.

## <protocol> (configuration/policy-options/policy-statement/term/to)

**Usage**    <configuration>  
           <policy-options>  
           <policy-statement>  
           <term>  
           <to>  
             <protocol>  
               <name>name</name>    <!-- identifier -->  
             </protocol>  
           </to>  
           </term>  
           </policy-statement>  
           </policy-options>  
       </configuration>

**Description**    Protocol from which route was learned.

**Contents**    <name>—Protocol from which route was learned.

- aggregate—Aggregate routes.
- bgp—BGP.
- direct—Directly connected routes.
- dvmrp—DVMRP.
- isis—IS-IS.
- ldp—LDP.
- local—Local system addresses.
- msdp—Multicast Source Discovery.
- ospf—OSPF.
- pim—PIM.
- rip—RIP.
- ripng—RIPng.
- rsvp—RSVP.
- static—Statically defined addresses.

- <protocol> (configuration/policy-options/policy-statement/to)

•   **Usage**   <configuration>  
•    <policy-options>  
•     <policy-statement>  
•       <to>  
•         <protocol>  
•         <name>name</name>    <!-- identifier -->  
•         </protocol>  
•        </to>  
•     </policy-statement>  
•     </policy-options>  
•   </configuration>

•   **Description**   Protocol from which route was learned.

•   **Contents**   <name>—Protocol from which route was learned.

- aggregate—Aggregate routes.
- bgp—BGP.
- direct—Directly connected routes.
- dvmrp—DVMRP.
- isis—IS-IS.
- ldp—LDP.
- local—Local system addresses.
- msdp—Multicast Source Discovery.
- ospf—OSPF.
- pim—PIM.
- rip—RIP.
- ripng—RIPng.
- rsvp—RSVP.
- static—Statically defined addresses.

## &lt;protocol-except&gt; (configuration/firewall/family/inet/filter/term/from)

```

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <protocol-except>
 <name>name</name> <!-- identifier -->
 </protocol-except>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
 </configuration>

```

**Description** Do not match IP protocol type.

**Contents** <name>—No documentation is available yet.

- ah—IPSec AH.
- dstopts—IPv6 destination options.
- egp—EGP.
- esp—IPSec ESP.
- fragment—IPv6 fragment header.
- gre—GRE.
- hop-by-hop—IPv6 hop-by-hop options.
- icmp—ICMP.
- icmpv6—ICMP V6.
- igmp—IGMP.
- ipip—IP in IP.
- ipv6—IPv6 in IP.
- name—Range of values.
- no-next-header—IPv6 no next header.
- ospf—OSPF.
- pim—PIM.
- routing—IPv6 routing header.

- ■ rsvp—RSVP.
  - ■ tcp—TCP.
  - ■ udp—UDP.
- • • • •
- <protocol-version> (configuration/system/services/ssh)
- • • • •

**Usage**   <configuration>  
           <system>  
           <services>  
           <ssh>  
             <protocol-version>  
               <name>name</name>    <!-- identifier -->  
             </protocol-version>  
           </ssh>  
           </services>  
           </system>  
       </configuration>

**Description**   Specify ssh protocol versions supported.

**Contents**   <name>—Specify ssh protocol versions supported.

- ■ v1—Version 1 ssh protocol.
- ■ v2—Version 2 ssh protocol.

## <protocols> (configuration)

**Usage**   <configuration>  
           <protocols>  
             <igmp>...</igmp>  
             <router-discovery>...</router-discovery>  
             <router-advertisement>...</router-advertisement>  
             <sap>...</sap>  
             <rsvp>...</rsvp>  
             <mpls>...</mpls>  
             <bgp>...</bgp>  
             <dvmrp>...</dvmrp>  
             <isis>...</isis>  
             <msdp>...</msdp>  
             <ospf>...</ospf>  
             <ldp>...</ldp>  
             <pim>...</pim>  
             <rip>...</rip>  
             <ripng>...</ripng>  
             <connections>...</connections>  
             <vrrp>...</vrrp>  
             <l2circuit>...</l2circuit>  
             <link-management>...</link-management>  
           </protocols>  
       </configuration>

**Description**   Routing protocol configuration.

<b>Contents</b>	<bgp>—BGP options.	•
	<connections>—Circuit cross-connect configuration.	•
	<dvmrp>—DVMRP options.	•
	<igmp>—IGMP options.	•
	<isis>—IS-IS options.	•
	<l2circuit>—Configuration for Layer 2 circuits over MPLS.	•
	<ldp>—LDP options.	•
	<link-management>—LMP options.	•
	<mpls>—Multiprotocol Label Switching options.	•
	<msdp>—MSDP options.	•
	<ospf>—OSPF configuration.	•
	<pim>—PIM configuration.	•
	<rip>—RIP options.	•
	<ripng>—RIPng options.	•
	<router-advertisement>—IPv6 router advertisement options.	•
	<router-discovery>—ICMP router discovery options.	•
	<rsvp>—RSVP options.	•
	<sap>—Session Advertisement Protocol options.	•
	<vrrp>—VRRP options.	•

- <protocols> (configuration/routing-instances/instance)

**Usage**   <configuration>  
           <routing-instances>  
           <instance>  
           <protocols>  
             <bpg>...</bpg>  
             <ospf>...</ospf>  
             <rip>...</rip>  
             <isis>...</isis>  
             <l2vpn>...</l2vpn>  
             <pim>...</pim>  
             <ldp>...</ldp>  
             <router-discovery>...</router-discovery>  
           </protocols>  
           </instance>  
         </routing-instances>  
       </configuration>

**Description**   Routing protocol configuration.

**Contents**   <bpg>—BGP options.  
                   <isis>—IS-IS configuration.  
                   <l2vpn>—Layer 2 VPN configuration.  
                   <ldp>—LDP configuration.  
                   <ospf>—OSPF configuration.  
                   <pim>—PIM configuration.  
                   <rip>—RIP options.  
                   <router-discovery>—ICMP router discovery options.

- <radius-server> (configuration/system)

**Usage**   <configuration>  
           <system>  
           <radius-server>  
             <name>name</name>    <!-- identifier -->  
             <port>port</port>  
             <secret>secret</secret>  
             <timeout>seconds</timeout>  
             <retry>retry</retry>  
           </radius-server>  
           </system>  
       </configuration>

**Description**   RADIUS server configuration.

**Contents**   <name>—RADIUS authentication server address.  
                   <port>—Port number.

<retry>—Retry attempts.  
 <secret>—Shared secret with the authentication server.  
 <timeout>—Request timeout period.

## <receive> (configuration/protocols/rip)

<b>Usage</b>	<pre>&lt;configuration&gt;   &lt;protocols&gt;     &lt;rip&gt;       &lt;receive&gt;         &lt;both/&gt;         &lt;none/&gt;         &lt;version-1/&gt;         &lt;version-2/&gt;       &lt;/receive&gt;     &lt;/rip&gt;   &lt;/protocols&gt; &lt;/configuration&gt;</pre>
<b>Description</b>	Configure RIP receive options.
<b>Contents</b>	<p>&lt;both&gt;—Accept both RIPv1 and RIPv2 packets.</p> <p>&lt;none&gt;—Do not receive RIP packets.</p> <p>&lt;version-1&gt;—Accept RIPv1 packets only.</p> <p>&lt;version-2&gt;—Accept only RIPv2 packets.</p>

## <receive> (configuration/protocols/rip/group/neighbor)

<b>Usage</b>	<pre>&lt;configuration&gt;   &lt;protocols&gt;     &lt;rip&gt;       &lt;group&gt;         &lt;neighbor&gt;           &lt;receive&gt;             &lt;both/&gt;             &lt;none/&gt;             &lt;version-1/&gt;             &lt;version-2/&gt;           &lt;/receive&gt;         &lt;/neighbor&gt;       &lt;/group&gt;     &lt;/rip&gt;   &lt;/protocols&gt; &lt;/configuration&gt;</pre>
<b>Description</b>	Configure RIP receive options.
<b>Contents</b>	<p>&lt;both&gt;—Accept both RIPv1 and RIPv2 packets.</p> <p>&lt;none&gt;—Do not receive RIP packets.</p>

- <version-1>—Accept RIPv1 packets only.
- <version-2>—Accept only RIPv2 packets.
- 
- 
- 
- 
- 

<receive> (configuration/protocols/ripng)

**Usage** <configuration>  
    <protocols>  
        <ripng>  
            <receive>  
                <none/>  
            </receive>  
        </ripng>  
    </protocols>  
</configuration>

**Description** Configure RIPng receive options.

**Contents** <none>—Do not receive RIPng packets.

<receive> (configuration/protocols/ripng/group/neighbor)

**Usage** <configuration>  
    <protocols>  
        <ripng>  
            <group>  
                <neighbor>  
                    <receive>  
                        <none/>  
                    </receive>  
                </neighbor>  
            </group>  
        </ripng>  
    </protocols>  
</configuration>

**Description** Configure RIPng receive options.

**Contents** <none>—Do not receive RIPng packets.

## &lt;receive&gt; (configuration/routing-instances/instance/protocols/rip)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <rip>
 <receive>
 <both/>
 <none/>
 <version-1/>
 <version-2/>
 </receive>
 </rip>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>
```

**Description** Configure RIP receive options.

**Contents**

- <both>—Accept both RIPv1 and RIPv2 packets.
- <none>—Do not receive RIP packets.
- <version-1>—Accept RIPv1 packets only.
- <version-2>—Accept only RIPv2 packets.

## &lt;receive&gt; (configuration/routing-instances/instance/protocols/rip/group/neighbor)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <rip>
 <group>
 <neighbor>
 <receive>
 <both/>
 <none/>
 <version-1/>
 <version-2/>
 </receive>
 </neighbor>
 </group>
 </rip>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>
```

**Description** Configure RIP receive options.

- **Contents** <both>—Accept both RIPv1 and RIPv2 packets.
- <none>—Do not receive RIP packets.
- <version-1>—Accept RIPv1 packets only.
- <version-2>—Accept only RIPv2 packets.

<receive-bucket> (configuration/interfaces/interface)

```
Usage <configuration>
 <interfaces>
 <interface>
 <receive-bucket>
 <overflow>overflow-choice</overflow>
 <rate>rate</rate>
 <threshold>threshold</threshold>
 </receive-bucket>
 </interface>
 </interfaces>
 </configuration>
```

**Description** Set receive bucket parameters.

- Contents** <overflow>—Overflow behavior.
  - discard—Discard overflow packets.
  - tag—Tag and count overflow packets.
- <rate>—Bucket rate.
- <threshold>—Bucket threshold.

## <redundancy> (configuration/chassis)

**Usage**    <configuration>  
            <chassis>  
                <redundancy>  
                    <routing-engine>...</routing-engine>  
                    <ssb>...</ssb>  
                    <failover>...</failover>  
                    <keepalive-time>keepalive-time</keepalive-time>  
                </redundancy>  
            </chassis>  
      </configuration>

**Description** Redundancy settings.

**Contents** <failover>—Failover to other Routing Engine.  
<keepalive-time>—Time before Routing Engine failover (seconds).  
<routing-engine>—Redundancy options for Routing Engines.  
<ssb>—Redundancy options for System Switch Boards (SSBs).

- <reject> (configuration/firewall/family/inet/filter/term/then)

**Usage**   <configuration>  
          <firewall>  
            <family>  
              <inet>  
                <filter>  
                  <term>  
                    <then>  
                      <reject>  
                        <network-unreachable/>  
                        <host-unreachable/>  
                        <protocol-unreachable/>  
                        <port-unreachable/>  
                        <source-route-failed/>  
                        <network-unknown/>  
                        <host-unknown/>  
                        <source-host-isolated/>  
                        <network-prohibited/>  
                        <host-prohibited/>  
                        <bad-network-tos/>  
                        <bad-host-tos/>  
                        <administratively-prohibited/>  
                        <precedence-violation/>  
                        <precedence-cutoff/>  
                        <tcp-reset/>  
                      </reject>  
                    </then>  
                  </term>  
                </filter>  
              </inet>  
            </family>  
          </firewall>  
        </configuration>

**Description**   Reject the packet.

**Contents**   <administratively-prohibited>—Send ICMP Administratively Prohibited message.  
  
                  <bad-host-tos>—Send ICMP Bad Host TOS message.  
  
                  <bad-network-tos>—Send ICMP Bad Network TOS message.  
  
                  <host-prohibited>—Send ICMP Host Prohibited message.  
  
                  <host-unknown>—Send ICMP Host Unknown message.  
  
                  <host-unreachable>—Send ICMP Host Unreachable message.  
  
                  <network-prohibited>—Send ICMP Network Prohibited message.  
  
                  <network-unknown>—Send ICMP Network Unknown message.  
  
                  <network-unreachable>—Send ICMP Network Unreachable message.  
  
                  <port-unreachable>—Send ICMP Port Unreachable message.

<precedence-cutoff>—Send ICMP Precedence Cutoff message.  
 <precedence-violation>—Send ICMP Precedence Violation message.  
 <protocol-unreachable>—Send ICMP Protocol Unreachable message.  
 <source-host-isolated>—Send ICMP Source Host Isolated message.  
 <source-route-failed>—Send ICMP Source Route Failed message.  
 <tcp-reset>—Send TCP Reset message.

## <reject> (configuration/firewall/family/inet6/filter/term/then)

**Usage**   <configuration>  
   <firewall>  
   <family>  
   <inet6>  
   <filter>  
   <term>  
   <then>  
     <reject>  
       <network-unreachable/>  
       <host-unreachable/>  
       <protocol-unreachable/>  
       <port-unreachable/>  
       <source-route-failed/>  
       <network-unknown/>  
       <host-unknown/>  
       <source-host-isolated/>  
       <network-prohibited/>  
       <host-prohibited/>  
       <bad-network-tos/>  
       <bad-host-tos/>  
       <administratively-prohibited/>  
       <precedence-violation/>  
       <precedence-cutoff/>  
       <tcp-reset/>  
     </reject>  
   </then>  
   </term>  
   </filter>  
   </inet6>  
   </family>  
   </firewall>  
 </configuration>

**Description**   Reject the packet.

**Contents**   <administratively-prohibited>—Send ICMP Administratively Prohibited message.  
                 <bad-host-tos>—Send ICMP Bad Host TOS message.  
                 <bad-network-tos>—Send ICMP Bad Network TOS message.  
                 <host-prohibited>—Send ICMP Host Prohibited message.

<remote> (configuration/interfaces/interface/unit/family/tcc)

- <host-known>—Send ICMP Host Known message.
- <host-unknown>—Send ICMP Host Unknown message.
- <host-unreachable>—Send ICMP Host Unreachable message.
- <network-prohibited>—Send ICMP Network Prohibited message.
- <network-unknown>—Send ICMP Network Unknown message.
- <network-unreachable>—Send ICMP Network Unreachable message.
- <port-unreachable>—Send ICMP Port Unreachable message.
- <precedence-cutoff>—Send ICMP Precedence Cutoff message.
- <precedence-violation>—Send ICMP Precedence Violation message.
- <protocol-unreachable>—Send ICMP Protocol Unreachable message.
- <source-host-isolated>—Send ICMP Source Host Isolated message.
- <source-route-failed>—Send ICMP Source Route Failed message.
- <tcp-reset>—Send TCP Reset message.

<remote> (configuration/interfaces/interface/unit/family/tcc)

**Usage**   <configuration>  
          <interfaces>  
            <interface>  
              <unit>  
                <family>  
                  <tcc>  
                    <remote>  
                      <mac-address>mac-address</mac-address>  
                    </remote>  
                  </tcc>  
                </family>  
              </unit>  
            </interface>  
          </interfaces>  
    </configuration>

**Description**   No documentation is available yet.

**Contents**   <mac-address>—Remote host MAC address on Ethernet side of Ethernet TCC encapsulation.

## &lt;remote-interface-switch&gt; (configuration/protocols/connections)

```
Usage <configuration>
 <protocols>
 <connections>
 <remote-interface-switch>
 <name>name</name> <!-- identifier -->
 <interface>interface</interface> <!-- mandatory -->
 <transmit-lsp>transmit-lsp</transmit-lsp> <!-- mandatory -->
 <receive-lsp>receive-lsp</receive-lsp> <!-- mandatory -->
 </remote-interface-switch>
 </connections>
 </protocols>
 </configuration>
```

**Description** Bidirectional switch between a local and a remote interface.

**Contents** <interface>—Local interface name.

<name>—Name of remote interface switch.

<receive-lsp>—Name of incoming label-switched path.

<transmit-lsp>—Name of outgoing label-switched path.

## &lt;resolution&gt; (configuration/routing-instances/instance/routing-options)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <resolution>
 <tracefilter>...</tracefilter>
 <traceoptions>...</traceoptions>
 </resolution>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>
```

**Description** Route next-hop resolution options.

**Contents** <tracefilter>—Filter policy.

<traceoptions>—Trace options.

• <resolution> (configuration/routing-options)

**Usage** <configuration>  
    <routing-options>  
        <resolution>  
            <tracefilter>...</tracefilter>  
            <traceoptions>...</traceoptions>  
        </resolution>  
    </routing-options>  
</configuration>

**Description** Route next-hop resolution options.

**Contents** <tracefilter>—Filter policy.

<traceoptions>—Trace options.

• <rewrite-rules> (configuration/class-of-service)

**Usage** <configuration>  
    <class-of-service>  
        <rewrite-rules>  
            <dscp>...</dscp>  
            <exp>...</exp>  
            <inet-precedence>...</inet-precedence>  
        </rewrite-rules>  
    </class-of-service>  
</configuration>

**Description** Write code point value of outgoing packets.

**Contents** <dscp>—Differentiated Service Code Point (DSCP) rewrite rule.

<exp>—MPLS EXP rewrite rule.

<inet-precedence>—IPv4 precedence rewrite rule.

## &lt;rewrite-rules&gt; (configuration/class-of-service/interfaces/unit)

**Usage** <configuration>  
   <class-of-service>  
     <interfaces>  
       <unit>  
         <rewrite-rules>  
           <dscp>...</dscp>  
           <exp>...</exp>  
           <ieee-802.1>...</ieee-802.1>  
           <inet-precedence>...</inet-precedence>  
         </rewrite-rules>  
       </unit>  
     </interfaces>  
   </class-of-service>  
</configuration>

**Description** Rewrite rules applied to outgoing packets.

**Contents** <dscp>—DSCP rewrite rule.

<exp>—EXP rewrite rule.

<ieee-802.1>—IEEE-802.1 rewrite rule.

<inet-precedence>—IPv4 precedence rewrite rule.

## &lt;rib&gt; (configuration/routing-instances/instance/routing-options)

**Usage** <configuration>  
   <routing-instances>  
     <instance>  
       <routing-options>  
         <rib>  
           <name>name</name>    <!-- identifier --&gt;<br/>
           <static>...</static>  
           <martians>...</martians>  
           <aggregate>...</aggregate>  
           <generate>...</generate>  
           <maximum-routes>...</maximum-routes>  
         </rib>  
       </routing-options>  
     </instance>  
   </routing-instances>  
</configuration>

**Description** Routing table options.

**Contents** <aggregate>—Coalesced routes.

<generate>—Route of last resort.

<martians>—Invalid routes.

<maximum-routes>—Maximum number of routes.

<rib> (configuration/routing-options)

- `<name>`—Routing table name.
- `<static>`—Static routes.

<rib> (configuration/routing-options)

**Usage**    <configuration>  
              <routing-options>  
              <rib>  
                 <name>*name*</name>    <!-- identifier -->  
                 <static>...</static>  
                 <martians>...</martians>  
                 <aggregate>...</aggregate>  
                 <generate>...</generate>  
                 <maximum-routes>...</maximum-routes>  
              </rib>  
              </routing-options>  
      </configuration>

**Description**    Routing table options.

**Contents**    <aggregate>—Coalesced routes.  
  
              <generate>—Route of last resort.  
  
              <martians>—Invalid routes.  
  
              <maximum-routes>—Maximum number of routes.  
  
              <name>—Routing table name.  
  
              <static>—Static routes.

<rib-group> (configuration/protocols/bgp/family/inet/any)

**Usage**    <configuration>  
              <protocols>  
                 <bpg>  
                 <family>  
                 <inet>  
                 <any>  
                 <rib-group>  
                    <ribgroup-name>*ribgroup-name*</ribgroup-name>  
                 </rib-group>  
                 </any>  
                 </inet>  
                 </family>  
                 </bpg>  
              </protocols>  
      </configuration>

**Description**    Routing table group.

**Contents**    <ribgroup-name>—Name of the routing table group.

## &lt;rib-group&gt; (configuration/protocols/bgp/family/inet/labeled-unicast)

**Usage** <configuration>  
   <protocols>  
     <bgp>  
       <family>  
         <inet>  
           <labeled-unicast>  
             **<rib-group>**  
               <ribgroup-name>ribgroup-name</ribgroup-name>  
             **</rib-group>**  
           </labeled-unicast>  
         </inet>  
       </family>  
     </bgp>  
   </protocols>  
</configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

## &lt;rib-group&gt; (configuration/protocols/bgp/family/inet/multicast)

**Usage** <configuration>  
   <protocols>  
     <bgp>  
       <family>  
         <inet>  
           <multicast>  
             **<rib-group>**  
               <ribgroup-name>ribgroup-name</ribgroup-name>  
             **</rib-group>**  
           </multicast>  
         </inet>  
       </family>  
     </bgp>  
   </protocols>  
</configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/family/inet/unicast)

•

•     **Usage**   <configuration>  
•        <protocols>  
•          <bgp>  
•            <family>  
•              <inet>  
•                <unicast>  
•                  **<rib-group>**  
•                    <ribgroup-name>*ribgroup-name*</ribgroup-name>  
•                  **</rib-group>**  
•                </unicast>  
•              </inet>  
•              </family>  
•            </bgp>  
•          </protocols>  
•        </configuration>

•     **Description**   Routing table group.

•     **Contents**   <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/family/inet-vpn/any)

•

•     **Usage**   <configuration>  
•        <protocols>  
•          <bgp>  
•            <family>  
•              <inet-vpn>  
•                <any>  
•                  **<rib-group>**  
•                    <ribgroup-name>*ribgroup-name*</ribgroup-name>  
•                  **</rib-group>**  
•                </any>  
•              </inet-vpn>  
•              </family>  
•            </bgp>  
•          </protocols>  
•        </configuration>

•     **Description**   Routing table group.

•     **Contents**   <ribgroup-name>—Name of the routing table group.

## &lt;rib-group&gt; (configuration/protocols/bgp/family/inet-vpn/multicast)

**Usage** <configuration>  
   <protocols>  
     <bgp>  
       <family>  
         <inet-vpn>  
           <multicast>  
             **<rib-group>**  
               <ribgroup-name>*ribgroup-name*</ribgroup-name>  
             **</rib-group>**  
           </multicast>  
         </inet-vpn>  
       </family>  
     </bgp>  
   </protocols>  
</configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

## &lt;rib-group&gt; (configuration/protocols/bgp/family/inet-vpn/unicast)

**Usage** <configuration>  
   <protocols>  
     <bgp>  
       <family>  
         <inet-vpn>  
           <unicast>  
             **<rib-group>**  
               <ribgroup-name>*ribgroup-name*</ribgroup-name>  
             **</rib-group>**  
           </unicast>  
         </inet-vpn>  
       </family>  
     </bgp>  
   </protocols>  
</configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/family/inet6/any)

•

•     **Usage**   <configuration>  
•        <protocols>  
•          <bgp>  
•            <family>  
•              <inet6>  
•                <any>  
•                  **<rib-group>**  
•                    <ribgroup-name>*ribgroup-name*</ribgroup-name>  
•                  **</rib-group>**  
•                </any>  
•              </inet6>  
•            </family>  
•            </bgp>  
•        </protocols>  
•    </configuration>

•     **Description**   Routing table group.

•     **Contents**   <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/family/inet6/labeled-unicast)

•

•     **Usage**   <configuration>  
•        <protocols>  
•          <bgp>  
•            <family>  
•              <inet6>  
•                <labeled-unicast>  
•                  **<rib-group>**  
•                    <ribgroup-name>*ribgroup-name*</ribgroup-name>  
•                  **</rib-group>**  
•                </labeled-unicast>  
•              </inet6>  
•            </family>  
•            </bgp>  
•        </protocols>  
•    </configuration>

•     **Description**   Routing table group.

•     **Contents**   <ribgroup-name>—Name of the routing table group.

## &lt;rib-group&gt; (configuration/protocols/bgp/family/inet6/multicast)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <multicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </multicast>
 </inet6>
 </family>
 </bgp>
 </protocols>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

## &lt;rib-group&gt; (configuration/protocols/bgp/family/inet6/unicast)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <unicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </unicast>
 </inet6>
 </family>
 </bgp>
 </protocols>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/family/l2vpn/unicast)

**Usage**   <configuration>  
          <protocols>  
            <bgp>  
              <family>  
                <l2vpn>  
                  <unicast>  
                    **<rib-group>**  
                      <ribgroup-name>*ribgroup-name*</ribgroup-name>  
                    **</rib-group>**  
                  </unicast>  
                </l2vpn>  
              </family>  
            </bgp>  
          </protocols>  
        </configuration>

**Description**   Routing table group.

**Contents**   <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/group/family/inet/any)

**Usage**   <configuration>  
          <protocols>  
            <bgp>  
              <group>  
                <family>  
                  <inet>  
                    <any>  
                     **<rib-group>**  
                      <ribgroup-name>*ribgroup-name*</ribgroup-name>  
                     **</rib-group>**  
                    </any>  
                </inet>  
              </family>  
            </group>  
          </bgp>  
          </protocols>  
        </configuration>

**Description**   Routing table group.

**Contents**   <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/protocols/bgp/group/family/inet/labeled-unicast)

**Usage** <configuration>  
    <protocols>  
        <bgp>  
            <group>  
                <family>  
                    <inet>  
                        <labeled-unicast>  
                            **<rib-group>**  
                                <ribgroup-name>ribgroup-name</ribgroup-name>  
                            **</rib-group>**  
                        </labeled-unicast>  
                    </inet>  
                    </family>  
                    </group>  
                    </bgp>  
                </protocols>  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/protocols/bgp/group/family/inet/multicast)

**Usage** <configuration>  
    <protocols>  
        <bgp>  
            <group>  
                <family>  
                    <inet>  
                        <multicast>  
                            **<rib-group>**  
                                <ribgroup-name>ribgroup-name</ribgroup-name>  
                            **</rib-group>**  
                        </multicast>  
                    </inet>  
                    </family>  
                    </group>  
                    </bgp>  
                </protocols>  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/group/family/inet/unicast)

```
Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <unicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </unicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/group/family/inet-vpn/any)

```
Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet-vpn>
 <any>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </any>
 </inet-vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

## &lt;rib-group&gt; (configuration/protocols/bgp/group/family/inet-vpn/multicast)

**Usage**

```

<configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet-vpn>
 <multicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </multicast>
 </inet-vpn>
 </family>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

## &lt;rib-group&gt; (configuration/protocols/bgp/group/family/inet-vpn/unicast)

**Usage**

```

<configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet-vpn>
 <unicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </unicast>
 </inet-vpn>
 </family>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/group/family/inet6/any)

**Usage**   <configuration>  
           <protocols>  
             <bgp>  
               <group>  
                 <family>  
                   <inet6>  
                   <any>  
                     <rib-group>  
                       <ribgroup-name>ribgroup-name</ribgroup-name>  
                     </rib-group>  
                   </any>  
                   </inet6>  
                 </family>  
                 </group>  
               </bgp>  
             </protocols>  
       </configuration>

**Description**   Routing table group.

**Contents**   <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/group/family/inet6/labeled-unicast)

**Usage**   <configuration>  
           <protocols>  
             <bgp>  
               <group>  
                 <family>  
                   <inet6>  
                   <labeled-unicast>  
                     <rib-group>  
                       <ribgroup-name>ribgroup-name</ribgroup-name>  
                     </rib-group>  
                   </labeled-unicast>  
                   </inet6>  
                 </family>  
                 </group>  
               </bgp>  
             </protocols>  
       </configuration>

**Description**   Routing table group.

**Contents**   <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/protocols/bgp/group/family/inet6/multicast)

**Usage** <configuration>  
    <protocols>  
        <bgp>  
            <group>  
                <family>  
                    <inet6>  
                        <multicast>  
                            **<rib-group>**  
                                <ribgroup-name>ribgroup-name</ribgroup-name>  
                            **</rib-group>**  
                        </multicast>  
                    </inet6>  
                </family>  
            </group>  
        </bgp>  
    </protocols>  
</configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/protocols/bgp/group/family/inet6/unicast)

**Usage** <configuration>  
    <protocols>  
        <bgp>  
            <group>  
                <family>  
                    <inet6>  
                        <unicast>  
                            **<rib-group>**  
                                <ribgroup-name>ribgroup-name</ribgroup-name>  
                            **</rib-group>**  
                        </unicast>  
                    </inet6>  
                </family>  
            </group>  
        </bgp>  
    </protocols>  
</configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/group/family/l2vpn/unicast)

**Usage**

```

<configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <l2vpn>
 <unicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </unicast>
 </l2vpn>
 </family>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/group/neighbor/family/inet/any)

**Usage**

```

<configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <any>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </any>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

## <rib-group> (configuration/protocols/bgp/group/neighbor/family/inet/labeled-unicast)

**Usage**

```

<configuration>
 <protocols>
 <bpg>
 <group>
 <neighbor>
 <family>
 <inet>
 <labeled-unicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </labeled-unicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bpg>
 </protocols>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

## <rib-group> (configuration/protocols/bgp/group/neighbor/family/inet/multicast)

**Usage**

```

<configuration>
 <protocols>
 <bpg>
 <group>
 <neighbor>
 <family>
 <inet>
 <multicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </multicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bpg>
 </protocols>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/group/neighbor/family/inet/unicast)

**Usage**   <configuration>  
           <protocols>  
             <bgp>  
               <group>  
                 <neighbor>  
                   <family>  
                     <inet>  
                       <unicast>  
                         **<rib-group>**  
                         <ribgroup-name>*ribgroup-name*</ribgroup-name>  
                         **</rib-group>**  
                       </unicast>  
                     </inet>  
                     </family>  
                   </neighbor>  
                   </group>  
                 </bgp>  
               </protocols>  
       </configuration>

**Description**   Routing table group.

**Contents**   <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/any)

**Usage**   <configuration>  
           <protocols>  
             <bgp>  
               <group>  
                 <neighbor>  
                   <family>  
                     <inet-vpn>  
                       <any>  
                         **<rib-group>**  
                         <ribgroup-name>*ribgroup-name*</ribgroup-name>  
                         **</rib-group>**  
                       </any>  
                     </inet-vpn>  
                     </family>  
                   </neighbor>  
                   </group>  
                 </bgp>  
               </protocols>  
       </configuration>

**Description**   Routing table group.

**Contents**   <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/multicast)

**Usage**

```

<configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <multicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </multicast>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/unicast)

**Usage**

```

<configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <unicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </unicast>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/group/neighbor/family/inet6/any)

**Usage**

```

<configuration>
 <protocols>
 <bpg>
 <group>
 <neighbor>
 <family>
 <inet6>
 <any>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </any>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bpg>
 </protocols>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/group/neighbor/family/inet6/labeled-unicast)

**Usage**

```

<configuration>
 <protocols>
 <bpg>
 <group>
 <neighbor>
 <family>
 <inet6>
 <labeled-unicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </labeled-unicast>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bpg>
 </protocols>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/protocols/bgp/group/neighbor/family/inet6/multicast)

**Usage**

```

<configuration>
 <protocols>
 <bpg>
 <group>
 <neighbor>
 <family>
 <inet6>
 <multicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </multicast>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bpg>
 </protocols>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/protocols/bgp/group/neighbor/family/inet6/unicast)

**Usage**

```

<configuration>
 <protocols>
 <bpg>
 <group>
 <neighbor>
 <family>
 <inet6>
 <unicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </unicast>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bpg>
 </protocols>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/protocols/bgp/group/neighbor/family/l2vpn/unicast)

**Usage**   <configuration>  
           <protocols>  
             <bpg>  
               <group>  
                 <neighbor>  
                   <family>  
                     <l2vpn>  
                       <unicast>  
                         **<rib-group>**  
                         *<ribgroup-name>ribgroup-name</ribgroup-name>*  
                         **</rib-group>**  
                       </unicast>  
                     </l2vpn>  
                     </family>  
                   </neighbor>  
                   </group>  
                 </bpg>  
               </protocols>  
       </configuration>

**Description**   Routing table group.

**Contents**   <ribgroup-name>—Name of the routing table group.

## <rib-group> (configuration/protocols/dvmrp)

**Usage**   <configuration>  
           <protocols>  
             <dvmrp>  
               **<rib-group>**  
               *<ribgroup-name>ribgroup-name</ribgroup-name>*  
               **</rib-group>**  
             </dvmrp>  
           </protocols>  
       </configuration>

**Description**   Routing table group.

**Contents**   <ribgroup-name>—Name of the routing table group.

## <rib-group> (configuration/protocols/msdp)

**Usage**

```
<configuration>
 <protocols>
 <msdp>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </msdp>
 </protocols>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

## <rib-group> (configuration/protocols/pim)

**Usage**

```
<configuration>
 <protocols>
 <pim>
 <rib-group>
 <inet-old-style>inet-old-style</inet-old-style>
 <inet>inet</inet>
 <inet6>inet6</inet6>
 </rib-group>
 </pim>
 </protocols>
</configuration>
```

**Description** Routing table group.

**Contents** <inet>—Name of the IPv4 routing table group.

<inet-old-style>—No documentation is available yet.

<inet6>—Name of the IPv6 routing table group.

## <rib-group> (configuration/protocols/rip)

**Usage**

```
<configuration>
 <protocols>
 <rip>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </rip>
 </protocols>
</configuration>
```

**Description** Routing table group for importing RIP routes.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/family/inet/any)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet>
 <any>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </any>
 </inet>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/family/inet/labeled-unicast)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet>
 <labeled-unicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </labeled-unicast>
 </inet>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/family/inet/multicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <family>  
                        <inet>  
                            <multicast>  
                                **<rib-group>**  
                                    *ribgroup-name*</ribgroup-name>  
                                **</rib-group>**  
                                    </multicast>  
                                </inet>  
                                </family>  
                                </bgp>  
                                </protocols>  
                                </instance>  
                                </routing-instances>  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/family/inet/unicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <family>  
                        <inet>  
                            <unicast>  
                                **<rib-group>**  
                                    *ribgroup-name*</ribgroup-name>  
                                **</rib-group>**  
                                    </unicast>  
                                </inet>  
                                </family>  
                                </bgp>  
                                </protocols>  
                                </instance>  
                                </routing-instances>  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn/any)

**Usage**   <configuration>  
           <routing-instances>  
           <instance>  
           <protocols>  
           <bgp>  
           <family>  
           <inet-vpn>  
           <any>  
           <rib-group>  
             <ribgroup-name>*ribgroup-name*</ribgroup-name>  
           </rib-group>  
           </any>  
           </inet-vpn>  
           </family>  
           </bgp>  
           </protocols>  
           </instance>  
           </routing-instances>  
       </configuration>

**Description**   Routing table group.

**Contents**   <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn/multicast)

**Usage**   <configuration>  
           <routing-instances>  
           <instance>  
           <protocols>  
           <bgp>  
           <family>  
           <inet-vpn>  
           <multicast>  
           <rib-group>  
             <ribgroup-name>*ribgroup-name*</ribgroup-name>  
           </rib-group>  
           </multicast>  
           </inet-vpn>  
           </family>  
           </bgp>  
           </protocols>  
           </instance>  
           </routing-instances>  
       </configuration>

**Description**   Routing table group.

**Contents**   <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn/unicast)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <unicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </unicast>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/family/inet6/any)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <any>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </any>
 </inet6>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/family/inet6/labeled-unicast)

**Usage** <configuration>  
   <routing-instances>  
     <instance>  
       <protocols>  
         <bgp>  
           <family>  
             <inet6>  
               <labeled-unicast>  
                 **<rib-group>**  
                   <ribgroup-name>*ribgroup-name*</ribgroup-name>  
                 **</rib-group>**  
               </labeled-unicast>  
             </inet6>  
             </family>  
           </bgp>  
           </protocols>  
         </instance>  
       </routing-instances>  
     </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/family/inet6/multicast)

**Usage** <configuration>  
   <routing-instances>  
     <instance>  
       <protocols>  
         <bgp>  
           <family>  
             <inet6>  
               <multicast>  
                 **<rib-group>**  
                   <ribgroup-name>*ribgroup-name*</ribgroup-name>  
                 **</rib-group>**  
               </multicast>  
             </inet6>  
             </family>  
           </bgp>  
           </protocols>  
         </instance>  
       </routing-instances>  
     </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/family/inet6/unicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <family>  
                        <inet6>  
                            <unicast>  
                                **<rib-group>**  
                                    *ribgroup-name*</ribgroup-name>  
                                **</rib-group>**  
                                    </unicast>  
                                </inet6>  
                                </family>  
                                </bgp>  
                                </protocols>  
                                </instance>  
                                </routing-instances>  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/family/l2vpn/unicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <family>  
                        <l2vpn>  
                            <unicast>  
                                **<rib-group>**  
                                    *ribgroup-name*</ribgroup-name>  
                                **</rib-group>**  
                                    </unicast>  
                                </l2vpn>  
                                </family>  
                                </bgp>  
                                </protocols>  
                                </instance>  
                                </routing-instances>  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/group/family/inet/any)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <any>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </any>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/group/family/inet/labeled-unicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <family>  
                            <inet>  
                                <labeled-unicast>  
                                    **<rib-group>**  
                                        <ribgroup-name>ribgroup-name</ribgroup-name>  
                                            **</rib-group>**  
                                        </labeled-unicast>  
                                    </inet>  
                                    </family>  
                                    </group>  
                                    </bgp>  
                                    </protocols>  
                                    </instance>  
                                    </routing-instances>  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/group/family/inet/multicast)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <multicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </multicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/group/family/inet/unicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <family>  
                            <inet>  
                                <unicast>  
                                    **<rib-group>**  
                                        <ribgroup-name>ribgroup-name</ribgroup-name>  
                                            **</rib-group>**  
                                        </unicast>  
                                    </inet>  
                                    </family>  
                                    </group>  
                                    </bgp>  
                                    </protocols>  
                                    </instance>  
                                    </routing-instances>  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn/any)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet-vpn>
 <any>
 <brib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </brib-group>
 </any>
 </inet-vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn/multicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <family>  
                            <inet-vpn>  
                                <multicast>  
                                    **<rib-group>**  
                                        <ribgroup-name>ribgroup-name</ribgroup-name>  
                                            **</rib-group>**  
                                        </multicast>  
                                        </inet-vpn>  
                                        </family>  
                                        </group>  
                                        </bgp>  
                                        </protocols>  
                                        </instance>  
                                        </routing-instances>  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn/unicast)

**Usage**    <configuration>  
            <routing-instances>  
                <instance>  
                  <protocols>  
                    <bgp>  
                      <group>  
                      <family>  
                      <inet-vpn>  
                      <unicast>  
                      **<rib-group>**  
                      <ribgroup-name>ribgroup-name</ribgroup-name>  
                      **</rib-group>**  
                      </unicast>  
                      </inet-vpn>  
                      </family>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
                      </configuration>

**Description**    Routing table group.

**Contents**    <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6/any)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <family>  
                            <inet6>  
                                <any>  
                                    **<rib-group>**  
                                        <ribgroup-name>ribgroup-name</ribgroup-name>  
                                            **</rib-group>**  
                                        </any>  
                                    </inet6>  
                                    </family>  
                                    </group>  
                                    </bgp>  
                                    </protocols>  
                                    </instance>  
                                    </routing-instances>  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6/labeled-unicast)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet6>
 <labeled-unicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 <rib-group>
 </labeled-unicast>
 </inet6>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6/multicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <family>  
                            <inet6>  
                                <multicast>  
                                    **<rib-group>**  
                                        <ribgroup-name>ribgroup-name</ribgroup-name>  
                                            **</rib-group>**  
                                        </multicast>  
                                        </inet6>  
                                        </family>  
                                        </group>  
                                        </bgp>  
                                        </protocols>  
                                        </instance>  
                                        </routing-instances>  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6/unicast)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet6>
 <unicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </unicast>
 </inet6>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/group/family/l2vpn/unicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <family>  
                            <l2vpn>  
                                <unicast>  
                                    **<rib-group>**  
                                        <ribgroup-name>ribgroup-name</ribgroup-name>  
                                            **</rib-group>**  
                                        </unicast>  
                                    </l2vpn>  
                                        **</family>**  
                                    **</group>**  
                                    **</bgp>**  
                                    **</protocols>**  
                                    **</instance>**  
                                    **</routing-instances>**  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/any)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <any>
 <bgroup>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </bgroup>
 </any>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/labeled-unicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <neighbor>  
                            <family>  
                                <inet>  
                                    <labeled-unicast>  
                                        **<rib-group>**  
                                            <ribgroup-name>*ribgroup-name*</ribgroup-name>  
                                        **</rib-group>**  
                                            </labeled-unicast>  
                                            </inet>  
                                            </family>  
                                            </neighbor>  
                                            </group>  
                                            </bgp>  
                                            </protocols>  
                                            </instance>  
                                            </routing-instances>  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/multicast)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <multicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </multicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/unicast)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <unicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </unicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn/any)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <any>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </any>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn/multicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <neighbor>  
                            <family>  
                                <inet-vpn>  
                                    <multicast>  
                                        **<rib-group>**  
                                            *ribgroup-name*  
                                                **</rib-group>**  
                                            </multicast>  
                                            </inet-vpn>  
                                            </family>  
                                            </neighbor>  
                                            </group>  
                                            </bgp>  
                                            </protocols>  
                                            </instance>  
                                            </routing-instances>  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn/unicast)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <unicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </unicast>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/any)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <neighbor>  
                            <family>  
                                <inet6>  
                                    <any>  
                                        **<rib-group>**  
                                            *ribgroup-name*  
                                                **</rib-group>**  
                                            </any>  
                                        </inet6>  
                                        </family>  
                                        </neighbor>  
                                        </group>  
                                        </bgp>  
                                        </protocols>  
                                        </instance>  
                                        </routing-instances>  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/labeled-unicast)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet6>
 <labeled-unicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </labeled-unicast>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/multicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <neighbor>  
                            <family>  
                                <inet6>  
                                    <multicast>  
                                        **<rib-group>**  
                                            *ribgroup-name*  
                                                **</rib-group>**  
                                            </multicast>  
                                        </inet6>  
                                        </family>  
                                        </neighbor>  
                                        </group>  
                                        </bgp>  
                                        </protocols>  
                                        </instance>  
                                        </routing-instances>  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/unicast)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet6>
 <unicast>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </unicast>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>
```

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/l2vpn/unicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <neighbor>  
                            <family>  
                                <l2vpn>  
                                    <unicast>  
                                        **<rib-group>**  
                                            *ribgroup-name*</ribgroup-name>  
                                        **</rib-group>**  
                                            </unicast>  
                                        </l2vpn>  
                                        </family>  
                                        </neighbor>  
                                        </group>  
                                        </bgp>  
                                        </protocols>  
                                        </instance>  
                                        </routing-instances>  
    </configuration>

**Description** Routing table group.

**Contents** <ribgroup-name>—Name of the routing table group.

<rib-group> (configuration/routing-instances/instance/protocols/pim)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <pim>  
                    **<rib-group>**  
                        <inet-old-style>*inet-old-style*</inet-old-style>  
                        <inet>*inet*</inet>  
                        <inet6>*inet6*</inet6>  
                    **</rib-group>**  
                        </pim>  
                        </protocols>  
                        </instance>  
                        </routing-instances>  
    </configuration>

**Description** Routing table group.

**Contents** <inet>—Name of the IPv4 routing table group.

<inet-old-style>—No documentation is available yet.

<inet6>—Name of the IPv6 routing table group.

- <rib-group> (configuration/routing-instances/instance/protocols/rip)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <rip>
 <rib-group>
 <ribgroup-name>ribgroup-name</ribgroup-name>
 </rib-group>
 </rip>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Routing table group for importing RIP routes.

**Contents** <ribgroup-name>—Name of the routing table group.

- <rib-group> (configuration/routing-instances/instance/routing-options/interface-routes)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <interface-routes>
 <rib-group>
 <inet-old-style>inet-old-style</inet-old-style>
 <inet>inet</inet>
 <inet6>inet6</inet6>
 </rib-group>
 </interface-routes>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Routing table group.

**Contents** <inet>—Name of the IPv4 routing table group.

<inet-old-style>—No documentation is available yet.

<inet6>—Name of the IPv6 routing table group.

## &lt;rib-group&gt; (configuration/routing-options/interface-routes)

**Usage**

```
<configuration>
 <routing-options>
 <interface-routes>
 <rib-group>
 <inet-old-style>inet-old-style</inet-old-style>
 <inet>inet</inet>
 <inet6>inet6</inet6>
 </rib-group>
 </interface-routes>
 </routing-options>
</configuration>
```

**Description** Routing table group.

**Contents** <inet>—Name of the IPv4 routing table group.

<inet-old-style>—No documentation is available yet.

<inet6>—Name of the IPv6 routing table group.

## &lt;rib-groups&gt; (configuration/routing-instances/instance/routing-options)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib-groups>
 <name>name</name> <!-- identifier -->
 <export-rib>export-rib</export-rib>
 <import-rib>...</import-rib>
 <import-policy>...</import-policy>
 </rib-groups>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Group of routing tables.

**Contents** <export-rib>—Export routing table.

<import-policy>—Import policy.

<import-rib>—Import routing table.

<name>—Routing table group.

- <rib-groups> (configuration/routing-options)

**Usage**   <configuration>  
           <routing-options>  
           <rib-groups>  
             <name>*name*</name>   <!-- identifier -->  
             <export-rib>*export-rib*</export-rib>  
             <import-rib>...</import-rib>  
             <import-policy>...</import-policy>  
           </rib-groups>  
         </routing-options>  
       </configuration>

**Description**   Group of routing tables.

**Contents**   <export-rib>—Export routing table.  
  
                   <import-policy>—Import policy.  
  
                   <import-rib>—Import routing table.  
  
                   <name>—Routing table group.

- <rip> (configuration/protocols)

**Usage**   <configuration>  
           <protocols>  
           <rip>  
             <traceoptions>...</traceoptions>  
             <rib-group>...</rib-group>  
             <metric-in>*metric-in*</metric-in>  
             <send>...</send>  
             <receive>...</receive>  
             <check-zero/>  
             <message-size>*message-size*</message-size>  
             <import>...</import>  
             <authentication-type>*authentication-type-choice*</authentication-type>  
             <authentication-key>*authentication-key*</authentication-key>  
             <group>...</group>  
           </rip>  
         </protocols>  
       </configuration>

**Description**   RIP options.

**Contents**   <authentication-key>—Authentication key (password).  
  
                   <authentication-type>—Authentication type.  
  
                     ■ md5—MD5 authentication.  
  
                     ■ none—No authentication.  
  
                     ■ simple—Simple password authentication.  
  
                   <check-zero>—Check reserved fields on incoming RIPv2 packets.

<group>—Instance configuration.

<import>—Import policy.

<message-size>—Number of route entries per update message.

<metric-in>—Metric value to add to incoming routes.

<receive>—Configure RIP receive options.

<rib-group>—Routing table group for importing RIP routes.

<send>—Configure RIP send options.

<traceoptions>—Trace options for RIP.

## <rip> (configuration/routing-instances(instance/protocols))

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <rip>
 <traceoptions>...</traceoptions>
 <rib-group>...</rib-group>
 <metric-in>metric-in</metric-in>
 <send>...</send>
 <receive>...</receive>
 <check-zero/>
 <message-size>message-size</message-size>
 <import>...</import>
 <authentication-type>authentication-type-choice</authentication-type>
 <authentication-key>authentication-key</authentication-key>
 <group>...</group>
 </rip>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** RIP options.

**Contents** <authentication-key>—Authentication key (password).

<authentication-type>—Authentication type.

- md5—MD5 authentication.
- none—No authentication.
- simple—Simple password authentication.

<check-zero>—Check reserved fields on incoming RIPv2 packets.

<group>—Instance configuration.

<ripng> (configuration/protocols)

- <import>—Import policy.
- 
- <message-size>—Number of route entries per update message.
- 
- <metric-in>—Metric value to add to incoming routes.
- 
- <receive>—Configure RIP receive options.
- 
- <rib-group>—Routing table group for importing RIP routes.
- 
- <send>—Configure RIP send options.
- 
- <traceoptions>—Trace options for RIP.
- 
- 

## <ripng> (configuration/protocols)

**Usage**   <configuration>  
          <protocols>  
            <ripng>  
              <traceoptions>...</traceoptions>  
              <metric-in>*metric-in*</metric-in>  
              <send>...</send>  
              <receive>...</receive>  
              <import>...</import>  
              <group>...</group>  
            </ripng>  
          </protocols>  
      </configuration>

**Description**   RIPng options.

**Contents**   <group>—Instance configuration.  
  
                <import>—Import policy.  
  
                <metric-in>—Metric value to add to incoming routes.  
  
                <receive>—Configure RIPng receive options.  
  
                <send>—Configure RIPng send options.  
  
                <traceoptions>—Trace options for RIPng.

## &lt;rmon&gt; (configuration/snmp)

**Usage** <configuration>  
   <snmp>  
     <rmon>  
       <alarm>...</alarm>  
       <event>...</event>  
     </rmon>  
   </snmp>  
 </configuration>

**Description** Remote Monitoring (RMON) configuration.

**Contents** <alarm>—RMON alarm entries.  
           <event>—RMON event entries.

## &lt;root-authentication&gt; (configuration/system)

**Usage** <configuration>  
   <system>  
     <root-authentication>  
       <plain-text-password-value>*plain-text-password-value*</plain-text-password-value>  
       <encrypted-password>*encrypted-password*</encrypted-password>  
       <ssh-rsa>...</ssh-rsa>  
       <ssh-dsa>...</ssh-dsa>  
       <load-key-file>*load-key-file*</load-key-file>  
     </root-authentication>  
   </system>  
 </configuration>

**Description** Authentication information for the root login.

**Contents** <encrypted-password>—Crypted password string.  
           <load-key-file>—File (URL) containing one or more ssh keys.  
           <plain-text-password-value>—Plain text password.  
           <ssh-dsa>—SSH DSA public key string.  
           <ssh-rsa>—Secure shell (ssh) RSA public key string.

- <route> (configuration/routing-instances(instance/routing-options/aggregate))

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <route>
 <name>name</name> <!-- identifier -->
 <policy>...</policy>
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>....</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <community>....</community>
 <as-path>...</as-path>
 <discard/>
 <brief/>
 <full/>
 <active/>
 <passive/>
 </route>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Individual route options.

**Contents** <active>—Remove inactive route from forwarding table.

<as-path>—Autonomous system path.

<brief>—Include longest common sequences from contributing paths.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community identifier.

<discard>—Drop packets to destination; send no ICMP unreachables.

<full>—Include all AS numbers from all contributing paths.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<name>—Destination prefix.

<passive>—Retain inactive route in forwarding table.

<policy>—Policy filter.

<preference>—Preference value.

<preference2>—Preference value 2.

<tag>—Tag string.

<tag2>—Tag string 2.

## <route> (configuration/routing-instances/instance/routing-options/generate)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <route>
 <name>name</name> <!-- identifier -->
 <policy>...</policy>
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <community>...</community>
 <as-path>...</as-path>
 <discard/>
 <brief/>
 <full/>
 <active/>
 <passive/>
 </route>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Individual route options.

**Contents** <active>—Remove inactive route from forwarding table.

<as-path>—Autonomous system path.

- <brief>—Include longest common sequences from contributing paths.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community identifier.

<discard>—Drop packets to destination; send no ICMP unreachables.

<full>—Include all AS numbers from all contributing paths.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<name>—Destination prefix.

<passive>—Retain inactive route in forwarding table.

<policy>—Policy filter.

<preference>—Preference value.

<preference2>—Preference value 2.

<tag>—Tag string.

<tag2>—Tag string 2.

<route> (configuration/routing-instances/instance/routing-options/rib/aggregate)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <aggregate>
 <route>
 <name>name</name> <!-- identifier -->
 <policy>...</policy>
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <community>...</community>
 <as-path>...</as-path>
 <discard/>
 <brief/>
 <full/>
 <active/>
 <passive/>
 </route>
 </aggregate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Individual route options.

**Contents** <active>—Remove inactive route from forwarding table.

<as-path>—Autonomous system path.

<brief>—Include longest common sequences from contributing paths.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community identifier.

<discard>—Drop packets to destination; send no ICMP unreachables.

<full>—Include all AS numbers from all contributing paths.

<metric>—Metric value.

- <metric2>—Metric value 2.
- <metric3>—Metric value 3.
- <metric4>—Metric value 4.
- <name>—Destination prefix.
- <passive>—Retain inactive route in forwarding table.
- <policy>—Policy filter.
- <preference>—Preference value.
- <preference2>—Preference value 2.
- <tag>—Tag string.
- <tag2>—Tag string 2.

<route> (configuration/routing-instances/instance/routing-options/rib/generate)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <generate>
 <route>
 <name>name</name> <!-- identifier -->
 <policy>...</policy>
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <community>...</community>
 <as-path>...</as-path>
 <discard/>
 <brief/>
 <full/>
 <active/>
 <passive/>
 </route>
 </generate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Individual route options.

**Contents** <active>—Remove inactive route from forwarding table.

<as-path>—Autonomous system path.

<brief>—Include longest common sequences from contributing paths.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community identifier.

<discard>—Drop packets to destination; send no ICMP unreachables.

<full>—Include all AS numbers from all contributing paths.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<name>—Destination prefix.

<passive>—Retain inactive route in forwarding table.

<policy>—Policy filter.

<preference>—Preference value.

<preference2>—Preference value 2.

<tag>—Tag string.

<tag2>—Tag string 2.

&lt;route&gt; (configuration/routing-instances/instance/routing-options/rib/static) . . .

```

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <static>
 <route>
 <name>name</name> <!-- identifier -->
 <next-hop>...</next-hop>
 <reject/>
 <discard/>
 <receive/>
 <next-table>next-table</next-table>
 <qualified-next-hop>...</qualified-next-hop>
 <lsp-next-hop>...</lsp-next-hop>
 <retain/>
 <install/>
 <readvertise/>
 <resolve/>
 <active/>
 <passive/>
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <community>...</community>
 <as-path>...</as-path>
 </route>
 </static>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

```

**Description** Static route.**Contents** <active>—Remove inactive route from forwarding table.

&lt;as-path&gt;—Autonomous system path.

&lt;color&gt;—Color (preference) value.

&lt;color2&gt;—Color (preference) value 2.

&lt;community&gt;—BGP community identifier.

&lt;discard&gt;—Drop packets to destination; send no ICMP unreachables.

- <install>—Install route into forwarding table.
- <lsp-next-hop>—LSP next hop.
- <metric>—Metric value.
- <metric2>—Metric value 2.
- <metric3>—Metric value 3.
- <metric4>—Metric value 4.
- <name>—No documentation is available yet.
- <next-hop>—Next hop to destination.
- <next-table>—Next hop to another table.
- <passive>—Retain inactive route in forwarding table.
- <preference>—Preference value.
- <preference2>—Preference value 2.
- <qualified-next-hop>—Next hop with qualifiers.
- <readvertise>—Mark route as eligible to be readvertised.
- <receive>—Install a receive route for the destination.
- <reject>—Drop packets to destination; send ICMP unreachables.
- <resolve>—Allow resolution of non-directly connected next hops.
- <retain>—Always keep route in forwarding table.
- <tag>—Tag string.
- <tag2>—Tag string 2.

<route> (configuration/routing-instances/instance/routing-options/static)

```

Usage <configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <static>
 <route>
 <name>name</name> <!-- identifier -->
 <next-hop>...</next-hop>
 <reject/>
 <discard/>
 <receive/>
 <next-table>next-table</next-table>
 <qualified-next-hop>...</qualified-next-hop>
 <lsp-next-hop>...</lsp-next-hop>
 <retain/>
 <install/>
 <readvertise/>
 <resolve/>
 <active/>
 <passive/>
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <community>...</community>
 <as-path>...</as-path>
 </route>
 </static>
 </routing-options>
 </instance>
 </routing-instances>
 </configuration>

```

**Description** Static route.

**Contents** <active>—Remove inactive route from forwarding table.

<as-path>—Autonomous system path.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community identifier.

<discard>—Drop packets to destination; send no ICMP unreachables.

<install>—Install route into forwarding table.

- <lsp-next-hop>—LSP next hop.
  - <metric>—Metric value.
  - <metric2>—Metric value 2.
  - <metric3>—Metric value 3.
  - <metric4>—Metric value 4.
  - <name>—No documentation is available yet.
  - <next-hop>—Next hop to destination.
  - <next-table>—Next hop to another table.
  - <passive>—Retain inactive route in forwarding table.
  - <preference>—Preference value.
  - <preference2>—Preference value 2.
  - <qualified-next-hop>—Next hop with qualifiers.
  - <readvertise>—Mark route as eligible to be readvertised.
  - <receive>—Install a receive route for the destination.
  - <reject>—Drop packets to destination; send ICMP unreachables.
  - <resolve>—Allow resolution of non-directly connected next hops.
  - <retain>—Always keep route in forwarding table.
  - <tag>—Tag string.
  - <tag2>—Tag string 2.

## &lt;route&gt; (configuration/routing-options/aggregate)

```

Usage <configuration>
 <routing-options>
 <aggregate>
 <route>>
 <name>name</name> <!-- identifier -->
 <policy>...</policy>
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <community>...</community>
 <as-path>...</as-path>
 <discard/>
 <brief/>
 <full/>
 <active/>
 <passive/>
 </route>>
 </aggregate>
 </routing-options>
 </configuration>

```

**Description** Individual route options.

**Contents** <active>—Remove inactive route from forwarding table.

<as-path>—Autonomous system path.

<brief>—Include longest common sequences from contributing paths.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community identifier.

<discard>—Drop packets to destination; send no ICMP unreachables.

<full>—Include all AS numbers from all contributing paths.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<name>—Destination prefix.

<route> (configuration/routing-options/generate)

- <passive>—Retain inactive route in forwarding table.
- 
- <policy>—Policy filter.
- 
- <preference>—Preference value.
- 
- <preference2>—Preference value 2.
- 
- <tag>—Tag string.
- 
- <tag2>—Tag string 2.
- 
- 
- 
- <route> (configuration/routing-options/generate)
- 

**Usage**    <configuration>  
              <routing-options>  
              <generate>  
              <route>  
              <name>name</name>    <!-- identifier -->  
              <policy>...</policy>  
              <metric>...</metric>  
              <metric2>...</metric2>  
              <metric3>...</metric3>  
              <metric4>...</metric4>  
              <tag>...</tag>  
              <tag2>...</tag2>  
              <preference>...</preference>  
              <preference2>...</preference2>  
              <color>...</color>  
              <color2>...</color2>  
              <community>...</community>  
              <as-path>...</as-path>  
              <discard/>  
              <brief/>  
              <full/>  
              <active/>  
              <passive/>  
              </route>  
              </generate>  
              </routing-options>  
              </configuration>

**Description**    Individual route options.

**Contents**    <active>—Remove inactive route from forwarding table.  
                  <as-path>—Autonomous system path.  
                  <brief>—Include longest common sequences from contributing paths.  
                  <color>—Color (preference) value.  
                  <color2>—Color (preference) value 2.  
                  <community>—BGP community identifier.

<discard>—Drop packets to destination; send no ICMP unreachables.

<full>—Include all AS numbers from all contributing paths.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<name>—Destination prefix.

<passive>—Retain inactive route in forwarding table.

<policy>—Policy filter.

<preference>—Preference value.

<preference2>—Preference value 2.

<tag>—Tag string.

<tag2>—Tag string 2.

- <route> (configuration/routing-options/rib/aggregate)

**Usage**

```

<configuration>
 <routing-options>
 <rib>
 <aggregate>
 <route>
 <name>name</name> <!-- identifier -->
 <policy>...</policy>
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <community>...</community>
 <as-path>...</as-path>
 <discard/>
 <brief/>
 <full/>
 <active/>
 <passive/>
 </route>
 </aggregate>
 </rib>
 </routing-options>
</configuration>
```

**Description** Individual route options.

**Contents** <active>—Remove inactive route from forwarding table.

<as-path>—Autonomous system path.

<brief>—Include longest common sequences from contributing paths.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community identifier.

<discard>—Drop packets to destination; send no ICMP unreachables.

<full>—Include all AS numbers from all contributing paths.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<name>—Destination prefix.  
 <passive>—Retain inactive route in forwarding table.  
 <policy>—Policy filter.  
 <preference>—Preference value.  
 <preference2>—Preference value 2.  
 <tag>—Tag string.  
 <tag2>—Tag string 2.

## <route> (configuration/routing-options/rib/generate)

**Usage**

```

<configuration>
 <routing-options>
 <rib>
 <generate>
 <route>
 <name>name</name> <!-- identifier -->
 <policy>...</policy>
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <community>...</community>
 <as-path>...</as-path>
 <discard/>
 <brief/>
 <full/>
 <active/>
 <passive/>
 </route>
 </generate>
 </rib>
 </routing-options>
</configuration>
```

**Description** Individual route options.

**Contents**

- <active>—Remove inactive route from forwarding table.
- <as-path>—Autonomous system path.
- <brief>—Include longest common sequences from contributing paths.
- <color>—Color (preference) value.

- <color2>—Color (preference) value 2.
  - <community>—BGP community identifier.
  - <discard>—Drop packets to destination; send no ICMP unreachables.
  - <full>—Include all AS numbers from all contributing paths.
  - <metric>—Metric value.
  - <metric2>—Metric value 2.
  - <metric3>—Metric value 3.
  - <metric4>—Metric value 4.
  - <name>—Destination prefix.
  - <passive>—Retain inactive route in forwarding table.
  - <policy>—Policy filter.
  - <preference>—Preference value.
  - <preference2>—Preference value 2.
  - <tag>—Tag string.
  - <tag2>—Tag string 2.

## &lt;route&gt; (configuration/routing-options/rib/static)

```

Usage <configuration>
 <routing-options>
 <rib>
 <static>
 <route>
 <name>name</name> <!-- identifier -->
 <next-hop>...</next-hop>
 <reject/>
 <discard/>
 <receive/>
 <next-table>next-table</next-table>
 <qualified-next-hop>...</qualified-next-hop>
 <lsp-next-hop>...</lsp-next-hop>
 <retain/>
 <install/>
 <readvertise/>
 <resolve/>
 <active/>
 <passive/>
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <community>...</community>
 <as-path>...</as-path>
 </route>
 </static>
 </rib>
 </routing-options>
 </configuration>

```

**Description** Static route.

**Contents** <active>—Remove inactive route from forwarding table.

<as-path>—Autonomous system path.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community identifier.

<discard>—Drop packets to destination; send no ICMP unreachables.

<install>—Install route into forwarding table.

<lsp-next-hop>—LSP next hop.

- <metric>—Metric value.
  - <metric2>—Metric value 2.
  - <metric3>—Metric value 3.
  - <metric4>—Metric value 4.
  - <name>—No documentation is available yet.
  - <next-hop>—Next hop to destination.
  - <next-table>—Next hop to another table.
  - <passive>—Retain inactive route in forwarding table.
  - <preference>—Preference value.
  - <preference2>—Preference value 2.
  - <qualified-next-hop>—Next hop with qualifiers.
  - <readvertise>—Mark route as eligible to be readvertised.
  - <receive>—Install a receive route for the destination.
  - <reject>—Drop packets to destination; send ICMP unreachables.
  - <resolve>—Allow resolution of non-directly connected next hops.
  - <retain>—Always keep route in forwarding table.
  - <tag>—Tag string.
  - <tag2>—Tag string 2.

## &lt;route&gt; (configuration/routing-options/static)

```

Usage <configuration>
 <routing-options>
 <static>
 <rout>
 <name>name</name> <!-- identifier -->
 <next-hop>...</next-hop>
 <reject/>
 <discard/>
 <receive/>
 <next-table>next-table</next-table>
 <qualified-next-hop>...</qualified-next-hop>
 <lsp-next-hop>...</lsp-next-hop>
 <retain/>
 <install/>
 <readvertise/>
 <resolve/>
 <active/>
 <passive/>
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <community>...</community>
 <as-path>...</as-path>
 </rout>
 </static>
 </routing-options>
 </configuration>

```

**Description** Static route.

**Contents** <active>—Remove inactive route from forwarding table.

<as-path>—Autonomous system path.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community identifier.

<discard>—Drop packets to destination; send no ICMP unreachables.

<install>—Install route into forwarding table.

<lsp-next-hop>—LSP next hop.

<metric>—Metric value.

<route-distinguisher> (configuration/routing-instances/instance)

- <metric2>—Metric value 2.
- 
- <metric3>—Metric value 3.
- 
- <metric4>—Metric value 4.
- 
- <name>—No documentation is available yet.
- 
- <next-hop>—Next hop to destination.
- 
- <next-table>—Next hop to another table.
- 
- <passive>—Retain inactive route in forwarding table.
- 
- <preference>—Preference value.
- 
- <preference2>—Preference value 2.
- 
- <qualified-next-hop>—Next hop with qualifiers.
- 
- <readvertise>—Mark route as eligible to be readvertised.
- 
- <receive>—Install a receive route for the destination.
- 
- <reject>—Drop packets to destination; send ICMP unreachable.
- 
- <resolve>—Allow resolution of non-directly connected next hops.
- 
- <retain>—Always keep route in forwarding table.
- 
- <tag>—Tag string.
- 
- <tag2>—Tag string 2.

<route-distinguisher> (configuration/routing-instances/instance)

**Usage**   <configuration>  
          <routing-instances>  
          <instance>  
            <route-distinguisher>  
              <rd-type>rd-type</rd-type>  
            </route-distinguisher>  
          </instance>  
          </routing-instances>  
    </configuration>

**Description**   Route distinguisher for this instance.

**Contents**   <rd-type>—Number in (16 bit:32 bit) or (IP address:16bit) format.

## &lt;route-filter&gt; (configuration/policy-options/policy-statement/from)

```

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <route-filter>
 <address>address</address> <!-- identifier -->
 <exact/> <!-- identifier -->
 <longer/> <!-- identifier -->
 <orlonger/> <!-- identifier -->
 <upto>upto</upto> <!-- identifier -->
 <through>through</through> <!-- identifier -->
 <prefix-length-range>range</prefix-length-range> <!-- identifier -->
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <local-preference>...</local-preference>
 <origin>origin-choice</origin>
 <community>...</community>
 <damping>damping</damping>
 <as-path-prepend>as-path-prepend</as-path-prepend>
 <as-path-expand>...</as-path-expand>
 <next-hop>...</next-hop>
 <install-nexthop>...</install-nexthop>
 <trace/>
 <next>next-choice</next>
 <external>...</external>
 <load-balance>...</load-balance>
 <class>class</class>
 <destination-class>destination-class</destination-class>
 <source-class>source-class</source-class>
 <forwarding-class>forwarding-class</forwarding-class>
 <cos-next-hop-map>cos-next-hop-map</cos-next-hop-map>
 <accept/>
 <reject/>
 </route-filter>
 </from>
 </policy-statement>
 </policy-options>
 </configuration>

```

**Description** List of routes to match.

**Contents** <accept>—Accept a route.

<address>—IP address or host name.

<as-path-expand>—Prepend AS numbers prior to adding local-as (BGP only).

- <as-path-prepend>—Prepend AS numbers to an AS path (BGP only).

<class>—Set class-of-service parameters.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community properties associated with a route.

<cos-next-hop-map>—Set CoS-based next-hop map in forwarding table.

<damping>—Define BGP route flap damping parameters.

<destination-class>—Set destination class in forwarding table.

<exact>—Exactly match the prefix length.

<external>—External route.

<forwarding-class>—Set source/destination class in forwarding table.

<install-nexthop>—Choose the next hop to be used for forwarding.

<load-balance>—Type of load balancing in forwarding table.

<local-preference>—Local preference associated with a route.

<longer>—Mask is greater than the prefix length.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<next>—Skip to next policy or term.

  - **policy**—Skip to next policy filter.
  - **term**—Skip to next term in a policy filter.

<next-hop>—Set the address of the next-hop router.

<origin>—BGP path origin.

  - **egp**—Path originated in another AS.
  - **igp**—Path originated in the local IGP.
  - **incomplete**—Path was learned by some other means.

<orlonger>—Mask is greater than or equal to the prefix length.

<preference>—Preference value.

<preference2>—Preference value 2.

<prefix-length-range>—Mask falls between two prefix lengths.

<reject>—Reject a route.

<source-class>—Set source class in forwarding table.

<tag>—Tag string.

<tag2>—Tag string 2.

<through>—Route falls between two prefixes.

<trace>—Log matches to a trace file.

<upto>—Mask falls between two prefix lengths.

- <route-filter> (configuration/policy-options/policy-statement/term/from)

```

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <route-filter>
 <address>address</address> <!-- identifier -->
 <exact/> <!-- identifier -->
 <longer/> <!-- identifier -->
 <orlonger/> <!-- identifier -->
 <upto>upto</upto> <!-- identifier -->
 <through>through</through> <!-- identifier -->
 <prefix-length-range>range</prefix-length-range> <!-- identifier -->
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>....</preference>
 <preference2>....</preference2>
 <color>...</color>
 <color2>...</color2>
 <local-preference>...</local-preference>
 <origin>origin-choice</origin>
 <community>...</community>
 <damping>damping</damping>
 <as-path-prepend>as-path-prepend</as-path-prepend>
 <as-path-expand>...</as-path-expand>
 <next-hop>...</next-hop>
 <install-nexthop>...</install-nexthop>
 <trace/>
 <next>next-choice</next>
 <external>...</external>
 <load-balance>...</load-balance>
 <class>class</class>
 <destination-class>destination-class</destination-class>
 <source-class>source-class</source-class>
 <forwarding-class>forwarding-class</forwarding-class>
 <cos-next-hop-map>cos-next-hop-map</cos-next-hop-map>
 <accept/>
 <reject/>
 </route-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

```

**Description** List of routes to match.

**Contents** <accept>—Accept a route.

<address>—IP address or host name.

<as-path-expand>—Prepend AS numbers prior to adding local-as (BGP only).

<as-path-prepend>—Prepend AS numbers to an AS path (BGP only).

<class>—Set class-of-service parameters.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community properties associated with a route.

<cos-next-hop-map>—Set CoS-based next-hop map in forwarding table.

<damping>—Define BGP route flap damping parameters.

<destination-class>—Set destination class in forwarding table.

<exact>—Exactly match the prefix length.

<external>—External route.

<forwarding-class>—Set source/destination class in forwarding table.

<install-nexthop>—Choose the next hop to be used for forwarding.

<load-balance>—Type of load balancing in forwarding table.

<local-preference>—Local preference associated with a route.

<longer>—Mask is greater than the prefix length.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<next>—Skip to next policy or term.

■ policy—Skip to next policy filter.

■ term—Skip to next term in a policy filter.

<next-hop>—Set the address of the next-hop router.

<origin>—BGP path origin.

■ egp—Path originated in another AS.

■ igp—Path originated in the local IGP.

■ incomplete—Path was learned by some other means.

<orlonger>—Mask is greater than or equal to the prefix length.

- <preference>—Preference value.
- <preference2>—Preference value 2.
- <prefix-length-range>—Mask falls between two prefix lengths.
- <reject>—Reject a route.
- <source-class>—Set source class in forwarding table.
- <tag>—Tag string.
- <tag2>—Tag string 2.
- <through>—Route falls between two prefixes.
- <trace>—Log matches to a trace file.
- <upto>—Mask falls between two prefix lengths.

<router-advertisement> (configuration/protocols)

```
Usage <configuration>
 <protocols>
 <router-advertisement>
 <traceoptions>...</traceoptions>
 <interface>...</interface>
 </router-advertisement>
 </protocols>
 </configuration>
```

**Description** IPv6 router advertisement options.

**Contents** <interface>—Interfaces on which to configure router advertisement.

**<traceoptions>**—Trace options for router advertisement.

## <router-discovery> (configuration/protocols)

**Usage**

```
<configuration>
 <protocols>
 <router-discovery>
 <disable/>
 <traceoptions>...</traceoptions>
 <interface>...</interface>
 <address>...</address>
 </router-discovery>
 </protocols>
</configuration>
```

**Description** ICMP router discovery options.

**Contents** <address>—IP addresses to include in advertisements.

<disable>—Disable router discovery.

<interface>—Interfaces on which to configure router discovery.

<traceoptions>—Trace options for router discovery.

## <router-discovery> (configuration/routing-instances/instance/protocols)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <router-discovery>
 <disable/>
 <traceoptions>...</traceoptions>
 <interface>...</interface>
 <address>...</address>
 </router-discovery>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** ICMP router discovery options.

**Contents** <address>—IP addresses to include in advertisements.

<disable>—Disable router discovery.

<interface>—Interfaces on which to configure router discovery.

<traceoptions>—Trace options for router discovery.

- <routing-engine> (configuration/chassis/redundancy)

**Usage**   <configuration>  
           <chassis>  
           <redundancy>  
           <routing-engine>  
             <name>name</name>    <!-- identifier -->  
             <master/>  
             <backup/>  
             <disabled/>  
           </routing-engine>  
           </redundancy>  
         </chassis>  
       </configuration>

**Description**   Redundancy options for Routing Engines.

**Contents**   <backup>—Backup Routing Engine.

                  <disabled>—Routing Engine disabled.

                  <master>—Master Routing Engine.

                  <name>—Routing Engine slot number.

- <routing-engine-profile> (configuration/accounting-options)

**Usage**   <configuration>  
           <accounting-options>  
           <routing-engine-profile>  
             <name>name</name>    <!-- identifier -->  
             <file>file</file>  
             <interval>minutes</interval>  
             <fields>...</fields>    <!-- mandatory -->  
           </routing-engine-profile>  
         </accounting-options>  
       </configuration>

**Description**   Routing Engine profile for accounting data.

**Contents**   <fields>—Information to log to file.

                  <file>—Name of file for accounting data.

                  <interval>—Polling interval.

                  <name>—Name of profile.

## &lt;routing-instance&gt; (configuration/interfaces/interface/unit/tunnel)

**Usage**

```
<configuration>
 <interfaces>
 <interface>
 <unit>
 <tunnel>
 <routing-instance>
 <destination>destination</destination>
 </routing-instance>
 </tunnel>
 </unit>
 </interface>
 </interfaces>
</configuration>
```

**Description** Routing instance to which tunnel ends belong.

**Contents** <destination>—Routing instance of tunnel destination.

## &lt;routing-instances&gt; (configuration)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>...</instance>
 </routing-instances>
</configuration>
```

**Description** Routing instance configuration.

**Contents** <instance>—No documentation is available yet.

- <routing-options> (configuration)

**Usage**    <configuration>  
             <routing-options>  
                 <traceoptions>...</traceoptions>  
                 <options>...</options>  
                 <graceful-restart>...</graceful-restart>  
                 <interface-routes>...</interface-routes>  
                 <rib>...</rib>  
                 <static>...</static>  
                 <martians>...</martians>  
                 <aggregate>...</aggregate>  
                 <generate>...</generate>  
                 <maximum-routes>...</maximum-routes>  
                 <rib-groups>...</rib-groups>  
                 <route-record/>  
                 <router-id>*router-id*</router-id>  
                 <autonomous-system>...</autonomous-system>  
                 <confederation>...</confederation>  
                 <forwarding-table>...</forwarding-table>  
                 <resolution>...</resolution>  
                 <multicast>...</multicast>  
                 <instance-import>...</instance-import>  
                 <instance-export>...</instance-export>  
                 <auto-export>...</auto-export>  
                 <fate-sharing>...</fate-sharing>  
             </routing-options>  
     </configuration>

**Description**    Protocol-independent routing option configuration.

**Contents**    <aggregate>—Coalesced routes.

<auto-export>—Export routes between routing instances.

<autonomous-system>—Autonomous system number.

<confederation>—Confederation autonomous system number.

<fate-sharing>—Fate sharing links/nodes database.

<forwarding-table>—Forwarding table management options.

<generate>—Route of last resort.

<graceful-restart>—Graceful/hitless routing restart options.

<instance-export>—Export policy for instance RIBs.

<instance-import>—Import policy for instance RIBs.

<interface-routes>—Define routing table groups for interface routes.

<martians>—Invalid routes.

<maximum-routes>—Maximum number of routes.

<multicast>—Global multicast options.  
 <options>—Miscellaneous options.  
 <resolution>—Route next-hop resolution options.  
 <rib>—Routing table options.  
 <rib-groups>—Group of routing tables.  
 <route-record>—Enable route-recording.  
 <router-id>—Router identifier.  
 <static>—Static routes.  
 <traceoptions>—Global routing protocol trace options.

## <routing-options> (configuration/routing-instances/instance)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <traceoptions>...</traceoptions>
 <options>...</options>
 <graceful-restart>...</graceful-restart>
 <interface-routes>...</interface-routes>
 <rib>...</rib>
 <static>...</static>
 <martians>...</martians>
 <aggregate>...</aggregate>
 <generate>...</generate>
 <maximum-routes>...</maximum-routes>
 <rib-groups>...</rib-groups>
 <route-record/>
 <router-id>router-id</router-id>
 <autonomous-system>...</autonomous-system>
 <confederation>...</confederation>
 <forwarding-table>...</forwarding-table>
 <resolution>...</resolution>
 <multicast>...</multicast>
 <instance-import>...</instance-import>
 <instance-export>...</instance-export>
 <auto-export>...</auto-export>
 <fate-sharing>...</fate-sharing>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Protocol-independent routing option configuration.

**Contents** <aggregate>—Coalesced routes.

<auto-export>—Export routes between routing instances.

- <autonomous-system>—Autonomous system number.

<confederation>—Confederation autonomous system number.

<fate-sharing>—Fate sharing links/nodes database.

<forwarding-table>—Forwarding table management options.

<generate>—Route of last resort.

<graceful-restart>—Graceful/hitless routing restart options.

<instance-export>—Export policy for instance routing tables.

<instance-import>—Import policy for instance routing tables.

<interface-routes>—Define routing table groups for interface routes.

<martians>—Invalid routes.

<maximum-routes>—Maximum number of routes.

<multicast>—Global multicast options.

<options>—Miscellaneous options.

<resolution>—Route next-hop resolution options.

<rib>—Routing table options.

<rib-groups>—Group of routing tables.

<route-record>—Enable route-recording.

<router-id>—Router identifier.

<static>—Static routes.

<traceoptions>—Global routing protocol trace options.

## <rp> (configuration/protocols/pim)

```
Usage <configuration>
 <protocols>
 <pim>
 <rp>
 <bootstrap-priority>bootstrap-priority</bootstrap-priority>
 <bootstrap-import>...</bootstrap-import>
 <bootstrap-export>...</bootstrap-export>
 <local>...</local>
 <auto-rp>...</auto-rp>
 <static>...</static>
 </rp>
 </pim>
 </protocols>
 </configuration>
```

**Description** Router's rendezvous point properties.

**Contents** <auto-rp>—Set auto-RP mode.

<bootstrap-export>—Bootstrap export policy.

<bootstrap-import>—Bootstrap import policy.

<bootstrap-priority>—Eligibility to be the bootstrap router.

<local>—Router's local RP properties.

<static>—Configure static PIM RPs.

## <rp> (configuration/routing-instances/instance/protocols/pim)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <pim>
 <rp>
 <bootstrap-priority>bootstrap-priority</bootstrap-priority>
 <bootstrap-import>...</bootstrap-import>
 <bootstrap-export>...</bootstrap-export>
 <local>...</local>
 <auto-rp>...</auto-rp>
 <static>...</static>
 </rp>
 </pim>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>
```

**Description** Router's rendezvous point properties.

- **Contents** <auto-rp>—Set auto-RP mode.
- <bootstrap-export>—Bootstrap export policy.
- <bootstrap-import>—Bootstrap import policy.
- <bootstrap-priority>—Eligibility to be the bootstrap router.
- <local>—Router's local RP properties.
- <static>—Configure static PIM RPs.

<rpf-check> (configuration/interfaces/interface/unit/family/inet)

**Usage** <configuration>  
    <interfaces>  
        <interface>  
            <unit>  
                <family>  
                    <inet>  
                        **<rpf-check>**  
                            <fail-filter>fail-filter</fail-filter>  
                        **</rpf-check>**  
                    </inet>  
                </family>  
            </unit>  
        </interface>  
    </interfaces>  
</configuration>

**Description** Enable reverse-path forwarding checks on this interface.

**Contents** <fail-filter>—Name of filter applied to packets failing RPF check.

<rpf-check> (configuration/interfaces/interface/unit/family/inet6)

**Usage** <configuration>  
    <interfaces>  
        <interface>  
            <unit>  
                <family>  
                    <inet6>  
                        **<rpf-check>**  
                            <fail-filter>fail-filter</fail-filter>  
                        **</rpf-check>**  
                    </inet6>  
                </family>  
            </unit>  
        </interface>  
    </interfaces>  
</configuration>

**Description** Enable reverse-path forwarding checks on this interface.

**Contents** <fail-filter>—Name of filter applied to packets failing RPF check.

## <rsvp> (configuration/protocols)

<b>Usage</b>	<pre>&lt;configuration&gt;   &lt;protocols&gt;     &lt;rsvp&gt;       &lt;disable/&gt;       &lt;traceoptions&gt;...&lt;/traceoptions&gt;       &lt;refresh-time&gt;refresh-time&lt;/refresh-time&gt;       &lt;keep-multiplier&gt;keep-multiplier&lt;/keep-multiplier&gt;       &lt;preemption&gt;preemption-choice&lt;/preemption&gt;       &lt;interface&gt;...&lt;/interface&gt;     &lt;/rsvp&gt;   &lt;/protocols&gt; &lt;/configuration&gt;</pre>
<b>Description</b>	RSVP options.
<b>Contents</b>	<p>&lt;disable&gt;—Disable RSVP.</p> <p>&lt;interface&gt;—RSVP interface options.</p> <p>&lt;keep-multiplier&gt;—Keep multiplier.</p> <p>&lt;preemption&gt;—Set RSVP session preemption type.</p> <ul style="list-style-type: none"> <li>■ aggressive—Run RSVP session preemption whenever necessary.</li> <li>■ disabled—No RSVP session preemption.</li> <li>■ normal—Run RSVP session preemption to accommodate new sessions.</li> </ul> <p>&lt;refresh-time&gt;—Refresh time.</p> <p>&lt;traceoptions&gt;—Trace options for RSVP.</p>

## <sampling> (configuration/forwarding-options)

<b>Usage</b>	<pre>&lt;configuration&gt;   &lt;forwarding-options&gt;     &lt;sampling&gt;       &lt;disable/&gt;       &lt;traceoptions&gt;...&lt;/traceoptions&gt;       &lt;input&gt;...&lt;/input&gt;       &lt;output&gt;...&lt;/output&gt;     &lt;/sampling&gt;   &lt;/forwarding-options&gt; &lt;/configuration&gt;</pre>
<b>Description</b>	Statistical traffic sampling options.
<b>Contents</b>	<p>&lt;disable&gt;—Disable sampling.</p> <p>&lt;input&gt;—Traffic sampling data acquisition.</p>

< sap> (configuration/protocols)

- <output>—Traffic sampling data disposition.
- <traceoptions>—Traffic sampling trace options.

## <sap> (configuration/protocols)

**Usage** <configuration>  
    <protocols>  
        <sap>  
            <disable/>  
            <listen>...</listen>  
        </sap>  
    </protocols>  
</configuration>

- Description** Session Advertisement Protocol options.
- Contents** <disable>—Disable Session Advertisement Protocol.
- <listen>—Address for SAP and SDP to listen on.

## <scheduler-maps> (configuration/class-of-service)

**Usage** <configuration>  
    <class-of-service>  
        <scheduler-maps>  
            <name>name</name>    <!-- identifier -->  
            <forwarding-class>...</forwarding-class>  
        </scheduler-maps>  
    </class-of-service>  
</configuration>

- Description** Mapping of forwarding classes to packet schedulers.
- Contents** <name>—Scheduler map name.

## <schedulers> (configuration/class-of-service)

**Usage** <configuration>  
    <class-of-service>  
        <schedulers>  
            <name>name</name>    <!-- identifier -->  
            <transmit-rate>...</transmit-rate>  
            <buffer-size>...</buffer-size>  
            <priority>priority-choice</priority>  
            <drop-profile-map>...</drop-profile-map>  
        </Schedulers>  
    </class-of-service>  
</configuration>

- Description** Packet schedulers.

**Contents** <buffer-size>—Queue transmission buffer size.

<drop-profile-map>—Assign drop profile to a loss priority and protocol.

<name>—Scheduler name.

<priority>—Scheduling priority.

- high—Scheduling priority high.

- low—Scheduling priority low.

- strict-high—Scheduling priority strictly high.

<transmit-rate>—Transmit rate.

## <scope> (configuration/routing-instances/instance/routing-options/multicast)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <routing-options>  
                <multicast>  
                    <scope>  
                        <name>name</name>    <!-- identifier --&gt;<br/>                        <prefix>prefix</prefix>  
                        <interface>...</interface>  
                    </scope>  
                </multicast>  
                </routing-options>  
            </instance>  
        </routing-instances>  
    </configuration>

**Description** Multicast address scope.

**Contents** <interface>—Interface on which to configure scoping.

<name>—Name to identify multicast address scope.

<prefix>—Administratively scoped address.

- <scope> (configuration/routing-options/multicast)

**Usage**   <configuration>  
           <routing-options>  
           <multicast>  
           <scope>  
             <name>name</name>    <!-- identifier -->  
             <prefix>prefix</prefix>  
             <interface>...</interface>  
           </scope>  
           </multicast>  
           </routing-options>  
         </configuration>

**Description** Multicast address scope.

**Contents** <interface>—Interface on which to configure scoping.

<name>—Name to identify multicast address scope.

<prefix>—Administratively scoped address.

- <secondary> (configuration/protocols/mpls/label-switched-path)

**Usage**   <configuration>  
           <protocols>  
           <mpls>  
           <label-switched-path>  
           <secondary>  
             <name>name</name>    <!-- identifier -->  
             <bandwidth>bandwidth</bandwidth>  
             <class-of-service>class-of-service</class-of-service>  
             <no-decrement-ttl/>  
             <hop-limit>hop-limit</hop-limit>  
             <no-cspf/>  
             <optimize-timer>seconds</optimize-timer>  
             <preference>preference</preference>  
             <setup-priority>setup-priority</setup-priority>  
             <reservation-priority>reservation-priority</reservation-priority>  
             <record/>  
             <standby/>  
             <admin-group>...</admin-group>  
             <adaptive/>  
           </secondary>  
           </label-switched-path>  
         </mpls>  
       </protocols>  
     </configuration>

**Description** Backup path.

**Contents** <adaptive>—Have the LSP smoothly cut over to new routes.

<admin-group>—Administrative group policy.

<bandwidth>—Bandwidth to reserve (bps).

<class-of-service>—Class-of-service value.  
 <hop-limit>—Maximum allowed router hops.  
 <name>—Name of path.  
 <no-cspf>—Disable automatic path computation.  
 <no-decrement-ttl>—Do not decrement the TTL within an LSP.  
 <optimize-timer>—Periodical path reoptimizations.  
 <preference>—Preference value.  
 <record>—Record transit routers.  
 <standby>—Keep backup paths in continuous standby.

## <security> (configuration)

<b>Usage</b>	<configuration> <security> <traceoptions>...</traceoptions> <ipsec>...</ipsec> <ike>...</ike> <certificates>...</certificates> </security> </configuration>
<b>Description</b>	Security configuration.
<b>Contents</b>	<certificates>—X.509 certificate configuration. <ike>—IKE configuration. <ipsec>—IPSec configuration. <traceoptions>—Trace options for security.

## <security-association> (configuration/security/ipsec)

<b>Usage</b>	<configuration> <security> <ipsec> <security-association> <name>name</name>  <!-- identifier --> <mode>mode-choice</mode> <manual>...</manual> <dynamic>...</dynamic> </security-association> </ipsec> </security> </configuration>
<b>Description</b>	Define an IPSec security association.

- **Contents** <dynamic>—Define a dynamic IPSec security association.
- <manual>—Define a manual IPSec security association.
- <mode>—Define the mode for the SA.
  - transport—Transport mode.
  - tunnel—Tunnel mode.
- <name>—Name of security association.

## <send> (configuration/protocols/rip)

**Usage** <configuration>  
    <protocols>  
        <rip>  
            <send>  
                <broadcast/>  
                <multicast/>  
                <none/>  
                <version-1/>  
            </send>  
            </rip>  
        </protocols>  
    </configuration>

**Description** Configure RIP send options.

- Contents** <broadcast>—Broadcast RIPv2 packets (RIPv1 compatible).
- <multicast>—Multicast RIPv2 packets.
- <none>—Do not send RIP updates.
- <version-1>—Broadcast RIPv1 packets.

## &lt;send&gt; (configuration/protocols/rip/group/neighbor)

```
Usage <configuration>
 <protocols>
 <rip>
 <group>
 <neighbor>
 <send>
 <broadcast/>
 <multicast/>
 <none/>
 <version-1/>
 </send>
 </neighbor>
 </group>
 </rip>
 </protocols>
 </configuration>
```

**Description** Configure RIP send options.

**Contents** <broadcast>—Broadcast RIPv2 packets (RIPv1 compatible).  
<multicast>—Multicast RIPv2 packets.  
<none>—Do not send RIP updates.  
<version-1>—Broadcast RIPv1 packets.

## &lt;send&gt; (configuration/protocols/ripng)

```
Usage <configuration>
 <protocols>
 <ripng>
 <send>
 <none/>
 </send>
 </ripng>
 </protocols>
 </configuration>
```

**Description** Configure RIPng send options.

**Contents** <none>—Do not send RIPng updates.

<send> (configuration/protocols/ripng/group/neighbor)

- <send> (configuration/protocols/ripng/group/neighbor)

**Usage** <configuration>  
  <protocols>  
    <ripng>  
      <group>  
        <neighbor>  
          <send>  
            <none/>  
          </send>  
        </neighbor>  
      </group>  
    </ripng>  
  </protocols>  
</configuration>

**Description** Configure RIPng send options.

**Contents** <none>—Do not send RIPng updates.

- <send> (configuration/routing-instances/instance/protocols/rip)

**Usage** <configuration>  
  <routing-instances>  
    <instance>  
      <protocols>  
        <rip>  
          <send>  
            <broadcast/>  
            <multicast/>  
            <none/>  
            <version-1/>  
          </send>  
        </rip>  
      </protocols>  
    </instance>  
  </routing-instances>  
</configuration>

**Description** Configure RIP send options.

**Contents** <broadcast>—Broadcast RIPv2 packets (RIPv1 compatible).

<multicast>—Multicast RIPv2 packets.

<none>—Do not send RIP updates.

<version-1>—Broadcast RIPv1 packets.

<send> (configuration/routing-instances/instance/protocols/rip/group/neighbor)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <rip>  
                    <group>  
                        <neighbor>  
                            <send>  
                                <broadcast/>  
                                <multicast/>  
                                <none/>  
                                <version-1/>  
                            </send>  
                        </neighbor>  
                        </group>  
                        </rip>  
                        </protocols>  
                        </instance>  
                        </routing-instances>  
    </configuration>

**Description** Configure RIP send options.

**Contents** <broadcast>—Broadcast RIPv2 packets (RIPv1 compatible).  
                  <multicast>—Multicast RIPv2 packets.  
                  <none>—Do not send RIP updates.  
                  <version-1>—Broadcast RIPv1 packets.

<server> (configuration/forwarding-options/helpers/bootp)

**Usage** <configuration>  
    <forwarding-options>  
        <helpers>  
            <bootp>  
                <server>  
                    <name>name</name>    <!-- identifier --&gt;<br/>                </server>  
            </bootp>  
            </helpers>  
        </forwarding-options>  
    </configuration>

**Description** Name or address of BOOTP/DHCP server to which to forward.

**Contents** <name>—Name or address of BOOTP/DHCP server to which to forward.

- <server> (configuration/forwarding-options/helpers/bootp/interface)

**Usage**

```
<configuration>
 <forwarding-options>
 <helpers>
 <bootp>
 <interface>
 <server>
 <name>name</name> <!-- identifier -->
 </server>
 </interface>
 </bootp>
 </helpers>
 </forwarding-options>
</configuration>
```

**Description** Name or address of BOOTP/DHCP server to which to forward.

**Contents** <name>—Name or address of BOOTP/DHCP server to which to forward.

- <services> (configuration/system)

**Usage**

```
<configuration>
 <system>
 <services>
 <finger>...</finger>
 <ftp>...</ftp>
 <ssh>...</ssh>
 <telnet>...</telnet>
 <xnm-clear-text>...</xnm-clear-text>
 <xnm-ssl>...</xnm-ssl>
 </services>
 </system>
</configuration>
```

**Description** System services.

**Contents** <finger>—Allow finger requests from remote systems.

<ftp>—Allow ftp file transfers.

<ssh>—Allow ssh access.

<telnet>—Allow telnet login.

<xnm-clear-text>—Allow clear text-based JUNOScript connections.

<xnm-ssl>—Allow SSL-based JUNOScript connections.

## &lt;sfm&gt; (configuration/chassis)

**Usage**

```
<configuration>
 <chassis>
 <sfm>
 <name>name</name> <!-- identifier -->
 </sfm>
 </chassis>
</configuration>
```

**Description** Switching and Forwarding Module (SFM) card parameters.

**Contents** <name>—SFM slot number.

## &lt;sfm&gt; (configuration/chassis/redundancy)

**Usage**

```
<configuration>
 <chassis>
 <redundancy>
 <sfm>
 <name>name</name> <!-- identifier -->
 <always/>
 <preferred/>
 </sfm>
 </redundancy>
 </chassis>
</configuration>
```

**Description** Redundancy options for Switching and Forwarding Modules (SFMs).

**Contents** <always>—Sole device.

<name>—SFM slot number.

<preferred>—Preferred device.

## &lt;shaping&gt; (configuration/interfaces/interface/unit)

**Usage**

```
<configuration>
 <interfaces>
 <interface>
 <unit>
 <shaping>
 <cbr>cbr</cbr>
 <vbr>...</vbr>
 <queue-length>queue-length</queue-length>
 </shaping>
 </unit>
 </interface>
 </interfaces>
</configuration>
```

**Description** Virtual circuit traffic-shaping options.



## &lt;site&gt; (configuration/routing-instances/instance/protocols/l2vpn)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <l2vpn>
 <site>
 <name>name</name> <!-- identifier -->
 <site-identifier>site-identifier</site-identifier> <!-- mandatory -->
 <interface>...</interface>
 </site>
 </l2vpn>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Layer 2 VPN sites connected to this Provider Equipment.

**Contents** <interface>—Interface connecting this site to the VPN.

<name>—Name of Layer 2 VPN site.

<site-identifier>—Layer 2 VPN site identifier, unique within the VPN.

## &lt;snmp&gt; (configuration)

**Usage**

```
<configuration>
 <snmp>
 <name>name</name>
 <description>description</description>
 <location>location</location>
 <contact>contact</contact>
 <interface>...</interface>
 <engine-id>...</engine-id>
 <access>...</access>
 <view>...</view>
 <community>...</community>
 <trap-options>...</trap-options>
 <trap-group>...</trap-group>
 <traceoptions>...</traceoptions>
 <rmon>...</rmon>
 </snmp>
</configuration>
```

**Description** Simple Network Management Protocol.

**Contents** <access>—SNMPv3 access information.

<community>—Configure a community string.

<contact>—Contact information for administrator.

<description>—System description.

- `<engine-id>`—SNMPv3 engine ID.
- `<interface>`—Restrict SNMP requests to interfaces.
- `<location>`—Physical location of system.
- `<name>`—System name override.
- `<rmon>`—Remote Monitoring (RMON) configuration.
- `<traceoptions>`—Trace options for SNMP.
- `<trap-group>`—Configure traps and notifications.
- `<trap-options>`—SNMP trap options.
- `<view>`—Define MIB views.

• **<sonet> (configuration/chassis/aggregated-devices)**

**Usage**   `<configuration>`  
          `<chassis>`  
          `<aggregated-devices>`  
          `<sonet>`  
          `<device-count>device-count</device-count>`  
          `</sonet>`  
          `</aggregated-devices>`  
          `</chassis>`  
        `</configuration>`

**Description**   Aggregated device options for POS.

**Contents**   `<device-count>`—Number of aggregated POS devices.

## &lt;sonet&gt; (configuration/chassis/alarm)

```

Usage <configuration>
 <chassis>
 <alarm>
 <sonet>
 <lol>lol-choice</lol>
 <pll>pll-choice</pll>
 <lof>lof-choice</lof>
 <los>los-choice</los>
 <ais-l>ais-l-choice</ais-l>
 <ais-p>ais-p-choice</ais-p>
 <lop-p>lop-p-choice</lop-p>
 <ber-sd>ber-sd-choice</ber-sd>
 <ber-sf>ber-sf-choice</ber-sf>
 <rfi-l>rfi-l-choice</rfi-l>
 <rfi-p>rfi-p-choice</rfi-p>
 <uneq-p>uneq-p-choice</uneq-p>
 <locd>locd-choice</locd>
 <plm-p>plm-p-choice</plm-p>
 </sonet>
 </alarm>
 </chassis>
 </configuration>

```

**Description** SONET alarms.

**Contents** <ais-l>—Line alarm indication signal, AIS-L failure.

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

<ais-p>—Path alarm indication signal, AIS-P failure.

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

<ber-sd>—Signal Degrade (SD), bit error rate > 1E-6.

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

- <ber-sf>—Signal Fail (SF), bit error rate > 1E-3.
    - ignore—Do not assert any alarm signals.
    - red—Assert red system alarm.
    - yellow—Assert yellow system alarm.
  - <locd>—Loss of cell delineation (ATM only).
    - ignore—Do not assert any alarm signals.
    - red—Assert red system alarm.
    - yellow—Assert yellow system alarm.
  - <lof>—Loss of framing, LOF failure.
    - ignore—Do not assert any alarm signals.
    - red—Assert red system alarm.
    - yellow—Assert yellow system alarm.
  - <lol>—Loss of light.
    - ignore—Do not assert any alarm signals.
    - red—Assert red system alarm.
    - yellow—Assert yellow system alarm.
  - <lop-p>—Loss of pointer, LOP-P failure.
    - ignore—Do not assert any alarm signals.
    - red—Assert red system alarm.
    - yellow—Assert yellow system alarm.
  - <los>—Loss of signal, LOS failure.
    - ignore—Do not assert any alarm signals.
    - red—Assert red system alarm.
    - yellow—Assert yellow system alarm.
  - <pll>—Phase locked loop out of lock.
    - ignore—Do not assert any alarm signals.
    - red—Assert red system alarm.
    - yellow—Assert yellow system alarm.

<plm-p>—STS payload label (C2) mismatch, PLM-P failure.

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

<rfi-l>—Line remote failure indication, RFI-L, line FERF

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

<rfi-p>—Path remote failure indication, RFI-P, STS path yellow.

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

<uneq-p>—STS Path (C2) unequipped, UNEQ-P failure.

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

## <sonet-options> (configuration/interfaces/interface)

```
Usage <configuration>
 <interfaces>
 <interface>
 <sonet-options>
 <fcs>fcs-choice</fcs>
 <path-trace>path-trace</path-trace>
 <loopback>loopback-choice</loopback>
 <aps>...</aps>
 <payload-scrambler>...</payload-scrambler>
 <no-payload-scrambler/>
 <z0-increment/>
 <bytes>...</bytes>
 <rfc-2615/>
 <aggregate>aggregate</aggregate>
 </sonet-options>
 </interface>
 </interfaces>
 </configuration>
```

**Description** SONET interface-specific options.

- **Contents** <aggregate>—Join a SONET aggregate.
- <aps>—Automatic Protect Switching.
- <bytes>—Set SONET header bytes.
- <fcs>—Frame checksum.
  - 16—16-bit mode.
  - 32—32-bit mode.
- <loopback>—Loopback mode.
  - local—Local loopback.
  - remote—Remote loopback.
- <no-payload-scrambler>—Do not enable payload scrambling.
- <path-trace>—Path trace string.
- <payload-scrambler>—Enable payload scrambling.
- <rfc-2615>—RFC 2615 compliance.
- <z0-increment>—Increment Z0 in SDH mode.
- <source> (configuration/protocols/igmp/interface/static/group)
  - **Usage** <configuration>
    - <protocols>
      - <igmp>
        - <interface>
          - <static>
            - <group>
              - <source>
                - <name>name</name> <!-- identifier -->
                - </source>
              - </group>
            - </static>
          - </interface>
        - </igmp>
      - </protocols>
    - </configuration>
  - **Description** IP multicast source address.
  - **Contents** <name>—Source address of IP multicast data.

## &lt;source-address&gt; (configuration/firewall/family/inet/filter/term/from)

**Usage**

```
<configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <source-address>
 <name>name</name> <!-- identifier -->
 <except/>
 </source-address>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
</configuration>
```

**Description** Match IP source address.

**Contents** <except>—Match address not in this prefix.

<name>—Prefix to match.

## &lt;source-address&gt; (configuration/firewall/family/inet6/filter/term/from)

**Usage**

```
<configuration>
 <firewall>
 <family>
 <inet6>
 <filter>
 <term>
 <from>
 <source-address>
 <name>name</name> <!-- identifier -->
 <except/>
 </source-address>
 </from>
 </term>
 </filter>
 </inet6>
 </family>
 </firewall>
</configuration>
```

**Description** Match IP source address.

**Contents** <except>—Match address not in this prefix.

<name>—Prefix to match.

- <source-address-filter> (configuration/interfaces/interface/aggregated-ether-options)

**Usage**

```
<configuration>
 <interfaces>
 <interface>
 <aggregated-ether-options>
 <source-address-filter>
 <name>name</name> <!-- identifier -->
 </source-address-filter>
 </aggregated-ether-options>
 </interface>
 </interfaces>
</configuration>
```

**Description** Source address filters.

**Contents** <name>—Define a source address filter.

- <source-address-filter> (configuration/interfaces/interface/fastether-options)

**Usage**

```
<configuration>
 <interfaces>
 <interface>
 <fastether-options>
 <source-address-filter>
 <name>name</name> <!-- identifier -->
 </source-address-filter>
 </fastether-options>
 </interface>
 </interfaces>
</configuration>
```

**Description** Source address filters.

**Contents** <name>—Define a source address filter.

- <source-address-filter> (configuration/interfaces/interface/gigether-options)

**Usage**

```
<configuration>
 <interfaces>
 <interface>
 <gigether-options>
 <source-address-filter>
 <name>name</name> <!-- identifier -->
 </source-address-filter>
 </gigether-options>
 </interface>
 </interfaces>
</configuration>
```

**Description** Source address filters.

**Contents** <name>—Define a source address filter.

## &lt;source-address-filter&gt; (configuration/policy-options/policy-statement/from)

```

Usage <configuration>
 <policy-options>
 <policy-statement>
 <from>
 <source-address-filter>
 <address>address</address> <!-- identifier -->
 <exact/> <!-- identifier -->
 <longer/> <!-- identifier -->
 <orlonger/> <!-- identifier -->
 <upto>upto</upto> <!-- identifier -->
 <through>through</through> <!-- identifier -->
 <prefix-length-range>range</prefix-length-range> <!-- identifier -->
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <local-preference>...</local-preference>
 <origin>origin-choice</origin>
 <community>...</community>
 <damping>damping</damping>
 <as-path-prepend>as-path-prepend</as-path-prepend>
 <as-path-expand>...</as-path-expand>
 <next-hop>...</next-hop>
 <install-nexthop>...</install-nexthop>
 <trace/>
 <next>next-choice</next>
 <external>...</external>
 <load-balance>...</load-balance>
 <class>class</class>
 <destination-class>destination-class</destination-class>
 <source-class>source-class</source-class>
 <forwarding-class>forwarding-class</forwarding-class>
 <cos-next-hop-map>cos-next-hop-map</cos-next-hop-map>
 <accept/>
 <reject/>
 </source-address-filter>
 </from>
 </policy-statement>
 </policy-options>
 </configuration>

```

**Description** List of source addresses to match.

**Contents** <accept>—Accept a route.

<address>—IP address or host name.

<as-path-expand>—Prepend AS numbers prior to adding local-as (BGP only).

- <as-path-prepend>—Prepend AS numbers to an AS path (BGP only).

<class>—Set class-of-service parameters.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community properties associated with a route.

<cos-next-hop-map>—Set CoS-based next-hop map in forwarding table.

<damping>—Define BGP route flap damping parameters.

<destination-class>—Set destination class in forwarding table.

<exact>—Exactly match the prefix length.

<external>—External route.

<forwarding-class>—Set source/destination class in forwarding table.

<install-nexthop>—Choose the next hop to be used for forwarding.

<load-balance>—Type of load balancing in forwarding table.

<local-preference>—Local preference associated with a route.

<longer>—Mask is greater than the prefix length.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<next>—Skip to next policy or term.

  - **policy**—Skip to next policy filter.
  - **term**—Skip to next term in a policy filter.

<next-hop>—Set the address of the next-hop router.

<origin>—BGP path origin.

  - **egp**—Path originated in another AS.
  - **igp**—Path originated in the local IGP.
  - **incomplete**—Path was learned by some other means.

<orlonger>—Mask is greater than or equal to the prefix length.

<preference>—Preference value.

- <preference2>—Preference value 2.
  - <prefix-length-range>—Mask falls between two prefix lengths.
  - <reject>—Reject a route.
  - <source-class>—Set source class in forwarding table.
  - <tag>—Tag string.
  - <tag2>—Tag string 2.
  - <through>—Route falls between two prefixes.
  - <trace>—Log matches to a trace file.
  - <upto>—Mask falls between two prefix lengths.
- ⋮

- <source-address-filter> (configuration/policy-options/policy-statement/term/from)

```

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <from>
 <source-address-filter>
 <address>address</address> <!-- identifier -->
 <exact/> <!-- identifier -->
 <longer/> <!-- identifier -->
 <orlonger/> <!-- identifier -->
 <upto>upto</upto> <!-- identifier -->
 <through>through</through> <!-- identifier -->
 <prefix-length-range>range</prefix-length-range> <!-- identifier -->
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <local-preference>...</local-preference>
 <origin>origin-choice</origin>
 <community>...</community>
 <damping>damping</damping>
 <as-path-prepend>as-path-prepend</as-path-prepend>
 <as-path-expand>...</as-path-expand>
 <next-hop>...</next-hop>
 <install-nexthop>...</install-nexthop>
 <trace/>
 <next>next-choice</next>
 <external>...</external>
 <load-balance>...</load-balance>
 <class>class</class>
 <destination-class>destination-class</destination-class>
 <source-class>source-class</source-class>
 <forwarding-class>forwarding-class</forwarding-class>
 <cos-next-hop-map>cos-next-hop-map</cos-next-hop-map>
 <accept/>
 <reject/>
 </source-address-filter>
 </from>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

```

**Description** List of source addresses to match.

**Contents** <accept>—Accept a route.

<address>—IP address or host name.

<as-path-expand>—Prepend AS numbers prior to adding local-as (BGP only).

<as-path-prepend>—Prepend AS numbers to an AS path (BGP only).

<class>—Set class-of-service parameters.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community properties associated with a route.

<cos-next-hop-map>—Set CoS-based next-hop map in forwarding table.

<damping>—Define BGP route flap damping parameters.

<destination-class>—Set destination class in forwarding table.

<exact>—Exactly match the prefix length.

<external>—External route.

<forwarding-class>—Set source/destination class in forwarding table.

<install-nexthop>—Choose the next hop to be used for forwarding.

<load-balance>—Type of load balancing in forwarding table.

<local-preference>—Local preference associated with a route.

<longer>—Mask is greater than the prefix length.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<next>—Skip to next policy or term.

- policy—Skip to next policy filter.

- term—Skip to next term in a policy filter.

<next-hop>—Set the address of the next-hop router.

<origin>—BGP path origin.

- egp—Path originated in another AS.

- igp—Path originated in the local IGP.

- incomplete—Path was learned by some other means.

<orlonger>—Mask is greater than or equal to the prefix length.

- *<preference>*—Preference value.
  - *<preference2>*—Preference value 2.
  - *<prefix-length-range>*—Mask falls between two prefix lengths.
  - *<reject>*—Reject a route.
  - *<source-class>*—Set source class in forwarding table.
  - *<tag>*—Tag string.
  - *<tag2>*—Tag string 2.
  - *<through>*—Route falls between two prefixes.
  - *<trace>*—Log matches to a trace file.
  - *<upto>*—Mask falls between two prefix lengths.
- <*source-class-usage*> (configuration/interfaces/interface/unit/family/inet/accounting)

**Usage**   <configuration>  
          <interfaces>  
            <interface>  
              <unit>  
                <family>  
                  <inet>  
                    <accounting>  
                      <*source-class-usage*>  
                      <input/>  
                      <output/>  
                      </*source-class-usage*>  
                    </accounting>  
                  </inet>  
                  </family>  
                  </unit>  
                  </interface>  
                  </interfaces>  
      </configuration>

**Description**   No documentation is available yet.

**Contents**   <input>—Specify this interface for source-class-usage input.

                  <output>—Specify this interface for source-class-usage output.

<source-class-usage> (configuration/interfaces/interface/unit/family/inet6/accounting)

**Usage**

```
<configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <inet6>
 <accounting>
 <source-class-usage>
 <input/>
 <output/>
 </source-class-usage>
 </accounting>
 </inet6>
 </family>
 </unit>
 </interface>
 </interfaces>
</configuration>
```

**Description** No documentation is available yet.

**Contents** <input>—Specify this interface for source-class-usage input.

<output>—Specify this interface for source-class-usage output.

<source-classes> (configuration/accounting-options/class-usage-profile)

**Usage**

```
<configuration>
 <accounting-options>
 <class-usage-profile>
 <source-classes>
 <name>name</name> <!-- identifier -->
 </source-classes>
 </class-usage-profile>
 </accounting-options>
</configuration>
```

**Description** Name of source class.

**Contents** <name>—Class name.

- <source-destination-prefix> (configuration/forwarding-options/sampling/output/cflowd/aggregation)

**Usage**

```

<configuration>
 <forwarding-options>
 <sampling>
 <output>
 <cflowd>
 <aggregation>
 <source-destination-prefix>
 <caida-compliant/>
 </source-destination-prefix>
 </aggregation>
 </cflowd>
 </output>
 </sampling>
 </forwarding-options>
</configuration>
```

**Description** Aggregate by source and destination prefix.

**Contents** <caida-compliant>—Compatible with Caida record format for prefix aggregation (v8).

- <source-port> (configuration/firewall/family/inet/filter/term/from)

**Usage**

```

<configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <source-port>
 <name>name</name> <!-- identifier -->
 </source-port>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
</configuration>
```

**Description** Match TCP/UDP source port.

**Contents** <name>—No documentation is available yet.

- afs—Andrew File System.
- bgp—BGP.
- biff—Biff/Comsat.
- bootpc—BOOTP Client.
- bootps—BOOTP Server.

- cmd—UNIX rsh.
- cvspserver—CVS pserver.
- dhcp—DHCP.
- domain—Domain Name System (DNS).
- eklogin—Encrypted Kerberos rlogin.
- ekshell—Encrypted Kerberos rsh.
- exec—UNIX rexec.
- finger—Finger.
- ftp—FTP.
- ftp-data—FTP data.
- http—HTTP.
- https—Secure HTTP.
- ident—Ident.
- imap—IMAP.
- kerberos-sec—Kerberos Sec.
- klogin—Kerberos rlogin.
- kpasswd—Kerberos passwd.
- krb-prop—Kerberos db propagation.
- krbupdate—Kerberos db update.
- kshell—Kerberos rsh.
- ldap—LDAP.
- ldp—Label Distribution Protocol.
- login—UNIX rlogin.
- mobileip-agent—Mobile IP agent.
- mobilip-mn—Mobile IP MN.
- msdp—Multicast Source Discovery Protocol.
- name—Range of values.
- netbios-dgm—NETBIOS DGM.
- netbios-ns—NETBIOS NS.

- ■ netbios-ssn—NETBIOS SSN.
- ■ nfsd—NFS.
- ■ nntp—NNTP.
- ■ ntalk—New Talk.
- ■ ntp—NTP.
- ■ pop3—POP3.
- ■ pptp—Point-to-Point Tunneling.
- ■ printer—Printer.
- ■ radacct—RADIUS accounting.
- ■ radius—RADIUS authentication.
- ■ rip—Routing Information Protocol.
- ■ rkinit—Kerberos remote kinit.
- ■ smtp—SMTP.
- ■ snmp—SNMP.
- ■ snmptrap—SNMP traps.
- ■ snpp—Simple paging protocol.
- ■ socks—Socks.
- ■ ssh—Secure shell (ssh).
- ■ sunrpc—SUN RPC.
- ■ syslog—Syslog.
- ■ tacacs—TACACS (original, not TACACS+ ).
- ■ talk—UNIX Talk.
- ■ telnet—Telnet.
- ■ tftp—TFTP.
- ■ timed—UNIX Time Daemon.
- ■ who—UNIX rwho.
- ■ xdmcp—XDMCP.

<source-port> (configuration/firewall/family/inet6/filter/term/from)

```
Usage <configuration>
 <firewall>
 <family>
 <inet6>
 <filter>
 <term>
 <from>
 <source-port>
 <name>name</name> <!-- identifier -->
 </source-port>
 </from>
 </term>
 </filter>
 </inet6>
 </family>
 </firewall>
 </configuration>
```

**Description** Match TCP/UDP source port.

**Contents** <name>—No documentation is available yet.

- afs—Andrew File System.
- bgp—BGP.
- biff—Biff/Comsat.
- bootpc—BOOTP Client.
- bootps—BOOTP Server.
- cmd—UNIX rsh.
- cvspserver—CVS pserver.
- dhcp—DHCP.
- domain—Domain Name System (DNS).
- eklogin—Encrypted Kerberos rlogin.
- ekshell—Encrypted Kerberos rsh.
- exec—UNIX rexec.
- finger—Finger
- ftp—FTP.
- ftp-data—FTP data.
- http—HTTP.
- https—Secure HTTP.

- ■ ident—Ident.
- ■ imap—IMAP.
- ■ kerberos-sec—Kerberos Sec.
- ■ klogin—Kerberos rlogin.
- ■ kpasswd—Kerberos passwd.
- ■ krb-prop—Kerberos db propagation.
- ■ krbupdate—Kerberos db update.
- ■ kshell—Kerberos rsh.
- ■ ldap—LDAP.
- ■ ldp—Label Distribution Protocol.
- ■ login—UNIX rlogin.
- ■ mobileip-agent—Mobile IP agent.
- ■ mobilip-mn—Mobile IP MN.
- ■ msdp—Multicast Source Discovery Protocol.
- ■ name—Range of values.
- ■ netbios-dgm—NETBIOS DGM.
- ■ netbios-ns—NETBIOS NS.
- ■ netbios-ssn—NETBIOS SSN.
- ■ nfsd—NFS.
- ■ nntp—NNTP.
- ■ ntalk—New Talk.
- ■ ntp—NTP.
- ■ pop3—POP3.
- ■ pptp—Point-to-Point Tunneling.
- ■ printer—Printer.
- ■ radacct—RADIUS accounting.
- ■ radius—RADIUS authentication.
- ■ rip—Routing Information Protocol.
- ■ rkinit—Kerberos remote kinit.

- smtp—SMTP.
- snmp—SNMP.
- snmptrap—SNMP traps.
- snpp—Simple paging protocol.
- socks—Socks.
- ssh—Secure shell (ssh).
- sunrpc—SUN RPC.
- syslog—Syslog.
- tacacs—TACACS (original, not TACACS+ ).
- talk—UNIX Talk.
- telnet—Telnet.
- tftp—TFTP.
- timed—UNIX Time Daemon.
- who—UNIX rwho.
- xdmcp—XDMCP.

## &lt;source-port-except&gt; (configuration/firewall/family/inet/filter/term/from)

**Usage**

```
<configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <source-port-except>
 <name>name</name> <!-- identifier -->
 </source-port-except>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
</configuration>
```

**Description** Do not match TCP/UDP source port.

- **Contents** <name>—No documentation is available yet.
  - afs—Andrew File System.
  - bgp—BGP.
  - biff—Biff/Comsat.
  - bootpc—BOOTP Client.
  - bootps—BOOTP Server.
  - cmd—UNIX rsh.
  - cvspserver—CVS pserver.
  - dhcp—DHCP.
  - domain—Domain Name System (DNS).
  - eklogin—Encrypted Kerberos rlogin.
  - ekshell—Encrypted Kerberos rsh.
  - exec—UNIX rexec.
  - finger—Finger.
  - ftp—FTP.
  - ftp-data—FTP data.
  - http—HTTP.
  - https—Secure HTTP.
  - ident—Ident.
  - imap—IMAP.
  - kerberos-sec—Kerberos Sec.
  - klogin—Kerberos rlogin.
  - kpasswd—Kerberos passwd.
  - krb-prop—Kerberos db propagation.
  - krbupdate—Kerberos db update.
  - kshell—Kerberos rsh.
  - ldap—LDAP.
  - ldp—Label Distribution Protocol.
  - login—UNIX rlogin.

- mobileip-agent—Mobile IP agent.
- mobilip-mn—Mobile IP MN.
- msdp—Multicast Source Discovery Protocol.
- name—Range of values.
- netbios-dgm—NETBIOS DGM.
- netbios-ns—NETBIOS NS.
- netbios-ssn—NETBIOS SSN.
- nfsd—NFS.
- nntp—NNTP.
- ntalk—New Talk.
- ntp—NTP.
- pop3—POP3.
- pptp—Point-to-Point Tunneling.
- printer—Printer.
- radacct—RADIUS accounting.
- radius—RADIUS authentication.
- rip—Routing Information Protocol.
- rkinit—Kerberos remote kinit.
- smtp—SMTP.
- snmp—SNMP.
- snmptrap—SNMP traps.
- snpp—Simple paging protocol.
- socks—Socks.
- ssh—Secure shell (ssh).
- sunrpc—SUN RPC.
- syslog—Syslog.
- tacacs—TACACS (original, not TACACS+ ).
- talk—UNIX Talk.
- telnet—Telnet.

<source-port-except> (configuration/firewall/family/inet6/filter/term/from)

- tftp—TFTP.
  - timed—UNIX Time Daemon.
  - who—UNIX rwho.
  - xdmcp—XDMCP.
- 
- <source-port-except> (configuration/firewall/family/inet6/filter/term/from)

**Usage** <configuration>  
    <firewall>  
        <family>  
            <inet6>  
                <filter>  
                    <term>  
                        <from>  
                            <source-port-except>  
                                <name>name</name>    <!-- identifier -->  
                            </source-port-except>  
                        </from>  
                        </term>  
                        </filter>  
                        </inet6>  
                        </family>  
                        </firewall>  
    </configuration>

**Description** Do not match TCP/UDP source port.

**Contents** <name>—No documentation is available yet.

- afs—Andrew File System.
- bgp—BGP.
- biff—Biff/Comsat.
- bootpc—BOOTP Client.
- bootps—BOOTP Server.
- cmd—UNIX rsh.
- cvspserver—CVS pserver.
- dhcp—DHCP.
- domain—Domain Name System (DNS).
- eklogin—Encrypted Kerberos rlogin.
- ekshell—Encrypted Kerberos rsh.
- exec—UNIX rexec.

- finger—Finger.
- ftp—FTP.
- ftp-data—FTP data.
- http—HTTP.
- https—Secure HTTP.
- ident—Ident.
- imap—IMAP.
- kerberos-sec—Kerberos Sec.
- klogin—Kerberos rlogin.
- kpasswd—Kerberos passwd.
- krb-prop—Kerberos db propagation.
- krbupdate—Kerberos db update.
- kshell—Kerberos rsh.
- ldap—LDAP.
- ldp—Label Distribution Protocol.
- login—UNIX rlogin.
- mobileip-agent—Mobile IP agent.
- mobilip-mn—Mobile IP MN.
- msdp—Multicast Source Discovery Protocol.
- name—Range of values.
- netbios-dgm—NETBIOS DGM.
- netbios-ns—NETBIOS NS.
- netbios-ssn—NETBIOS SSN.
- nfsd—NFS.
- nntp—NNTP.
- ntalk—New Talk.
- ntp—NTP.
- pop3—POP3.
- pptp—Point-to-Point Tunneling.

- ■ printer—Printer.
- ■ radacct—RADIUS accounting.
- ■ radius—RADIUS authentication.
- ■ rip—Routing Information Protocol.
- ■ rkinit—Kerberos remote kinit.
- ■ smtp—SMTP.
- ■ snmp—SNMP.
- ■ snmptrap—SNMP traps.
- ■ snpp—Simple paging protocol.
- ■ socks—Socks.
- ■ ssh—Secure shell (ssh).
- ■ sunrpc—SUN RPC.
- ■ syslog—Syslog.
- ■ tacacs—TACACS (original, not TACACS+ ).
- ■ talk—UNIX Talk.
- ■ telnet—Telnet.
- ■ tftp—TFTP.
- ■ timed—UNIX Time Daemon.
- ■ who—UNIX rwho.
- ■ xdmcp—XDMCP.

## &lt;source-prefix-list&gt; (configuration/firewall/family/inet/filter/term/from)

```

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <from>
 <source-prefix-list>
 <name>name</name> <!-- identifier -->
 <except/>
 </source-prefix-list>
 </from>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
 </configuration>

```

**Description** Match IP source prefix list.

**Contents** <except>—Match addresses not in this prefix list.

<name>—Prefix list to match.

## &lt;ssb&gt; (configuration/chassis/redundancy)

```

Usage <configuration>
 <chassis>
 <redundancy>
 <ssb>
 <name>name</name> <!-- identifier -->
 <always/>
 <preferred/>
 </ssb>
 </redundancy>
 </chassis>
 </configuration>

```

**Description** Redundancy options for System Switch Boards (SSBs).

**Contents** <always>—Sole device.

<name>—SSB slot number.

<preferred>—Preferred device.

- <ssh> (configuration/system/services)

**Usage**   <configuration>  
           <system>  
           <services>  
           <ssh>  
             <root-login>*root-login-choice*</root-login>  
             <protocol-version>...</protocol-version>  
             <connection-limit>*connection-limit*</connection-limit>  
             <rate-limit>*rate-limit*</rate-limit>  
           </ssh>  
           </services>  
         </system>  
       </configuration>

**Description**   Allow ssh access.

**Contents**   <connection-limit>—Maximum number of allowed connections.

<protocol-version>—Specify ssh protocol versions supported.

<rate-limit>—Maximum number of connections per minute.

<root-login>—Configure root access via ssh.

- allow—Allow root access via ssh.

- deny—Do not allow root access via ssh.

- deny-password—Allow for non-password-based authentication methods only.

- <ssh-dsa> (configuration/system/login/user/authentication)

**Usage**   <configuration>  
           <system>  
           <login>  
           <user>  
           <authentication>  
           <ssh-dsa>  
             <name>*name*</name>   <!-- identifier -->  
           </ssh-dsa>  
         </authentication>  
       </user>  
     </login>  
   </system>  
</configuration>

**Description**   SSH DSA public key string.

**Contents**   <name>—Secure shell (ssh) DSA public key string.

## &lt;ssh-dsa&gt; (configuration/system/root-authentication)

**Usage** <configuration>  
   <system>  
     <root-authentication>  
       <ssh-dsa>  
         <name>name</name>   <!-- identifier -->  
       </ssh-dsa>  
     </root-authentication>  
   </system>  
</configuration>

**Description** SSH DSA public key string.

**Contents** <name>—Secure shell (ssh) DSA public key string.

## &lt;ssh-rsa&gt; (configuration/system/login/user/authentication)

**Usage** <configuration>  
   <system>  
     <login>  
       <user>  
         <authentication>  
           <ssh-rsa>  
             <name>name</name>   <!-- identifier -->  
           </ssh-rsa>  
         </authentication>  
       </user>  
     </login>  
   </system>  
</configuration>

**Description** Secure shell (ssh) RSA public key string.

**Contents** <name>—SSH RSA public key string.

## &lt;ssh-rsa&gt; (configuration/system/root-authentication)

**Usage** <configuration>  
   <system>  
     <root-authentication>  
       <ssh-rsa>  
         <name>name</name>   <!-- identifier -->  
       </ssh-rsa>  
     </root-authentication>  
   </system>  
</configuration>

**Description** Secure shell (ssh) RSA public key string.

**Contents** <name>—SSH RSA public key string.

- <ssm-groups> (configuration/routing-instances(instance/routing-options/multicast)

**Usage**   <configuration>  
           <routing-instances>  
             <instance>  
               <routing-options>  
                 <multicast>  
                   <ssm-groups>  
                     <name>name</name>    <!-- identifier -->  
                   </ssm-groups>  
                 </multicast>  
                 </routing-options>  
               </instance>  
             </routing-instances>  
         </configuration>

**Description**   Source-specific multicast group ranges.

**Contents**   <name>—Source-specific multicast group ranges.

- <ssm-groups> (configuration/routing-options/multicast)

**Usage**   <configuration>  
           <routing-options>  
             <multicast>  
               <ssm-groups>  
                   <name>name</name>    <!-- identifier -->  
                   </ssm-groups>  
                 </multicast>  
                 </routing-options>  
         </configuration>

**Description**   Source-specific multicast group ranges.

**Contents**   <name>—Source-specific multicast group ranges.

- <static> (configuration/protocols/igmp/interface)

**Usage**   <configuration>  
           <protocols>  
             <igmp>  
               <interface>  
                 <static>  
                   <group>...</group>  
                 </static>  
               </interface>  
             </igmp>  
           </protocols>  
         </configuration>

**Description**   Static group or source membership.

**Contents**   <group>—IP multicast group address.

## &lt;static&gt; (configuration/protocols/pim/rp)

**Usage** <configuration>  
   <protocols>  
     <pim>  
       <rp>  
         **<static>**  
           <address>...</address>  
         **</static>**  
       </rp>  
     </pim>  
   </protocols>  
</configuration>

**Description** Configure static PIM RPs.

**Contents** <address>—RP address.

## &lt;static&gt; (configuration/routing-instances/instance/protocols/pim/rp)

**Usage** <configuration>  
   <routing-instances>  
     <instance>  
       <protocols>  
         <pim>  
           <rp>  
             **<static>**  
               <address>...</address>  
             **</static>**  
           </rp>  
         </pim>  
       </protocols>  
     </instance>  
   </routing-instances>  
</configuration>

**Description** Configure static PIM RPs.

**Contents** <address>—RP address.

• <static> (configuration/routing-instances/instance/routing-options)

**Usage** <configuration>  
  <routing-instances>  
    <instance>  
      <routing-options>  
        <static>  
          <rib-group>rib-group</rib-group>  
          <defaults>...</defaults>  
          <route>...</route>  
        </static>  
      </routing-options>  
    </instance>  
  </routing-instances>  
</configuration>

**Description** Static routes.

**Contents** <defaults>—Global route options.

<rib-group>—Routing table group.

<route>—Static route.

• <static> (configuration/routing-instances/instance/routing-options/rib)

**Usage** <configuration>  
  <routing-instances>  
    <instance>  
      <routing-options>  
        <rib>  
          <static>  
            <rib-group>rib-group</rib-group>  
            <defaults>...</defaults>  
            <route>...</route>  
          </static>  
        </rib>  
      </routing-options>  
    </instance>  
  </routing-instances>  
</configuration>

**Description** Static routes.

**Contents** <defaults>—Global route options.

<rib-group>—Routing table group.

<route>—Static route.

## <static> (configuration/routing-options)

**Usage** <configuration>  
   <routing-options>  
     <static>  
       <rib-group>rib-group</rib-group>  
       <defaults>...</defaults>  
       <route>...</route>  
     </static>  
   </routing-options>  
</configuration>

**Description** Static routes.

**Contents** <defaults>—Global route options.  
           <rib-group>—Routing table group.  
           <route>—Static route.

## <static> (configuration/routing-options/rib)

**Usage** <configuration>  
   <routing-options>  
     <rib>  
       <static>  
        <rib-group>rib-group</rib-group>  
        <defaults>...</defaults>  
        <route>...</route>  
       </static>  
     </rib>  
   </routing-options>  
</configuration>

**Description** Static routes.

**Contents** <defaults>—Global route options.  
           <rib-group>—Routing table group.  
           <route>—Static route.

- <static-host-mapping> (configuration/system)

```
Usage <configuration>
 <system>
 <static-host-mapping>
 <name>name</name> <!-- identifier -->
 <inet>...</inet>
 <inet6>...</inet6>
 <sysid>sysid</sysid>
 <alias>...</alias>
 </static-host-mapping>
 </system>
 </configuration>
```

**Description** Static host name database mapping.

**Contents** <alias>—Hostname alias.

<inet>—IP address.

<inet6>—IPv6 address.

**<name>**—Fully qualified name of system.

<sysid>—ISO/ISIS system identifier.

<static-path> (configuration/protocols/mpls)

```
Usage <configuration>
 <protocols>
 <mpls>
 <static-path>
 <name>name</name> <!-- identifier -->
 <path>...</path>
 </static-path>
 </mpls>
 </protocols>
</configuration>
```

**Description** Static label-switched path.

**Contents** <name>—No documentation is available yet.

#### ■ inet—IP version 4.

**<path>**—Name of static label-switched path.

## &lt;statistics&gt; (configuration/protocols/mpls)

**Usage** <configuration>  
   <protocols>  
     <mpls>  
       <statistics>  
         <file>...</file>   <!-- mandatory -->  
         <interval>interval</interval>  
         <auto-bandwidth/>  
       </statistics>  
     </mpls>  
   </protocols>  
</configuration>

**Description** Collect statistics for signaled label-switched paths.

**Contents** <auto-bandwidth>—Enable auto bandwidth allocation.

<file>—Statistics file options.

<interval>—Time to collect statistics (seconds).

## &lt;stub&gt; (configuration/protocols/ospf/area)

**Usage** <configuration>  
   <protocols>  
     <ospf>  
       <area>  
         <stub>  
           <default-metric>default-metric</default-metric>  
           <summaries/>  
         </stub>  
       </area>  
     </ospf>  
   </protocols>  
</configuration>

**Description** Configure a stub area.

**Contents** <default-metric>—Metric for the default route in this stub area.

<summaries>—Flood summary LSAs into this stub area.

- <stub> (configuration/routing-instances/instance/protocols/ospf/area)

**Usage**   <configuration>  
           <routing-instances>  
           <instance>  
           <protocols>  
           <ospf>  
           <area>  
           <stub>  
             <default-metric>*default-metric*</default-metric>  
             <summaries/>  
           </stub>  
           </area>  
         </ospf>  
         </protocols>  
       </instance>  
     </routing-instances>  
 </configuration>

**Description**   Configure a stub area.

**Contents**   <default-metric>—Metric for the default route in this stub area.

  <summaries>—Flood summary LSAs into this stub area.

- <syslog> (configuration/routing-instances/instance/routing-options/options)

**Usage**   <configuration>  
           <routing-instances>  
           <instance>  
           <routing-options>  
           <options>  
             <syslog>  
               <level>...</level>  
               <upto>*upto-choice*</upto>  
             </syslog>  
           </options>  
         </routing-options>  
       </instance>  
     </routing-instances>  
 </configuration>

**Description**   Set system logging level.

**Contents**   <level>—Logging level.

  <upto>—Log up to a particular logging level.

- alert—Alert level.
- critical—Critical level.
- debug—Debugging level.
- emergency—Emergency level.

- error—Error level.
- info—Informational level.
- notice—Notice level.
- warning—Warning level.

## <syslog> (configuration/routing-options/options)

**Usage** <configuration>  
   <routing-options>  
     <options>  
       <syslog>  
         <level>...</level>  
         <upto>upto-choice</upto>  
       </syslog>  
     </options>  
   </routing-options>  
</configuration>

**Description** Set system logging level.

**Contents** <level>—Logging level.

<upto>—Log up to a particular logging level.

- alert—Alert level.
- critical—Critical level.
- debug—Debugging level.
- emergency—Emergency level.
- error—Error level.
- info—Informational level.
- notice—Notice level.
- warning—Warning level.

• <syslog> (configuration/system)

**Usage**   <configuration>  
          <system>  
            <syslog>  
              <archive>...</archive>  
              <user>...</user>  
              <host>...</host>  
              <file>...</file>  
              <console>...</console>  
            </syslog>  
          </system>  
        </configuration>

**Description**   System logging facility.

**Contents**   <archive>—Archive file information.

                  <console>—Console logging.

                  <file>—Name of file for logging data.

                  <host>—Host to be notified.

                  <user>—Notify a user of the event.

## &lt;system&gt; (configuration)

```
Usage <configuration>
 <system>
 <host-name>host-name</host-name>
 <domain-name>domain-name</domain-name>
 <domain-search>...</domain-search>
 <backup-router>...</backup-router>
 <inet6-backup-router>...</inet6-backup-router>
 <time-zone><continent>/<major-city></time-zone>
 <default-address-selection/>
 <no-redirects/>
 <saved-core-context/>
 <mirror-flash-on-disk/>
 <authentication-order>...</authentication-order>
 <location>...</location>
 <ports>...</ports>
 <diag-port-authentication>...</diag-port-authentication>
 <pic-console-authentication>...</pic-console-authentication>
 <root-authentication>...</root-authentication>
 <name-server>...</name-server>
 <radius-server>...</radius-server>
 <tacplus-server>...</tacplus-server>
 <login>...</login>
 <static-host-mapping>...</static-host-mapping>
 <services>...</services>
 <syslog>...</syslog>
 <compress-configuration-files/>
 </system>
 </configuration>
```

**Description** System parameters.

**Contents** <authentication-order>—Order in which authentication methods are invoked.

<backup-router>—IPv4 router to use while booting.

<compress-configuration-files>—Compress the router configuration files.

<default-address-selection>—Use system address for locally originated traffic.

<diag-port-authentication>—Authentication for the diagnostic port.

<domain-name>—Domain name for this router.

<domain-search>—List of domain names to search.

<host-name>—Host name for this router.

<inet6-backup-router>—IPv6 router to use while booting.

<location>—Location of the system, in various forms.

<login>—Users, their classes and passwords.

<mirror-flash-on-disk>—Mirror contents of the flash drive onto hard drive.

*< t1 > (configuration/chassis/fpc/pic/ct3/port)*

- <name-server>—DNS name servers.
- <no-redirects>—Disable ICMP redirects.
- <pic-console-authentication>—Authentication for the console port on PICs.
- <ports>—Craft interface RS-232 ports.
- <radius-server>—RADIUS server configuration.
- <root-authentication>—Authentication information for the root login.
- <saved-core-context>—Save context information for core files.
- <services>—System services.
- <static-host-mapping>—Static host name database mapping.
- <syslog>—System logging facility.
- <tacplus-server>—TACACS+ server configuration.
- <time-zone>—Time zone definition name.

<t1> (configuration/chassis/fpc/pic/ct3/port)

```
Usage <configuration>
 <chassis>
 <fpc>
 <pic>
 <ct3>
 <port>
 <t1>
 <name>name</name> <!-- identifier -->
 <channel-group>...</channel-group>
 </t1>
 </port>
 </ct3>
 </pic>
 </fpc>
 </chassis>
 </configuration>
```

**Description** T1 link.

**Contents** <channel-group>—Define a channel group.

<name>—T1 link number.

## <t1-options> (configuration/interfaces/interface)

```

Usage <configuration>
 <interfaces>
 <interface>
 <interface>
 <t1-options>
 <timeslots>timeslots</timeslots>
 <loopback>loopback-choice</loopback>
 <buildout>buildout-choice</buildout>
 <byte-encoding>byte-encoding-choice</byte-encoding>
 <line-encoding>line-encoding-choice</line-encoding>
 <invert-data/>
 <framing>framing-choice</framing>
 <fcs>fcs-choice</fcs>
 <idle-cycle-flag>idle-cycle-flag-choice</idle-cycle-flag>
 <start-end-flag>start-end-flag-choice</start-end-flag>
 <bert-algorithm>bert-algorithm-choice</bert-algorithm>
 <bert-error-rate>bert-error-rate</bert-error-rate>
 <bert-period>seconds</bert-period>
 </t1-options>
 </interface>
 </interfaces>
 </configuration>

```

**Description** T1 interface-specific options.

**Contents** <bert-algorithm>—Set BERT algorithm.

- all-ones-repeating—Repeating one bits.
- all-zeros-repeating—Repeating zero bits.
- alternating-double-ones-zeros—Alternating pairs of ones and zeros.
- alternating-ones-zeros—Alternating ones and zeros.
- pseudo-2e11-o152—Pattern is  $2^{11} - 1$  (per O.152 standard).
- pseudo-2e15-o151—Pattern is  $2^{15} - 1$  (per O.152 standard).
- pseudo-2e20-o151—Pattern is  $2^{20} - 1$  (per O.151 standard).
- pseudo-2e20-o153—Pattern is  $2^{20} - 1$  (per O.153 standard).
- repeating-1-in-4—1 bit in 4 is set.
- repeating-1-in-8—1 bit in 8 is set.
- repeating-3-in-24—3 bits in 24 are set.

<bert-error-rate>—Bit error rate to use in BERT test ( $10^{-n}$ ).

<bert-period>—Length of BERT test.

- 0-132—Line buildout is between 0-132 feet.
  - 133-265—Line buildout is between 133-265 feet.
  - 266-398—Line buildout is between 266-398 feet.
  - 399-531—Line buildout is between 399-531 feet.
  - 532-655—Line buildout is between 532-655 feet.

<byte-encoding>—Byte encoding.

  - nx56—7 bits per byte.
  - nx64—8 bits per byte.

<fcs>—Frame checksum.

  - 16—16-bit mode.
  - 32—32-bit mode.

<framing>—Framing mode.

  - esf—Extended super frame.
  - sf—Super frame.

<idle-cycle-flag>—Value to transmit in idle cycles.

  - flags—Transmit 0x7E in idle cycles.
  - ones—Transmit 0xFF (all ones) in idle cycles.

<invert-data>—Invert data.

<line-encoding>—Line encoding.

  - ami—Automatic mark inversion.
  - b8zs—8-bit zero suppression.

<loopback>—Loopback mode.

  - local—Local loopback.
  - remote—Remote loopback.

<start-end-flag>—Set start/end flags on transmission.

  - filler—Send two idle cycles between start/end flags.
  - shared—Share start/end flags on transmit.

<timeslots>—1..24, for example 1-3,4,9,22-24 (no space).

## <t3> (configuration/chassis/alarm)

```
Usage <configuration>
 <chassis>
 <alarm>
 <t3>
 <ais>ais-choice</ais>
 <exz>exz-choice</exz>
 <ferf>ferf-choice</ferf>
 <idle>idle-choice</idle>
 <lcv>lcv-choice</lcv>
 <lof>lof-choice</lof>
 <los>los-choice</los>
 <pll>pll-choice</pll>
 <ylw>ylw-choice</ylw>
 </t3>
 </alarm>
 </chassis>
 </configuration>
```

**Description** DS-3 alarms.

**Contents** <ais>—Alarm indicator signal.

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

<exz>—Excessive zeros.

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

<ferf>—Far-end failure.

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

<idle>—Idle alarm.

- ignore—Do not assert any alarm signals.
- red—Assert red system alarm.
- yellow—Assert yellow system alarm.

- Line code violation.
- ignore—Do not assert any alarm signals.
  - red—Assert red system alarm.
  - yellow—Assert yellow system alarm.
- <lof>—Loss of frame.
- ignore—Do not assert any alarm signals.
  - red—Assert red system alarm.
  - yellow—Assert yellow system alarm.
- <los>—Loss of signal.
- ignore—Do not assert any alarm signals.
  - red—Assert red system alarm.
  - yellow—Assert yellow system alarm.
- <pll>—Phase-locked loop out of lock.
- ignore—Do not assert any alarm signals.
  - red—Assert red system alarm.
  - yellow—Assert yellow system alarm.
- <ylw>—Yellow alarm.
- ignore—Do not assert any alarm signals.
  - red—Assert red system alarm.
  - yellow—Assert yellow system alarm.

## &lt;t3-options&gt; (configuration/interfaces/interface)

```

Usage <configuration>
 <interfaces>
 <interface>
 <interface>
 <t3-options>
 <loopback>loopback-choice</loopback>
 <long-buildout/>
 <loop-timing/>
 <compatibility-mode>...</compatibility-mode>
 <payload-scrambler/>
 <cbit-parity/>
 <fcs>fcs-choice</fcs>
 <idle-cycle-flag>idle-cycle-flag-choice</idle-cycle-flag>
 <start-end-flag>start-end-flag-choice</start-end-flag>
 <feac-loop-respond/>
 <bert-algorithm>bert-algorithm-choice</bert-algorithm>
 <bert-error-rate>bert-error-rate</bert-error-rate>
 <bert-period>seconds</bert-period>
 <buildout>feet</buildout>
 <atm-encapsulation>atm-encapsulation-choice</atm-encapsulation>
 </t3-options>
 </interface>
 </interfaces>
 </configuration>

```

**Description** T3 interface-specific options.

**Contents** <atm-encapsulation>—DS-3 interface encapsulation.

- direct—ATM direct mapping.

- plcp—PLCP encapsulation.

<bert-algorithm>—Set BERT algorithm.

- all-ones-repeating—Repeating one bits.

- all-zeros-repeating—Repeating zero bits.

- alternating-double-ones-zeros—Alternating pairs of ones and zeros.

- alternating-ones-zeros—Alternating ones and zeros.

- pseudo-2e10—Pattern is  $2^{10} - 1$ .

- pseudo-2e11-o152—Pattern is  $2^{11} - 1$  (per O.152 standard).

- pseudo-2e15-o151—Pattern is  $2^{15} - 1$  (per O.152 standard).

- pseudo-2e17—Pattern is  $2^{17} - 1$ .

- pseudo-2e18—Pattern is  $2^{18} - 1$ .

- pseudo-2e20-o151—Pattern is  $2^{20} - 1$  (per O.151 standard).

- pseudo-2e20-o153—Pattern is  $2^{20} - 1$  (per O.153 standard).

- ■ pseudo-2e21—Pattern is  $2^{21} - 1$ .
- ■ pseudo-2e22—Pattern is  $2^{22} - 1$ .
- ■ pseudo-2e23-o151—Pattern is  $2^{23}$  (per O.151 standard).
- ■ pseudo-2e25—Pattern is  $2^{25} - 1$ .
- ■ pseudo-2e28—Pattern is  $2^{28} - 1$ .
- ■ pseudo-2e29—Pattern is  $2^{29} - 1$ .
- ■ pseudo-2e3—Pattern is  $2^3 - 1$ .
- ■ pseudo-2e31—Pattern is  $2^{31} - 1$ .
- ■ pseudo-2e32—Pattern is  $2^{32} - 1$ .
- ■ pseudo-2e4—Pattern is  $2^4 - 1$ .
- ■ pseudo-2e5—Pattern is  $2^5 - 1$ .
- ■ pseudo-2e6—Pattern is  $2^6 - 1$ .
- ■ pseudo-2e7—Pattern is  $2^7 - 1$ .
- ■ pseudo-2e9-o153—Pattern is  $2^9 - 1$  (per O.153 standard).
- ■ repeating-1-in-4—1 bit in 4 is set.
- ■ repeating-1-in-8—1 bit in 8 is set.
- ■ repeating-3-in-24—3 bits in 24 are set.
- <bert-error-rate>—Bit error rate to use in BERT test ( $10^{-n}$ ).
- <bert-period>—Length of BERT test.
- <buildout>—Line buildout.
- <cbit-parity>—Enable C-bit parity mode.
- <compatibility-mode>—Set CSU compatibility mode.
- <fcs>—Frame checksum.
  - 16—16-bit mode.
  - 32—32-bit mode.
- <feac-loop-respond>—Respond to FEAC loop requests.
- <idle-cycle-flag>—Value to transmit in idle cycles.
  - flags—Transmit 0x7E in idle cycles.
  - ones—Transmit 0xFF (all ones) in idle cycles.

<long-buildout>—Set hardware to drive line longer than 255 feet.

<loop-timing>—Set loop-timing for all T1 channel under CT3.

<loopback>—Loopback mode.

- local—Local loopback.

- remote—Remote loopback.

<payload-scrambler>—Enable payload scrambling.

<start-end-flag>—Set start/end flags on transmission.

- filler—Send two idle cycles between start/end flags.

- shared—Share start/end flags on transmit.

## <tacplus-server> (configuration/system)

**Usage** <configuration>  
 <system>  
   <tacplus-server>  
     <name>name</name>   <!-- identifier -->  
     <secret>secret</secret>  
     <timeout>seconds</timeout>  
     <single-connection/>  
   </tacplus-server>  
 </system>  
</configuration>

**Description** TACACS+ server configuration.

**Contents** <name>—TACACS+ authentication server address.

<secret>—Shared secret with the authentication server.

<single-connection>—Optimize TCP connection attempts.

<timeout>—Request timeout period.

• <tag> (configuration/policy-options/policy-statement/from/route-filter)

**Usage** <configuration>  
    <policy-options>  
        <policy-statement>  
            <from>  
                <route-filter>  
                    <tag>  
                        <tag>tag</tag>  
                        <add>add</add>  
                        <subtract>subtract</subtract>  
                    </tag>  
                </route-filter>  
            </from>  
        </policy-statement>  
    </policy-options>  
</configuration>

**Description** Tag string.

**Contents** <add>—Add constant to attribute.

<subtract>—Subtract constant from attribute.

<tag>—No documentation is available yet.

• <tag> (configuration/policy-options/policy-statement/from/source-address-filter)

**Usage** <configuration>  
    <policy-options>  
        <policy-statement>  
            <from>  
                <source-address-filter>  
                    <tag>  
                        <tag>tag</tag>  
                        <add>add</add>  
                        <subtract>subtract</subtract>  
                    </tag>  
                </source-address-filter>  
            </from>  
        </policy-statement>  
    </policy-options>  
</configuration>

**Description** Tag string.

**Contents** <add>—Add constant to attribute.

<subtract>—Subtract constant from attribute.

<tag>—No documentation is available yet.

<tag> (configuration/policy-options/policy-statement/term/from/route-filter)

**Usage** <configuration>  
    <policy-options>  
        <policy-statement>  
            <term>  
                <from>  
                    <route-filter>  
                        **<tag>**  
                        <tag>tag</tag>  
                        <add>add</add>  
                        <subtract>subtract</subtract>  
                        **</tag>**  
                    </route-filter>  
                </from>  
                </term>  
            </policy-statement>  
        </policy-options>  
    </configuration>

**Description** Tag string.

**Contents** <add>—Add constant to attribute.  
  
<subtract>—Subtract constant from attribute.  
  
<tag>—No documentation is available yet.

<tag> (configuration/policy-options/policy-statement/term/from/source-address-filter)

**Usage** <configuration>  
    <policy-options>  
        <policy-statement>  
            <term>  
                <from>  
                    <source-address-filter>  
                        **<tag>**  
                        <tag>tag</tag>  
                        <add>add</add>  
                        <subtract>subtract</subtract>  
                        **</tag>**  
                    </source-address-filter>  
                </from>  
                </term>  
        </policy-statement>  
    </policy-options>  
</configuration>

**Description** Tag string.

**Contents** <add>—Add constant to attribute.  
  
<subtract>—Subtract constant from attribute.  
  
<tag>—No documentation is available yet.

• <tag> (configuration/policy-options/policy-statement/term/then)

**Usage**   <configuration>  
          <policy-options>  
            <policy-statement>  
              <term>  
              <then>  
                **<tag>**  
                <tag>tag</tag>  
                <add>add</add>  
                <subtract>subtract</subtract>  
                **</tag>**  
              </then>  
            </term>  
          </policy-statement>  
        </policy-options>  
      </configuration>

**Description**   Tag string.

**Contents**   <add>—Add constant to attribute.

                  <subtract>—Subtract constant from attribute.

                  <tag>—No documentation is available yet.

• <tag> (configuration/policy-options/policy-statement/then)

**Usage**   <configuration>  
          <policy-options>  
            <policy-statement>  
              <then>  
                **<tag>**  
                <tag>tag</tag>  
                <add>add</add>  
                <subtract>subtract</subtract>  
                **</tag>**  
              </then>  
            </policy-statement>  
          </policy-options>  
      </configuration>

**Description**   Tag string.

**Contents**   <add>—Add constant to attribute.

                  <subtract>—Subtract constant from attribute.

                  <tag>—No documentation is available yet.

<tag> (configuration/routing-instances/instance/routing-options/aggregate/defaults)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <defaults>
 <tag>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag>
 </defaults>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Tag string.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<tag> (configuration/routing-instances/instance/routing-options/aggregate/route)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <route>
 <tag>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag>
 </route>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Tag string.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <tag> (configuration/routing-instances/instance/routing-options/generate/defaults)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <routing-options>  
                <generate>  
                  <defaults>  
                    <tag>  
                      <metric-value>metric-value</metric-value>   <!-- mandatory -->  
                    <type>type</type>  
                  </tag>  
                  </defaults>  
                  </generate>  
                  </routing-options>  
            </instance>  
          </routing-instances>  
      </configuration>

**Description**   Tag string.

**Contents**   <metric-value>—Metric value.

          <type>—Metric type.

- <tag> (configuration/routing-instances/instance/routing-options/generate/route)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <routing-options>  
                <generate>  
                  <route>  
                    <tag>  
                      <metric-value>metric-value</metric-value>   <!-- mandatory -->  
                    <type>type</type>  
                  </tag>  
                  </route>  
                  </generate>  
                  </routing-options>  
            </instance>  
          </routing-instances>  
      </configuration>

**Description**   Tag string.

**Contents**   <metric-value>—Metric value.

          <type>—Metric type.

<tag> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <routing-options>  
                <rib>  
                    <aggregate>  
                        <defaults>  
                            **<tag>**  
                                <metric-value>metric-value</metric-value>    <!-- mandatory --&gt;<br/>                                <type>type</type>  
                            **</tag>**  
                                </defaults>  
                            </aggregate>  
                        **</rib>**  
                        </routing-options>  
                **</instance>**  
            </routing-instances>  
    </configuration>

**Description** Tag string.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<tag> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <routing-options>  
                <rib>  
                    <aggregate>  
                        <route>  
                            **<tag>**  
                                <metric-value>metric-value</metric-value>    <!-- mandatory --&gt;<br/>                                <type>type</type>  
                            **</tag>**  
                                </route>  
                            </aggregate>  
                        **</rib>**  
                        </routing-options>  
                **</instance>**  
            </routing-instances>  
    </configuration>

**Description** Tag string.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <tag> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <generate>
 <defaults>
 <tag>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag>
 </defaults>
 </generate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Tag string.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <tag> (configuration/routing-instances/instance/routing-options/rib/generate/route)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <generate>
 <route>
 <tag>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag>
 </route>
 </generate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Tag string.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<tag> (configuration/routing-instances/instance/routing-options/rib/static/defaults)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <static>
 <defaults>
 <tag>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag>
 </defaults>
 </static>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Tag string.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<tag> (configuration/routing-instances/instance/routing-options/rib/static/route)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <static>
 <route>
 <tag>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag>
 </route>
 </static>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Tag string.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <tag> (configuration/routing-instances/instance/routing-options/static/defaults)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <routing-options>  
                <static>  
                  <defaults>  
                    <tag>  
                      <metric-value>metric-value</metric-value>   <!-- mandatory -->  
                    <type>type</type>  
                  </tag>  
                  </defaults>  
                  </static>  
                </routing-options>  
            </instance>  
          </routing-instances>  
        </configuration>

**Description**   Tag string.

**Contents**   <metric-value>—Metric value.

          <type>—Metric type.

- <tag> (configuration/routing-instances/instance/routing-options/static/route)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <routing-options>  
                <static>  
                  <route>  
                    <tag>  
                      <metric-value>metric-value</metric-value>   <!-- mandatory -->  
                      <type>type</type>  
                  </tag>  
                  </route>  
                  </static>  
                </routing-options>  
            </instance>  
          </routing-instances>  
        </configuration>

**Description**   Tag string.

**Contents**   <metric-value>—Metric value.

          <type>—Metric type.

<tag> (configuration/routing-options/aggregate/defaults)

**Usage** <configuration>  
    <routing-options>  
        <aggregate>  
            <defaults>  
                **<tag>**  
                    <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
                    <type>*type*</type>  
                **</tag>**  
            </defaults>  
        </aggregate>  
    </routing-options>  
</configuration>

**Description** Tag string.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<tag> (configuration/routing-options/aggregate/route)

**Usage** <configuration>  
    <routing-options>  
        <aggregate>  
            <route>  
                **<tag>**  
                    <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
                    <type>*type*</type>  
                **</tag>**  
            </route>  
        </aggregate>  
    </routing-options>  
</configuration>

**Description** Tag string.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <tag> (configuration/routing-options/generate/defaults)

•

•     **Usage**   <configuration>  
•        <routing-options>  
•           <generate>  
•              <defaults>  
•                **<tag>**  
•                <metric-value>*metric-value*</metric-value>    <!-- mandatory -->  
•                <type>*type*</type>  
•                **</tag>**  
•                </defaults>  
•              </generate>  
•            </routing-options>  
•        </configuration>

•

•     **Description**   Tag string.

•     **Contents**    <metric-value>—Metric value.

•                  <type>—Metric type.

- <tag> (configuration/routing-options/generate/route)

•

•     **Usage**   <configuration>  
•        <routing-options>  
•           <generate>  
•              <route>  
•                **<tag>**  
•                <metric-value>*metric-value*</metric-value>    <!-- mandatory -->  
•                <type>*type*</type>  
•                **</tag>**  
•                </route>  
•              </generate>  
•            </routing-options>  
•        </configuration>

•

•     **Description**   Tag string.

•     **Contents**    <metric-value>—Metric value.

•                  <type>—Metric type.

## &lt;tag&gt; (configuration/routing-options/rib/aggregate/defaults)

**Usage**

```
<configuration>
 <routing-options>
 <rib>
 <aggregate>
 <defaults>
 <tag>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag>
 </defaults>
 </aggregate>
 </rib>
 </routing-options>
</configuration>
```

**Description** Tag string.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

## &lt;tag&gt; (configuration/routing-options/rib/aggregate/route)

**Usage**

```
<configuration>
 <routing-options>
 <rib>
 <aggregate>
 <route>
 <tag>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag>
 </route>
 </aggregate>
 </rib>
 </routing-options>
</configuration>
```

**Description** Tag string.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <tag> (configuration/routing-options/rib/generate/defaults)

•

•     **Usage**   <configuration>  
•        <routing-options>  
•          <rib>  
•            <generate>  
•              <defaults>  
•                **<tag>**  
•                <metric-value>*metric-value*</metric-value>    <!-- mandatory --&gt;<br/>•                <type>*type*</type>  
•                **</tag>**  
•                </defaults>  
•              </generate>  
•            </rib>  
•        </routing-options>  
•    </configuration>

•     **Description**   Tag string.

•     **Contents**   <metric-value>—Metric value.

•            <type>—Metric type.

- <tag> (configuration/routing-options/rib/generate/route)

•

•     **Usage**   <configuration>  
•        <routing-options>  
•          <rib>  
•            <generate>  
•              <route>  
•                **<tag>**  
•                <metric-value>*metric-value*</metric-value>    <!-- mandatory --&gt;<br/>•                <type>*type*</type>  
•                **</tag>**  
•              </route>  
•            </generate>  
•            </rib>  
•        </routing-options>  
•    </configuration>

•     **Description**   Tag string.

•     **Contents**   <metric-value>—Metric value.

•            <type>—Metric type.

## &lt;tag&gt; (configuration/routing-options/rib/static/defaults)

**Usage**

```
<configuration>
 <routing-options>
 <rib>
 <static>
 <defaults>
 <tag>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag>
 </defaults>
 </static>
 </rib>
 </routing-options>
</configuration>
```

**Description** Tag string.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

## &lt;tag&gt; (configuration/routing-options/rib/static/route)

**Usage**

```
<configuration>
 <routing-options>
 <rib>
 <static>
 <route>
 <tag>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag>
 </route>
 </static>
 </rib>
 </routing-options>
</configuration>
```

**Description** Tag string.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

• <tag> (configuration/routing-options/static/defaults)

**Usage** <configuration>  
  <routing-options>  
    <static>  
      <defaults>  
        **<tag>**  
          <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
          <type>*type*</type>  
        **</tag>**  
      </defaults>  
    </static>  
  </routing-options>  
</configuration>

**Description** Tag string.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

• <tag> (configuration/routing-options/static/route)

**Usage** <configuration>  
  <routing-options>  
    <static>  
      <route>  
        **<tag>**  
          <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
          <type>*type*</type>  
        **</tag>**  
      </route>  
    </static>  
  </routing-options>  
</configuration>

**Description** Tag string.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

## &lt;tag2&gt; (configuration/policy-options/policy-statement/from/route-filter)

**Usage** <configuration>  
   <policy-options>  
     <policy-statement>  
       <from>  
       <route-filter>  
         **<tag2>**  
           <tag2>tag2</tag2>  
           <add>add</add>  
           <subtract>subtract</subtract>  
         **</tag2>**  
       </route-filter>  
       </from>  
     </policy-statement>  
   </policy-options>  
</configuration>

**Description** Tag string 2.

**Contents** <add>—Add constant to attribute.  
           <subtract>—Subtract constant from attribute.  
           <tag2>—No documentation is available yet.

## &lt;tag2&gt; (configuration/policy-options/policy-statement/from/source-address-filter)

**Usage** <configuration>  
   <policy-options>  
     <policy-statement>  
       <from>  
       <source-address-filter>  
         **<tag2>**  
           <tag2>tag2</tag2>  
           <add>add</add>  
           <subtract>subtract</subtract>  
         **</tag2>**  
       </source-address-filter>  
       </from>  
     </policy-statement>  
   </policy-options>  
</configuration>

**Description** Tag string 2.

**Contents** <add>—Add constant to attribute.  
           <subtract>—Subtract constant from attribute.  
           <tag2>—No documentation is available yet.

- <tag2> (configuration/policy-options/policy-statement/term/from/route-filter)

**Usage**   <configuration>  
           <policy-options>  
           <policy-statement>  
           <term>  
           <from>  
           <route-filter>  
           <tag2>  
             <tag2>tag2</tag2>  
             <add>add</add>  
             <subtract>subtract</subtract>  
           </tag2>  
           </route-filter>  
         </from>  
         </term>  
       </policy-statement>  
     </policy-options>  
 </configuration>

**Description** Tag string 2.

**Contents** <add>—Add constant to attribute.

<subtract>—Subtract constant from attribute.

<tag2>—No documentation is available yet.

- <tag2> (configuration/policy-options/policy-statement/term/from/source-address-filter)

**Usage**   <configuration>  
           <policy-options>  
           <policy-statement>  
           <term>  
           <from>  
           <source-address-filter>  
           <tag2>  
             <tag2>tag2</tag2>  
             <add>add</add>  
             <subtract>subtract</subtract>  
           </tag2>  
           </source-address-filter>  
         </from>  
         </term>  
       </policy-statement>  
     </policy-options>  
 </configuration>

**Description** Tag string 2.

**Contents** <add>—Add constant to attribute.

<subtract>—Subtract constant from attribute.

<tag2>—No documentation is available yet.

## &lt;tag2&gt; (configuration/policy-options/policy-statement/term/then)

**Usage**

```
<configuration>
 <policy-options>
 <policy-statement>
 <term>
 <then>
 <tag2>
 <tag2>tag2</tag2>
 <add>add</add>
 <subtract>subtract</subtract>
 </tag2>
 </then>
 </term>
 </policy-statement>
 </policy-options>
</configuration>
```

**Description** Tag string 2.

**Contents**

- <add>—Add constant to attribute.
- <subtract>—Subtract constant from attribute.
- <tag2>—No documentation is available yet.

## &lt;tag2&gt; (configuration/policy-options/policy-statement/then)

**Usage**

```
<configuration>
 <policy-options>
 <policy-statement>
 <then>
 <tag2>
 <tag2>tag2</tag2>
 <add>add</add>
 <subtract>subtract</subtract>
 </tag2>
 </then>
 </policy-statement>
 </policy-options>
</configuration>
```

**Description** Tag string 2.

**Contents**

- <add>—Add constant to attribute.
- <subtract>—Subtract constant from attribute.
- <tag2>—No documentation is available yet.

- <tag2> (configuration/routing-instances/instance/routing-options/aggregate/defaults)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <defaults>
 <tag2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag2>
 </defaults>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Tag string 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <tag2> (configuration/routing-instances/instance/routing-options/aggregate/route)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <aggregate>
 <route>
 <tag2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag2>
 </route>
 </aggregate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Tag string 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<tag2> (configuration/routing-instances/instance/routing-options/generate/defaults)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <defaults>
 <tag2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag2>
 </defaults>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Tag string 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<tag2> (configuration/routing-instances/instance/routing-options/generate/route)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <generate>
 <route>
 <tag2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag2>
 </route>
 </generate>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Tag string 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <tag2> (configuration/routing-instances/instance/routing-options/rib/aggregate/defaults)

**Usage**   <configuration>  
           <routing-instances>  
           <instance>  
           <routing-options>  
           <rib>  
           <aggregate>  
           <defaults>  
           <tag2>  
             <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
             <type>*type*</type>  
           </tag2>  
           </defaults>  
           </aggregate>  
         </rib>  
         </routing-options>  
       </instance>  
     </routing-instances>  
 </configuration>

**Description**   Tag string 2.

**Contents**   <metric-value>—Metric value.

          <type>—Metric type.

- <tag2> (configuration/routing-instances/instance/routing-options/rib/aggregate/route)

**Usage**   <configuration>  
           <routing-instances>  
           <instance>  
           <routing-options>  
           <rib>  
           <aggregate>  
           <route>  
           <tag2>  
             <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
             <type>*type*</type>  
           </tag2>  
           </route>  
           </aggregate>  
         </rib>  
         </routing-options>  
       </instance>  
     </routing-instances>  
 </configuration>

**Description**   Tag string 2.

**Contents**   <metric-value>—Metric value.

          <type>—Metric type.

<tag2> (configuration/routing-instances/instance/routing-options/rib/generate/defaults)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <generate>
 <defaults>
 <tag2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag2>
 </defaults>
 </generate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Tag string 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<tag2> (configuration/routing-instances/instance/routing-options/rib/generate/route)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <generate>
 <route>
 <tag2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag2>
 </route>
 </generate>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Tag string 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <tag2> (configuration/routing-instances/instance/routing-options/rib/static/defaults)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <static>
 <defaults>
 <tag2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag2>
 </defaults>
 </static>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Tag string 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <tag2> (configuration/routing-instances/instance/routing-options/rib/static/route)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <rib>
 <static>
 <route>
 <tag2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag2>
 </route>
 </static>
 </rib>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Tag string 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<tag2> (configuration/routing-instances/instance/routing-options/static/defaults)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <static>
 <defaults>
 <tag2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag2>
 </defaults>
 </static>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Tag string 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

<tag2> (configuration/routing-instances/instance/routing-options/static/route)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <static>
 <route>
 <tag2>
 <metric-value>metric-value</metric-value> <!-- mandatory -->
 <type>type</type>
 </tag2>
 </route>
 </static>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Tag string 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <tag2> (configuration/routing-options/aggregate/defaults)

•

•   **Usage**   <configuration>  
•        <routing-options>  
•           <aggregate>  
•             <defaults>  
•               **<tag2>**  
•                <metric-value>*metric-value*</metric-value>    <!-- mandatory -->  
•                <type>*type*</type>  
•                **</tag2>**  
•                </defaults>  
•                </aggregate>  
•            </routing-options>  
•    </configuration>

•

•   **Description**   Tag string 2.

•   **Contents**   <metric-value>—Metric value.

•                  <type>—Metric type.

- <tag2> (configuration/routing-options/aggregate/route)

•

•   **Usage**   <configuration>  
•        <routing-options>  
•           <aggregate>  
•             <route>  
•               **<tag2>**  
•                <metric-value>*metric-value*</metric-value>    <!-- mandatory -->  
•                <type>*type*</type>  
•                **</tag2>**  
•                </route>  
•                </aggregate>  
•            </routing-options>  
•    </configuration>

•

•   **Description**   Tag string 2.

•   **Contents**   <metric-value>—Metric value.

•                  <type>—Metric type.

## &lt;tag2&gt; (configuration/routing-options/generate/defaults)

**Usage** <configuration>  
   <routing-options>  
     <generate>  
       <defaults>  
         **<tag2>**  
           <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
           <type>*type*</type>  
         **</tag2>**  
       </defaults>  
     </generate>  
   </routing-options>  
</configuration>

**Description** Tag string 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

## &lt;tag2&gt; (configuration/routing-options/generate/route)

**Usage** <configuration>  
   <routing-options>  
     <generate>  
       <route>  
         **<tag2>**  
           <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
           <type>*type*</type>  
         **</tag2>**  
       </route>  
     </generate>  
   </routing-options>  
</configuration>

**Description** Tag string 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <tag2> (configuration/routing-options/rib/aggregate/defaults)
  - **Usage** <configuration>  
  <routing-options>  
    <rib>  
      <aggregate>  
        <defaults>  
          **<tag2>**  
            <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
            <type>*type*</type>  
          **</tag2>**  
        </defaults>  
      </aggregate>  
    </rib>  
  </routing-options>  
</configuration>
  - **Description** Tag string 2.
  - **Contents** <metric-value>—Metric value.  
  
<type>—Metric type.
- <tag2> (configuration/routing-options/rib/aggregate/route)
  - **Usage** <configuration>  
  <routing-options>  
    <rib>  
      <aggregate>  
        <route>  
          **<tag2>**  
            <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
            <type>*type*</type>  
          **</tag2>**  
        </route>  
      </aggregate>  
    </rib>  
  </routing-options>  
</configuration>
  - **Description** Tag string 2.
  - **Contents** <metric-value>—Metric value.  
  
<type>—Metric type.

## &lt;tag2&gt; (configuration/routing-options/rib/generate/defaults)

**Usage** <configuration>  
   <routing-options>  
     <rib>  
       <generate>  
         <defaults>  
           **<tag2>**  
             <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
             <type>*type*</type>  
           **</tag2>**  
         </defaults>  
       </generate>  
     </rib>  
   </routing-options>  
</configuration>

**Description** Tag string 2.

**Contents** <metric-value>—Metric value.  
                   <type>—Metric type.

## &lt;tag2&gt; (configuration/routing-options/rib/generate/route)

**Usage** <configuration>  
   <routing-options>  
     <rib>  
       <generate>  
         <route>  
           **<tag2>**  
             <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
             <type>*type*</type>  
           **</tag2>**  
         </route>  
       </generate>  
     </rib>  
   </routing-options>  
</configuration>

**Description** Tag string 2.

**Contents** <metric-value>—Metric value.  
                   <type>—Metric type.

- <tag2> (configuration/routing-options/rib/static/defaults)

•

•   **Usage**   <configuration>  
•        <routing-options>  
•           <rib>  
•             <static>  
•               <defaults>  
•                 **<tag2>**  
•                 <metric-value>*metric-value*</metric-value>    <!-- mandatory --&gt;<br/>•                 <type>*type*</type>  
•                 **</tag2>**  
•                 </defaults>  
•                 </static>  
•             </rib>  
•        </routing-options>  
•    </configuration>

•   **Description**   Tag string 2.

•   **Contents**   <metric-value>—Metric value.

•        <type>—Metric type.

- <tag2> (configuration/routing-options/rib/static/route)

•

•   **Usage**   <configuration>  
•        <routing-options>  
•           <rib>  
•             <static>  
•               <route>  
•                 **<tag2>**  
•                 <metric-value>*metric-value*</metric-value>    <!-- mandatory --&gt;<br/>•                 <type>*type*</type>  
•                 **</tag2>**  
•                 </route>  
•                 </static>  
•             </rib>  
•        </routing-options>  
•    </configuration>

•   **Description**   Tag string 2.

•   **Contents**   <metric-value>—Metric value.

•        <type>—Metric type.

## &lt;tag2&gt; (configuration/routing-options/static/defaults)

**Usage** <configuration>  
   <routing-options>  
     <static>  
       <defaults>  
         **<tag2>**  
           <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
           <type>*type*</type>  
         **</tag2>**  
       </defaults>  
     </static>  
   </routing-options>  
</configuration>

**Description** Tag string 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

## &lt;tag2&gt; (configuration/routing-options/static/route)

**Usage** <configuration>  
   <routing-options>  
     <static>  
       <route>  
         **<tag2>**  
           <metric-value>*metric-value*</metric-value>   <!-- mandatory -->  
           <type>*type*</type>  
         **</tag2>**  
       </route>  
     </static>  
   </routing-options>  
</configuration>

**Description** Tag string 2.

**Contents** <metric-value>—Metric value.

<type>—Metric type.

- <targets> (configuration/snmp/trap-group)

**Usage** <configuration>  
    <snmp>  
        <trap-group>  
            <targets>  
                <name>name</name>   <!-- identifier -->  
            </targets>  
        </trap-group>  
    </snmp>  
</configuration>

**Description** Targets for trap messages.

**Contents** <name>—IP address.

- <tcc> (configuration/interfaces/interface/unit/family)

**Usage** <configuration>  
    <interfaces>  
        <interface>  
            <unit>  
                <family>  
                    <tcc>  
                        <policer>...</policer>  
                        <remote>...</remote>  
                    </tcc>  
                </family>  
            </unit>  
        </interface>  
    </interfaces>  
</configuration>

**Description** Translational cross-connect parameters.

**Contents** <policer>—Interface policing.

<remote>—No documentation is available yet.

## &lt;te-link&gt; (configuration/protocols/link-management)

**Usage**

```
<configuration>
 <protocols>
 <link-management>
 <te-link>
 <name>name</name> <!-- identifier -->
 <local-address>local-address</local-address>
 <remote-address>remote-address</remote-address>
 <remote-id>remote-id</remote-id>
 <interface>...</interface>
 </te-link>
 </link-management>
 </protocols>
</configuration>
```

**Description** Traffic engineering link.

**Contents** <interface>—Member interface of TE link.

<local-address>—Address of the local end of the link.

<name>—Name of TE link.

<remote-address>—Address of the remote end of the link.

<remote-id>—Link ID for the remote end of the link.

## &lt;te-link&gt; (configuration/protocols/link-management/peer)

**Usage**

```
<configuration>
 <protocols>
 <link-management>
 <peer>
 <te-link>
 <name>name</name> <!-- identifier -->
 </te-link>
 </peer>
 </link-management>
 </protocols>
</configuration>
```

**Description** List of TE links managed by this peer.

**Contents** <name>—List of TE links managed by this peer.

## • &lt;teardown&gt; (configuration/protocols/bgp/family/inet/any/prefix-limit)

**Usage**   <configuration>  
           <protocols>  
             <bgp>  
               <family>  
                 <inet>  
                   <any>  
                     <prefix-limit>  
                       <teardown>  
                         <limit-threshold>*limit-threshold*</limit-threshold>  
                         <idle-timeout>...</idle-timeout>  
                       </teardown>  
                     </prefix-limit>  
                   </any>  
                   </inet>  
                   </family>  
                   </bgp>  
                   </protocols>  
                 </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

## • &lt;teardown&gt; (configuration/protocols/bgp/family/inet/labeled-unicast/prefix-limit)

**Usage**   <configuration>  
           <protocols>  
             <bgp>  
               <family>  
                 <inet>  
                   <labeled-unicast>  
                     <prefix-limit>  
                       <teardown>  
                         <limit-threshold>*limit-threshold*</limit-threshold>  
                         <idle-timeout>...</idle-timeout>  
                       </teardown>  
                     </prefix-limit>  
                   </labeled-unicast>  
                   </inet>  
                   </family>  
                   </bgp>  
                   </protocols>  
                 </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

## &lt;teardown&gt; (configuration/protocols/bgp/family/inet/multicast/prefix-limit)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <family>
 <inet>
 <multicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet>
 </family>
 </bgp>
 </protocols>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

## &lt;teardown&gt; (configuration/protocols/bgp/family/inet/unicast/prefix-limit)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <family>
 <inet>
 <unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet>
 </family>
 </bgp>
 </protocols>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/protocols/bgp/family/inet-vpn/any/prefix-limit)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <any>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </any>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/protocols/bgp/family/inet-vpn/multicast/prefix-limit)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <multicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

## &lt;teardown&gt; (configuration/protocols/bgp/family/inet-vpn/unicast/prefix-limit)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

## &lt;teardown&gt; (configuration/protocols/bgp/family/inet6/any/prefix-limit)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <any>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </any>
 </inet6>
 </family>
 </bgp>
 </protocols>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/protocols/bgp/family/inet6/labeled-unicast/prefix-limit)

**Usage**   <configuration>  
           <protocols>  
             <bgp>  
               <family>  
                 <inet6>  
                   <labeled-unicast>  
                     <prefix-limit>  
                       <teardown>  
                         <limit-threshold>*limit-threshold*</limit-threshold>  
                         <idle-timeout>...</idle-timeout>  
                       </teardown>  
                     </prefix-limit>  
                   </labeled-unicast>  
                 </inet6>  
               </family>  
             </bgp>  
           </protocols>  
   </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/protocols/bgp/family/inet6/multicast/prefix-limit)

**Usage**   <configuration>  
           <protocols>  
             <bgp>  
               <family>  
                 <inet6>  
                   <multicast>  
                     <prefix-limit>  
                       <teardown>  
                         <limit-threshold>*limit-threshold*</limit-threshold>  
                         <idle-timeout>...</idle-timeout>  
                       </teardown>  
                     </prefix-limit>  
                   </multicast>  
                 </inet6>  
               </family>  
             </bgp>  
           </protocols>  
   </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

## &lt;teardown&gt; (configuration/protocols/bgp/family/inet6/unicast/prefix-limit)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet6>
 </family>
 </bgp>
 </protocols>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

## &lt;teardown&gt; (configuration/protocols/bgp/family/l2vpn/unicast/prefix-limit)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <family>
 <l2vpn>
 <unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </l2vpn>
 </family>
 </bgp>
 </protocols>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

## • &lt;teardown&gt; (configuration/protocols/bgp/group/family/inet/any/prefix-limit)

```

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <any>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </any>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>

```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

## • &lt;teardown&gt; (configuration/protocols/bgp/group/family/inet/labeled-unicast/prefix-limit)

```

Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <labeled-unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>

```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

## <teardown> (configuration/protocols/bgp/group/family/inet/multicast/prefix-limit)

```
Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <multicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/protocols/bgp/group/family/inet/unicast/prefix-limit)

**Usage**

```
<configuration>
 <protocols>
 <bpg>
 <group>
 <family>
 <inet>
 <unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet>
 </family>
 </group>
 </bpg>
 </protocols>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/protocols/bgp/group/family/inet-vpn/any/prefix-limit)

**Usage**

```
<configuration>
 <protocols>
 <bpg>
 <group>
 <family>
 <inet-vpn>
 <any>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </any>
 </inet-vpn>
 </family>
 </group>
 </bpg>
 </protocols>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

## <teardown> (configuration/protocols/bgp/group/family/inet-vpn/multicast/prefix-limit)

```
Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet-vpn>
 <multicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet-vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/protocols/bgp/group/family/inet-vpn/unicast/prefix-limit)

**Usage**   <configuration>  
           <protocols>  
             <bpg>  
               <group>  
                 <family>  
                   <inet-vpn>  
                     <unicast>  
                       <prefix-limit>  
                       <teardown>  
                         <limit-threshold>*limit-threshold*</limit-threshold>  
                         <idle-timeout>...</idle-timeout>  
                       </teardown>  
                       </prefix-limit>  
                     </unicast>  
                     </inet-vpn>  
                     </family>  
                     </group>  
                   </bpg>  
                 </protocols>  
       </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/protocols/bgp/group/family/inet6/any/prefix-limit)

**Usage**   <configuration>  
           <protocols>  
             <bpg>  
               <group>  
                 <family>  
                   <inet6>  
                     <any>  
                       <prefix-limit>  
                       <teardown>  
                         <limit-threshold>*limit-threshold*</limit-threshold>  
                         <idle-timeout>...</idle-timeout>  
                       </teardown>  
                       </prefix-limit>  
                     </any>  
                     </inet6>  
                     </family>  
                     </group>  
                   </bpg>  
                 </protocols>  
       </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

## <teardown> (configuration/protocols/bgp/group/family/inet6/labeled-unicast/prefix-limit)

**Usage** <configuration>  
    <protocols>  
        <bpg>  
            <group>  
                <family>  
                    <inet6>  
                        <labeled-unicast>  
                            <prefix-limit>  
                                <**teardown**>  
                                    <limit-threshold>*limit-threshold*</limit-threshold>  
                                    <idle-timeout>...</idle-timeout>  
                                </**teardown**>  
                                    </prefix-limit>  
                                    </labeled-unicast>  
                                    </inet6>  
                                    </family>  
                                    </group>  
                                    </bpg>  
                                    </protocols>  
    </configuration>

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/protocols/bgp/group/family/inet6/multicast/prefix-limit)

**Usage**

```
<configuration>
 <protocols>
 <bpg>
 <group>
 <family>
 <inet6>
 <multicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet6>
 </family>
 </group>
 </bpg>
 </protocols>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/protocols/bgp/group/family/inet6/unicast/prefix-limit)

**Usage**

```
<configuration>
 <protocols>
 <bpg>
 <group>
 <family>
 <inet6>
 <unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet6>
 </family>
 </group>
 </bpg>
 </protocols>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

## <teardown> (configuration/protocols/bgp/group/family/l2vpn/unicast/prefix-limit)

```
Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <l2vpn>
 <unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </l2vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/protocols/bgp/group/neighbor/family/inet/any/prefix-limit)

**Usage**   <configuration>  
          <protocols>  
            <bpg>  
              <group>  
                <neighbor>  
                  <family>  
                    <inet>  
                      <any>  
                      <prefix-limit>  
                        **<teardown>**  
                        <limit-threshold>*limit-threshold*</limit-threshold>  
                        <idle-timeout>...</idle-timeout>  
                        **</teardown>**  
                      </prefix-limit>  
                      </any>  
                      </inet>  
                      </family>  
                      </neighbor>  
                      </group>  
                      </bpg>  
                      </protocols>  
              </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/protocols/bgp/group/neighbor/family/inet/labeled-unicast/prefix-limit)

**Usage**

```

<configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <labeled-unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/protocols/bgp/group/neighbor/family/inet/multicast/prefix-limit)

Usage   <configuration>  
      <protocols>  
        <bpg>  
          <group>  
            <neighbor>  
              <family>  
              <inet>  
                <multicast>  
                  <prefix-limit>  
                    **<teardown>**  
                    <limit-threshold>*limit-threshold*</limit-threshold>  
                    <idle-timeout>...</idle-timeout>  
                  **</teardown>**  
                  </prefix-limit>  
                </multicast>  
                </inet>  
                </family>  
                </neighbor>  
                </group>  
              </bpg>  
            </protocols>  
      </configuration>

Description   Clear peer connection on reaching limit.

Contents   <idle-timeout>—Timeout before attempting to restart peer.

              <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/protocols/bgp/group/neighbor/family/inet/unicast/prefix-limit)

**Usage**

```

<configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/any/prefix-limit)

```
Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <any>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </any>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/multicast/prefix-limit)

**Usage** <configuration>  
    <protocols>  
        <bpg>  
            <group>  
                <neighbor>  
                    <family>  
                        <inet-vpn>  
                            <multicast>  
                                <prefix-limit>  
                                    **<teardown>**  
                                        <limit-threshold>*limit-threshold*</limit-threshold>  
                                        <idle-timeout>...</idle-timeout>  
                                            **</teardown>**  
                                        </prefix-limit>  
                                        </multicast>  
                                        </inet-vpn>  
                                        </family>  
                                        </neighbor>  
                                        </group>  
                                        </bpg>  
                                        </protocols>  
    </configuration>

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/protocols/bgp/group/neighbor/family/inet-vpn/unicast/prefix-limit)

**Usage**   <configuration>  
          <protocols>  
            <bgp>  
              <group>  
                <neighbor>  
                  <family>  
                    <inet-vpn>  
                      <unicast>  
                      <prefix-limit>  
                        **<teardown>**  
                        <limit-threshold>*limit-threshold*</limit-threshold>  
                        <idle-timeout>...</idle-timeout>  
                        **</teardown>**  
                        </prefix-limit>  
                        </unicast>  
                        </inet-vpn>  
                        </family>  
                        </neighbor>  
                        </group>  
                        </bgp>  
                        </protocols>  
                </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/protocols/bgp/group/neighbor/family/inet6/any/prefix-limit)

**Usage** <configuration>  
    <protocols>  
        <bpg>  
            <group>  
                <neighbor>  
                    <family>  
                        <inet6>  
                            <any>  
                                <prefix-limit>  
                                    **<teardown>**  
                                        <limit-threshold>*limit-threshold*</limit-threshold>  
                                        <idle-timeout>...</idle-timeout>  
                                            **</teardown>**  
                                        </prefix-limit>  
                                        </any>  
                                        </inet6>  
                                        </family>  
                                        </neighbor>  
                                        </group>  
                                        </bpg>  
                                        </protocols>  
    </configuration>

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/protocols/bgp/group/neighbor/family/inet6/labeled-unicast/prefix-limit)

**Usage**   <configuration>  
          <protocols>  
            <bgp>  
              <group>  
                <neighbor>  
                  <family>  
                    <inet6>  
                      <labeled-unicast>  
                      <prefix-limit>  
                        **<teardown>**  
                        <limit-threshold>*limit-threshold*</limit-threshold>  
                        <idle-timeout>...</idle-timeout>  
                        **</teardown>**  
                      </prefix-limit>  
                      </labeled-unicast>  
                    </inet6>  
                    </family>  
                  </neighbor>  
                  </group>  
                </bgp>  
              </protocols>  
    </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/protocols/bgp/group/neighbor/family/inet6/multicast/prefix-limit)

**Usage** <configuration>  
    <protocols>  
        <bpg>  
            <group>  
                <neighbor>  
                    <family>  
                        <inet6>  
                            <multicast>  
                                <prefix-limit>  
                                    **<teardown>**  
                                        <limit-threshold>*limit-threshold*</limit-threshold>  
                                        <idle-timeout>...</idle-timeout>  
                                            **</teardown>**  
                                        </prefix-limit>  
                                        </multicast>  
                                        </inet6>  
                                        </family>  
                                        </neighbor>  
                                        </group>  
                                        </bpg>  
                                        </protocols>  
    </configuration>

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/protocols/bgp/group/neighbor/family/inet6/unicast/prefix-limit)

**Usage**   <configuration>  
          <protocols>  
            <bgp>  
              <group>  
                <neighbor>  
                  <family>  
                    <inet6>  
                      <unicast>  
                      <prefix-limit>  
                        **<teardown>**  
                        <limit-threshold>*limit-threshold*</limit-threshold>  
                        <idle-timeout>...</idle-timeout>  
                        **</teardown>**  
                      </prefix-limit>  
                      </unicast>  
                      </inet6>  
                      </family>  
                      </neighbor>  
                      </group>  
                      </bgp>  
                      </protocols>  
              </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/protocols/bgp/group/neighbor/family/l2vpn/unicast/prefix-limit)

```
Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <l2vpn>
 <unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </l2vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet/any/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <family>  
                    <inet>  
                      <any>  
                      <prefix-limit>  
                        **<teardown>**  
                        <limit-threshold>*limit-threshold*</limit-threshold>  
                        <idle-timeout>...</idle-timeout>  
                        **</teardown>**  
                      </prefix-limit>  
                      </any>  
                      </inet>  
                      </family>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet/labeled-unicast/prefix-limit)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <family>  
                        <inet>  
                            <labeled-unicast>  
                                <prefix-limit>  
                                    **<teardown>**  
                                        <limit-threshold>*limit-threshold*</limit-threshold>  
                                        <idle-timeout>...</idle-timeout>  
                                            **</teardown>**  
                                        </prefix-limit>  
                                        </labeled-unicast>  
                                        </inet>  
                                        </family>  
                                        </bgp>  
                                        </protocols>  
                                        </instance>  
                                        </routing-instances>  
    </configuration>

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet/multicast/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <family>  
                    <inet>  
                      <multicast>  
                      <prefix-limit>  
                        **<teardown>**  
                        <limit-threshold>*limit-threshold*</limit-threshold>  
                        <idle-timeout>...</idle-timeout>  
                        **</teardown>**  
                      </prefix-limit>  
                      </multicast>  
                    </inet>  
                    </family>  
                  </bgp>  
                  </protocols>  
                  </instance>  
                  </routing-instances>  
      </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet/unicast/prefix-limit)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet>
 <unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn/any/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <family>  
                    <inet-vpn>  
                      <any>  
                      <prefix-limit>  
                        **<teardown>**  
                        <limit-threshold>*limit-threshold*</limit-threshold>  
                        <idle-timeout>...</idle-timeout>  
                        **</teardown>**  
                      </prefix-limit>  
                      </any>  
                      </inet-vpn>  
                      </family>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn/multicast/prefix-limit)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <multicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn/unicast/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <family>  
                    <inet-vpn>  
                      <unicast>  
                      <prefix-limit>  
                        **<teardown>**  
                        <limit-threshold>*limit-threshold*</limit-threshold>  
                        <idle-timeout>...</idle-timeout>  
                        **</teardown>**  
                        </prefix-limit>  
                        </unicast>  
                        </inet-vpn>  
                        </family>  
                        </bgp>  
                        </protocols>  
                        </instance>  
                        </routing-instances>  
                </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet6/any/prefix-limit)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <family>  
                        <inet6>  
                            <any>  
                                <prefix-limit>  
                                    **<teardown>**  
                                        <limit-threshold>*limit-threshold*</limit-threshold>  
                                        <idle-timeout>...</idle-timeout>  
                                            **</teardown>**  
                                        </prefix-limit>  
                                        </any>  
                                        </inet6>  
                                        </family>  
                                        </bgp>  
                                        </protocols>  
                                        </instance>  
                                        </routing-instances>  
    </configuration>

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet6/labeled-unicast/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <family>  
                    <inet6>  
                      <labeled-unicast>  
                      <prefix-limit>  
                        **<teardown>**  
                        <limit-threshold>*limit-threshold*</limit-threshold>  
                        <idle-timeout>...</idle-timeout>  
                        **</teardown>**  
                      </prefix-limit>  
                      </labeled-unicast>  
                    </inet6>  
                    </family>  
                  </bgp>  
                  </protocols>  
                  </instance>  
                  </routing-instances>  
        </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet6/multicast/prefix-limit)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <multicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet6>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/family/inet6/unicast/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <family>  
                    <inet6>  
                      <unicast>  
                      <prefix-limit>  
                        **<teardown>**  
                        <limit-threshold>*limit-threshold*</limit-threshold>  
                        <idle-timeout>...</idle-timeout>  
                        **</teardown>**  
                      </prefix-limit>  
                      </unicast>  
                      </inet6>  
                      </family>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/family/l2vpn/unicast/prefix-limit)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <family>  
                        <l2vpn>  
                            <unicast>  
                                <prefix-limit>  
                                    **<teardown>**  
                                        <limit-threshold>*limit-threshold*</limit-threshold>  
                                        <idle-timeout>...</idle-timeout>  
                                            **</teardown>**  
                                        </prefix-limit>  
                                        </unicast>  
                                        </l2vpn>  
                                        </family>  
                                        </bgp>  
                                        </protocols>  
                                        </instance>  
                                        </routing-instances>  
    </configuration>

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/group/family/inet/any/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <family>  
                      <inet>  
                      <any>  
                      <prefix-limit>  
                        <teardown>  
                          <limit-threshold>*limit-threshold*</limit-threshold>  
                          <idle-timeout>...</idle-timeout>  
                        </teardown>  
                      </prefix-limit>  
                      </any>  
                      </inet>  
                      </family>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
                </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/group/family/inet/labeled-unicast/prefix-limit)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <labeled-unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/group/family/inet/multicast/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <family>  
                      <inet>  
                      <multicast>  
                      <prefix-limit>  
                      <teardown>  
                      <limit-threshold>*limit-threshold*</limit-threshold>  
                      <idle-timeout>...</idle-timeout>  
                      </teardown>  
                      </prefix-limit>  
                      </multicast>  
                      </inet>  
                      </family>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/group/family/inet/unicast/prefix-limit)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn/any/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <family>  
                      <inet-vpn>  
                      <any>  
                      <prefix-limit>  
                        <teardown>  
                          <limit-threshold>*limit-threshold*</limit-threshold>  
                          <idle-timeout>...</idle-timeout>  
                        </teardown>  
                      </prefix-limit>  
                      </any>  
                      </inet-vpn>  
                      </family>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

          <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn/multicast/prefix-limit)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet-vpn>
 <multicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet-vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn/unicast/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <family>  
                      <inet-vpn>  
                      <unicast>  
                      <prefix-limit>  
                        <teardown>  
                          <limit-threshold>*limit-threshold*</limit-threshold>  
                          <idle-timeout>...</idle-timeout>  
                        </teardown>  
                      </prefix-limit>  
                      </unicast>  
                      </inet-vpn>  
                      </family>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

          <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6/any/prefix-limit)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet6>
 <any>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </any>
 </inet6>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances(instance/protocols/bgp/group/family/inet6/labeled-unicast/prefix-limit)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet6>
 <labeled-unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit.threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 <labeled-unicast>
 </inet6>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6/multicast/prefix-limit)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <family>  
                            <inet6>  
                                <multicast>  
                                    <prefix-limit>  
                                        <teardown>  
                                            <limit-threshold>*limit-threshold*</limit-threshold>  
                                            <idle-timeout>...</idle-timeout>  
                                                </teardown>  
                                            </prefix-limit>  
                                            </multicast>  
                                            </inet6>  
                                            </family>  
                                            </group>  
                                            </bgp>  
                                            </protocols>  
                                            </instance>  
                                            </routing-instances>  
    </configuration>

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6/unicast/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <family>  
                      <inet6>  
                      <unicast>  
                      <prefix-limit>  
                        <teardown>  
                          <limit-threshold>*limit-threshold*</limit-threshold>  
                          <idle-timeout>...</idle-timeout>  
                        </teardown>  
                      </prefix-limit>  
                      </unicast>  
                      </inet6>  
                      </family>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
                </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/group/family/l2vpn/unicast/prefix-limit)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <family>  
                            <l2vpn>  
                                <unicast>  
                                    <prefix-limit>  
                                        <teardown>  
                                            <limit-threshold>*limit-threshold*</limit-threshold>  
                                            <idle-timeout>...</idle-timeout>  
                                        </teardown>  
                                            </prefix-limit>  
                                            </unicast>  
                                            </l2vpn>  
                                            </family>  
                                            </group>  
                                            </bgp>  
                                            </protocols>  
                                            </instance>  
                                            </routing-instances>  
    </configuration>

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/any/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <neighbor>  
                      <family>  
                      <inet>  
                      <any>  
                      <prefix-limit>  
                      <teardown>  
                      <limit-threshold>*limit-threshold*</limit-threshold>  
                      <idle-timeout>...</idle-timeout>  
                      </teardown>  
                      </prefix-limit>  
                      </any>  
                      </inet>  
                      </family>  
                      </neighbor>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/labeled-unicast/prefix-limit)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <labeled-unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </labeled-unicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/multicast/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <neighbor>  
                      <family>  
                      <inet>  
                      <multicast>  
                      <prefix-limit>  
                      <teardown>  
                      <limit-threshold>*limit-threshold*</limit-threshold>  
                      <idle-timeout>...</idle-timeout>  
                      </teardown>  
                      </prefix-limit>  
                      </multicast>  
                      </inet>  
                      </family>  
                      </neighbor>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet/unicast/prefix-limit)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn/any/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <neighbor>  
                      <family>  
                      <inet-vpn>  
                        <any>  
                        <prefix-limit>  
                          <teardown>  
                            <limit-threshold>*limit-threshold*</limit-threshold>  
                            <idle-timeout>...</idle-timeout>  
                          </teardown>  
                        </prefix-limit>  
                        </any>  
                        </inet-vpn>  
                        </family>  
                        </neighbor>  
                        </group>  
                        </bgp>  
                        </protocols>  
                        </instance>  
                        </routing-instances>  
                </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn/multicast/prefix-limit)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <multicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn/unicast/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <neighbor>  
                      <family>  
                      <inet-vpn>  
                      <unicast>  
                      <prefix-limit>  
                      <teardown>  
                      <limit-threshold>*limit-threshold*</limit-threshold>  
                      <idle-timeout>...</idle-timeout>  
                      </teardown>  
                      </prefix-limit>  
                      </unicast>  
                      </inet-vpn>  
                      </family>  
                      </neighbor>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/any/prefix-limit)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet6>
 <any>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </any>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/labeled-unicast/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <neighbor>  
                      <family>  
                      <inet6>  
                        <labeled-unicast>  
                        <prefix-limit>  
                          <teardown>  
                            <limit-threshold>*limit-threshold*</limit-threshold>  
                            <idle-timeout>...</idle-timeout>  
                          </teardown>  
                        </prefix-limit>  
                        </labeled-unicast>  
                      </inet6>  
                      </family>  
                      </neighbor>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/multicast/prefix-limit)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet6>
 <multicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </multicast>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

- <teardown> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6/unicast/prefix-limit)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <neighbor>  
                      <family>  
                      <inet6>  
                      <unicast>  
                      <prefix-limit>  
                      <teardown>  
                      <limit-threshold>*limit-threshold*</limit-threshold>  
                      <idle-timeout>...</idle-timeout>  
                      </teardown>  
                      </prefix-limit>  
                      </unicast>  
                      </inet6>  
                      </family>  
                      </neighbor>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
              </configuration>

**Description**   Clear peer connection on reaching limit.

**Contents**   <idle-timeout>—Timeout before attempting to restart peer.

                  <limit-threshold>—Percentage of prefix-limit to start warnings.

<teardown> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/l2vpn/unicast/prefix-limit)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <l2vpn>
 <unicast>
 <prefix-limit>
 <teardown>
 <limit-threshold>limit-threshold</limit-threshold>
 <idle-timeout>...</idle-timeout>
 </teardown>
 </prefix-limit>
 </unicast>
 </l2vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Clear peer connection on reaching limit.

**Contents** <idle-timeout>—Timeout before attempting to restart peer.

<limit-threshold>—Percentage of prefix-limit to start warnings.

<telnet> (configuration/system/services)

**Usage**

```

<configuration>
 <system>
 <services>
 <telnet>
 <connection-limit>connection-limit</connection-limit>
 <rate-limit>rate-limit</rate-limit>
 </telnet>
 </services>
 </system>
</configuration>
```

**Description** Allow telnet login.

**Contents** <connection-limit>—Maximum number of allowed connections.

<rate-limit>—Maximum number of connections per minute.

• <term> (configuration/firewall/family/inet/filter)

**Usage** <configuration>  
    <firewall>  
        <family>  
            <inet>  
                <filter>  
                    **<term>**  
                        <name>name</name>    <!-- identifier --&gt;<br/>                        <from>...</from>  
                        <then>...</then>  
                    **</term>**  
                </filter>  
            </inet>  
            </family>  
        </firewall>  
    </configuration>

**Description** Define a firewall term.

**Contents** <from>—Define match criteria.

<name>—Term name.

<then>—Action to take if the 'from' condition is matched.

• <term> (configuration/firewall/family/inet6/filter)

**Usage** <configuration>  
    <firewall>  
        <family>  
            <inet6>  
                <filter>  
                    **<term>**  
                        <name>name</name>    <!-- identifier --&gt;<br/>                        <from>...</from>  
                        <then>...</then>  
                    **</term>**  
                </filter>  
            </inet6>  
            </family>  
        </firewall>  
    </configuration>

**Description** Define a firewall term.

**Contents** <from>—Define match criteria.

<name>—Term name.

<then>—Action to take if the 'from' condition is matched.

## &lt;term&gt; (configuration/policy-options/policy-statement)

```
Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <name>name</name> <!-- identifier -->
 <from>...</from>
 <to>...</to>
 <then>...</then>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>
```

**Description** Policy term.

**Contents** <from>—Conditions to match a route's source.

<name>—No documentation is available yet.

<then>—Actions to take if 'from' and 'to' conditions match.

<to>—Conditions to match a route's destination.

## &lt;tftp&gt; (configuration/forwarding-options/helpers)

```
Usage <configuration>
 <forwarding-options>
 <helpers>
 <tftp>
 <description>description</description>
 <server>server</server>
 <interface>...</interface>
 </tftp>
 </helpers>
 </forwarding-options>
 </configuration>
```

**Description** Incoming TFTP request forwarding configuration.

**Contents** <description>—Text description of TFTP service.

<interface>—Incoming TFTP request forwarding interface configuration.

<server>—Name or address of TFTP server to which to forward.

- <then> (configuration/firewall/family/inet/filter/policer)

Usage   <configuration>  
      <firewall>  
         <family>  
            <inet>  
             <filter>  
                <policer>  
                 <then>  
                    <discard/>  
                    <loss-priority>*loss-priority-choice*</loss-priority>  
                    <forwarding-class>*forwarding-class*</forwarding-class>  
                 </then>  
                </policer>  
              </filter>  
            </inet>  
          </family>  
         </firewall>  
      </configuration>

Description   Action to take if the rate limits are exceeded.

Contents   <discard>—Discard the packet.

              <forwarding-class>—Classify packet to forwarding class.

              <loss-priority>—Classify packet to loss-priority.

                ■ high—Loss priority high.

                ■ low—Loss priority low.

## &lt;then&gt; (configuration/firewall/family/inet/filter/term)

```

Usage <configuration>
 <firewall>
 <family>
 <inet>
 <filter>
 <term>
 <then>
 <count>count</count>
 <policer>policer</policer>
 <log/>
 <syslog/>
 <sample/>
 <loss-priority>loss-priority-choice</loss-priority>
 <forwarding-class>forwarding-class</forwarding-class>
 <accept/>
 <discard/>
 <next>next-choice</next>
 <routing-instance>routing-instance</routing-instance>
 <ipsec-sa>ipsec-sa</ipsec-sa>
 <reject>...</reject>
 </then>
 </term>
 </filter>
 </inet>
 </family>
 </firewall>
 </configuration>

```

**Description** Action to take if the 'from' condition is matched.

**Contents** <accept>—Accept the packet.

<count>—Count the packet in the named counter.

<discard>—Discard the packet.

<forwarding-class>—Classify packet to forwarding class.

<ipsec-sa>—Use specified IPSec security association.

<log>—Log the packet.

<loss-priority>—Classify packet to loss-priority.

- high—Loss priority high.

- low—Loss priority low.

<next>—Continue to next term in a filter.

- term—Continue to next term in a filter.

<policer>—Police the packet using the named policer.

<reject>—Reject the packet.

<then> (configuration/firewall/family/inet6/filter/policer)

- `<routing-instance>`—Provide routing instance.
- `<sample>`—Sample the packet.
- `<syslog>`—Syslog information about the packet.
- 
- <then> (configuration/firewall/family/inet6/filter/policer)
- 

**Usage**   <configuration>  
          <firewall>  
            <family>  
              <inet6>  
              <filter>  
                <policer>  
                  **<then>**  
                    <discard/>  
                    <loss-priority>*loss-priority-choice*</loss-priority>  
                    <forwarding-class>*forwarding-class*</forwarding-class>  
                  **</then>**  
                </policer>  
                </filter>  
              </inet6>  
            </family>  
          </firewall>  
        </configuration>

**Description**   Action to take if the rate limits are exceeded.

**Contents**   <discard>—Discard the packet.

                  <forwarding-class>—Classify packet to forwarding class.

                  <loss-priority>—Classify packet to loss-priority.

            ■ high—Loss priority high.

            ■ low—Loss priority low.

## &lt;then&gt; (configuration/firewall/family/inet6/filter/term)

```
Usage <configuration>
 <firewall>
 <family>
 <inet6>
 <filter>
 <term>
 <then>
 <count>count</count>
 <policer>policer</policer>
 <log/>
 <syslog/>
 <sample/>
 <loss-priority>loss-priority-choice</loss-priority>
 <forwarding-class>forwarding-class</forwarding-class>
 <accept/>
 <discard/>
 <next>next-choice</next>
 <routing-instance>routing-instance</routing-instance>
 <reject>...</reject>
 </then>
 </term>
 </filter>
 </inet6>
 </family>
 </firewall>
 </configuration>
```

**Description** Action to take if the 'from' condition is matched.

**Contents** <accept>—Accept the packet.

<count>—Count the packet in the named counter.

<discard>—Discard the packet.

<forwarding-class>—Classify packet to forwarding class.

<log>—Log the packet.

<loss-priority>—Classify packet to loss-priority.

- high—Loss priority high.

- low—Loss priority low.

<next>—Continue to next term in a filter.

- term—Continue to next term in a filter.

<policer>—Police the packet using the named policer.

<reject>—Reject the packet.

<routing-instance>—Provide routing instance.

<then> (configuration/firewall/policer)

- <sample>—Sample the packet.
- <syslog>—Syslog information about the packet.

<then> (configuration/firewall/policer)

**Usage**    <configuration>  
              <firewall>  
              <policer>  
              <then>  
                  <discard/>  
                  <loss-priority>*loss-priority-choice*</loss-priority>  
                  <forwarding-class>*forwarding-class*</forwarding-class>  
                  </then>  
              </policer>  
              </firewall>  
              </configuration>

**Description**    Action to take if the rate limits are exceeded.

**Contents**    <discard>—Discard the packet.  
  
                  <forwarding-class>—Classify packet to forwarding class.  
  
                  <loss-priority>—Classify packet to loss-priority.  
  
                    ■ high—Loss priority high.  
  
                    ■ low—Loss priority low.

## &lt;then&gt; (configuration/policy-options/policy-statement)

```

Usage <configuration>
 <policy-options>
 <policy-statement>
 <then>
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <local-preference>...</local-preference>
 <origin>origin-choice</origin>
 <community>...</community>
 <damping>damping</damping>
 <as-path-prepend>as-path-prepend</as-path-prepend>
 <as-path-expand>...</as-path-expand>
 <next-hop>...</next-hop>
 <install-nexthop>...</install-nexthop>
 <trace/>
 <next>next-choice</next>
 <external>...</external>
 <load-balance>...</load-balance>
 <class>class</class>
 <destination-class>destination-class</destination-class>
 <source-class>source-class</source-class>
 <forwarding-class>forwarding-class</forwarding-class>
 <cos-next-hop-map>cos-next-hop-map</cos-next-hop-map>
 <accept/>
 <reject/>
 </then>
 </policy-statement>
 </policy-options>
 </configuration>

```

**Description** Actions to take if 'from' and 'to' conditions match.

**Contents** <accept>—Accept a route.

<as-path-expand>—Prepend AS numbers prior to adding local-as (BGP only).

<as-path-prepend>—Prepend AS numbers to an AS path (BGP only).

<class>—Set class-of-service parameters.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community properties associated with a route.

<cos-next-hop-map>—Set CoS-based next-hop map in forwarding table.

- <damping>—Define BGP route flap damping parameters.

<destination-class>—Set destination class in forwarding table.

<external>—External route.

<forwarding-class>—Set source/destination class in forwarding table.

<install-nexthop>—Choose the next hop to be used for forwarding.

<load-balance>—Type of load balancing in forwarding table.

<local-preference>—Local preference associated with a route.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<next>—Skip to next policy or term.

  - policy—Skip to next policy filter.
  - term—Skip to next term in a policy filter.

<next-hop>—Set the address of the next-hop router.

<origin>—BGP path origin.

  - egp—Path originated in another AS.
  - igp—Path originated in the local IGP.
  - incomplete—Path was learned by some other means.

<preference>—Preference value.

<preference2>—Preference value 2.

<reject>—Reject a route.

<source-class>—Set source class in forwarding table.

<tag>—Tag string.

<tag2>—Tag string 2.

<trace>—Log matches to a trace file.

## &lt;then&gt; (configuration/policy-options/policy-statement/term)

```

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <then>
 <metric>...</metric>
 <metric2>...</metric2>
 <metric3>...</metric3>
 <metric4>...</metric4>
 <tag>...</tag>
 <tag2>...</tag2>
 <preference>...</preference>
 <preference2>...</preference2>
 <color>...</color>
 <color2>...</color2>
 <local-preference>...</local-preference>
 <origin>origin-choice</origin>
 <community>...</community>
 <damping>damping</damping>
 <as-path-prepend>as-path-prepend</as-path-prepend>
 <as-path-expand>...</as-path-expand>
 <next-hop>...</next-hop>
 <install-nexthop>...</install-nexthop>
 <trace/>
 <next>next-choice</next>
 <external>...</external>
 <load-balance>...</load-balance>
 <class>class</class>
 <destination-class>destination-class</destination-class>
 <source-class>source-class</source-class>
 <forwarding-class>forwarding-class</forwarding-class>
 <cos-next-hop-map>cos-next-hop-map</cos-next-hop-map>
 <accept/>
 <reject/>
 </then>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

```

**Description** Actions to take if 'from' and 'to' conditions match.

**Contents** <accept>—Accept a route.

<as-path-expand>—Prepend AS numbers prior to adding local-as (BGP only).

<as-path-prepend>—Prepend AS numbers to an AS path (BGP only).

<class>—Set class-of-service parameters.

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community properties associated with a route.

- <cos-next-hop-map>—Set CoS-based next-hop map in forwarding table.

<damping>—Define BGP route flap damping parameters.

<destination-class>—Set destination class in forwarding table.

<external>—External route.

<forwarding-class>—Set source/destination class in forwarding table.

<install-nexthop>—Choose the next hop to be used for forwarding.

<load-balance>—Type of load balancing in forwarding table.

<local-preference>—Local preference associated with a route.

<metric>—Metric value.

<metric2>—Metric value 2.

<metric3>—Metric value 3.

<metric4>—Metric value 4.

<next>—Skip to next policy or term.

  - **policy**—Skip to next policy filter.
  - **term**—Skip to next term in a policy filter.

<next-hop>—Set the address of the next-hop router.

<origin>—BGP path origin.

  - **egp**—Path originated in another AS.
  - **igp**—Path originated in the local IGP.
  - **incomplete**—Path was learned by some other means.

<preference>—Preference value.

<preference2>—Preference value 2.

<reject>—Reject a route.

<source-class>—Set source class in forwarding table.

<tag>—Tag string.

<tag2>—Tag string 2.

<trace>—Log matches to a trace file.

## <to> (configuration/policy-options/policy-statement)

```

Usage <configuration>
 <policy-options>
 <policy-statement>
 <to>
 <instance>instance</instance>
 <protocol>...</protocol>
 <rib>rib</rib>
 <neighbor>...</neighbor>
 <next-hop>...</next-hop>
 <interface>...</interface>
 <area>area</area>
 <as-path>...</as-path>
 <origin>origin-choice</origin>
 <community>...</community>
 <level>level</level>
 <external>...</external>
 <metric>metric</metric>
 <metric2>metric2</metric2>
 <metric3>metric3</metric3>
 <metric4>metric4</metric4>
 <tag>tag</tag>
 <tag2>tag2</tag2>
 <preference>preference</preference>
 <preference2>preference2</preference2>
 <color>color</color>
 <color2>color2</color2>
 <local-preference>local-preference</local-preference>
 <policy>...</policy>
 <family>family-choice</family>
 </to>
 </policy-statement>
 </policy-options>
 </configuration>

```

**Description** Conditions to match a route's destination.

**Contents** <area>—OSPF area identifier.

<as-path>—Name of AS path regular expression (BGP only).

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community.

<external>—External route.

<family>—No documentation is available yet.

- inet—IPv4 family.

- inet6—IPv6 family.

<instance>—Routing protocol instance.

- *<interface>*—Interface name or address.
- *<level>*—IS-IS level.
- *<local-preference>*—Local preference associated with a route.
- *<metric>*—Metric value.
- *<metric2>*—Metric value 2.
- *<metric3>*—Metric value 3.
- *<metric4>*—Metric value 4.
- *<neighbor>*—Neighboring router.
- *<next-hop>*—Next-hop router.
- *<origin>*—BGP origin attribute.
  - *egp*—Path originated in another AS.
  - *igp*—Path originated in the local IGP.
  - *incomplete*—Path was learned by some other means.
- *<policy>*—Name of policy to evaluate.
- *<preference>*—Preference value.
- *<preference2>*—Preference value 2.
- *<protocol>*—Protocol from which route was learned.
- *<rib>*—Routing table.
- *<tag>*—Tag string.
- *<tag2>*—Tag string 2.

## &lt;to&gt; (configuration/policy-options/policy-statement/term)

```

Usage <configuration>
 <policy-options>
 <policy-statement>
 <term>
 <to>
 <instance>instance</instance>
 <protocol>...</protocol>
 <rib>rib</rib>
 <neighbor>...</neighbor>
 <next-hop>...</next-hop>
 <interface>...</interface>
 <area>area</area>
 <as-path>...</as-path>
 <origin>origin-choice</origin>
 <community>...</community>
 <level>level</level>
 <external>...</external>
 <metric>metric</metric>
 <metric2>metric2</metric2>
 <metric3>metric3</metric3>
 <metric4>metric4</metric4>
 <tag>tag</tag>
 <tag2>tag2</tag2>
 <preference>preference</preference>
 <preference2>preference2</preference2>
 <color>color</color>
 <color2>color2</color2>
 <local-preference>local-preference</local-preference>
 <policy>...</policy>
 <family>family-choice</family>
 </to>
 </term>
 </policy-statement>
 </policy-options>
 </configuration>

```

**Description** Conditions to match a route's destination.

**Contents** <area>—OSPF area identifier.

<as-path>—Name of AS path regular expression (BGP only).

<color>—Color (preference) value.

<color2>—Color (preference) value 2.

<community>—BGP community.

<external>—External route.

<family>—No documentation is available yet.

- inet—IPv4 family.

- inet6—IPv6 family.

- *<instance>*—Routing protocol instance.
- *<interface>*—Interface name or address.
- *<level>*—IS-IS level.
- *<local-preference>*—Local preference associated with a route.
- *<metric>*—Metric value.
- *<metric2>*—Metric value 2.
- *<metric3>*—Metric value 3.
- *<metric4>*—Metric value 4.
- *<neighbor>*—Neighboring router.
- *<next-hop>*—Next-hop router.
- *<origin>*—BGP origin attribute.
  - *egp*—Path originated in another AS.
  - *igp*—Path originated in the local IGP.
  - *incomplete*—Path was learned by some other means.
- *<policy>*—Name of policy to evaluate.
- *<preference>*—Preference value.
- *<preference2>*—Preference value 2.
- *<protocol>*—Protocol from which route was learned.
- *<rib>*—Routing table.
- *<tag>*—Tag string.
- *<tag2>*—Tag string 2.

<tracefilter> (configuration/routing-instances/instance/routing-options/resolution)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <routing-options>  
                <resolution>  
                    **<tracefilter>**  
                        <name>name</name>    <!-- identifier --&gt;<br/>                    **</tracefilter>**  
                </resolution>  
                </routing-options>  
            </instance>  
        </routing-instances>  
    </configuration>

**Description** Filter policy.

**Contents** <name>—Filter policy.

<tracefilter> (configuration/routing-options/resolution)

**Usage** <configuration>  
    <routing-options>  
        <resolution>  
            **<tracefilter>**  
                <name>name</name>    <!-- identifier --&gt;<br/>            **</tracefilter>**  
        </resolution>  
    </routing-options>  
</configuration>

**Description** Filter policy.

**Contents** <name>—Filter policy.

<traceoptions> (configuration/access)

**Usage** <configuration>  
    <access>  
        **<traceoptions>**  
            <flag>...</flag>  
        **</traceoptions>**  
    </access>  
</configuration>

**Description** Network access daemon tracing options.

**Contents** <flag>—Tracing parameters.

• <traceoptions> (configuration/forwarding-options/helpers)

**Usage** <configuration>  
    <forwarding-options>  
        <helpers>  
            <traceoptions>  
                <file>...</file>  
                <level>level-choice</level>  
                <flag>...</flag>  
            </traceoptions>  
        </helpers>  
    </forwarding-options>  
</configuration>

**Description** Trace options for helper.

**Contents** <file>—Trace file options.

<flag>—Area of fud on which to enable debugging output.

<level>—Level of debugging output.

- all—Matches all levels.
- error—Match error conditions.
- info—Match informational messages.
- notice—Match conditions that should be handled specially.
- verbose—Match verbose messages.
- warning—Match warning messages.

• <traceoptions> (configuration/forwarding-options/sampling)

**Usage** <configuration>  
    <forwarding-options>  
        <sampling>  
            <traceoptions>  
                <file>...</file>  
            </traceoptions>  
        </sampling>  
    </forwarding-options>  
</configuration>

**Description** Traffic sampling trace options.

**Contents** <file>—Trace file information.

## <traceoptions> (configuration/interfaces)

**Usage** <configuration>  
   <interfaces>  
     <traceoptions>  
       <file>...</file>  
       <flag>...</flag>  
     </traceoptions>  
   </interfaces>  
</configuration>

**Description** Interface trace options.

**Contents** <file>—Trace file information.  
           <flag>—Tracing parameters.

## <traceoptions> (configuration/interfaces/interface)

**Usage** <configuration>  
   <interfaces>  
     <interface>  
       <traceoptions>  
        <flag>...</flag>  
       </traceoptions>  
     </interface>  
   </interfaces>  
</configuration>

**Description** Interface trace options.

**Contents** <flag>—Tracing parameters.

## <traceoptions> (configuration/protocols/bgp)

**Usage** <configuration>  
   <protocols>  
     <bpg>  
       <traceoptions>  
        <file>...</file>  
        <flag>...</flag>  
       </traceoptions>  
     </bpg>  
   </protocols>  
</configuration>

**Description** Trace options.

**Contents** <file>—Trace file options.  
           <flag>—Tracing parameters.

- <traceoptions> (configuration/protocols/bgp/group)

**Usage**   <configuration>  
          <protocols>  
            <bgp>  
              <group>  
                <traceoptions>  
                  <file>...</file>  
                  <flag>...</flag>  
                </traceoptions>  
              </group>  
            </bgp>  
          </protocols>  
      </configuration>

**Description**   Trace options.

**Contents**   <file>—Trace file options.

                  <flag>—Tracing parameters.

- <traceoptions> (configuration/protocols/bgp/group/neighbor)

**Usage**   <configuration>  
          <protocols>  
            <bgp>  
              <group>  
                <neighbor>  
                  <traceoptions>  
                  <file>...</file>  
                  <flag>...</flag>  
                </traceoptions>  
              </neighbor>  
            </group>  
          </bgp>  
          </protocols>  
      </configuration>

**Description**   Trace options.

**Contents**   <file>—Trace file options.

                  <flag>—Tracing parameters.

## &lt;traceoptions&gt; (configuration/protocols/dvmrp)

```
Usage <configuration>
 <protocols>
 <dvmrp>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </dvmrp>
 </protocols>
 </configuration>
```

**Description** Trace options for DVMRP.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

## &lt;traceoptions&gt; (configuration/protocols/igmp)

```
Usage <configuration>
 <protocols>
 <igmp>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </igmp>
 </protocols>
 </configuration>
```

**Description** Trace options for IGMP.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

## &lt;traceoptions&gt; (configuration/protocols/isis)

```
Usage <configuration>
 <protocols>
 <isis>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </isis>
 </protocols>
 </configuration>
```

**Description** Trace options for IS-IS.

- **Contents** <file>—Trace file options.
  - <flag>—Tracing parameters.
  - <traceoptions> (configuration/protocols/I2circuit)

<traceoptions> (configuration/protocols/l2circuit)

```
Usage <configuration>
 <protocols>
 <l2circuit>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </l2circuit>
 </protocols>
 </configuration>
```

**Description** Trace options for l2circuit.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

<traceoptions> (configuration/protocols/ldp)

```
Usage <configuration>
 <protocols>
 <ldp>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </ldp>
 </protocols>
</configuration>
```

**Description** Trace options for LDP.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

## &lt;traceoptions&gt; (configuration/protocols/link-management)

**Usage**

```
<configuration>
 <protocols>
 <link-management>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </link-management>
 </protocols>
</configuration>
```

**Description** LMP trace options.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

## &lt;traceoptions&gt; (configuration/protocols/mpls)

**Usage**

```
<configuration>
 <protocols>
 <mpls>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </mpls>
 </protocols>
</configuration>
```

**Description** Trace options for MPLS.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

## &lt;traceoptions&gt; (configuration/protocols/msdp)

**Usage**

```
<configuration>
 <protocols>
 <msdp>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </msdp>
 </protocols>
</configuration>
```

**Description** Trace options for MSDP.

• **Contents** <file>—Trace file options.

• <flag>—Tracing parameters.

• <traceoptions> (configuration/protocols/msdp/group)

• **Usage** <configuration>  
  <protocols>  
    <msdp>  
      <group>  
        <traceoptions>  
          <file>...</file>  
          <flag>...</flag>  
        </traceoptions>  
      </group>  
    </msdp>  
  </protocols>  
</configuration>

• **Description** Trace options for MSDP.

• **Contents** <file>—Trace file options.

• <flag>—Tracing parameters.

• <traceoptions> (configuration/protocols/msdp/group/peer)

• **Usage** <configuration>  
  <protocols>  
    <msdp>  
      <group>  
        <peer>  
          <traceoptions>  
            <file>...</file>  
            <flag>...</flag>  
          </traceoptions>  
        </peer>  
      </group>  
    </msdp>  
  </protocols>  
</configuration>

• **Description** Trace options for MSDP.

• **Contents** <file>—Trace file options.

• <flag>—Tracing parameters.

## <traceoptions> (configuration/protocols/msdp/peer)

**Usage**

```
<configuration>
 <protocols>
 <msdp>
 <peer>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </peer>
 </msdp>
 </protocols>
</configuration>
```

**Description** Trace options for MSDP.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

## <traceoptions> (configuration/protocols/ospf)

**Usage**

```
<configuration>
 <protocols>
 <ospf>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </ospf>
 </protocols>
</configuration>
```

**Description** Trace options for OSPF.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

## <traceoptions> (configuration/protocols/pim)

**Usage**

```
<configuration>
 <protocols>
 <pim>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </pim>
 </protocols>
</configuration>
```

**Description** Trace options for PIM.

• **Contents** <file>—Trace file options.

• <flag>—Tracing parameters.

• <traceoptions> (configuration/protocols/rip)

• **Usage** <configuration>  
  <protocols>  
    <rip>  
      <traceoptions>  
        <file>...</file>  
        <flag>...</flag>  
      </traceoptions>  
    </rip>  
  </protocols>  
</configuration>

• **Description** Trace options for RIP.

• **Contents** <file>—Trace file options.

• <flag>—Tracing parameters.

• <traceoptions> (configuration/protocols/ripng)

• **Usage** <configuration>  
  <protocols>  
    <ripng>  
      <traceoptions>  
        <file>...</file>  
        <flag>...</flag>  
      </traceoptions>  
    </ripng>  
  </protocols>  
</configuration>

• **Description** Trace options for RIPng.

• **Contents** <file>—Trace file options.

• <flag>—Tracing parameters.

## &lt;traceoptions&gt; (configuration/protocols/router-advertisement)

**Usage**

```
<configuration>
 <protocols>
 <router-advertisement>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </router-advertisement>
 </protocols>
</configuration>
```

**Description** Trace options for router advertisement.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

## &lt;traceoptions&gt; (configuration/protocols/router-discovery)

**Usage**

```
<configuration>
 <protocols>
 <router-discovery>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </router-discovery>
 </protocols>
</configuration>
```

**Description** Trace options for router discovery.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

## &lt;traceoptions&gt; (configuration/protocols/rsvp)

**Usage**

```
<configuration>
 <protocols>
 <rsvp>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </rsvp>
 </protocols>
</configuration>
```

**Description** Trace options for RSVP.

• **Contents** <file>—Trace file options.

• <flag>—Tracing parameters.

• <traceoptions> (configuration/protocols/vrrp)

• **Usage** <configuration>  
  <protocols>  
    <vrrp>  
      <traceoptions>  
        <file>...</file>  
        <flag>...</flag>  
      </traceoptions>  
    </vrrp>  
  </protocols>  
</configuration>

• **Description** Trace options for VRRP.

• **Contents** <file>—Trace file information.

• <flag>—Tracing parameters.

• <traceoptions> (configuration/routing-instances/instance/protocols/bgp)

• **Usage** <configuration>  
  <routing-instances>  
    <instance>  
      <protocols>  
        <bpg>  
          <traceoptions>  
            <file>...</file>  
            <flag>...</flag>  
          </traceoptions>  
        </bpg>  
      </protocols>  
    </instance>  
  </routing-instances>  
</configuration>

• **Description** Trace options.

• **Contents** <file>—Trace file options.

• <flag>—Tracing parameters.

<traceoptions> (configuration/routing-instances/instance/protocols/bgp/group)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Trace options.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

<traceoptions> (configuration/routing-instances/instance/protocols/bgp/group/neighbor)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Trace options.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

• <traceoptions> (configuration/routing-instances/instance/protocols/isis)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <isis>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </isis>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>
```

Description Trace options for IS-IS.

Contents <file>—Trace file options.

<flag>—Tracing parameters.

• <traceoptions> (configuration/routing-instances/instance/protocols/l2vpn)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <l2vpn>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </l2vpn>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>
```

Description Trace options for Layer 2 VPN.

Contents <file>—Trace file options.

<flag>—Tracing parameters.

## &lt;traceoptions&gt; (configuration/routing-instances/instance/protocols/lkp)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <lkp>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </lkp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Trace options for LDP.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

## &lt;traceoptions&gt; (configuration/routing-instances/instance/protocols/ospf)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <ospf>
 <traceoptions>
 <file>...</file>
 <flag>...</flag>
 </traceoptions>
 </ospf>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Trace options for OSPF.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

• <traceoptions> (configuration/routing-instances/instance/protocols/pim)

**Usage** <configuration>  
  <routing-instances>  
    <instance>  
      <protocols>  
        <pim>  
          **<traceoptions>**  
            <file>...</file>  
            <flag>...</flag>  
          **</traceoptions>**  
        </pim>  
      </protocols>  
    </instance>  
  </routing-instances>  
</configuration>

**Description** Trace options for PIM.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

• <traceoptions> (configuration/routing-instances/instance/protocols/rip)

**Usage** <configuration>  
  <routing-instances>  
    <instance>  
      <protocols>  
        <rip>  
          **<traceoptions>**  
            <file>...</file>  
            <flag>...</flag>  
          **</traceoptions>**  
        </rip>  
      </protocols>  
    </instance>  
  </routing-instances>  
</configuration>

**Description** Trace options for RIP.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

<traceoptions> (configuration/routing-instances/instance/protocols/router-discovery)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <router-discovery>  
                    <traceoptions>  
                        <file>...</file>  
                        <flag>...</flag>  
                    </traceoptions>  
                </router-discovery>  
            </protocols>  
        </instance>  
    </routing-instances>  
</configuration>

**Description** Trace options for router discovery.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

<traceoptions> (configuration/routing-instances/instance/routing-options)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <routing-options>  
                <traceoptions>  
                    <file>...</file>  
                    <flag>...</flag>  
                </traceoptions>  
            </routing-options>  
        </instance>  
    </routing-instances>  
</configuration>

**Description** Global routing protocol trace options.

**Contents** <file>—Trace file options.

<flag>—Tracing parameters.

- <traceoptions> (configuration/routing-instances/instance/routing-options/auto-export)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <routing-options>  
                <auto-export>  
                  <traceoptions>  
                    <file>...</file>  
                    <flag>...</flag>  
                  </traceoptions>  
                </auto-export>  
                </routing-options>  
            </instance>  
          </routing-instances>  
        </configuration>

**Description**   Trace options.

**Contents**   <file>—Trace file options.

                  <flag>—Tracing parameters.

- <traceoptions> (configuration/routing-instances/instance/routing-options/resolution)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <routing-options>  
                <resolution>  
                  <traceoptions>  
                    <file>...</file>  
                    <flag>...</flag>  
                  </traceoptions>  
                </resolution>  
                </routing-options>  
            </instance>  
          </routing-instances>  
        </configuration>

**Description**   Trace options.

**Contents**   <file>—Trace file options.

                  <flag>—Tracing parameters.

## <traceoptions> (configuration/routing-options)

**Usage** <configuration>  
   <routing-options>  
     <traceoptions>  
       <file>...</file>  
       <flag>...</flag>  
     </traceoptions>  
   </routing-options>  
</configuration>

- Description** Global routing protocol trace options.
- Contents** <file>—Trace file options.  
           <flag>—Tracing parameters.

## <traceoptions> (configuration/routing-options/auto-export)

**Usage** <configuration>  
   <routing-options>  
     <auto-export>  
       <traceoptions>  
        <file>...</file>  
        <flag>...</flag>  
       </traceoptions>  
     </auto-export>  
   </routing-options>  
</configuration>

- Description** Trace options.
- Contents** <file>—Trace file options.  
           <flag>—Tracing parameters.

## <traceoptions> (configuration/routing-options/resolution)

**Usage** <configuration>  
   <routing-options>  
     <resolution>  
       <traceoptions>  
        <file>...</file>  
        <flag>...</flag>  
       </traceoptions>  
     </resolution>  
   </routing-options>  
</configuration>

- Description** Trace options.
- Contents** <file>—Trace file options.  
           <flag>—Tracing parameters.

- <traceoptions> (configuration/security)

**Usage**   <configuration>  
              <security>  
              <traceoptions>  
              <file>...</file>  
              <flag>...</flag>  
              </traceoptions>  
              </security>  
              </configuration>

**Description** Trace options for security.

**Contents** <file>—Trace file options.

                <flag>—Tracing parameters.

- <traceoptions> (configuration/snmp)

**Usage**   <configuration>  
              <snmp>  
              <traceoptions>  
              <file>...</file>  
              <flag>...</flag>  
              </traceoptions>  
              </snmp>  
              </configuration>

**Description** Trace options for SNMP.

**Contents** <file>—Trace file options.

                <flag>—Tracing parameters.

<track> (configuration/interfaces/interface/unit/family/inet/address/vrrp-group)

**Usage** <configuration>  
    <interfaces>  
        <interface>  
            <unit>  
                <family>  
                    <inet>  
                        <address>  
                            <vrrp-group>  
                                **<track>**  
                                    <interface>...</interface>  
                                **</track>**  
                                    </vrrp-group>  
                                </address>  
                                    </inet>  
                                    </family>  
                                    </unit>  
                                    </interface>  
                                    </interfaces>  
    </configuration>

**Description** Interfaces to track for the VRRP group.

**Contents** <interface>—Interface to track in this VRRP group.

<traffic-class> (configuration/firewall/family/inet6/filter/term/from)

**Usage** <configuration>  
    <firewall>  
        <family>  
            <inet6>  
                <filter>  
                    <term>  
                        <from>  
                            **<traffic-class>**  
                                <name>name</name>    <!-- identifier --&gt;<br/>                                **</traffic-class>**  
                        </from>  
                        </term>  
                        </filter>  
                        </inet6>  
                        </family>  
                        </firewall>  
    </configuration>

**Description** Match diffserv codepoint.

**Contents** <name>—No documentation is available yet.

- af11—Assured Forwarding Class 1, Low Drop Precedence.
- af12—Assured Forwarding Class 1, Medium Drop Precedence.
- af13—Assured Forwarding Class 1, High Drop Precedence.

<traffic-class-except> (configuration/firewall/family/inet6/filter/term/from)

- af21—Assured Forwarding Class 2, Low Drop Precedence.
- af22—Assured Forwarding Class 2, Medium Drop Precedence.
- af23—Assured Forwarding Class 2, High Drop Precedence.
- af31—Assured Forwarding Class 3, Low Drop Precedence.
- af32—Assured Forwarding Class 3, Medium Drop Precedence.
- af33—Assured Forwarding Class 3, High Drop Precedence.
- af41—Assured Forwarding Class 4, Low Drop Precedence.
- af42—Assured Forwarding Class 4, Medium Drop Precedence.
- af43—Assured Forwarding Class 4, High Drop Precedence.
- ef—Expedited forwarding.
- name—Range of values.

<traffic-class-except> (configuration/firewall/family/inet6/filter/term/from)

**Usage** <configuration>  
  <firewall>  
    <family>  
      <inet6>  
        <filter>  
          <term>  
            <from>  
              <traffic-class-except>  
                <name>name</name>    <!-- identifier -->  
              </traffic-class-except>  
            </from>  
          </term>  
        </filter>  
      </inet6>  
    </family>  
  </firewall>  
</configuration>

**Description** Do not match diffserv codepoint.

**Contents** <name>—No documentation is available yet.

- af11—Assured Forwarding Class 1, Low Drop Precedence.
- af12—Assured Forwarding Class 1, Medium Drop Precedence.
- af13—Assured Forwarding Class 1, High Drop Precedence.
- af21—Assured Forwarding Class 2, Low Drop Precedence.
- af22—Assured Forwarding Class 2, Medium Drop Precedence.

- af23—Assured Forwarding Class 2, High Drop Precedence.
- af31—Assured Forwarding Class 3, Low Drop Precedence.
- af32—Assured Forwarding Class 3, Medium Drop Precedence.
- af33—Assured Forwarding Class 3, High Drop Precedence.
- af41—Assured Forwarding Class 4, Low Drop Precedence.
- af42—Assured Forwarding Class 4, Medium Drop Precedence.
- af43—Assured Forwarding Class 4, High Drop Precedence.
- ef—Expedited forwarding.
- name—Range of values.

## <traffic-engineering> (configuration/protocols/isis)

**Usage**

```
<configuration>
 <protocols>
 <isis>
 <traffic-engineering>
 <disable/>
 <shortcuts/>
 </traffic-engineering>
 </isis>
 </protocols>
</configuration>
```

**Description** Configure traffic engineering attributes.

**Contents** <disable>—Disable traffic engineering.

<shortcuts>—Use label-switched paths as next hops if possible.

## <traffic-engineering> (configuration/protocols/ospf)

**Usage**

```
<configuration>
 <protocols>
 <ospf>
 <traffic-engineering>
 <no-topology/>
 <shortcuts/>
 </traffic-engineering>
 </ospf>
 </protocols>
</configuration>
```

**Description** Configure traffic engineering attributes.

**Contents** <no-topology>—Disable the dissemination of TE link state topology information.

<shortcuts>—Use label-switched paths as next hops if possible.

- <traffic-engineering> (configuration/routing-instances/instance/protocols/isis)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <isis>  
                    **<traffic-engineering>**  
                    <disable/>  
                    <shortcuts/>  
                    **</traffic-engineering>**  
                </isis>  
                </protocols>  
            </instance>  
        </routing-instances>  
    </configuration>

**Description** Configure traffic engineering attributes.

**Contents** <disable>—Disable traffic engineering.

<shortcuts>—Use label-switched paths as next hops if possible.

- <traffic-engineering> (configuration/routing-instances/instance/protocols/ospf)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <ospf>  
                    **<traffic-engineering>**  
                    <no-topology/>  
                    <shortcuts/>  
                    **</traffic-engineering>**  
                </ospf>  
                </protocols>  
            </instance>  
        </routing-instances>  
    </configuration>

**Description** Configure traffic engineering attributes.

**Contents** <no-topology>—Disable the dissemination of TE link state topology information.

<shortcuts>—Use label-switched paths as next hops if possible.

## &lt;traffic-statistics&gt; (configuration/protocols/lkp)

**Usage** <configuration>  
   <protocols>  
     <lkp>  
       <traffic-statistics>  
         <file>...</file>   <!-- mandatory -->  
         <interval>interval</interval>  
       </traffic-statistics>  
     </lkp>  
   </protocols>  
</configuration>

**Description** Collect statistics for LDP label-switched paths.

**Contents** <file>—Statistics file options.

<interval>—Time to collect statistics (seconds).

## &lt;traffic-statistics&gt; (configuration/routing-instances/instance/protocols/lkp)

**Usage** <configuration>  
   <routing-instances>  
     <instance>  
       <protocols>  
         <lkp>  
           <traffic-statistics>  
             <file>...</file>   <!-- mandatory -->  
             <interval>interval</interval>  
           </traffic-statistics>  
         </lkp>  
       </protocols>  
     </instance>  
   </routing-instances>  
</configuration>

**Description** Collect statistics for LDP label-switched paths.

**Contents** <file>—Statistics file options.

<interval>—Time to collect statistics (seconds).

- <transmit-bucket> (configuration/interfaces/interface)

```
Usage <configuration>
 <interfaces>
 <interface>
 <transmit-bucket>
 <overflow>overflow-choice</overflow>
 <rate>rate</rate>
 <threshold>threshold</threshold>
 </transmit-bucket>
 </interface>
 </interfaces>
 </configuration>
```

**Description** Set transmit bucket parameters.

**Contents** <overflow>—Overflow behavior.

- **discard**—Discard overflow packets.

<rate>—Bucket rate.

**<threshold>**—Bucket threshold.

<transmit-rate> (configuration/class-of-service/schedulers)

```
Usage <configuration>
 <class-of-service>
 <schedulers>
 <transmit-rate>
 <rate>bits per second</rate>
 <percent>percent</percent>
 <remainder/>
 <exact/>
 </transmit-rate>
 </Schedulers>
 </class-of-service>
</configuration>
```

**Description** Transmit rate.

**Contents** <exact>—Enforce exact transmit rate.

<percent>—Transmit rate as percentage.

**<rate>**—Transmit rate as rate.

<remainder>—Remainder available.

## <trap-group> (configuration/snmp)

<b>Usage</b>	<pre>&lt;configuration&gt;   &lt;snmp&gt;     &lt;trap-group&gt;       &lt;name&gt;name&lt;/name&gt;    &lt;!-- identifier --&gt;       &lt;version&gt;version-choice&lt;/version&gt;       &lt;destination-port&gt;destination-port&lt;/destination-port&gt;       &lt;categories&gt;...&lt;/categories&gt;       &lt;targets&gt;...&lt;/targets&gt;     &lt;/trap-group&gt;   &lt;/snmp&gt; &lt;/configuration&gt;</pre>
<b>Description</b>	Configure traps and notifications.
<b>Contents</b>	<p>&lt;categories&gt;—Trap categories.</p> <p>&lt;destination-port&gt;—SNMP trap receiver port number.</p> <p>&lt;name&gt;—Trap group name.</p> <p>&lt;targets&gt;—Targets for trap messages.</p> <p>&lt;version&gt;—SNMP version.</p> <ul style="list-style-type: none"> <li>■ all—Send SNMPv1 and SNMPv2 traps.</li> <li>■ v1—Send SNMPv1 traps.</li> <li>■ v2—Send SNMPv2 traps.</li> </ul>

## <trap-options> (configuration/snmp)

<b>Usage</b>	<pre>&lt;configuration&gt;   &lt;snmp&gt;     &lt;trap-options&gt;       &lt;source-address&gt;source-address-choice&lt;/source-address&gt;       &lt;agent-address&gt;agent-address-choice&lt;/agent-address&gt;     &lt;/trap-options&gt;   &lt;/snmp&gt; &lt;/configuration&gt;</pre>
<b>Description</b>	SNMP trap options.
<b>Contents</b>	<p>&lt;agent-address&gt;—Agent address for v1 trap PDUs.</p> <ul style="list-style-type: none"> <li>■ outgoing-interface—Use address on outgoing interface.</li> </ul> <p>&lt;source-address&gt;—Source address for trap PDUs.</p> <ul style="list-style-type: none"> <li>■ lo0—Use lowest address on loopback interface.</li> </ul>

- <tunnel> (configuration/interfaces/interface/unit)

**Usage**   <configuration>  
           <interfaces>  
           <interface>  
           <unit>  
           <tunnel>  
             <source>source</source>   <!-- mandatory -->  
             <destination>destination</destination>   <!-- mandatory -->  
             <ttl>ttl</ttl>  
             <routing-instance>...</routing-instance>  
           </tunnel>  
           </unit>  
         </interface>  
       </interfaces>  
   </configuration>

**Description**   Tunnel parameters.

**Contents**   <destination>—Tunnel destination.

          <routing-instance>—Routing instance to which tunnel ends belong.

          <source>—Tunnel source.

          <ttl>—Time to live.

- <unicast> (configuration/protocols/bgp/family/inet)

**Usage**   <configuration>  
           <protocols>  
           <bpg>  
           <family>  
           <inet>  
           <unicast>  
             <prefix-limit>...</prefix-limit>  
             <rib-group>...</rib-group>  
           </unicast>  
           </inet>  
         </family>  
       </bpg>  
     </protocols>  
   </configuration>

**Description**   Include unicast NLRI.

**Contents**   <prefix-limit>—Limit maximum number of prefixes from a peer.

          <rib-group>—Routing table group.

## &lt;unicast&gt; (configuration/protocols/bgp/family/inet-vpn)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </unicast>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
</configuration>
```

**Description** Include unicast NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.  
 <rib-group>—Routing table group.

## &lt;unicast&gt; (configuration/protocols/bgp/family/inet6)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </unicast>
 </inet6>
 </family>
 </bgp>
 </protocols>
</configuration>
```

**Description** Include unicast NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.  
 <rib-group>—Routing table group.

- <unicast> (configuration/protocols/bgp/family/l2vpn)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <family>
 <l2vpn>
 <unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </unicast>
 </l2vpn>
 </family>
 </bgp>
 </protocols>
</configuration>
```

**Description** Include Layer 2 VPN NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.  
 <rib-group>—Routing table group.

- <unicast> (configuration/protocols/bgp/group/family/inet)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </unicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Include unicast NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.  
 <rib-group>—Routing table group.

## &lt;unicast&gt; (configuration/protocols/bgp/group/family/inet-vpn)

```
Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet-vpn>
 <unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </unicast>
 </inet-vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>
```

**Description** Include unicast NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.  
<rib-group>—Routing table group.

## &lt;unicast&gt; (configuration/protocols/bgp/group/family/inet6)

```
Usage <configuration>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet6>
 <unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </unicast>
 </inet6>
 </family>
 </group>
 </bgp>
 </protocols>
 </configuration>
```

**Description** Include unicast NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.  
<rib-group>—Routing table group.

- <unicast> (configuration/protocols/bgp/group/family/l2vpn)

**Usage**   <configuration>  
           <protocols>  
             <bpg>  
               <group>  
               <family>  
                 <l2vpn>  
                   <unicast>  
                     <prefix-limit>...</prefix-limit>  
                     <rib-group>...</rib-group>  
                   </unicast>  
                 </l2vpn>  
               </family>  
               </group>  
             </bpg>  
           </protocols>  
         </configuration>

**Description**   Include Layer 2 VPN NLRI.

**Contents**   <prefix-limit>—Limit maximum number of prefixes from a peer.  
                   <rib-group>—Routing table group.

- <unicast> (configuration/protocols/bgp/group/neighbor/family/inet)

**Usage**   <configuration>  
           <protocols>  
             <bpg>  
               <group>  
               <neighbor>  
                 <family>  
                 <inet>  
                   <unicast>  
                     <prefix-limit>...</prefix-limit>  
                     <rib-group>...</rib-group>  
                   </unicast>  
                 </inet>  
                 </family>  
               </neighbor>  
               </group>  
             </bpg>  
           </protocols>  
         </configuration>

**Description**   Include unicast NLRI.

**Contents**   <prefix-limit>—Limit maximum number of prefixes from a peer.  
                   <rib-group>—Routing table group.

## &lt;unicast&gt; (configuration/protocols/bgp/group/neighbor/family/inet-vpn)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet-vpn>
 <unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </unicast>
 </inet-vpn>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Include unicast NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

## &lt;unicast&gt; (configuration/protocols/bgp/group/neighbor/family/inet6)

**Usage**

```
<configuration>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet6>
 <unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </unicast>
 </inet6>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
</configuration>
```

**Description** Include unicast NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

- <unicast> (configuration/protocols/bgp/group/neighbor/family/l2vpn)

**Usage**   <configuration>  
           <protocols>  
             <bpg>  
               <group>  
                 <neighbor>  
                   <family>  
                     <l2vpn>  
                       <unicast>  
                         <prefix-limit>...</prefix-limit>  
                         <rib-group>...</rib-group>  
                       </unicast>  
                     </l2vpn>  
                   </family>  
                   </neighbor>  
                   </group>  
                   </bpg>  
                   </protocols>  
                 </configuration>

**Description**   Include Layer 2 VPN NLRI.

**Contents**   <prefix-limit>—Limit maximum number of prefixes from a peer.

                  <rib-group>—Routing table group.

- <unicast> (configuration/routing-instances/instance/protocols/bgp/family/inet)

**Usage**   <configuration>  
           <routing-instances>  
             <instance>  
               <protocols>  
                 <bpg>  
                   <family>  
                     <inet>  
                       <unicast>  
                         <prefix-limit>...</prefix-limit>  
                         <rib-group>...</rib-group>  
                       </unicast>  
                     </inet>  
                   </family>  
                   </bpg>  
                   </protocols>  
                   </instance>  
                 </routing-instances>  
               </configuration>

**Description**   Include unicast NLRI.

**Contents**   <prefix-limit>—Limit maximum number of prefixes from a peer.

                  <rib-group>—Routing table group.

<unicast> (configuration/routing-instances/instance/protocols/bgp/family/inet-vpn)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet-vpn>
 <unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </unicast>
 </inet-vpn>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Include unicast NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

<unicast> (configuration/routing-instances/instance/protocols/bgp/family/inet6)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <inet6>
 <unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </unicast>
 </inet6>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Include unicast NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

- <unicast> (configuration/routing-instances/instance/protocols/bgp/family/l2vpn)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <family>
 <l2vpn>
 <unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </unicast>
 </l2vpn>
 </family>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Include Layer 2 VPN NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

- <unicast> (configuration/routing-instances/instance/protocols/bgp/group/family/inet)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet>
 <unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </unicast>
 </inet>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Include unicast NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

## <unicast> (configuration/routing-instances/instance/protocols/bgp/group/family/inet-vpn)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bpg>
 <group>
 <family>
 <inet-vpn>
 <unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </unicast>
 </inet-vpn>
 </family>
 </group>
 </bpg>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>
```

**Description** Include unicast NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

- <unicast> (configuration/routing-instances/instance/protocols/bgp/group/family/inet6)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <inet6>
 <unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </unicast>
 </inet6>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Include unicast NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.  
 <rib-group>—Routing table group.

- <unicast> (configuration/routing-instances/instance/protocols/bgp/group/family/l2vpn)

**Usage**

```
<configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <family>
 <l2vpn>
 <unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </unicast>
 </l2vpn>
 </family>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Include Layer 2 VPN NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

## <unicast> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet)

```
Usage <configuration>
 <routing-instances>
 <instance>
 <protocols>
 <bgp>
 <group>
 <neighbor>
 <family>
 <inet>
 <unicast>
 <prefix-limit>...</prefix-limit>
 <rib-group>...</rib-group>
 </unicast>
 </inet>
 </family>
 </neighbor>
 </group>
 </bgp>
 </protocols>
 </instance>
 </routing-instances>
 </configuration>
```

**Description** Include unicast NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

- <unicast> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet-vpn)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <neighbor>  
                      <family>  
                      <inet-vpn>  
                        **<unicast>**  
                        <prefix-limit>...</prefix-limit>  
                        <rib-group>...</rib-group>  
                        **</unicast>**  
                        </inet-vpn>  
                      </family>  
                      </neighbor>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
                </configuration>

**Description**   Include unicast NLRI.

**Contents**   <prefix-limit>—Limit maximum number of prefixes from a peer.

                  <rib-group>—Routing table group.

<unicast> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/inet6)

**Usage** <configuration>  
    <routing-instances>  
        <instance>  
            <protocols>  
                <bgp>  
                    <group>  
                        <neighbor>  
                            <family>  
                                <inet6>  
                                    <unicast>  
                                        <prefix-limit>...</prefix-limit>  
                                        <rib-group>...</rib-group>  
                                            </unicast>  
                                        </inet6>  
                                        </family>  
                                        </neighbor>  
                                        </group>  
                                        </bgp>  
                                        </protocols>  
                                        </instance>  
                                        </routing-instances>  
    </configuration>

**Description** Include unicast NLRI.

**Contents** <prefix-limit>—Limit maximum number of prefixes from a peer.

<rib-group>—Routing table group.

- <unicast> (configuration/routing-instances/instance/protocols/bgp/group/neighbor/family/l2vpn)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <bgp>  
                  <group>  
                    <neighbor>  
                      <family>  
                      <l2vpn>  
                        <unicast>  
                          <prefix-limit>...</prefix-limit>  
                          <rib-group>...</rib-group>  
                        </unicast>  
                      </l2vpn>  
                      </family>  
                      </neighbor>  
                      </group>  
                      </bgp>  
                      </protocols>  
                      </instance>  
                      </routing-instances>  
                </configuration>

**Description**   Include Layer 2 VPN NLRI.

**Contents**   <prefix-limit>—Limit maximum number of prefixes from a peer.

                  <rib-group>—Routing table group.

<unicast> (configuration/routing-instances/instance/routing-options/auto-export/family/inet)

**Usage**

```

<configuration>
 <routing-instances>
 <instance>
 <routing-options>
 <auto-export>
 <family>
 <inet>
 <unicast>
 <disable/>
 <rib-group>rib-group</rib-group>
 </unicast>
 </inet>
 </family>
 </auto-export>
 </routing-options>
 </instance>
 </routing-instances>
</configuration>
```

**Description** Unicast routing information.

**Contents** <disable>—Disable Instance export.

<rib-group>—Auxiliary rib-group of additional ribs to consider.

<unicast> (configuration/routing-options/auto-export/family/inet)

**Usage**

```

<configuration>
 <routing-options>
 <auto-export>
 <family>
 <inet>
 <unicast>
 <disable/>
 <rib-group>rib-group</rib-group>
 </unicast>
 </inet>
 </family>
 </auto-export>
 </routing-options>
</configuration>
```

**Description** Unicast routing information.

**Contents** <disable>—Disable Instance export.

<rib-group>—Auxiliary rib-group of additional ribs to consider.

- <unit> (configuration/class-of-service/interfaces)

**Usage**   <configuration>  
          <class-of-service>  
          <interfaces>  
          <unit>  
            <name>*name*</name>    <!-- identifier -->  
            <forwarding-class>*forwarding-class*</forwarding-class>  
            <classifiers>...</classifiers>  
            <rewrite-rules>...</rewrite-rules>  
          </unit>  
          </interfaces>  
        </class-of-service>  
      </configuration>

**Description**   Logical interface unit or wildcard.

**Contents**   <classifiers>—Classifiers applied to incoming packets.

                  <forwarding-class>—Forwarding class assigned to incoming packets.

                  <name>—Logical unit number.

                  <rewrite-rules>—Rewrite rules applied to outgoing packets.

## &lt;unit&gt; (configuration/interfaces/interface)

```

Usage <configuration>
 <interfaces>
 <interface>
 <unit>
 <name>name</name> <!-- identifier -->
 <disable/>
 <passive-monitor-mode/>
 <description>description</description>
 <encapsulation>encapsulation-choice</encapsulation>
 <point-to-point/>
 <multipoint/>
 <bandwidth>bandwidth</bandwidth>
 <traps/>
 <vlan-id>vlan-id</vlan-id>
 <receive-lsp>receive-lsp</receive-lsp>
 <transmit-lsp>transmit-lsp</transmit-lsp>
 <dlci>dlci</dlci>
 <multicast-dlci>multicast-dlci</multicast-dlci>
 <vci>vci</vci>
 <allow-any-vci/>
 <vpi>vpi</vpi>
 <multicast-vci>multicast-vci</multicast-vci>
 <shaping>...</shaping>
 <oam-period>...</oam-period>
 <oam-liveness>...</oam-liveness>
 <inverse-arp/>
 <mrru>bytes</mrru>
 <short-sequence/>
 <fragment-threshold>bytes</fragment-threshold>
 <drop-timeout>milliseconds</drop-timeout>
 <minimum-links>minimum-links</minimum-links>
 <accounting-profile>accounting-profile</accounting-profile>
 <tunnel>...</tunnel>
 <family>...</family>
 </unit>
 </interface>
 </interfaces>
 </configuration>

```

**Description** Logical interface.

**Contents** <accounting-profile>—Accounting profile name.

<allow-any-vci>—Allow all VCIs to open in atm-ccc-cell-relay mode.

<bandwidth>—Logical unit bandwidth (informational only).

<description>—Text description of the interface.

<disable>—Disable this logical interface.

<dlci>—Frame Relay link control identifier.

<drop-timeout>—Drop timeout.

- <encapsulation>—Logical link-layer encapsulation.

  - 802.3-llc—Ethernet IEEE 802.3 LLC (RFC 1042).
  - 802.3-snap—Ethernet IEEE 802.3 SNAP (RFC 1042).
  - atm-ccc-cell-relay—ATM Cell Relay for CCC.
  - atm-ccc-vc-mux—ATM VC for CCC.
  - atm-cisco-nlpid—Cisco-compatible ATM NLPID encapsulation.
  - atm-nlpid—ATM NLPID encapsulation.
  - atm-snap—ATM LLC/SNAP encapsulation.
  - atm-tcc-snap—ATM LLC/SNAP for translational cross connection.
  - atm-tcc-vc-mux—ATM VC for translational cross connection.
  - atm-vc-mux—ATM VC multiplexing.
  - dix—Ethernet DIXv2 (RFC 894).
  - ether-over-atm-llc—Ethernet over ATM (LLC/SNAP) encapsulation.
  - frame-relay-ccc—Frame Relay DLCI for CCC.
  - frame-relay-tcc—Frame Relay DLCI for translational cross connection.
  - multilink-framerelay—Multilink Frame Relay (FRF.15).
  - multilink-ppp—Multilink PPP.
  - vlan-ccc—802.1Q tagging for a cross connection.
- <family>—Protocol family.
- <fragment-threshold>—Fragmentation threshold in 64-byte steps.
- <inverse-arp>—Enable Inverse ARP.
- <minimum-links>—Minimum number of links to sustain the bundle.
- <mrru>—Maximum received reconstructed unit.
- <multicast-dlci>—Frame Relay link control identifier for multicast packets.
- <multicast-vci>—ATM virtual circuit identifier for multicast packets.
- <multipoint>—Multipoint connection.
- <name>—Logical unit number.
- <oam-liveness>—OAM virtual circuit liveness parameters.
- <oam-period>—OAM cell period.

<passive-monitor-mode>—Interface will be used to tap packets from another router.

<point-to-point>—Point-to-point connection.

<receive-lsp>—Name of incoming label-switched path.

<shaping>—Virtual circuit traffic-shaping options.

<short-sequence>—Short sequence number header format (MLPPP only).

<transmit-lsp>—Name of outgoing label-switched path.

<traps>—Enable SNMP notifications on state changes.

<tunnel>—Tunnel parameters.

<vci>—ATM point-to-point virtual circuit identifier ([vpi.]vci).

<vlan-id>—Virtual LAN identifier value for 802.1Q VLAN tags.

<vpi>—Allow all VCIs in this VPI to open in atm-ccc-cell-relay mode.

## <user> (configuration/snmp/access)

**Usage** <configuration>  
   <snmp>  
     <access>  
       <user>  
         <name>name</name>   <!-- identifier -->  
         <authentication-type>authentication-type-choice</authentication-type>  
         <authentication-password>authentication-password</authentication-password>  
         <privacy-type>privacy-type-choice</privacy-type>  
         <privacy-password>privacy-password</privacy-password>  
         <clients>...</clients>  
       </user>  
     </access>  
   </snmp>  
 </configuration>

**Description** SNMPv3 USM user information.

**Contents** <authentication-password>—SNMPv3 USM authentication password.

<authentication-type>—SNMPv3 USM authentication type.

- md5—MD5 hash algorithm.
- none—No authentication.
- sha—SHA hash algorithm.

<clients>—List of source address prefix ranges to accept.

<name>—SNMPv3 USM user name.

< user> (configuration/snmp/access/group)

- <privacy-password>—SNMPv3 USM privacy password.
- <privacy-type>—SNMPv3 USM privacy type.
  - des—DES algorithm.
  - none—No privacy.

<user> (configuration/snmp/access/group)

**Usage** <configuration>  
    <snmp>  
        <access>  
            <group>  
                <user>  
                    <name>name</name>    <!-- identifier --&gt;<br/>                </user>  
            </group>  
            </access>  
        </snmp>  
    </configuration>

**Description** SNMPv3 USM user name.

**Contents** <name>—SNMPv3 USM user name.

<user> (configuration/system/login)

**Usage** <configuration>  
    <system>  
        <login>  
            <user>  
                <name>name</name>    <!-- identifier --&gt;<br/>                <full-name>full-name</full-name>  
                <uid>uid</uid>  
                <class>class</class>    <!-- mandatory --&gt;<br/>                <authentication>...</authentication>  
            </user>  
            </login>  
        </system>  
    </configuration>

**Description** Username.

**Contents** <authentication>—Authentication method.

<class>—Login class.

<full-name>—Full name.

<name>—User name (login).

<uid>—User identifier (uid).

## <user> (configuration/system/syslog)

**Usage**

```
<configuration>
 <system>
 <syslog>
 <user>
 <name>name</name> <!-- identifier -->
 <contents>...</contents>
 </user>
 </syslog>
 </system>
</configuration>
```

**Description** Notify a user of the event.

**Contents** <contents>—No documentation is available yet.

<name>—Name of user to notify.

## <vbr> (configuration/interfaces/interface/unit/family/inet/address/multipoint-destination/shaping)

**Usage**

```
<configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <inet>
 <address>
 <multipoint-destination>
 <shaping>
 <vbr>
 <peak>peak</peak> <!-- mandatory -->
 <sustained>sustained</sustained> <!-- mandatory -->
 <burst>burst</burst> <!-- mandatory -->
 </vbr>
 </shaping>
 </multipoint-destination>
 </address>
 </inet>
 </family>
 </unit>
 </interface>
 </interfaces>
</configuration>
```

**Description** Variable bandwidth utilization.

**Contents** <burst>—Burst size.

<peak>—Peak rate.

<sustained>—Sustained rate.

- <vbr> (configuration/interfaces/interface/unit/shaping)

•

•     **Usage**   <configuration>  
•        <interfaces>  
•           <interface>  
•              <unit>  
•                <shaping>  
•                  **<vbr>**  
•                    <peak>peak</peak>    <!-- mandatory -->  
•                    <sustained>sustained</sustained>    <!-- mandatory -->  
•                    <burst>burst</burst>    <!-- mandatory -->  
•                  **</vbr>**  
•                </shaping>  
•              </unit>  
•            </interface>  
•        </interfaces>  
•    </configuration>

•     **Description**   Variable bandwidth utilization.

•     **Contents**   <burst>—Burst size.

•        <peak>—Peak rate.

•        <sustained>—Sustained rate.

- <view> (configuration/snmp)

•     **Usage**   <configuration>  
•        <snmp>  
•           **<view>**  
•              <name>name</name>    <!-- identifier -->  
•              <oid>...</oid>  
•            **</view>**  
•        </snmp>  
•    </configuration>

•     **Description**   Define MIB views.

•     **Contents**   <name>—MIB view name.

•        <oid>—OID include/exclude list.

## &lt;virtual-address&gt; (configuration/interfaces/interface/unit/family/inet/address/vrrp-group)

**Usage**

```
<configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <inet>
 <address>
 <vrrp-group>
 <virtual-address>
 <name>name</name> <!-- identifier -->
 </virtual-address>
 </vrrp-group>
 </address>
 </inet>
 </family>
 </unit>
 </interface>
 </interfaces>
</configuration>
```

**Description** Virtual addresses.

**Contents** <name>—Virtual addresses.

## &lt;virtual-link&gt; (configuration/protocols/ospf/area)

**Usage**

```
<configuration>
 <protocols>
 <ospf>
 <area>
 <virtual-link>
 <neighbor-id>neighbor-id</neighbor-id> <!-- identifier -->
 <transit-area>transit-area</transit-area> <!-- identifier -->
 <disable/>
 <retransmit-interval>retransmit-interval</retransmit-interval>
 <transit-delay>transit-delay</transit-delay>
 <hello-interval>hello-interval</hello-interval>
 <dead-interval>dead-interval</dead-interval>
 <authentication-key>...</authentication-key>
 </virtual-link>
 </area>
 </ospf>
 </protocols>
</configuration>
```

**Description** Configure virtual links.

**Contents** <authentication-key>—Authentication key.

<dead-interval>—Dead interval (seconds).

<disable>—Disable this virtual link.

< virtual-link> (configuration/routing-instances/instance/protocols/ospf/area)

- <hello-interval>—Hello interval (seconds).
- <neighbor-id>—Router ID of a virtual neighbor.
- <retransmit-interval>—Retransmission interval (seconds).
- <transit-area>—Transit area in common with virtual neighbor.
- <transit-delay>—Transit delay (seconds).

<virtual-link> (configuration/routing-instances/instance/protocols/ospf/area)

**Usage**   <configuration>  
          <routing-instances>  
            <instance>  
              <protocols>  
                <ospf>  
                  <area>  
                    **<virtual-link>**  
                      <neighbor-id>*neighbor-id*</neighbor-id>   <!-- identifier -->  
                      <transit-area>*transit-area*</transit-area>   <!-- identifier -->  
                      <disable/>  
                      <retransmit-interval>*retransmit-interval*</retransmit-interval>  
                      <transit-delay>*transit-delay*</transit-delay>  
                      <hello-interval>*hello-interval*</hello-interval>  
                      <dead-interval>*dead-interval*</dead-interval>  
                      <authentication-key>...</authentication-key>  
                    </virtual-link>  
                    </area>  
                  </ospf>  
                  </protocols>  
                  </instance>  
                  </routing-instances>  
                </configuration>

**Description**   Configure virtual links.

**Contents**   <authentication-key>—Authentication key.

          <dead-interval>—Dead interval (seconds).

          <disable>—Disable this virtual link.

          <hello-interval>—Hello interval (seconds).

          <neighbor-id>—Router ID of a virtual neighbor.

          <retransmit-interval>—Retransmission interval (seconds).

          <transit-area>—Transit area in common with virtual neighbor.

          <transit-delay>—Transit delay (seconds).

## &lt;vpi&gt; (configuration/interfaces/interface/atm-options)

```
Usage <configuration>
 <interfaces>
 <interface>
 <atm-options>
 <vpi>
 <name>name</name> <!-- identifier -->
 <maximum-vcs>maximum-vcs</maximum-vcs>
 </vpi>
 </atm-options>
 </interface>
 </interfaces>
 </configuration>
```

**Description** Define a virtual path.

**Contents** <maximum-vcs>—Maximum number of virtual circuits on this VP.

<name>—Virtual path index.

## &lt;vpi&gt; (configuration/interfaces/interface/atm-options/promiscuous-mode)

```
Usage <configuration>
 <interfaces>
 <interface>
 <atm-options>
 <promiscuous-mode>
 <vpi>
 <name>name</name> <!-- identifier -->
 </vpi>
 </promiscuous-mode>
 </atm-options>
 </interface>
 </interfaces>
 </configuration>
```

**Description** Open this VPI in promiscuous mode.

**Contents** <name>—Virtual path index.

- <vrf-export> (configuration/routing-instances/instance)

•     **Usage**   <configuration>  
•        <routing-instances>  
•           <instance>  
•              <vrf-export>  
•                <name>name</name>    <!-- identifier -->  
•              </vrf-export>  
•            </instance>  
•        </routing-instances>  
•    </configuration>

•     **Description**   Export policy for VRF instance routing tables.

•     **Contents**   <name>—Export policy for VRF instance routing tables.

- <vrf-import> (configuration/routing-instances/instance)

•     **Usage**   <configuration>  
•        <routing-instances>  
•           <instance>  
•              <vrf-import>  
•                <name>name</name>    <!-- identifier -->  
•              </vrf-import>  
•            </instance>  
•        </routing-instances>  
•    </configuration>

•     **Description**   Import policy for VRF instance routing tables.

•     **Contents**   <name>—Import policy for VRF instance routing tables.

- <vrrp> (configuration/protocols)

•     **Usage**   <configuration>  
•        <protocols>  
•           <vrrp>  
•              <traceoptions>...</traceoptions>  
•            </vrrp>  
•        </protocols>  
•    </configuration>

•     **Description**   VRRP options.

•     **Contents**   <traceoptions>—Trace options for VRRP.

## &lt;vrrp-group&gt; (configuration/interfaces/interface/unit/family/inet/address)

**Usage**

```

<configuration>
 <interfaces>
 <interface>
 <unit>
 <family>
 <inet>
 <address>
 <vrrp-group>
 <name>name</name> <!-- identifier -->
 <virtual-address>...</virtual-address>
 <priority>priority</priority>
 <advertise-interval>seconds</advertise-interval>
 <preempt/>
 <accept-data/>
 <authentication-type>authentication-type</authentication-type>
 <authentication-key>authentication-key</authentication-key>
 <track>...</track>
 </vrrp-group>
 </address>
 </inet>
 </family>
 </unit>
 </interface>
 </interfaces>
</configuration>
```

**Description** VRRP group.

**Contents** <accept-data>—Accept packets destined for virtual IP address.

<advertise-interval>—Advertisement interval.

<authentication-key>—Authentication key.

<authentication-type>—Authentication type.

- md5—HMAC-MD5-96.

- simple—Simple password.

<name>—VRRP group ID.

<preempt>—Allow preemption.

<priority>—Virtual router election priority.

<track>—Interfaces to track for the VRRP group.

<virtual-address>—Virtual addresses.

- <*xnm-clear-text*> (configuration/system/services)

**Usage**   <configuration>  
          <system>  
            <services>  
              <*xnm-clear-text*>  
                <connection-limit>*connection-limit*</connection-limit>  
                <rate-limit>*rate-limit*</rate-limit>  
              </*xnm-clear-text*>  
            </services>  
          </system>  
      </configuration>

**Description**   Allow clear text-based JUNOScript connections.

**Contents**   <connection-limit>—Maximum number of allowed connections.  
                  <rate-limit>—Maximum number of connections per minute.

- <*xnm-ssl*> (configuration/system/services)

**Usage**   <configuration>  
          <system>  
            <services>  
              <*xnm-ssl*>  
                <local-certificate>*local-certificate*</local-certificate>  
                <connection-limit>*connection-limit*</connection-limit>  
                <rate-limit>*rate-limit*</rate-limit>  
              </*xnm-ssl*>  
            </services>  
          </system>  
      </configuration>

**Description**   Allow SSL-based JUNOScript connections.

**Contents**   <connection-limit>—Maximum number of allowed connections.  
                  <local-certificate>—Name of local X.509 certificate to use.  
                  <rate-limit>—Maximum number of connections per minute.

# Part 2

## JUNOScript Document Type Definitions

The chapters in this section contain the document type definitions (DTDs) for various router functions:

- DTD for Session Control Response Tags on page 1481
- DTD for Accounting Response Tags on page 1483
- DTD for Alarm Response Tags on page 1487
- DTD for Chassis Response Tags on page 1489
- DTD for Class of Service Response Tags on page 1495
- DTD for Firewall Filter Response Tags on page 1501
- DTD for Forwarding and Routing Table Response Tags on page 1503
- DTD for Interface Response Tags on page 1505
- DTD for IPSec Response Tags on page 1527
- DTD for IPv6 Neighbor Discovery Response Tags on page 1531
- DTD for Routing Protocols Response Tags on page 1533
- DTD for SNMP Response Tags on page 1569
- DTD for UDP Forwarding Helper Response Tags on page 1573

卷之三

# Chapter 6

## DTD for Session Control Response Tags

This chapter contains the document type definition (DTD) called `junos.dtd`, which lists the session control tags returned by the JUNOScript server. The associated XML namespace is `http://xml.juniper.net/junos/5.4R1/junos`. To review reference pages for the tags, see “Summary of Session Control Tags” on page 3.

```
<!-- Copyright (c) 2000-2002, Juniper Networks, Inc. -->
<!-- All rights reserved. -->
<!-- junos.dtd -->

<!ELEMENT abort EMPTY>

<!ELEMENT abort-acknowledgement EMPTY>

<!ELEMENT action (#PCDATA)>

<!ELEMENT build-date (#PCDATA)>

<!ELEMENT build-number (#PCDATA)>

<!ELEMENT builder (#PCDATA)>

<!ELEMENT cause (#PCDATA)>

<!ELEMENT column (#PCDATA)>

<!ELEMENT component (#PCDATA)>

<!ELEMENT configuration (#PCDATA)>

<!ELEMENT configuration-text (#PCDATA)>

<!ELEMENT deprecated (#PCDATA)>

<!ELEMENT edit-path (#PCDATA)>

<!ELEMENT end-session EMPTY>

<!ELEMENT error (parse | source-daemon | filename | line-number | column | token | edit-path | statement | message)*>

<!ELEMENT filename (#PCDATA)>

<!ELEMENT line-number (#PCDATA)>

<!ELEMENT major (#PCDATA)>
```

```
<!ELEMENT message (#PCDATA)>

<!ELEMENT minor (#PCDATA)>

<!ELEMENT output (#PCDATA)>

<!ELEMENT parse EMPTY>

<!ELEMENT release-category (#PCDATA)>

<!ELEMENT rpc-reply (#PCDATA)*>

<!ELEMENT severity (#PCDATA)>

<!ELEMENT source-daemon (#PCDATA)>

<!ELEMENT spin (#PCDATA)>

<!ELEMENT statement (#PCDATA)>

<!ELEMENT syslog-tag (message | type | severity | deprecated | cause | action)*>

<!ELEMENT syslog-tag-information (syslog-tag)*>

<!ELEMENT token (#PCDATA)>

<!ELEMENT type (#PCDATA)>

<!ELEMENT version-info (component | major | minor | release-category | build-number | spin | builder | build-date)*>

<!ELEMENT warning (source-daemon | filename | line-number | column | token | message)*>

<!ELEMENT xnm:error (parse | source-daemon | filename | line-number | column | token | edit-path | statement | message)*>

<!ELEMENT xnm:warning (source-daemon | filename | line-number | column | token | message)*>
```

# Chapter 7

## DTD for Accounting Response Tags

This chapter contains the document type definition (DTD) called `junos-accounting.dtd`, which lists the tags returned by the JUNOScript server to describe accounting records. The associated XML namespace is `http://xml.juniper.net/junos/5.4R1/junos-accounting`. To review reference pages for the tags, see “Summary of Accounting Response Tags” on page 68.

```
<!-- Copyright (c) 2000-2002, Juniper Networks, Inc. -->
<!-- All rights reserved. -->
<!-- junos-accounting.dtd -->

<!ELEMENT accounting-profile-columns (column-label)*>

<!ELEMENT accounting-profile-filter (filter-name | next-scheduled-collection)*>

<!ELEMENT accounting-profile-header (profile-name | profile-interval | profile-use-count | filename |
filesize | filenumber | bytes-written | transfer-interval | next-transfer-time)*>

<!ELEMENT accounting-profile-information (accounting-profile-header | accounting-profile-columns |
accounting-profile-interfaces | accounting-profile-filter)*>

<!ELEMENT accounting-profile-interfaces (interface-name | next-scheduled-collection)*>

<!ELEMENT accounting-record-information (interface-accounting-statistics |
routing-engine-accounting-statistics | filter-accounting-statistics | cu-accounting-statistics)*>

<!ELEMENT address-family (#PCDATA)>

<!ELEMENT byte-count (#PCDATA)>

<!ELEMENT bytes-written (#PCDATA)>

<!ELEMENT column-label (#PCDATA)>

<!ELEMENT counter-name (#PCDATA)>

<!ELEMENT cpu15min (#PCDATA)>

<!ELEMENT cpu1min (#PCDATA)>

<!ELEMENT cpu5min (#PCDATA)>

<!ELEMENT cu-accounting-record (profile-layout | epoch-timestamp | utc-timestamp | interface-name |
address-family | destination-class-name | source-class-name | counter-name | packet-count |
byte-count)*>
<!ATTLIST cu-accounting-record junos:style CDATA #IMPLIED>
```

```
<!ELEMENT cu-accounting-statistics (cu-accounting-record)*>
<!ELEMENT date-yyyymmdd (#PCDATA)>
<!ELEMENT destination-class-name (#PCDATA)>
<!ELEMENT epoch-timestamp (#PCDATA)>
<!ELEMENT filename (#PCDATA)>
<!ELEMENT filenumber (#PCDATA)>
<!ELEMENT filesize (#PCDATA)>
<!ELEMENT filter-accounting-record (profile-layout | epoch-timestamp | utc-timestamp | interfaces |
filter-name | counter-name | packet-count | byte-count)*>
<!ATTLIST filter-accounting-record junos:style CDATA #IMPLIED>
<!ELEMENT filter-accounting-statistics (filter-accounting-record)*>
<!ELEMENT filter-name (#PCDATA)>
<!ELEMENT hostname (#PCDATA)>
<!ELEMENT input-bytes (#PCDATA)>
<!ELEMENT input-errors (#PCDATA)>
<!ELEMENT input-multicast (#PCDATA)>
<!ELEMENT input-packets (#PCDATA)>
<!ELEMENT input-unicast (#PCDATA)>
<!ELEMENT interface-accounting-record (profile-layout | epoch-timestamp | utc-timestamp |
interface-name | snmp-index | input-bytes | output-bytes | input-packets | output-packets | input-unicast |
output-unicast | input-multicast | output-multicast | input-errors | output-errors | no-proto |
rpf-check-bytes | rpf-check-packets | rpf.check6-bytes | rpf.check6-packets)*>
<!ATTLIST interface-accounting-record junos:style CDATA #IMPLIED>
<!ELEMENT interface-accounting-statistics (interface-accounting-record)*>
<!ELEMENT interface-name (#PCDATA)>
<!ELEMENT interfaces (#PCDATA)>
<!ELEMENT next-scheduled-collection (#PCDATA)>
<!ELEMENT next-transfer-time (#PCDATA)>
<!ELEMENT no-proto (#PCDATA)>
<!ELEMENT output-bytes (#PCDATA)>
<!ELEMENT output-errors (#PCDATA)>
<!ELEMENT output-multicast (#PCDATA)>
<!ELEMENT output-packets (#PCDATA)>
<!ELEMENT output-unicast (#PCDATA)>
```

```
<!ELEMENT packet-count (#PCDATA)>
<!ELEMENT profile-interval (#PCDATA)>
<!ELEMENT profile-layout (#PCDATA)>
<!ELEMENT profile-name (#PCDATA)>
<!ELEMENT profile-use-count (#PCDATA)>
<!ELEMENT routing-engine-accounting-record (profile-layout | epoch-timestamp | utc-timestamp |
hostname | date-yyyymmdd | timeofday-hhmmss | uptime | cpu1min | cpu5min | cpu15min)*>
<!ATTLIST routing-engine-accounting-record junos:style CDATA #IMPLIED>
<!ELEMENT routing-engine-accounting-statistics (routing-engine-accounting-record)*>
<!ELEMENT rpf-check-bytes (#PCDATA)>
<!ELEMENT rpf-check-packets (#PCDATA)>
<!ELEMENT rpf-check6-bytes (#PCDATA)>
<!ELEMENT rpf-check6-packets (#PCDATA)>
<!ELEMENT snmp-index (#PCDATA)>
<!ELEMENT source-class-name (#PCDATA)>
<!ELEMENT timeofday-hhmmss (#PCDATA)>
<!ELEMENT transfer-interval (#PCDATA)>
<!ELEMENT uptime (#PCDATA)>
<!ATTLIST uptime junos:seconds CDATA #IMPLIED>
<!ELEMENT utc-timestamp (#PCDATA)>
```



# Chapter 8

## DTD for Alarm Response Tags

This chapter contains the document type definition (DTD) called `junos-alarm.dtd`, which lists the tags returned by the JUNOScript server to describe alarms. The associated XML namespace is `http://xml.juniper.net/junos/5.4R1/junos-alarm`. To review reference pages for the tags, see “Summary of Alarm Response Tags” on page 75.

```
<!-- Copyright (c) 2000-2002, Juniper Networks, Inc. -->
<!-- All rights reserved. -->
<!-- junos-alarm.dtd -->

<!ELEMENT active-alarm-count (#PCDATA)>
<!ELEMENT alarm-class (#PCDATA)>
<!ELEMENT alarm-description (#PCDATA)>
<!ELEMENT alarm-detail (alarm-time | alarm-class | alarm-description)*>
<!ELEMENT alarm-information (alarm-summary | alarm-detail)*>
<!ELEMENT alarm-summary (active-alarm-count | no-active-alarms)*>
<!ELEMENT alarm-time (#PCDATA)>
<!ATTLIST alarm-time junos:seconds CDATA #IMPLIED>
<!ELEMENT no-active-alarms EMPTY>
```



# Chapter 9

## DTD for Chassis Response Tags

This chapter contains the document type definition (DTD) called `junos-chassis.dtd`, which lists the tags returned by the JUNOScript server to describe the router chassis. The associated XML namespace is `http://xml.juniper.net/junos/5.4R1/junos-chassis`. To review reference pages for the tags, see “Summary of Chassis Response Tags” on page 76.

```
<!-- Copyright (c) 2000-2002, Juniper Networks, Inc. -->
<!-- All rights reserved. -->
<!-- junos-chassis.dtd -->

<!ELEMENT activate-count (#PCDATA)>

<!ELEMENT alarm-indicators (red-led | yellow-led | major-alarm-relay | minor-alarm-relay)*>

<!ELEMENT amber-led EMPTY>

<!ELEMENT asic-information (#PCDATA)>

<!ELEMENT asic-name (#PCDATA)>

<!ELEMENT assembly-flags (#PCDATA)>

<!ELEMENT assembly-identifier (#PCDATA)>

<!ELEMENT assembly-version (#PCDATA)>

<!ELEMENT bios-version (#PCDATA)>

<!ELEMENT blue-led EMPTY>

<!ELEMENT board-information-record (#PCDATA)>

<!ELEMENT cb (slot | amber-led | green-led | blue-led)*>

<!ELEMENT cb-panel (cb)*>

<!ELEMENT chassis (name | version | part-number | serial-number | description | i2c-information | chassis-module)*>
<!ATTLIST chassis junos:style CDATA #IMPLIED>

<!ELEMENT chassis-inventory (chassis)*>

<!ELEMENT chassis-module (name | version | part-number | serial-number | description | i2c-information | firmware | chassis-sub-module)*>

<!ELEMENT chassis-sub-module (name | version | part-number | serial-number | description | i2c-information | firmware)*>
```

```
<!ELEMENT class (#PCDATA)>
<!ELEMENT comment (#PCDATA)>
<!ELEMENT cpu-background (#PCDATA)>
<!ELEMENT cpu-idle (#PCDATA)>
<!ELEMENT cpu-interrupt (#PCDATA)>
<!ELEMENT cpu-system (#PCDATA)>
<!ELEMENT cpu-total (#PCDATA)>
<!ELEMENT cpu-user (#PCDATA)>
<!ELEMENT craft-information (front-panel | mcs-panel | sfm-panel | pcg-panel | cb-panel | sib-panel | scg-panel | output)*>
<!ELEMENT description (#PCDATA)>
<!ELEMENT display-line (#PCDATA)>
<!ELEMENT display-panel (display-line)*>
<!ELEMENT eeprom-version (#PCDATA)>
<!ELEMENT environment-information (environment-item)*>
<!ELEMENT environment-item (class | name | status | temperature | comment)*>
<!ELEMENT fail-led EMPTY>
<!ELEMENT failover-count (#PCDATA)>
<!ELEMENT firmware (type | firmware-version)*>
<!ELEMENT firmware-information (chassis)*>
<!ELEMENT firmware-version (#PCDATA)>
<!ELEMENT fpc (slot | logical-slot | state | temperature | cpu-total | cpu-interrupt | memory-dram-size | memory-sram-size | memory-sdram-size | memory-notification-sdram-size | memory-heap-utilization | memory-buffer-utilization | asic-information | start-time | up-time | comment | pic | pic-detail | red-led | green-led)*>
<!ELEMENT fpc-information (fpc)*>
<!ATTLIST fpc-information junos:style CDATA #IMPLIED>
<!ELEMENT fpc-panel (fpc)*>
<!ELEMENT front-panel (display-panel | re-panel | alarm-indicators | fpc-panel)*>
<!ELEMENT green-led EMPTY>
<!ELEMENT i2c-data (#PCDATA)>
<!ELEMENT i2c-identifier (#PCDATA)>
<!ELEMENT i2c-information (jedec-code | eeprom-version | part-number | serial-number | assembly-identifier | assembly-version | manufacture-date | assembly-flags | i2c-version | i2c-identifier | i2c-data | board-information-record | rma-record)*>
```

```
<!ELEMENT i2c-version (#PCDATA)>
<!ELEMENT jedec-code (#PCDATA)>
<!ELEMENT load-average-fifteen (#PCDATA)>
<!ELEMENT load-average-five (#PCDATA)>
<!ELEMENT load-average-one (#PCDATA)>
<!ELEMENT logical-slot (#PCDATA)>
<!ELEMENT major-alarm-relay EMPTY>
<!ELEMENT manufacture-date (#PCDATA)>
<!ELEMENT master-led EMPTY>
<!ELEMENT mastership-priority (#PCDATA)>
<!ELEMENT mastership-state (#PCDATA)>
<!ELEMENT mcs (slot | amber-led | green-led | blue-led)*>
<!ELEMENT mcs-panel (mcs)*>
<!ELEMENT memory-buffer-utilization (#PCDATA)>
<!ELEMENT memory-dram-size (#PCDATA)>
<!ELEMENT memory-heap-utilization (#PCDATA)>
<!ELEMENT memory-notification-sdram-size (#PCDATA)>
<!ELEMENT memory-sdram-size (#PCDATA)>
<!ELEMENT memory-sram-size (#PCDATA)>
<!ELEMENT minor-alarm-relay EMPTY>
<!ELEMENT model (#PCDATA)>
<!ELEMENT name (#PCDATA)>
<!ELEMENT number (#PCDATA)>
<!ELEMENT ok-led EMPTY>
<!ELEMENT output (#PCDATA)>
<!ELEMENT part-number (#PCDATA)>
<!ELEMENT pcg (slot | amber-led | green-led | blue-led)*>
<!ELEMENT pcg-panel (pcg)*>
<!ELEMENT pic (pic-slot | pic-type | comment)*>
<!ELEMENT pic-asic-type (#PCDATA)>
<!ELEMENT pic-cpu-rom-version (#PCDATA)>
```

```
<!ELEMENT pic-cpu-sw-version (#PCDATA)>

<!ELEMENT pic-detail (slot | pic-slot | pic-type | pic-asic-type | comment | pic-version | state | cpu-total | cpu-interrupt | memory-buffer-utilization | memory-heap-utilization | memory-dram-size | pic-cpu-sw-version | pic-cpu-rom-version | up-time)*>

<!ELEMENT pic-slot (#PCDATA)>

<!ELEMENT pic-type (#PCDATA)>

<!ELEMENT pic-version (#PCDATA)>

<!ELEMENT re (slot | ok-led | fail-led | master-led)*>

<!ELEMENT re-panel (re)*>

<!ELEMENT red-led EMPTY>

<!ELEMENT reset-count (#PCDATA)>

<!ELEMENT rma-record (#PCDATA)>

<!ELEMENT route-engine (description | slot | mastership-state | mastership-priority | temperature | memory-dram-size | cpu-user | cpu-background | cpu-system | cpu-interrupt | cpu-idle | model | serial-number | start-time | up-time | load-average-one | load-average-five | load-average-fifteen | bios-version)*>

<!ELEMENT route-engine-information (route-engine)*>

<!ELEMENT scb (slot | state | failover-count | reset-count | activate-count | temperature | spp-temperature | spr-temperature | cpu-total | cpu-interrupt | memory-dram-size | memory-sram-size | memory-heap-utilization | memory-buffer-utilization | asic-name | asic-information | start-time | up-time | comment)*>

<!ELEMENT scb-information (scb-type | scb)*>
<!ATTLIST scb-information junos:style CDATA #IMPLIED>

<!ELEMENT scb-type (#PCDATA)>

<!ELEMENT scg (slot | amber-led | green-led | blue-led)*>

<!ELEMENT scg-panel (scg)*>

<!ELEMENT serial-number (#PCDATA)>

<!ELEMENT sfm (slot | amber-led | green-led | blue-led)*>

<!ELEMENT sfm-panel (sfm)*>

<!ELEMENT sib-panel (#PCDATA)*>

<!ELEMENT slot (#PCDATA)>

<!ELEMENT spp-temperature (#PCDATA)>

<!ELEMENT spr-temperature (#PCDATA)>

<!ELEMENT start-time (#PCDATA)>
<!ATTLIST start-time junos:seconds CDATA #IMPLIED>

<!ELEMENT state (#PCDATA)>
```

```
<!ELEMENT status (#PCDATA)>

<!ELEMENT temperature (#PCDATA)>
<!ATTLIST temperature junos:celsius CDATA #IMPLIED>

<!ELEMENT type (#PCDATA)>

<!ELEMENT up-time (#PCDATA)>
<!ATTLIST up-time junos:seconds CDATA #IMPLIED>

<!ELEMENT version (#PCDATA)>

<!ELEMENT yellow-led EMPTY>
```



# Chapter 10

## DTD for Class of Service Response Tags

This chapter contains the document type definition (DTD) called `junos-cos.dtd`, which lists the tags returned by the JUNOScript server to describe class of service settings. The associated XML namespace is `http://xml.juniper.net/junos/5.4R1/junos-cos`. To review reference pages for the tags, see “Summary of Class of Service Response Tags” on page 92.

```
<!-- Copyright (c) 2000-2002, Juniper Networks, Inc. -->
<!-- All rights reserved. -->
<!-- junos-cos.dtd -->

<!ELEMENT alias-map (alias-map-item)*>
<!ELEMENT alias-map-item (code-point-bits | code-point-alias)*>
<!ELEMENT classifier (classifier-name | code-point-type | table-index | classifier-map)*>
<!ELEMENT classifier-map (classifier-map-item)*>
<!ELEMENT classifier-map-item (code-point | fc-name | loss-priority)*>
<!ELEMENT classifier-name (#PCDATA)>
<!ELEMENT classifier-table (table-index | number-of-entries | table-type | classifier-table-entry)*>
<!ELEMENT classifier-table-entry (table-index | code-point | fc-queue-number | loss-priority)*>
<!ELEMENT classifier-table-entry-index (#PCDATA)>
<!ELEMENT classifier-table-map (table-index | table-type | logical-interface | logical-interface-index)*>
<!ELEMENT code-point (#PCDATA)>
<!ELEMENT code-point-alias (#PCDATA)>
<!ELEMENT code-point-bits (#PCDATA)>
<!ELEMENT code-point-map (code-point-type | alias-map)*>
<!ELEMENT code-point-type (#PCDATA)>
<!ELEMENT cos-classifier-information (classifier)*>
<!ELEMENT cos-classifier-table-information (classifier-table)*>
<!ELEMENT cos-classifier-table-map-information (classifier-table-map)*>
<!ELEMENT cos-code-point-map-information (code-point-map)*>
```

```
<!ELEMENT cos-drop-profile-information (drop-profile)*>
<!ELEMENT cos-forwarding-class-information (fc-map)*>
<!ELEMENT cos-information (cos-forwarding-class-information | cos-classifier-information |
cos-drop-profile-information | cos-rewrite-information | cos-code-point-map-information)*>
<!ELEMENT cos-interface-information (interface-map)*>
<!ELEMENT cos-red-information (red)*>
<!ELEMENT cos-rewrite-information (rewrite)*>
<!ELEMENT cos-rewrite-table-information (rewrite-table)*>
<!ELEMENT cos-rewrite-table-map-information (rewrite-table-map)*>
<!ELEMENT cos-scheduler-map-information (scheduler-map)*>
<!ELEMENT cos-scheduler-map-table-information (policy)*>
<!ELEMENT cos-table-information (cos-classifier-table-information | cos-classifier-table-map-information |
cos-scheduler-map-table-information | cos-red-information | cos-rewrite-table-information |
cos-rewrite-table-map-information)*>
<!ELEMENT dest-fpc-index (#PCDATA)>
<!ELEMENT drop-bps-high (#PCDATA)>
<!ELEMENT drop-bps-low (#PCDATA)>
<!ELEMENT drop-bytes-high (#PCDATA)>
<!ELEMENT drop-bytes-low (#PCDATA)>
<!ELEMENT drop-pkts-high (#PCDATA)>
<!ELEMENT drop-pkts-low (#PCDATA)>
<!ELEMENT drop-pps-high (#PCDATA)>
<!ELEMENT drop-pps-low (#PCDATA)>
<!ELEMENT drop-profile (profile-name | profile-type | table-index | profile-map)*>
<!ELEMENT fabric-queue-information (fpc-queue-information)*>
<!ELEMENT fc-map (fc-map-item)*>
<!ELEMENT fc-map-item (fc-name | fc-queue-number | fc-priority)*>
<!ELEMENT fc-name (#PCDATA)>
<!ELEMENT fc-priority (#PCDATA)>
<!ELEMENT fc-queue-number (#PCDATA)>
<!ELEMENT fill-level (#PCDATA)>
<!ELEMENT fpc-queue-information (dest-fpc-index | src-fpc-index | queue-information)*>
<!ELEMENT high-drop-profile-identifier (#PCDATA)>
```

```

<!ELEMENT i-logical-index (#PCDATA)>
<!ELEMENT i-logical-map (i-logical-name | i-logical-index | i-logical-objects)*>
...
<!ELEMENT i-logical-name (#PCDATA)>
...
<!ELEMENT i-logical-object-index (#PCDATA)>
...
<!ELEMENT i-logical-object-name (#PCDATA)>
...
<!ELEMENT i-logical-object-subtype (#PCDATA)>
...
<!ELEMENT i-logical-object-type (#PCDATA)>
...
<!ELEMENT i-logical-objects (i-logical-object-type | i-logical-object-name | i-logical-object-subtype | i-logical-object-index)*>
...
<!ELEMENT interface-index (#PCDATA)>
...
<!ELEMENT interface-map (interface-name | interface-index | scheduler-map-name | scheduler-map-index | i-logical-map)*>
...
<!ELEMENT interface-name (#PCDATA)>
...
<!ELEMENT logical-interface (#PCDATA)>
...
<!ELEMENT logical-interface-index (#PCDATA)>
...
<!ELEMENT loss-priority (#PCDATA)>
...
<!ELEMENT low-drop-profile-identifier (#PCDATA)>
...
<!ELEMENT number-of-entries (#PCDATA)>
...
<!ELEMENT physical-interface (#PCDATA)>
...
<!ELEMENT physical-interface-index (#PCDATA)>
...
<!ELEMENT policy (physical-interface | physical-interface-index | policy-index | policy-number-of-queues | policy-entry)*>
...
<!ELEMENT policy-buffer-size-percentage (#PCDATA)>
...
<!ELEMENT policy-buffer-size-remainder (#PCDATA)>
...
<!ELEMENT policy-entry (table-index | policy-entry-identifier | fc-queue-number | policy-transmit-rate | policy-transmit-rate-percentage | policy-transmit-rate-remainder | policy-buffer-size-percentage | policy-buffer-size-remainder | policy-high-priority | policy-packet-loss-profile | policy-exact)*>
...
<!ELEMENT policy-entry-identifier (#PCDATA)>
...
<!ELEMENT policy-exact (#PCDATA)>
...
<!ELEMENT policy-high-priority (#PCDATA)>
...
<!ELEMENT policy-index (#PCDATA)>
...
<!ELEMENT policy-number-of-queues (#PCDATA)>
...
<!ELEMENT policy-packet-loss-profile (high-drop-profile-identifier | low-drop-profile-identifier | tcp-high-drop-profile-identifier | tcp-low-drop-profile-identifier)*>
...

```

```
<!ELEMENT policy-transmit-rate (#PCDATA)>
<!ELEMENT policy-transmit-rate-percentage (#PCDATA)>
<!ELEMENT policy-transmit-rate-remainder (#PCDATA)>
<!ELEMENT probability (#PCDATA)>
<!ELEMENT profile-map (profile-map-item)*>
<!ELEMENT profile-map-item (fill-level | probability)*>
<!ELEMENT profile-name (#PCDATA)>
<!ELEMENT profile-type (#PCDATA)>
<!ELEMENT queue-information (queue-information-item)*>
<!ELEMENT queue-information-item (total-pkts-high | total-bytes-high | total-pkts-low | total-bytes-low |
total-pps-high | total-bps-high | total-pps-low | total-bps-low | tx-pkts-high | tx-bytes-high | tx-pkts-low |
tx-bytes-low | tx-pps-high | tx-bps-high | tx-pps-low | tx-bps-low | drop-pkts-high | drop-bytes-high |
drop-pkts-low | drop-bytes-low | drop-pps-high | drop-bps-high | drop-pps-low | drop-bps-low)*>
<!ELEMENT red (red-drop-profile-identifier | number-of-entries | red-entry)*>
<!ELEMENT red-drop-probability (#PCDATA)>
<!ELEMENT red-drop-profile-identifier (#PCDATA)>
<!ELEMENT red-entry (red-entry-index | red-fullness | red-drop-probability)*>
<!ELEMENT red-entry-index (#PCDATA)>
<!ELEMENT red-fullness (#PCDATA)>
<!ELEMENT rewrite (rewrite-name | code-point-type | table-index | rewrite-map)*>
<!ELEMENT rewrite-high-codepoint (#PCDATA)>
<!ELEMENT rewrite-high-enable-state (#PCDATA)>
<!ELEMENT rewrite-low-codepoint (#PCDATA)>
<!ELEMENT rewrite-low-enable-state (#PCDATA)>
<!ELEMENT rewrite-map (rewrite-map-item)*>
<!ELEMENT rewrite-map-item (code-point | fc-name | loss-priority)*>
<!ELEMENT rewrite-name (#PCDATA)>
<!ELEMENT rewrite-table (table-index | number-of-entries | table-type | rewrite-table-entry)*>
<!ELEMENT rewrite-table-entry (fc-queue-number | rewrite-low-codepoint | rewrite-low-enable-state |
rewrite-high-codepoint | rewrite-high-enable-state)*>
<!ELEMENT rewrite-table-map (table-index | table-type | logical-interface | logical-interface-index)*>
<!ELEMENT scheduler (fc-name | scheduler-name | scheduler-index | scheduler-tx-rate | scheduler-tx-limit |
scheduler-buffer-size | scheduler-priority | scheduler-drop-profile-ln-index | scheduler-drop-profile-ln |
scheduler-drop-profile-lt-index | scheduler-drop-profile-lt | scheduler-drop-profile-hn-index |
scheduler-drop-profile-hn | scheduler-drop-profile-ht-index | scheduler-drop-profile-ht)*>
```

```
<!ELEMENT scheduler-buffer-size (#PCDATA)>
...
<!ELEMENT scheduler-drop-profile-hn (#PCDATA)>
...
<!ELEMENT scheduler-drop-profile-hn-index (#PCDATA)>
...
<!ELEMENT scheduler-drop-profile-ht (#PCDATA)>
...
<!ELEMENT scheduler-drop-profile-ht-index (#PCDATA)>
...
<!ELEMENT scheduler-drop-profile-In (#PCDATA)>
...
<!ELEMENT scheduler-drop-profile-In-index (#PCDATA)>
...
<!ELEMENT scheduler-drop-profile-It (#PCDATA)>
...
<!ELEMENT scheduler-drop-profile-It-index (#PCDATA)>
...
<!ELEMENT scheduler-index (#PCDATA)>
...
<!ELEMENT scheduler-map (scheduler-map-name | scheduler-map-index | scheduler)*>
...
<!ELEMENT scheduler-map-index (#PCDATA)>
...
<!ELEMENT scheduler-map-name (#PCDATA)>
...
<!ELEMENT scheduler-name (#PCDATA)>
...
<!ELEMENT scheduler-priority (#PCDATA)>
...
<!ELEMENT scheduler-tx-limit (#PCDATA)>
...
<!ELEMENT scheduler-tx-rate (#PCDATA)>
...
<!ELEMENT src-fpc-index (#PCDATA)>
...
<!ELEMENT table-index (#PCDATA)>
...
<!ELEMENT table-type (#PCDATA)>
...
<!ELEMENT tcp-high-drop-profile-identifier (#PCDATA)>
...
<!ELEMENT tcp-low-drop-profile-identifier (#PCDATA)>
...
<!ELEMENT total-bps-high (#PCDATA)>
...
<!ELEMENT total-bps-low (#PCDATA)>
...
<!ELEMENT total-bytes-high (#PCDATA)>
...
<!ELEMENT total-bytes-low (#PCDATA)>
...
<!ELEMENT total-pkts-high (#PCDATA)>
...
<!ELEMENT total-pkts-low (#PCDATA)>
...
<!ELEMENT total-pps-high (#PCDATA)>
...
<!ELEMENT total-pps-low (#PCDATA)>
...
<!ELEMENT tx-bps-high (#PCDATA)>
```

```
<!ELEMENT tx-bps-low (#PCDATA)>
<!ELEMENT tx-bytes-high (#PCDATA)>
<!ELEMENT tx-bytes-low (#PCDATA)>
<!ELEMENT tx-pkts-high (#PCDATA)>
<!ELEMENT tx-pkts-low (#PCDATA)>
<!ELEMENT tx-pps-high (#PCDATA)>
<!ELEMENT tx-pps-low (#PCDATA)>
```

# Chapter 11

## DTD for Firewall Filter Response Tags

This chapter contains the document type definition (DTD) called `junos-filter.dtd`, which lists the tags returned by the JUNOScript server to describe firewall filter information. The associated XML namespace is `http://xml.juniper.net/junos/5.4R1/junos-filter`. To review reference pages for the tags, see “Summary of Forwarding and Routing Table Response Tags” on page 114.

```
<!-- Copyright (c) 2000-2002, Juniper Networks, Inc. -->
<!-- All rights reserved. -->
<!-- junos-filter.dtd -->

<!ELEMENT action-name (#PCDATA)>
<!ELEMENT byte-count (#PCDATA)>
<!ELEMENT counter (counter-name | byte-count | packet-count)*>
<!ELEMENT counter-name (#PCDATA)>
<!ELEMENT destination-address (#PCDATA)>
<!ELEMENT filter-information (filter-name | counter | policer)*>
<!ELEMENT filter-name (#PCDATA)>
<!ELEMENT firewall-information (filter-information)*>
<!ELEMENT firewall-log-information (log-information)*>
<!ELEMENT icmp-code (#PCDATA)>
<!ELEMENT icmp-type (#PCDATA)>
<!ELEMENT interface-name (#PCDATA)>
<!ELEMENT log-information (time | filter-name | action-name | interface-name | protocol-name |
source-address | destination-address | packet-length | icmp-type | icmp-code)*>
<!ATTLIST log-information junos:style CDATA #IMPLIED>
<!ELEMENT packet-count (#PCDATA)>
<!ELEMENT packet-length (#PCDATA)>
<!ELEMENT policer (policer-name | packet-count)*>
<!ELEMENT policer-name (#PCDATA)>
```



# Chapter 12

## DTD for Forwarding and Routing Table Response Tags

This chapter contains the XML document type definition (DTD) called `junos-rtinfo.dtd`, which lists the tags returned by the JUNOScript server to describe forwarding and routing table information. The associated XML namespace is `http://xml.juniper.net/junos/5.4R1/junos-rtinfo`. To review reference pages for the tags, see “Summary of Forwarding and Routing Table Response Tags” on page 114.

```
<!-- Copyright (c) 2000-2002, Juniper Networks, Inc. -->
<!-- All rights reserved. -->
<!-- junos-rtinfo.dtd -->

<!ELEMENT address-family (#PCDATA)>
<!ELEMENT address-family-number (#PCDATA)>
<!ELEMENT destination (#PCDATA)>
<!ELEMENT destination-type (#PCDATA)>
<!ELEMENT forwarding-table-information (routing-table)*>
<!ELEMENT interface-name (#PCDATA)>
<!ELEMENT nexthop (nexthop-address | nexthop-type | nexthop-index | nexthop-reference-count | interface-name)*>
<!ELEMENT nexthop-address (#PCDATA)>
<!ELEMENT nexthop-index (#PCDATA)>
<!ELEMENT nexthop-reference-count (#PCDATA)>
<!ELEMENT nexthop-type (#PCDATA)>
<!ELEMENT route-count (#PCDATA)>
<!ELEMENT route-flags (#PCDATA)>
<!ELEMENT route-reference-count (#PCDATA)>
<!ELEMENT routing-table (routing-table-name | routing-table-deleted | address-family | address-family-number | routing-table-entry | routing-table-summary)*>
<!ELEMENT routing-table-deleted EMPTY>
```



# Chapter 13

## DTD for Interface Response Tags

This chapter contains the document type definition (DTD) called `junos-interface.dtd`, which lists the tags returned by the JUNOScript server to describe router interfaces. The associated XML namespace is `http://xml.juniper.net/junos/5.4R1/junos-interface`. To review reference pages for the tags, see “Summary of Interface Response Tags” on page 117.

```
<!-- Copyright (c) 2000-2002, Juniper Networks, Inc. -->
<!-- All rights reserved. -->
<!-- junos-interface.dtd -->

<!ELEMENT active-alarms (type | interface-alarms)*>
<!ELEMENT active-defects (type | interface-alarms)*>

<!ELEMENT address-family (address-family-name | multilink-bundle-name | as-bundle-name |
ae-bundle-name | es-sa-name | es-sa-fail-count | es-sa-xmt-seq-num | es-sa-recv-seq-num | mtu |
address-family-flags | generation | route-table | filter-information | policer-information | interface-address |
route-rpf-statistics | destination-class-statistics | source-class-statistics)*>

<!ELEMENT address-family-flags (ifff-none | ifff-primary | ifff-redirects | ifff-no-redirects | ifff-hard-down |
ifff-down | ifff-up | ifff-func1 | ifff-func2 | ifff-is-primary | ifff-transit-options-ttl-exceeded |
ifff-dst-class-usage | ifff-src-class-input | ifff-src-class-output | ifff-rpf-check | generic-value)*>

<!ELEMENT address-family-name (#PCDATA)>

<!ELEMENT admin-status (#PCDATA)>
<!ATTLIST admin-status junos:format CDATA #IMPLIED>

<!ELEMENT ae-bundle-name (#PCDATA)>

<!ELEMENT aged-packets (#PCDATA)>

<!ELEMENT alarm-not-present EMPTY>

<!ELEMENT alternate-physical-address (#PCDATA)>

<!ELEMENT as-bundle-name (#PCDATA)>

<!ELEMENT atm-defects (media-alarm)*>

<!ELEMENT atm-e3-framing (#PCDATA)>

<!ELEMENT atm-encapsulation (#PCDATA)>

<!ELEMENT atm-hcs-state (#PCDATA)>
```

```
<!ELEMENT atm-information (plcp-defects | atm-defects | plcp-statistics | atm-hcs-state | atm-loss-of-cell | atm-statistics)*>

<!ELEMENT atm-line-build-out (#PCDATA)>

<!ELEMENT atm-loss-of-cell (#PCDATA)>

<!ELEMENT atm-statistics (uncorrectable-hcs-errors | correctable-hcs-errors | tx-cell-fifo-overruns | rx-cell-fifo-overruns | rx-cell-fifo-underruns | rx-cell-count | tx-cell-count | tx-idle-cell-count | vc-queue-drops | no-buffers | length-errors | timeouts | rx-invalid-vcs | bad-crcs | oam-cell-no-buffers)*>

<!ELEMENT atm-tm-cbr EMPTY>

<!ELEMENT atm-tm-vbr EMPTY>

<!ELEMENT autonegotiation-status (#PCDATA)>

<!ELEMENT bad-crcs (#PCDATA)>

<!ELEMENT bad-hardware-length-count (#PCDATA)>

<!ELEMENT bad-packet-length-count (#PCDATA)>

<!ELEMENT bad-protocol-count (#PCDATA)>

<!ELEMENT bad-protocol-length-count (#PCDATA)>

<!ELEMENT bandwidth (#PCDATA)>

<!ELEMENT bipe-count (#PCDATA)>

<!ELEMENT bipe-seconds (#PCDATA)>

<!ELEMENT bundle (fragments | packets)*>

<!ELEMENT burst (#PCDATA)>

<!ELEMENT cam-destination-filter-count (#PCDATA)>

<!ELEMENT cam-source-filter-count (#PCDATA)>

<!ELEMENT carrier-transitions (#PCDATA)>

<!ELEMENT cds1-information (interface-tx-queue)*>

<!ELEMENT chap-state (#PCDATA)>

<!ELEMENT clocking (#PCDATA)>

<!ELEMENT coc12-information (interface-tx-queue)*>

<!ELEMENT control-memory-error (#PCDATA)>

<!ELEMENT correctable-hcs-errors (#PCDATA)>

<!ELEMENT cos-information (cos-queue-config)*>

<!ELEMENT cos-queue-bandwidth (#PCDATA)>

<!ELEMENT cos-queue-bandwidth-bps (#PCDATA)>

<!ELEMENT cos-queue-buffer (#PCDATA)>
```

```

<!ELEMENT cos-queue-buffer-bytes (#PCDATA)>
 ...
<!ELEMENT cos-queue-config (cos-queue-number | cos-queue-forwarding-class | cos-queue-bandwidth |
cos-queue-bandwidth-bps | cos-queue-buffer | cos-queue-buffer-bytes | cos-queue-priority |
cos-queue-limit)*>
 ...
<!ELEMENT cos-queue-forwarding-class (#PCDATA)>
 ...
<!ELEMENT cos-queue-limit (#PCDATA)>
 ...
<!ELEMENT cos-queue-number (#PCDATA)>
 ...
<!ELEMENT cos-queue-priority (#PCDATA)>
 ...
<!ELEMENT crc (#PCDATA)>
 ...
<!ELEMENT ct3-information (interface-tx-queue)*>
 ...
<!ELEMENT current-physical-address (#PCDATA)>
 ...
<!ELEMENT data-memory-error (#PCDATA)>
 ...
<!ELEMENT dcu-class-bytes (#PCDATA)>
 ...
<!ELEMENT dcu-class-name (#PCDATA)>
 ...
<!ELEMENT dcu-class-packets (#PCDATA)>
 ...
<!ELEMENT denied-count (#PCDATA)>
 ...
<!ELEMENT description (#PCDATA)>
 ...
<!ELEMENT destination-class-statistics (dcu-class-name | dcu-class-packets | dcu-class-bytes)*>
 ...
<!ELEMENT destination-mask (#PCDATA)>
 ...
<!ELEMENT destination-slot (#PCDATA)>
 ...
<!ELEMENT dlci (#PCDATA)>
 ...
<!ELEMENT down EMPTY>
 ...
<!ELEMENT down-count (#PCDATA)>
 ...
<!ELEMENT down-hold-time (#PCDATA)>
 ...
<!ELEMENT down-time (#PCDATA)>
 ...
<!ELEMENT drop-timeout (#PCDATA)>
 ...
<!ELEMENT dropped-count (#PCDATA)>
 ...
<!ELEMENT ds1-alarm-ais EMPTY>
 ...
<!ELEMENT ds1-alarm-lof EMPTY>
 ...
<!ELEMENT ds1-alarm-los EMPTY>
 ...
<!ELEMENT ds1-alarm-ylw EMPTY>
 ...
<!ELEMENT ds1-bert-algorithm (#PCDATA)>
 ...

```

```
<!ELEMENT ds1-bert-bit-count (#PCDATA)>
<!ELEMENT ds1-bert-elapsed (#PCDATA)>
<!ELEMENT ds1-bert-error-bit-count (#PCDATA)>
<!ELEMENT ds1-bert-error-rate (#PCDATA)>
<!ELEMENT ds1-bert-induced-error-rate (#PCDATA)>

<!ELEMENT ds1-bert-information (ds1-bert-period | ds1-bert-elapsed | ds1-bert-status |
ds1-bert-algorithm | ds1-bert-error-rate | ds1-bert-induced-error-rate | ds1-bert-bit-count |
ds1-bert-error-bit-count | ds1-bert-los-status | ds1-bert-los-seconds)*>

<!ELEMENT ds1-bert-los-seconds (#PCDATA)>

<!ELEMENT ds1-bert-los-status (#PCDATA)>

<!ELEMENT ds1-bert-period (#PCDATA)>

<!ELEMENT ds1-bert-status (#PCDATA)>

<!ELEMENT ds1-buildout (#PCDATA)>

<!ELEMENT ds1-byte-encoding (#PCDATA)>

<!ELEMENT ds1-data-inversion (#PCDATA)>

<!ELEMENT ds1-framing (#PCDATA)>

<!ELEMENT ds1-line-encoding (#PCDATA)>

<!ELEMENT ds1-timeslots (#PCDATA)>

<!ELEMENT ds3-alarm-ais EMPTY>

<!ELEMENT ds3-alarm-exz EMPTY>

<!ELEMENT ds3-alarm-ferf EMPTY>

<!ELEMENT ds3-alarm-idle EMPTY>

<!ELEMENT ds3-alarm-lcv EMPTY>

<!ELEMENT ds3-alarm-lof EMPTY>

<!ELEMENT ds3-alarm-los EMPTY>

<!ELEMENT ds3-alarm-pli EMPTY>

<!ELEMENT ds3-alarm-ylw EMPTY>

<!ELEMENT ds3-bert-algorithm (#PCDATA)>

<!ELEMENT ds3-bert-bit-count (#PCDATA)>

<!ELEMENT ds3-bert-bit-count-overflow (#PCDATA)>

<!ELEMENT ds3-bert-elapsed (#PCDATA)>

<!ELEMENT ds3-bert-error-bit-count (#PCDATA)>
```

```

<!ELEMENT ds3-bert-error-bit-count-overflow (#PCDATA)>
...
<!ELEMENT ds3-bert-error-rate (#PCDATA)>
...
<!ELEMENT ds3-bert-induced-error-rate (#PCDATA)>
...
<!ELEMENT ds3-bert-information (ds3-bert-period | ds3-bert-elapsed | ds3-bert-status |
ds3-bert-algorithm | ds3-bert-error-rate | ds3-bert-induced-error-rate | ds3-bert-bit-count |
ds3-bert-bit-count-overflow | ds3-bert-error-bit-count | ds3-bert-error-bit-count-overflow |
ds3-bert-los-status | ds3-bert-los-count | ds3-bert-los-seconds)*>
...
<!ELEMENT ds3-bert-los-count (#PCDATA)>
...
<!ELEMENT ds3-bert-los-seconds (#PCDATA)>
...
<!ELEMENT ds3-bert-los-status (#PCDATA)>
...
<!ELEMENT ds3-bert-period (#PCDATA)>
...
<!ELEMENT ds3-bert-status (#PCDATA)>
...
<!ELEMENT ds3-mode (#PCDATA)>
...
<!ELEMENT dsu-compatibility-mode (#PCDATA)>
...
<!ELEMENT dsu-information (dsu-compatibility-mode | dsu-scrambler | dsu-subrate | feac-loopback |
feac-response | feac-count)*>
...
<!ELEMENT dsu-scrambler (#PCDATA)>
...
<!ELEMENT dsu-subrate (#PCDATA)>
...
<!ELEMENT e3-bert-algorithm (#PCDATA)>
...
<!ELEMENT e3-bert-bit-count (#PCDATA)>
...
<!ELEMENT e3-bert-bit-count-overflow (#PCDATA)>
...
<!ELEMENT e3-bert-elapsed (#PCDATA)>
...
<!ELEMENT e3-bert-error-bit-count (#PCDATA)>
...
<!ELEMENT e3-bert-error-bit-count-overflow (#PCDATA)>
...
<!ELEMENT e3-bert-error-rate (#PCDATA)>
...
<!ELEMENT e3-bert-induced-error-rate (#PCDATA)>
...
<!ELEMENT e3-bert-information (e3-bert-period | e3-bert-elapsed | e3-bert-status | e3-bert-algorithm |
e3-bert-error-rate | e3-bert-induced-error-rate | e3-bert-bit-count | e3-bert-bit-count-overflow |
e3-bert-error-bit-count | e3-bert-error-bit-count-overflow | e3-bert-los-status | e3-bert-los-count |
e3-bert-los-seconds)*>
...
<!ELEMENT e3-bert-los-count (#PCDATA)>
...
<!ELEMENT e3-bert-los-seconds (#PCDATA)>
...
<!ELEMENT e3-bert-los-status (#PCDATA)>
...
<!ELEMENT e3-bert-period (#PCDATA)>
...
<!ELEMENT e3-bert-status (#PCDATA)>
...

```

```
<!ELEMENT e3-framing (#PCDATA)>
<!ELEMENT encapsulation (#PCDATA)>
<!ELEMENT es-ifd-stats (total-anti-replay-count | total-authentication-failure-count)*>
<!ELEMENT es-sa-fail-count (#PCDATA)>
<!ELEMENT es-sa-name (#PCDATA)>
<!ELEMENT es-sa-recv-seq-num (#PCDATA)>
<!ELEMENT es-sa-xmt-seq-num (#PCDATA)>
<!ELEMENT ethernet-alarm-link-down EMPTY>
<!ELEMENT ethernet-autonegotiation (autonegotiation-status | link-partner-status | link-partner-reason | link-partner-duplexity | link-partner-speed | flow-control)*>
<!ELEMENT ethernet-filter-statistics (input-packets | input-reject-count | input-reject-destination-address-count | input-reject-source-address-count | output-packets | output-packet-pad-count | output-packet-error-count | cam-destination-filter-count | cam-source-filter-count)*>
<!ATTLIST ethernet-filter-statistics junos:style CDATA #IMPLIED>
<!ELEMENT ethernet-mac-statistics (input-bytes | input-packets | input-unicasts | input-broadcasts | input-multicasts | input-crc-errors | input-fifo-errors | input-mac-control-frames | input-mac-pause-frames | input-oversized-frames | input-jabber-frames | input-fragment-frames | input-vlan-tagged-frames | input-code-violations | output-bytes | output-packets | output-unicasts | output-broadcasts | output-multicasts | output-crc-errors | output-fifo-errors | output-mac-control-frames | output-mac-pause-frames)*>
<!ATTLIST ethernet-mac-statistics junos:style CDATA #IMPLIED>
<!ELEMENT feac-count (#PCDATA)>
<!ELEMENT feac-loopback (#PCDATA)>
<!ELEMENT feac-response (#PCDATA)>
<!ELEMENT febe-count (#PCDATA)>
<!ELEMENT febe-seconds (#PCDATA)>
<!ELEMENT ferr-count (#PCDATA)>
<!ELEMENT ferr-seconds (#PCDATA)>
<!ELEMENT filter-family (#PCDATA)>
<!ELEMENT filter-information (filter-family | filter-input | filter-output)*>
<!ELEMENT filter-input (#PCDATA)>
<!ELEMENT filter-output (#PCDATA)>
<!ELEMENT flow-control (#PCDATA)>
<!ELEMENT forwarding-class-name (#PCDATA)>
<!ELEMENT fragment-buffer-overflow (#PCDATA)>
<!ELEMENT fragment-drop-bytes (#PCDATA)>
```

```

<!ELEMENT fragment-drops (#PCDATA)>
<!ELEMENT fragment-threshold (#PCDATA)>
<!ELEMENT fragment-timeout (#PCDATA)>
<!ELEMENT fragments (input-frames | input-fps | input-bytes | input-bps | output-frames | output-fps | output-bytes | output-bps)*>
<!ELEMENT framing-errors (#PCDATA)>
<!ELEMENT generation (#PCDATA)>
<!ELEMENT generic-value (#PCDATA)>
<!ELEMENT hardware-physical-address (#PCDATA)>
<!ELEMENT hdlc-giant-threshold (#PCDATA)>
<!ELEMENT hdlc-information (hdlc-rx-bucket-state | hdlc-rx-bit-rate | hdlc-rx-threshold | hdlc-tx-bit-rate | hdlc-tx-bucket-state | hdlc-tx-threshold | hdlc-giant-threshold | hdlc-runt-threshold)*>
<!ELEMENT hdlc-runt-threshold (#PCDATA)>
<!ELEMENT hdlc-rx-bit-rate (#PCDATA)>
<!ELEMENT hdlc-rx-bucket-state (#PCDATA)>
<!ELEMENT hdlc-rx-threshold (#PCDATA)>
<!ELEMENT hdlc-tx-bit-rate (#PCDATA)>
<!ELEMENT hdlc-tx-bucket-state (#PCDATA)>
<!ELEMENT hdlc-tx-threshold (#PCDATA)>
<!ELEMENT hs-link-crc-errors (#PCDATA)>
<!ELEMENT hs-link-fifo-overflows (#PCDATA)>
<!ELEMENT hs-link-fifo-underflows (#PCDATA)>
<!ELEMENT if-config-flags (iff-none | iff-hardware-down | iff-down | iff-up | iff-admin-down | iff-admin-up | iff-link-down | iff-device-down | iff-point-to-point | iff-point-to-multipoint | iff-multiaccess | iff-change | iff-inverse-arp | iff-no-multicast | iff-multicast | iff-promiscuous | iff-all-multicast | iff-snmp-traps | iff-rx-passive | iff-tx-passive | iff-cccdown)*>
<!ELEMENT if-device-flags (ifdf-none | ifdf-present | ifdf-running | ifdf-duplex | ifdf-down | ifdf-no-carrier | ifdf-error1 | ifdf-error2 | ifdf-no-multicast | ifdf-loopback | ifdf-quench | ifdf-recv-all-multicasts | ifdf-promiscuous | ifdf-link-layer-down | ifdf-loop-detected | ifdf-pfe-gone)*>
<!ELEMENT if-flow-control (#PCDATA)>
<!ELEMENT if-media-flags (ifmf-none | ifmf-autoselect | ifmf-keepalives | ifmf-no-keepalives | ifmf-give-up | ifmf-loose-lcp | ifmf-loose-ncp | ifmf-loose-lmi | ifmf-dce | ifmf-dte)*>
<!ELEMENT if-type (#PCDATA)>
<!ELEMENT ifa-broadcast (#PCDATA)>
<!ELEMENT ifa-destination (#PCDATA)>

```

```
• <!ELEMENT ifa-flags (ifaf-none | ifaf-primary | ifaf-preferred | ifaf-down | ifaf-current-default |
• ifaf-current-preferred | ifaf-current-primary | generic-value)*>
• <!ELEMENT ifa-local (#PCDATA)>
• <!ELEMENT ifaf-current-default EMPTY>
• <!ELEMENT ifaf-current-preferred EMPTY>
• <!ELEMENT ifaf-current-primary EMPTY>
• <!ELEMENT ifaf-down EMPTY>
• <!ELEMENT ifaf-none EMPTY>
• <!ELEMENT ifaf-preferred EMPTY>
• <!ELEMENT ifaf-primary EMPTY>
• <!ELEMENT ifdf-down EMPTY>
• <!ELEMENT ifdf-duplex EMPTY>
• <!ELEMENT ifdf-error1 EMPTY>
• <!ELEMENT ifdf-error2 EMPTY>
• <!ELEMENT ifdf-link-layer-down EMPTY>
• <!ELEMENT ifdf-loop-detected EMPTY>
• <!ELEMENT ifdf-loopback EMPTY>
• <!ELEMENT ifdf-no-carrier EMPTY>
• <!ELEMENT ifdf-no-multicast EMPTY>
• <!ELEMENT ifdf-none EMPTY>
• <!ELEMENT ifdf-pfe-gone EMPTY>
• <!ELEMENT ifdf-present EMPTY>
• <!ELEMENT ifdf-promiscuous EMPTY>
• <!ELEMENT ifdf-quench EMPTY>
• <!ELEMENT ifdf-recv-all-multicasts EMPTY>
• <!ELEMENT ifdf-running EMPTY>
• <!ELEMENT iff-admin-down EMPTY>
• <!ELEMENT iff-admin-up EMPTY>
• <!ELEMENT iff-all-multicast EMPTY>
• <!ELEMENT iff-cccdown EMPTY>
• <!ELEMENT iff-change EMPTY>
• <!ELEMENT iff-device-down EMPTY>
•
```

```
<!ELEMENT iff-down EMPTY>
.
.
.
<!ELEMENT iff-hardware-down EMPTY>
.
.
.
<!ELEMENT iff-inverse-arp EMPTY>
.
.
.
<!ELEMENT iff-link-down EMPTY>
.
.
.
<!ELEMENT iff-multiaccess EMPTY>
.
.
.
<!ELEMENT iff-multicast EMPTY>
.
.
.
<!ELEMENT iff-no-multicast EMPTY>
.
.
.
<!ELEMENT iff-none EMPTY>
.
.
.
<!ELEMENT iff-point-to-multipoint EMPTY>
.
.
.
<!ELEMENT iff-point-to-point EMPTY>
.
.
.
<!ELEMENT iff-promiscuous EMPTY>
.
.
.
<!ELEMENT iff-rx-passive EMPTY>
.
.
.
<!ELEMENT iff-snmp-traps EMPTY>
.
.
.
<!ELEMENT iff-tx-passive EMPTY>
.
.
.
<!ELEMENT iff-up EMPTY>
.
.
.
<!ELEMENT ifff-down EMPTY>
.
.
.
<!ELEMENT ifff-dst-class-usage EMPTY>
.
.
.
<!ELEMENT ifff-func1 EMPTY>
.
.
.
<!ELEMENT ifff-func2 EMPTY>
.
.
.
<!ELEMENT ifff-hard-down EMPTY>
.
.
.
<!ELEMENT ifff-is-primary EMPTY>
.
.
.
<!ELEMENT ifff-no-redirects EMPTY>
.
.
.
<!ELEMENT ifff-none EMPTY>
.
.
.
<!ELEMENT ifff-primary EMPTY>
.
.
.
<!ELEMENT ifff-redirects EMPTY>
.
.
.
<!ELEMENT ifff-rpf-check EMPTY>
.
.
.
<!ELEMENT ifff-src-class-input EMPTY>
.
.
.
<!ELEMENT ifff-src-class-output EMPTY>
.
.
.
<!ELEMENT ifff-transit-options-ttl-exceeded EMPTY>
.
.
.
<!ELEMENT ifff-up EMPTY>
.
.
.
<!ELEMENT ifmf-autoselect EMPTY>
```

```
<!ELEMENT ifmf-dce EMPTY>
<!ELEMENT ifmf-dte EMPTY>
<!ELEMENT ifmf-give-up EMPTY>
<!ELEMENT ifmf-keepalives EMPTY>
<!ELEMENT ifmf-loose-lcp EMPTY>
<!ELEMENT ifmf-loose-lmi EMPTY>
<!ELEMENT ifmf-loose-ncp EMPTY>
<!ELEMENT ifmf-no-keepalives EMPTY>
<!ELEMENT ifmf-none EMPTY>
<!ELEMENT ifvc-active EMPTY>
<!ELEMENT ifvc-ccc-down EMPTY>
<!ELEMENT ifvc-closed EMPTY>
<!ELEMENT ifvc-down EMPTY>
<!ELEMENT ifvc-flags (ifvc-down | ifvc-none | ifvc-active | ifvc-closed | ifvc-inverse-arp | ifvc-ilmi | ifvc-oam | ifvc-shaping | ifvc-passiveoam | ifvc-multicast | ifvc-ccc-down)*>
<!ELEMENT ifvc-ilmi EMPTY>
<!ELEMENT ifvc-inverse-arp EMPTY>
<!ELEMENT ifvc-multicast EMPTY>
<!ELEMENT ifvc-multipoint-destination (multipoint-address)*>
<!ELEMENT ifvc-none EMPTY>
<!ELEMENT ifvc-oam EMPTY>
<!ELEMENT ifvc-passiveoam EMPTY>
<!ELEMENT ifvc-shaping EMPTY>
<!ELEMENT illegal-rx-packets (#PCDATA)>
<!ELEMENT in-arp-statistics (received-count | transmitted-count | denied-count | operation-not-supported-count | bad-packet-length-count | bad-protocol-count | bad-protocol-length-count | bad-hardware-length-count | dropped-count | last-received | last-transmitted)*>
<!ELEMENT ingress-rate-limit (#PCDATA)>
<!ELEMENT input-bps (#PCDATA)>
<!ELEMENT input-broadcasts (#PCDATA)>
<!ELEMENT input-bucket-drops (#PCDATA)>
<!ELEMENT input-bytes (#PCDATA)>
<!ELEMENT input-code-violations (#PCDATA)>
```

```

<!ELEMENT input-crc-errors (#PCDATA)>
...
<!ELEMENT input-disabled-bundle (#PCDATA)>
...
<!ELEMENT input-discards (#PCDATA)>
...
<!ELEMENT input-drops (#PCDATA)>
...
<!ELEMENT input-error-count (#PCDATA)>
...
<!ELEMENT input-error-frames (#PCDATA)>
...
<!ELEMENT input-error-list (input-errors | input-drops | invalid-vcs | framing-errors | input-runts |
input-giants | input-bucket-drops | input-discards | input-l3-incompletes | input-l2-channel-errors |
input-l2-mismatch-timeouts | input-fifo-errors | hs-link-crc-errors | hs-link-fifo-overflows | sram-errors)*>
...
<!ELEMENT input-errors (#PCDATA)>
...
<!ELEMENT input-fifo-errors (#PCDATA)>
...
<!ELEMENT input-fps (#PCDATA)>
...
<!ELEMENT input-fragment-frames (#PCDATA)>
...
<!ELEMENT input-frames (#PCDATA)>
...
<!ELEMENT input-giants (#PCDATA)>
...
<!ELEMENT input-jabber-frames (#PCDATA)>
...
<!ELEMENT input-l2-channel-errors (#PCDATA)>
...
<!ELEMENT input-l2-mismatch-timeouts (#PCDATA)>
...
<!ELEMENT input-l3-incompletes (#PCDATA)>
...
<!ELEMENT input-mac-control-frames (#PCDATA)>
...
<!ELEMENT input-mac-pause-frames (#PCDATA)>
...
<!ELEMENT input-multicasts (#PCDATA)>
...
<!ELEMENT input-oversized-frames (#PCDATA)>
...
<!ELEMENT input-packets (#PCDATA)>
...
<!ELEMENT input-pps (#PCDATA)>
...
<!ELEMENT input-reject-count (#PCDATA)>
...
<!ELEMENT input-reject-destination-address-count (#PCDATA)>
...
<!ELEMENT input-reject-source-address-count (#PCDATA)>
...
<!ELEMENT input-runts (#PCDATA)>
...
<!ELEMENT input-unicasts (#PCDATA)>
...
<!ELEMENT input-vlan-tagged-frames (#PCDATA)>
...
<!ELEMENT interface-address (ifa-flags | generation | ifa-destination | ifa-local | ifa-broadcast)*>
<!ATTLIST interface-address heading CDATA #IMPLIED>
...

```

```
<!ELEMENT interface-alarms (alarm-not-present | sonet-alarm-lol | sonet-alarm-pll | sonet-alarm-lof |
sonet-alarm-los | sonet-alarm-sef | sonet-alarm-lais | sonet-alarm-pais | sonet-alarm-lop |
sonet-alarm-berr-sd | sonet-alarm-berr-sf | sonet-alarm-lrdi | sonet-alarm-prdi | sonet-alarm-rei |
sonet-alarm-uneq | sonet-alarm-pmis | sonet-alarm-loc | sdh-alarm-lol | sdh-alarm-pll | sdh-alarm-lof |
sdh-alarm-los | sdh-alarm-oof | sdh-alarm-msais | sdh-alarm-hpais | sdh-alarm-lop | sdh-alarm-berr-sd |
sdh-alarm-berr-sf | sdh-alarm-msferf | sdh-alarm-hpferf | sdh-alarm-hpfebe | sdh-alarm-hpuneq |
sdh-alarm-hpplm | sdh-alarm-loc | ds3-alarm-pll | ds3-alarm-ais | ds3-alarm-lof | ds3-alarm-los |
ds3-alarm-lcv | ds3-alarm-exz | ds3-alarm-ferf | ds3-alarm-ylw | ds3-alarm-idle | ds1-alarm-ais |
ds1-alarm-lof | ds1-alarm-los | ds1-alarm-ylw | ethernet-alarm-link-down | generic-value)*>

<!ELEMENT interface-filter-information (physical-interface | logical-interface)*>
<!ATTLIST interface-filter-information heading CDATA #IMPLIED>
<!ATTLIST interface-filter-information junos:style CDATA #IMPLIED>

<!ELEMENT interface-flapped (#PCDATA)>

<!ELEMENT interface-information (physical-interface | logical-interface)*>
<!ATTLIST interface-information junos:style CDATA #IMPLIED>

<!ELEMENT interface-policer-information (physical-interface | logical-interface)*>
<!ATTLIST interface-policer-information heading CDATA #IMPLIED>
<!ATTLIST interface-policer-information junos:style CDATA #IMPLIED>

<!ELEMENT interface-tx-queue (name | bandwidth | wrr | output-packets | output-bytes | output-drops |
output-drops-bytes | output-errors)*>

<!ELEMENT invalid-vcs (#PCDATA)>

<!ELEMENT keepalive-config (keepalive-interval | keepalive-up-count | keepalive-down-count)*>

<!ELEMENT keepalive-down-count (#PCDATA)>

<!ELEMENT keepalive-input-count (#PCDATA)>

<!ELEMENT keepalive-input-time (#PCDATA)>

<!ELEMENT keepalive-interval (#PCDATA)>

<!ELEMENT keepalive-lmi-descriptor (#PCDATA)>

<!ELEMENT keepalive-output-count (#PCDATA)>

<!ELEMENT keepalive-output-time (#PCDATA)>

<!ELEMENT keepalive-statistics (keepalive-lmi-descriptor | keepalive-input-count | keepalive-input-time |
keepalive-output-count | keepalive-output-time)*>
<!ATTLIST keepalive-statistics junos:style CDATA #IMPLIED>

<!ELEMENT keepalive-up-count (#PCDATA)>

<!ELEMENT lag-bundle (input-packets | input-pps | input-bytes | input-bps | output-packets | output-pps |
output-bytes | output-bps)*>

<!ELEMENT lag-link (name | down | input-packets | input-pps | input-bytes | input-bps | output-packets |
output-pps | output-bytes | output-bps)*>

<!ELEMENT lag-marker (name | marker-rx-packets | marker-response-tx-packets | unknown-rx-packets |
illegal-rx-packets)*>

<!ELEMENT lag-traffic-statistics (lag-bundle | lag-link | lag-marker)*>

<!ELEMENT last-down-time (#PCDATA)>
```

```

<!ELEMENT last-received (#PCDATA)>
<!ELEMENT last-transmitted (#PCDATA)>
<!ELEMENT lcp-state (#PCDATA)>
<!ELEMENT length-errors (#PCDATA)>
<!ELEMENT link (name | down | input-frames | input-fps | input-bytes | input-bps | output-frames | output-fps | output-bytes | output-bps)*>
<!ELEMENT link-address (#PCDATA)>
<!ELEMENT link-level-type (#PCDATA)>
<!ELEMENT link-partner-duplexity (#PCDATA)>
<!ELEMENT link-partner-reason (#PCDATA)>
<!ELEMENT link-partner-speed (#PCDATA)>
<!ELEMENT link-partner-status (#PCDATA)>
<!ELEMENT link-type (#PCDATA)>
<!ELEMENT lmi-dce-config (lmi-type | lmi-n392dce | lmi-n393dce | lmi-t392dce)*>
<!ELEMENT lmi-dte-config (lmi-type | lmi-n391dte | lmi-n392dte | lmi-n393dte | lmi-t391dte)*>
<!ELEMENT lmi-n391dte (#PCDATA)>
<!ELEMENT lmi-n392dce (#PCDATA)>
<!ELEMENT lmi-n392dte (#PCDATA)>
<!ELEMENT lmi-n393dce (#PCDATA)>
<!ELEMENT lmi-n393dte (#PCDATA)>
<!ELEMENT lmi-t391dte (#PCDATA)>
<!ELEMENT lmi-t392dce (#PCDATA)>
<!ELEMENT lmi-type (#PCDATA)>
<!ELEMENT local-index (#PCDATA)>
<!ELEMENT local-traffic-statistics (input-bytes | output-bytes | input-bps | output-bps | input-packets | output-packets | input-pps | output-pps)*>
<!ELEMENT logical-interface (name | admin-status | oper-status | local-index | snmp-index | generation | description | if-config-flags | link-address | encapsulation | logical-interface-bandwidth | multilink-bundle-options | multilink-bundle-errors | multilink-traffic-statistics | traffic-statistics | local-traffic-statistics | transit-traffic-statistics | virtual-circuit-information | filter-information | policer-information | address-family | in-arp-statistics | lag-traffic-statistics)*>
<!ELEMENT logical-interface-bandwidth (#PCDATA)>
<!ELEMENT loopback (#PCDATA)>
<!ELEMENT marker-response-tx-packets (#PCDATA)>

```

```
<!ELEMENT marker-rx-packets (#PCDATA)>

<!ELEMENT media-alarm (media-alarm-name | media-alarm-seconds | media-alarm-count | media-alarm-state)*>

<!ELEMENT media-alarm-count (#PCDATA)>

<!ELEMENT media-alarm-name (#PCDATA)>

<!ELEMENT media-alarm-seconds (#PCDATA)>

<!ELEMENT media-alarm-state (#PCDATA)>

<!ELEMENT media-information (media-alarm | ds1-timeslots | ds1-line-encoding | ds1-byte-encoding | ds1-data-inversion | ds1-buildout | media-type)*>
<!ATTLIST media-information junos:style CDATA #IMPLIED>

<!ELEMENT media-type (#PCDATA)>

<!ELEMENT minimum-links (#PCDATA)>

<!ELEMENT minimum-links-in-aggregate (#PCDATA)>

<!ELEMENT mrru (#PCDATA)>

<!ELEMENT mrru-exceeded (#PCDATA)>

<!ELEMENT mtu (#PCDATA)>

<!ELEMENT multilink-bundle-errors (packet-drops | packet-drop-bytes | fragment-drops | fragment-drop-bytes | mrru-exceeded | processing-errors)*>

<!ELEMENT multilink-bundle-name (#PCDATA)>

<!ELEMENT multilink-bundle-options (mrru | drop-timeout | sequence-number-format | fragment-threshold | minimum-links)*>

<!ELEMENT multilink-interface-errors (oversized-frames | input-error-frames | input-disabled-bundle | output-disabled-bundle | queuing-drops | packet-buffer-overflow | fragment-buffer-overflow | fragment-timeout | sequence-number-missing | out-of-order-sequence-number | out-of-range-sequence-number | data-memory-error | control-memory-error)*>

<!ELEMENT multilink-traffic-statistics (bundle | link)*>

<!ELEMENT multipoint-address (#PCDATA)>

<!ELEMENT name (#PCDATA)>

<!ELEMENT ncp-information (ncp-protocol | ncp-state)*>

<!ELEMENT ncp-protocol (#PCDATA)>

<!ELEMENT ncp-state (#PCDATA)>

<!ELEMENT no-buffers (#PCDATA)>

<!ELEMENT nxds0-information (interface-tx-queue)*>

<!ELEMENT oam-ais-received-count (#PCDATA)>

<!ELEMENT oam-ais-received-last (#PCDATA)>
```

```

<!ELEMENT oam-cell-no-buffers (#PCDATA)>
...
<!ELEMENT oam-loopback-received-count (#PCDATA)>
...
<!ELEMENT oam-loopback-received-last (#PCDATA)>
...
<!ELEMENT oam-loopback-transmitted-count (#PCDATA)>
...
<!ELEMENT oam-loopback-transmitted-last (#PCDATA)>
...
<!ELEMENT oam-parameters (period | up-count | down-count)*>
...
<!ELEMENT oam-rdi-received-count (#PCDATA)>
...
<!ELEMENT oam-rdi-received-last (#PCDATA)>
...
<!ELEMENT oam-rdi-transmitted-count (#PCDATA)>
...
<!ELEMENT oam-rdi-transmitted-last (#PCDATA)>
...
<!ELEMENT oam-statistics (oam-loopback-received-count | oam-loopback-received-last |
oam-loopback-transmitted-count | oam-loopback-transmitted-last | oam-rdi-received-count |
oam-rdi-received-last | oam-rdi-transmitted-count | oam-rdi-transmitted-last | oam-ais-received-count |
oam-ais-received-last | oam-total-transmitted-count | oam-total-received-count)*>
...
<!ELEMENT oam-total-received-count (#PCDATA)>
...
<!ELEMENT oam-total-transmitted-count (#PCDATA)>
...
<!ELEMENT oper-status (#PCDATA)>
...
<!ELEMENT operation-not-supported-count (#PCDATA)>
...
<!ELEMENT out-of-order-sequence-number (#PCDATA)>
...
<!ELEMENT out-of-range-sequence-number (#PCDATA)>
...
<!ELEMENT output-bps (#PCDATA)>
...
<!ELEMENT output-broadcasts (#PCDATA)>
...
<!ELEMENT output-bytes (#PCDATA)>
...
<!ELEMENT output-collisions (#PCDATA)>
...
<!ELEMENT output-crc-errors (#PCDATA)>
...
<!ELEMENT output-disabled-bundle (#PCDATA)>
...
<!ELEMENT output-drops (#PCDATA)>
...
<!ELEMENT output-drops-bytes (#PCDATA)>
...
<!ELEMENT output-error-count (#PCDATA)>
...
<!ELEMENT output-error-list (carrier-transitions | output-errors | output-drops | output-collisions |
output-hs-link-fifo-overflows | aged-packets | output-fifo-errors | hs-link-fifo-underflows |
hs-link-crc-errors)*>
...
<!ELEMENT output-errors (#PCDATA)>
...
<!ELEMENT output-fifo-errors (#PCDATA)>
...

```

```
<!ELEMENT output-fps (#PCDATA)>
<!ELEMENT output-frames (#PCDATA)>
<!ELEMENT output-hs-link-fifo-overflows (#PCDATA)>
<!ELEMENT output-mac-control-frames (#PCDATA)>
<!ELEMENT output-mac-pause-frames (#PCDATA)>
<!ELEMENT output-multicasts (#PCDATA)>
<!ELEMENT output-packet-error-count (#PCDATA)>
<!ELEMENT output-packet-pad-count (#PCDATA)>
<!ELEMENT output-packets (#PCDATA)>
<!ELEMENT output-pps (#PCDATA)>
<!ELEMENT output-unicasts (#PCDATA)>
<!ELEMENT oversized-frames (#PCDATA)>
<!ELEMENT packet-buffer-overflow (#PCDATA)>
<!ELEMENT packet-drop-bytes (#PCDATA)>
<!ELEMENT packet-drops (#PCDATA)>
<!ELEMENT packets (input-frames | input-fps | input-bytes | input-bps | output-frames | output-fps | output-bytes | output-bps)*>
<!ELEMENT payload-scrambler (#PCDATA)>
<!ELEMENT peak (#PCDATA)>
<!ELEMENT period (#PCDATA)>
<!ELEMENT pfe-information (destination-slot | destination-mask | stream-number | stream-mask | plp-byte | plp-byte-count)*>
<!ELEMENT physical-information (#PCDATA)>
<!ELEMENT physical-interface (name | admin-status | oper-status | local-index | snmp-index | generation | description | if-type | link-level-type | mtu | speed | clocking | sonet-mode | loopback | atm-line-build-out | atm-encapsulation | atm-e3-framing | sonet-loopback | crc | payload-scrambler | ingress-rate-limit | source-filtering | if-flow-control | minimum-links-in-aggregate | if-device-flags | if-config-flags | link-type | if-media-flags | keepalive-config | lmi-dce-config | lmi-dte-config | queue-counters | keepalive-statistics | lcp-state | ncp-information | chap-state | physical-information | es-ifd-stats | up-hold-time | down-hold-time | current-physical-address | hardware-physical-address | alternate-physical-address | interface-flapped | statistics-cleared | traffic-statistics | multilink-interface-errors | input-error-list | input-error-count | output-error-list | output-error-count | active-alarms | active-defects | sonet-errors | sonet-physical-information | sonet-section-information | sonet-line-information | sonet-path-information | sonet-vt-information | sonet-rx-overhead | sonet-tx-overhead | sonet-rx-path-trace | sonet-tx-path-trace | media-information | ethernet-mac-statistics | ethernet-filter-statistics | ethernet-autonegotiation | atm-information | ct3-information | coc12-information | cds1-information | nxds0-information | ds3-mode | e3-framing | ds1-framing | dsu-information | ds3-bert-information | e3-bert-information | ds1-bert-information | hdlc-information | pfe-information | logical-interface | cos-information)*>
<!ELEMENT plcp-defects (media-alarm)*>
```

```

<!ELEMENT plcp-statistics (ferr-count | ferr-seconds | bipe-count | bipe-seconds | febe-count |
febe-seconds)*>

<!ELEMENT plp-byte (#PCDATA)>

<!ELEMENT plp-byte-count (#PCDATA)>

<!ELEMENT policer-family (#PCDATA)>

<!ELEMENT policer-information (policer-family | policer-input | policer-output)*>

<!ELEMENT policer-input (#PCDATA)>

<!ELEMENT policer-output (#PCDATA)>

<!ELEMENT processing-errors (#PCDATA)>

<!ELEMENT queue (queue-number | forwarding-class-name | queue-counters-queued-packets |
queue-counters-queued-bytes | queue-counters-queued-packets-rate | queue-counters-queued-bytes-rate |
queue-counters-trans-packets | queue-counters-trans-bytes | queue-counters-trans-packets-rate | . . .
queue-counters-trans-bytes-rate | queue-counters-tail-drop-packets | . . .
queue-counters-tail-drop-packets-rate | queue-counters-red-packets | queue-counters-red-bytes | . . .
queue-counters-red-packets-rate | queue-counters-red-bytes-rate | queue-counters-red-packets-In | . . .
queue-counters-red-bytes-In | queue-counters-red-packets-rate-In | queue-counters-red-bytes-rate-In | . . .
queue-counters-red-packets-It | queue-counters-red-bytes-It | queue-counters-red-packets-rate-It | . . .
queue-counters-red-bytes-rate-It | queue-counters-red-packets-ht | queue-counters-red-bytes-ht | . . .
queue-counters-red-packets-rate-ht | queue-counters-red-bytes-rate-ht | queue-counters-red-packets-hn | . . .
queue-counters-red-bytes-hn | queue-counters-red-packets-rate-hn | queue-counters-red-bytes-rate-hn)*>

<!ELEMENT queue-counters (queue-counters-error-message | queue)*>

<!ATTLIST queue-counters junos:style CDATA #IMPLIED>

<!ELEMENT queue-counters-error-message (#PCDATA)>

<!ELEMENT queue-counters-queued-bytes (#PCDATA)>

<!ELEMENT queue-counters-queued-bytes-rate (#PCDATA)>

<!ELEMENT queue-counters-queued-packets (#PCDATA)>

<!ELEMENT queue-counters-queued-packets-rate (#PCDATA)>

<!ELEMENT queue-counters-red-bytes (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-hn (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-ht (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-In (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-It (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-rate (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-rate-hn (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-rate-ht (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-rate-In (#PCDATA)>

<!ELEMENT queue-counters-red-bytes-rate-It (#PCDATA)>

```

```
<!ELEMENT queue-counters-red-packets (#PCDATA)>
<!ELEMENT queue-counters-red-packets-hn (#PCDATA)>
<!ELEMENT queue-counters-red-packets-ht (#PCDATA)>
<!ELEMENT queue-counters-red-packets-ln (#PCDATA)>
<!ELEMENT queue-counters-red-packets-lt (#PCDATA)>
<!ELEMENT queue-counters-red-packets-rate (#PCDATA)>
<!ELEMENT queue-counters-red-packets-rate-hn (#PCDATA)>
<!ELEMENT queue-counters-red-packets-rate-ht (#PCDATA)>
<!ELEMENT queue-counters-red-packets-rate-ln (#PCDATA)>
<!ELEMENT queue-counters-red-packets-rate-lt (#PCDATA)>
<!ELEMENT queue-counters-tail-drop-packets (#PCDATA)>
<!ELEMENT queue-counters-tail-drop-packets-rate (#PCDATA)>
<!ELEMENT queue-counters-trans-bytes (#PCDATA)>
<!ELEMENT queue-counters-trans-bytes-rate (#PCDATA)>
<!ELEMENT queue-counters-trans-packets (#PCDATA)>
<!ELEMENT queue-counters-trans-packets-rate (#PCDATA)>
<!ELEMENT queue-limit (#PCDATA)>
<!ELEMENT queue-number (#PCDATA)>
<!ELEMENT queuing-drops (#PCDATA)>
<!ELEMENT received-count (#PCDATA)>
<!ELEMENT route-rpf-bytes (#PCDATA)>
<!ELEMENT route-rpf-packets (#PCDATA)>
<!ELEMENT route-rpf-statistics (route-rpf-packets | route-rpf-bytes)*>
<!ELEMENT route-table (#PCDATA)>
<!ELEMENT rx-cell-count (#PCDATA)>
<!ELEMENT rx-cell-fifo-overruns (#PCDATA)>
<!ELEMENT rx-cell-fifo-underuns (#PCDATA)>
<!ELEMENT rx-invalid-vcs (#PCDATA)>
<!ELEMENT scu-class-bytes (#PCDATA)>
<!ELEMENT scu-class-name (#PCDATA)>
<!ELEMENT scu-class-packets (#PCDATA)>
```

```
<!ELEMENT sdh-alarm-berr-sd EMPTY>
<!ELEMENT sdh-alarm-berr-sf EMPTY>
<!ELEMENT sdh-alarm-hpais EMPTY>
<!ELEMENT sdh-alarm-hpfebe EMPTY>
<!ELEMENT sdh-alarm-hpferf EMPTY>
<!ELEMENT sdh-alarm-hpplm EMPTY>
<!ELEMENT sdh-alarm-hpuneq EMPTY>
<!ELEMENT sdh-alarm-loc EMPTY>
<!ELEMENT sdh-alarm-lof EMPTY>
<!ELEMENT sdh-alarm-lol EMPTY>
<!ELEMENT sdh-alarm-lop EMPTY>
<!ELEMENT sdh-alarm-los EMPTY>
<!ELEMENT sdh-alarm-msais EMPTY>
<!ELEMENT sdh-alarm-msferf EMPTY>
<!ELEMENT sdh-alarm-oof EMPTY>
<!ELEMENT sdh-alarm-pll EMPTY>
<!ELEMENT sequence-number-format (#PCDATA)>
<!ELEMENT sequence-number-missing (#PCDATA)>
<!ELEMENT snmp-index (#PCDATA)>
<!ELEMENT sonet-alarm-berr-sd EMPTY>
<!ELEMENT sonet-alarm-berr-sf EMPTY>
<!ELEMENT sonet-alarm-lais EMPTY>
<!ELEMENT sonet-alarm-loc EMPTY>
<!ELEMENT sonet-alarm-lof EMPTY>
<!ELEMENT sonet-alarm-lol EMPTY>
<!ELEMENT sonet-alarm-lop EMPTY>
<!ELEMENT sonet-alarm-los EMPTY>
<!ELEMENT sonet-alarm-ldri EMPTY>
<!ELEMENT sonet-alarm-pais EMPTY>
<!ELEMENT sonet-alarm-pll EMPTY>
<!ELEMENT sonet-alarm-pmis EMPTY>
```

```
• <!ELEMENT sonet-alarm-prdi EMPTY>
• <!ELEMENT sonet-alarm-rei EMPTY>
• <!ELEMENT sonet-alarm-sef EMPTY>
• <!ELEMENT sonet-alarm-uneq EMPTY>
• <!ELEMENT sonet-errors (media-alarm)*>
• <!ATTLIST sonet-errors junos:style CDATA #IMPLIED>
• <!ELEMENT sonet-line-information (media-alarm)*>
• <!ATTLIST sonet-line-information junos:style CDATA #IMPLIED>
• <!ELEMENT sonet-loopback (#PCDATA)>
• <!ELEMENT sonet-mode (#PCDATA)>
• <!ELEMENT sonet-path-information (media-alarm)*>
• <!ATTLIST sonet-path-information junos:style CDATA #IMPLIED>
• <!ELEMENT sonet-physical-information (media-alarm)*>
• <!ATTLIST sonet-physical-information junos:style CDATA #IMPLIED>
• <!ELEMENT sonet-rx-overhead (#PCDATA)>
• <!ELEMENT sonet-rx-path-trace (#PCDATA)>
• <!ELEMENT sonet-section-information (media-alarm)*>
• <!ATTLIST sonet-section-information junos:style CDATA #IMPLIED>
• <!ELEMENT sonet-tx-overhead (#PCDATA)>
• <!ELEMENT sonet-tx-path-trace (#PCDATA)>
• <!ELEMENT sonet-vt-information (media-alarm)*>
• <!ATTLIST sonet-vt-information junos:style CDATA #IMPLIED>
• <!ELEMENT source-class-statistics (scu-class-name | scu-class-packets | scu-class-bytes)*>
• <!ELEMENT source-filtering (#PCDATA)>
• <!ELEMENT speed (#PCDATA)>
• <!ELEMENT sram-errors (#PCDATA)>
• <!ELEMENT statistics-cleared (#PCDATA)>
• <!ELEMENT stream-mask (#PCDATA)>
• <!ELEMENT stream-number (#PCDATA)>
• <!ELEMENT sustained (#PCDATA)>
• <!ELEMENT timeouts (#PCDATA)>
• <!ELEMENT total-anti-replay-count (#PCDATA)>
• <!ELEMENT total-authentication-failure-count (#PCDATA)>
•
```

```
<!ELEMENT traffic-statistics (input-bytes | output-bytes | input-bps | output-bps | input-packets |
output-packets | input-pps | output-pps)*>
<!ATTLIST traffic-statistics junos:style CDATA #IMPLIED>

<!ELEMENT transit-traffic-statistics (input-bytes | output-bytes | input-bps | output-bps | input-packets |
output-packets | input-pps | output-pps)*>

<!ELEMENT transmitted-count (#PCDATA)>

<!ELEMENT tx-cell-count (#PCDATA)>

<!ELEMENT tx-cell-fifo-overruns (#PCDATA)>

<!ELEMENT tx-idle-cell-count (#PCDATA)>

<!ELEMENT type (#PCDATA)>

<!ELEMENT uncorrectable-hcs-errors (#PCDATA)>

<!ELEMENT unknown-rx-packets (#PCDATA)>

<!ELEMENT up-count (#PCDATA)>

<!ELEMENT up-hold-time (#PCDATA)>

<!ELEMENT vc-queue-drops (#PCDATA)>

<!ELEMENT vci (#PCDATA)>

<!ELEMENT virtual-circuit-information (vpi | vci | dlcI | ifvc-flags | ifvc-multipoint-destination | atm-tm-cbr |
atm-tm-vbr | peak | sustained | burst | queue-limit | down-time | last-down-time | oam-parameters |
oam-statistics | traffic-statistics | atm-statistics)*>

<!ELEMENT vpi (#PCDATA)>

<!ELEMENT wrr (#PCDATA)>
```



# Chapter 14

## DTD for IPSec Response Tags

This chapter contains the document type definition (DTD) called `junos-ipsec.dtd`, which lists the tags returned by the JUNOScript server to describe IPSec information. The associated XML namespace is `http://xml.juniper.net/junos/5.4R1/junos-ipsec`. To review reference pages for the tags, see “Summary of IPSec Response Tags” on page 172.

```
<!-- Copyright (c) 2000-2002, Juniper Networks, Inc. -->
<!-- All rights reserved. -->
<!-- junos-ipsec.dtd -->

<!ELEMENT ike-sa-algorithms (ike-sa-authentication-algorithm | ike-sa-encryption-algorithm | ike-sa-prf-algorithm)*>

<!ELEMENT ike-sa-authentication-algorithm (#PCDATA)>
<!ELEMENT ike-sa-authentication-method (#PCDATA)>
<!ELEMENT ike-sa-encryption-algorithm (#PCDATA)>
<!ELEMENT ike-sa-exchange-type (#PCDATA)>
<!ELEMENT ike-sa-flags (#PCDATA)>
<!ELEMENT ike-sa-initiator-cookie (#PCDATA)>
<!ELEMENT ike-sa-input-bytes (#PCDATA)>
<!ELEMENT ike-sa-input-packets (#PCDATA)>
<!ELEMENT ike-sa-lifetime (#PCDATA)>
<!ELEMENT ike-sa-local-address (#PCDATA)>
<!ELEMENT ike-sa-local-id (#PCDATA)>
<!ELEMENT ike-sa-local-port (#PCDATA)>

<!ELEMENT ike-sa-misc (ike-sa-flags | ike-sa-num-ipsec-sas-created | ike-sa-num-ipsec-sas-deleted | ike-sa-num-phase2-negotiations)*>

<!ELEMENT ike-sa-msg-id (#PCDATA)>
<!ELEMENT ike-sa-num-ipsec-sas-created (#PCDATA)>
<!ELEMENT ike-sa-num-ipsec-sas-deleted (#PCDATA)>
<!ELEMENT ike-sa-num-phase2-negotiations (#PCDATA)>
```

```
<!ELEMENT ike-sa-output-bytes (#PCDATA)>
<!ELEMENT ike-sa-output-packets (#PCDATA)>
<!ELEMENT ike-sa-phase2-information (ike-sa-phase2-type | ike-sa-role | ike-sa-msg-id |
ike-sa-local-address | ike-sa-local-port | ike-sa-remote-address | ike-sa-remote-port | ike-sa-local-id |
ike-sa-remote-id | ike-sa-flags)*>
<!ELEMENT ike-sa-phase2-type (#PCDATA)>
<!ELEMENT ike-sa-prf-algorithm (#PCDATA)>
<!ELEMENT ike-sa-remote-address (#PCDATA)>
<!ELEMENT ike-sa-remote-id (#PCDATA)>
<!ELEMENT ike-sa-remote-port (#PCDATA)>
<!ELEMENT ike-sa-responder-cookie (#PCDATA)>
<!ELEMENT ike-sa-role (#PCDATA)>
<!ELEMENT ike-sa-state (#PCDATA)>
<!ELEMENT ike-sa-traffic-statistics (ike-sa-input-packets | ike-sa-output-packets | ike-sa-input-bytes |
ike-sa-output-bytes)*>
<!ELEMENT ike-security-associations (ike-sa-role | ike-sa-state | ike-sa-initiator-cookie |
ike-sa-responder-cookie | ike-sa-exchange-type | ike-sa-authentication-method | ike-sa-local-address |
ike-sa-local-port | ike-sa-remote-address | ike-sa-remote-port | ike-sa-lifetime | ike-sa-algorithms |
ike-sa-traffic-statistics | ike-sa-misc | ike-sa-phase2-information)*>
<!ELEMENT ike-security-associations-block (ike-sa-remote-address | ike-security-associations)*>
<!ELEMENT ike-security-associations-information (ike-security-associations | ike-sa-phase2-information |
ike-security-associations-block)*>
<!ATTLIST ike-security-associations-information junos:style CDATA #IMPLIED>
<!ELEMENT kmd-memory-usage (memory-block-type | memory-in-use)*>
<!ELEMENT kmd-memory-usage-information (kmd-memory-usage)*>
<!ATTLIST kmd-memory-usage-information junos:style CDATA #IMPLIED>
<!ELEMENT memory-block-type (#PCDATA)>
<!ELEMENT memory-in-use (#PCDATA)>
<!ELEMENT sa-anti-replay-service (#PCDATA)>
<!ELEMENT sa-authentication-algorithm (#PCDATA)>
<!ELEMENT sa-block-state (#PCDATA)>
<!ELEMENT sa-direction (#PCDATA)>
<!ELEMENT sa-encryption-algorithm (#PCDATA)>
<!ELEMENT sa-hard-lifetime (#PCDATA)>
<!ELEMENT sa-mode (#PCDATA)>
<!ELEMENT sa-name (#PCDATA)>
```

```
<!ELEMENT sa-no-information EMPTY>
...
<!ELEMENT sa-protocol (#PCDATA)>
...
<!ELEMENT sa-replay-window-size (#PCDATA)>
...
<!ELEMENT sa-soft-lifetime (#PCDATA)>
...
<!ELEMENT sa-spi (#PCDATA)>
...
<!ELEMENT sa-state (#PCDATA)>
...
<!ELEMENT sa-type (#PCDATA)>
...
<!ELEMENT security-associations (sa-direction | sa-spi | sa-state | sa-mode | sa-type | sa-protocol |
sa-authentication-algorithm | sa-encryption-algorithm | sa-soft-lifetime | sa-hard-lifetime |
sa-anti-replay-service | sa-replay-window-size)*>
...
<!ELEMENT security-associations-block (sa-no-information | sa-name | sa-block-state |
security-associations)*>
...
<!ELEMENT security-associations-information (security-associations-block | security-associations)*>
<!ATTLIST security-associations-information junos:style CDATA #IMPLIED>
...
```



# Chapter 15

## DTD for IPv6 Neighbor Discovery Response Tags

This chapter contains the document type definition (DTD) called `junos-ipv6-nd.dtd`, which lists the tags returned by the JUNOScript server to describe Internet Protocol Version 6 (IPv6) neighbor discovery. The associated XML namespace is `http://xml.juniper.net/junos/5.4R1/junos-ipv6-nd`. To review reference pages for the tags, see “Summary of IPv6 Neighbor Discovery Response Tags” on page 177.

```
<!-- Copyright (c) 2000-2002, Juniper Networks, Inc. -->
<!-- All rights reserved. -->
<!-- junos-ipv6-nd.dtd -->

<!ELEMENT ipv6-error-output (#PCDATA)>

<!ELEMENT ipv6-modify-nd (ipv6-modify-nd-entry)*>

<!ELEMENT ipv6-modify-nd-entry (ipv6-nd-neighbor-address | ipv6-nd-neighbor-l2-address | ipv6-nd-change)*>

<!ELEMENT ipv6-nd-change (#PCDATA)>

<!ELEMENT ipv6-nd-entry (ipv6-nd-neighbor-address | ipv6-nd-neighbor-l2-address | ipv6-nd-state | ipv6-nd-expire | ipv6-nd-isrouter | ipv6-nd-interface-name)*>

<!ELEMENT ipv6-nd-expire (#PCDATA)>

<!ELEMENT ipv6-nd-information (ipv6-nd-entry)*>

<!ELEMENT ipv6-nd-interface-name (#PCDATA)>

<!ELEMENT ipv6-nd-isrouter (#PCDATA)>

<!ELEMENT ipv6-nd-neighbor-address (#PCDATA)>

<!ELEMENT ipv6-nd-neighbor-l2-address (#PCDATA)>

<!ELEMENT ipv6-nd-state (#PCDATA)>

<!ELEMENT ipv6-nd-total (#PCDATA)>
```



# Chapter 16

## DTD for Routing Protocols Response Tags

This chapter contains the document type definition (DTD) called `junos-routing.dtd`, which lists the tags returned by the JUNOScript server to describe routing protocols. The associated XML namespace is `http://xml.juniper.net/junos/5.4R1/junos-routing`. To review reference pages for the tags, see “Summary of Routing Protocols Response Tags” on page 179.

```
<!-- Copyright (c) 2000-2002, Juniper Networks, Inc. -->
<!-- All rights reserved. -->
<!-- junos-routing.dtd -->

<!ELEMENT ack-flag (#PCDATA)>

<!ELEMENT active-control-channel (#PCDATA)>

<!ELEMENT active-count (#PCDATA)>

<!ELEMENT active-holdtime (#PCDATA)>

<!ELEMENT active-path (#PCDATA)>

<!ELEMENT active-prefix-count (#PCDATA)>

<!ELEMENT active-reservation (#PCDATA)>

<!ELEMENT active-route-count (#PCDATA)>

<!ELEMENT active-tag (#PCDATA)>

<!ELEMENT activity-timer (#PCDATA)>

<!ELEMENT actual-free-bytes (#PCDATA)>

<!ELEMENT address (#PCDATA)>

<!ELEMENT address-families (#PCDATA)>

<!ELEMENT address-mask (#PCDATA)>

<!ELEMENT address-prefix (#PCDATA)>

<!ELEMENT adj-count (#PCDATA)>

<!ELEMENT adjacency-count (#PCDATA)>

<!ELEMENT adjacency-event (#PCDATA)>

<!ELEMENT adjacency-flag (#PCDATA)>
```

```
<!ELEMENT adjacency-restart-capable (#PCDATA)>
<!ELEMENT adjacency-state (#PCDATA)>
<!ELEMENT adjacency-topologies (#PCDATA)>
<!ELEMENT adjacency-when (#PCDATA)>
<!ATTLIST adjacency-when junos:seconds CDATA #IMPLIED>
<!ELEMENT adjust-threshold (#PCDATA)>
<!ELEMENT adjust-timer (#PCDATA)>
<!ELEMENT admin-group-name (#PCDATA)>
<!ELEMENT admin-group-number (#PCDATA)>
<!ELEMENT admin-groups (color | no-group-flag | admin-group-name | admin-group-number)*>
<!ATTLIST admin-groups heading CDATA #IMPLIED>
<!ELEMENT advertising-router (#PCDATA)>
<!ELEMENT age (#PCDATA)>
<!ATTLIST age junos:seconds CDATA #IMPLIED>
<!ELEMENT aggregate (aggregate-flags | aggregate-depth | aggregate-active | aggregate-as-path |
contributing-route-count | aggregated-route)*>
<!ELEMENT aggregate-active EMPTY>
<!ELEMENT aggregate-as-path (as-path | reference-count)*>
<!ELEMENT aggregate-depth (#PCDATA)>
<!ELEMENT aggregate-flag (#PCDATA)>
<!ELEMENT aggregate-flags (#PCDATA)>
<!ELEMENT aggregated-route (destination-prefix | protocol-name)*>
<!ELEMENT aging-timer (#PCDATA)>
<!ELEMENT allocated-length (#PCDATA)>
<!ELEMENT announce-bits (#PCDATA)>
<!ELEMENT announce-tasks (#PCDATA)>
<!ELEMENT area-address-tlv (address | tlv-length)*>
<!ELEMENT area-mismatch-error (#PCDATA)>
<!ELEMENT as-number (#PCDATA)>
<!ELEMENT as-path (#PCDATA)>
<!ELEMENT attached-router (#PCDATA)>
<!ELEMENT authentication-configured EMPTY>
<!ELEMENT authentication-failure-error (#PCDATA)>
```

```

<!ELEMENT authentication-flag (#PCDATA)>
<!ELEMENT authentication-key (#PCDATA)>
<!ELEMENT authentication-mismatch-error (#PCDATA)>
<!ELEMENT authentication-tlv (tlv-length)*>
<!ELEMENT available-bandwidth (#PCDATA)>
<!ELEMENT average-per-run (#PCDATA)>
<!ELEMENT average-time (#PCDATA)>
<!ELEMENT bad-packettype-error (#PCDATA)>
<!ELEMENT bad-version-error (#PCDATA)>
<!ELEMENT bandwidth (#PCDATA)>
<!ELEMENT bandwidth-priority (#PCDATA)>
<!ELEMENT bdr-address (#PCDATA)>
<!ELEMENT bdr-id (#PCDATA)>
<!ELEMENT bgp-error (name | send-count | receive-count)*>
<!ELEMENT bgp-group (type | peer-as | local-as | group-state | name | bgp-options | peer-count |
established-count | peer-address | unconfigured-peers | igrp-protocol | route-queue | bgp-peer |
bgp-option-information | tracing-information)*>
<!ELEMENT bgp-group-information (bgp-group)*>
<!ELEMENT bgp-information (group-count | peer-count | down-peer-count | unconfigured-peer-count |
half-open-peer-count | igrp-converging | bgp-rib | bgp-peer)*>
<!ELEMENT bgp-option-information (export-policy | import-policy | bgp-options | authentication-key |
authentication-configured | address-families | local-address | holdtime | metric-out | preference |
local-preference | prefix-limit | local-as | local-as-private | local-system-as | receive-buffer-size |
send-buffer-size | outbound-timer | med-action | ipsec-sa)*>
<!ELEMENT bgp-options (#PCDATA)>
<!ELEMENT bgp-output-queue (number | count)*>
<!ELEMENT bgp-peer (peer-address | peer-as | local-address | local-as | description | peer-type |
route-reflector-client | peer-state | peer-flags | last-state | last-event | last-error | bgp-option-information |
flap-count | peer-id | local-id | active-holdtime | keepalive-interval | local-interface-name |
local-interface-index | nlri-type-peer | nlri-type-session | peer-no-refresh | peer-refresh-capability |
peer-restart-nlri-configured | peer-restart-time-configured | peer-stale-route-time-configured |
peer-restart-time-received | peer-restart-flags-received | peer-restart-nlri-received |
peer-restart-nlri-state-saved | peer-no-restart | peer-restart-nlri-negotiated | peer-end-of-rib-received |
peer-end-of-rib-sent | peer-end-of-rib-scheduled | last-received | last-sent | last-checked | input-messages |
input-updates | input-refreshes | input-octets | output-messages | output-updates | output-refreshes |
output-octets | buffered-octets-rx | buffered-octets-tx | bgp-output-queue | route-queue-count | bgp-rib |
elapsed-time | extended-information | bgp-error | route-queue | tracing-information)*>
<!ATTLIST bgp-peer heading CDATA #IMPLIED>
<!ATTLIST bgp-peer junos:style CDATA #IMPLIED>

```

```
<!ELEMENT bgp-rib (name | rib-bit | rib-state | send-state | total-prefix-count | active-prefix-count | received-prefix-count | damped-prefix-count | suppressed-prefix-count | history-prefix-count | pending-prefix-count)*>
<!ATTLIST bgp-rib junos:style CDATA #IMPLIED>

<!ELEMENT bidirectional EMPTY>

<!ELEMENT bits (#PCDATA)>

<!ELEMENT buffered-octets-rx (#PCDATA)>

<!ELEMENT buffered-octets-tx (#PCDATA)>

<!ELEMENT bytes-left (#PCDATA)>

<!ELEMENT changed-entity (#PCDATA)>

<!ELEMENT checksum (#PCDATA)>

<!ELEMENT checksum-error (#PCDATA)>

<!ELEMENT circuit-id (#PCDATA)>

<!ELEMENT circuit-type (#PCDATA)>

<!ELEMENT color (#PCDATA)>

<!ELEMENT color2 (#PCDATA)>

<!ELEMENT connection (connection-id | connection-type | connection-status | last-change | up-transitions | local-interface | remote-interface | remote-pe | inbound-label | outbound-label | history)*>
<!ATTLIST connection heading CDATA #IMPLIED>

<!ELEMENT connection-id (#PCDATA)>

<!ELEMENT connection-status (#PCDATA)>

<!ELEMENT connection-type (#PCDATA)>

<!ELEMENT contributing-route-count (#PCDATA)>

<!ELEMENT control-channel-unusable EMPTY>

<!ELEMENT cos (#PCDATA)>

<!ELEMENT count (#PCDATA)>

<!ELEMENT csnp-interval (#PCDATA)>

<!ELEMENT cspf-paths (total-paths | successful | no-route | sys-error | cspfs)*>

<!ELEMENT cspf-queue (current | maximum | dequeued)*>

<!ELEMENT cspf-status (#PCDATA)>

<!ELEMENT cspf-time (#PCDATA)>

<!ELEMENT cspf-timing (total-time | cspf-time | average-time | rpd-time)*>

<!ELEMENT cspfs (#PCDATA)>

<!ELEMENT current (#PCDATA)>
```

```

<!ELEMENT current-active EMPTY>
...
<!ELEMENT current-bandwidth-header EMPTY>
...
<!ELEMENT current-reserve-bandwidth (#PCDATA)>
...
<!ELEMENT damped-prefix-count (#PCDATA)>
...
<!ELEMENT damping-parameters (#PCDATA)>
...
<!ELEMENT database-entry-state (#PCDATA)>
...
<!ELEMENT dbd-retransmit-time (#PCDATA)>
...
<!ELEMENT dead-interval (#PCDATA)>
...
<!ELEMENT dead-interval-mismatch-error (#PCDATA)>
...
<!ELEMENT default-damping-parameters EMPTY>
...
<!ELEMENT dequeued (#PCDATA)>
...
<!ELEMENT description (#PCDATA)>
...
<!ELEMENT destination-address (#PCDATA)>
...
<!ELEMENT destination-count (#PCDATA)>
...
<!ELEMENT destination-prefix (#PCDATA)>
...
<!ELEMENT detour (lsp-state | packet-information | explicit-route | record-route)*>
...
<!ELEMENT detour-bandwidth (bandwidth-priority | total-reserved-bandwidth | interface-address)*>
...
<!ELEMENT detour-branch (source-address | skip-address | lsp-state | explicit-route | record-route | packet-information)*>
...
<!ELEMENT detours (#PCDATA)>
...
<!ELEMENT disconnected EMPTY>
...
<!ELEMENT display-count (#PCDATA)>
...
<!ELEMENT down-count (#PCDATA)>
...
<!ELEMENT down-peer-count (#PCDATA)>
...
<!ELEMENT dr-address (#PCDATA)>
...
<!ELEMENT dr-flag (#PCDATA)>
...
<!ELEMENT dr-id (#PCDATA)>
...
<!ELEMENT dr-id-one (#PCDATA)>
...
<!ELEMENT dr-id-two (#PCDATA)>
...
<!ELEMENT elapsed-time (#PCDATA)>
<!ATTLIST elapsed-time junos:seconds CDATA #IMPLIED>
...
<!ELEMENT element (#PCDATA)>
...

```

```
• <!ELEMENT encoding-type (#PCDATA)>
•
• <!ELEMENT error-count (#PCDATA)>
•
• <!ELEMENT error-count-5seconds (#PCDATA)>
•
• <!ELEMENT error-message (#PCDATA)>
•
• <!ELEMENT established-count (#PCDATA)>
•
• <!ELEMENT estimated-free-bytes (#PCDATA)>
•
• <!ELEMENT expiration-time (#PCDATA)>
•
• <!ELEMENT expire-time (#PCDATA)>
<!ATTLIST expire-time junos:seconds CDATA #IMPLIED>
•
• <!ELEMENT explicit-route (address | explicit-route-type)*>
<!ATTLIST explicit-route heading CDATA #IMPLIED>
•
• <!ELEMENT explicit-route-type (#PCDATA)>
•
• <!ELEMENT export-count (#PCDATA)>
•
• <!ELEMENT export-list (#PCDATA)>
•
• <!ELEMENT export-policy (#PCDATA)>
•
• <!ELEMENT extended-information (#PCDATA)>
•
• <!ELEMENT external-prefix-metric (#PCDATA)>
•
• <!ELEMENT family (#PCDATA)>
•
• <!ELEMENT filelimit (#PCDATA)>
•
• <!ELEMENT filename (#PCDATA)>
•
• <!ELEMENT filesize (#PCDATA)>
•
• <!ELEMENT first-update (#PCDATA)>
<!ATTLIST first-update junos:seconds CDATA #IMPLIED>
•
• <!ELEMENT flags (#PCDATA)>
•
• <!ELEMENT flap-count (#PCDATA)>
•
• <!ELEMENT flood-list-count (#PCDATA)>
•
• <!ELEMENT flood-queue-depth (#PCDATA)>
•
• <!ELEMENT formatted-tlv-data (#PCDATA)>
•
• <!ELEMENT forward-address (#PCDATA)>
•
• <!ELEMENT forward-nz EMPTY>
•
• <!ELEMENT forward-rsvp EMPTY>
•
• <!ELEMENT forwarding-nh-count (#PCDATA)>
•
• <!ELEMENT fragments-rebuilt (#PCDATA)>
•
```

```

<!ELEMENT gateway (#PCDATA)>
...
<!ELEMENT generation-timer (#PCDATA)>
...
<!ELEMENT gpid (#PCDATA)>
...
<!ELEMENT group-count (#PCDATA)>
...
<!ELEMENT group-state (#PCDATA)>
...
<!ELEMENT half-open-peer-count (#PCDATA)>
...
<!ELEMENT hello-interval (#PCDATA)>
...
<!ELEMENT hello-interval-mismatch-error (#PCDATA)>
...
<!ELEMENT hello-received-error (#PCDATA)>
...
<!ELEMENT hello-time (#PCDATA)>
...
<!ELEMENT hellos-received (#PCDATA)>
...
<!ELEMENT hellos-sent (#PCDATA)>
...
<!ELEMENT hidden-route-count (#PCDATA)>
...
<!ELEMENT high-watermark (#PCDATA)>
...
<!ELEMENT history (log-time-stamp | log-event | changed-entity)*>
<!ATTLIST history heading CDATA #IMPLIED>
...
<!ELEMENT history-prefix-count (#PCDATA)>
...
<!ELEMENT hold-priority (#PCDATA)>
...
<!ELEMENT holddown-route-count (#PCDATA)>
...
<!ELEMENT holdtime (#PCDATA)>
...
<!ELEMENT hoplimit (#PCDATA)>
...
<!ELEMENT hostname (#PCDATA)>
...
<!ELEMENT hostname-tlv (hostname)*>
...
<!ELEMENT idrp-tlv (tlv-length)*>
...
<!ELEMENT igp-converging EMPTY>
...
<!ELEMENT igp-protocol (#PCDATA)>
...
<!ELEMENT import-count (#PCDATA)>
...
<!ELEMENT import-list (#PCDATA)>
...
<!ELEMENT import-policy (#PCDATA)>
...
<!ELEMENT inactive-reason (#PCDATA)>
...
<!ELEMENT inbound-label (#PCDATA)>
...
<!ELEMENT incomplete EMPTY>
...

```

```
• <!ELEMENT index (#PCDATA)>
•
• <!ELEMENT indirect-nh (#PCDATA)>
•
• <!ELEMENT indirect-nh-count (#PCDATA)>
•
• <!ELEMENT input-messages (#PCDATA)>
•
• <!ELEMENT input-octets (#PCDATA)>
•
• <!ELEMENT input-refreshes (#PCDATA)>
•
• <!ELEMENT input-updates (#PCDATA)>
•
• <!ELEMENT installation-time (#PCDATA)>
•
• <!ELEMENT instance (instance-name | instance-display-error | reference-site)*>
•
• <!ELEMENT instance-core (instance-name | instance-description | instance-type | instance-state | instance-restart-state | instance-pathsels-timeout | prib-name | prib-route-count | prib-active-count | prib-holddown-count | prib-hidden-count | instance-interface | instance-vrf | instance-rib)*>
• <!ATTLIST instance-core heading CDATA #IMPLIED>
• <!ATTLIST instance-core junos:style CDATA #IMPLIED>
•
• <!ELEMENT instance-description (#PCDATA)>
•
• <!ELEMENT instance-display-error (#PCDATA)>
•
• <!ELEMENT instance-flags (#PCDATA)>
•
• <!ELEMENT instance-information (instance-core)*>
•
• <!ELEMENT instance-interface (interface-name)*>
•
• <!ELEMENT instance-name (#PCDATA)>
•
• <!ELEMENT instance-options (#PCDATA)>
•
• <!ELEMENT instance-pathsels-timeout (#PCDATA)>
•
• <!ELEMENT instance-restart-state (#PCDATA)>
•
• <!ELEMENT instance-rib (irib-name | irib-route-count | irib-active-count | irib-holddown-count | irib-hidden-count)*>
• <!ATTLIST instance-rib junos:style CDATA #IMPLIED>
•
• <!ELEMENT instance-state (#PCDATA)>
•
• <!ELEMENT instance-type (#PCDATA)>
•
• <!ELEMENT instance-vrf (route-distinguisher | vrf-import | vrf-export)*>
•
• <!ELEMENT interface (interface-name | interface-id | interface-description)*>
•
• <!ELEMENT interface-address (#PCDATA)>
•
• <!ELEMENT interface-cost (#PCDATA)>
•
• <!ELEMENT interface-description (#PCDATA)>
•
• <!ELEMENT interface-description-list (#PCDATA)>
•
•
```

```

<!ELEMENT interface-disabled-flag EMPTY>
...
<!ELEMENT interface-encapsulation (#PCDATA)>
...
<!ELEMENT interface-flood-list-count (#PCDATA)>
...
<!ELEMENT interface-id (#PCDATA)>
...
<!ELEMENT interface-index (#PCDATA)>
...
<!ELEMENT interface-level-data (level | adjacency-count | interface-priority | metric | te-metric | passive | hello-time | holdtime | dr-id-one | dr-id-two | dr-flag)*>
...
<!ELEMENT interface-link-name (#PCDATA)>
...
<!ELEMENT interface-name (#PCDATA)>
...
<!ELEMENT interface-priority (#PCDATA)>
...
<!ELEMENT interface-state-value (#PCDATA)>
...
<!ELEMENT interface-status (#PCDATA)>
...
<!ELEMENT interface-type (#PCDATA)>
...
<!ELEMENT ip-address (#PCDATA)>
...
<!ELEMENT ip-prefix-tlv (isis-topology-id | address-prefix | metric | prefix-status | subtlv-size)*>
<!ATTLIST ip-prefix-tlv heading CDATA #IMPLIED>
...
<!ELEMENT ipaddress-tlv (address)*>
...
<!ELEMENT ipsec-sa (#PCDATA)>
...
<!ELEMENT ipv6-address (#PCDATA)>
...
<!ELEMENT ipv6-ra-advertisement (ipv6-source-address | ipv6-ra-time-since | ipv6-ra-managed-flag | ipv6-ra-managed-flag-conflict | ipv6-ra-other-config-flag | ipv6-ra-other-config-flag-conflict | ipv6-ra-link-mtu | ipv6-ra-link-mtu-conflict | ipv6-ra-reachable-time | ipv6-ra-reachable-time-conflict | ipv6-ra-default-lifetime | ipv6-ra-default-lifetime-conflict | ipv6-ra-retransmit-timer | ipv6-ra-retransmit-timer-conflict | ipv6-ra-current-hop-limit | ipv6-ra-current-hop-limit-conflict | ipv6-ra-prefix)*>
...
<!ELEMENT ipv6-ra-advertisement-sent-time (#PCDATA)>
<!ATTLIST ipv6-ra-advertisement-sent-time junos:seconds CDATA #IMPLIED>
...
<!ELEMENT ipv6-ra-advertisements-received (#PCDATA)>
...
<!ELEMENT ipv6-ra-advertisements-sent (#PCDATA)>
...
<!ELEMENT ipv6-ra-current-hop-limit (#PCDATA)>
...
<!ELEMENT ipv6-ra-current-hop-limit-conflict (#PCDATA)>
...
<!ELEMENT ipv6-ra-default-lifetime (#PCDATA)>
...
<!ELEMENT ipv6-ra-default-lifetime-conflict (#PCDATA)>
...
<!ELEMENT ipv6-ra-information (ipv6-ra-interface)*>
...
<!ELEMENT ipv6-ra-interface (interface-name | ipv6-ra-advertisements-sent | ipv6-ra-advertisement-sent-time | ipv6-ra-solicits-received | ipv6-ra-solicit-receive-time | ipv6-ra-advertisements-received | ipv6-ra-advertisement)*>
...

```

```
<!ELEMENT ipv6-ra-link-mtu (#PCDATA)>
<!ELEMENT ipv6-ra-link-mtu-conflict (#PCDATA)>
<!ELEMENT ipv6-ra-managed-flag (#PCDATA)>
<!ELEMENT ipv6-ra-managed-flag-conflict (#PCDATA)>
<!ELEMENT ipv6-ra-other-config-flag (#PCDATA)>
<!ELEMENT ipv6-ra-other-config-flag-conflict (#PCDATA)>
<!ELEMENT ipv6-ra-prefix (ipv6-ra-prefix-address | ipv6-ra-prefix-valid-lifetime |
ipv6-ra-prefix-valid-lifetime-conflict | ipv6-ra-prefix-preferred-lifetime |
ipv6-ra-prefix-preferred-lifetime-conflict | ipv6-ra-prefix-on-link | ipv6-ra-prefix-on-link-conflict |
ipv6-ra-prefix-autonomous | ipv6-ra-prefix-autonomous-conflict)*>
<!ELEMENT ipv6-ra-prefix-address (#PCDATA)>
<!ELEMENT ipv6-ra-prefix-autonomous (#PCDATA)>
<!ELEMENT ipv6-ra-prefix-autonomous-conflict (#PCDATA)>
<!ELEMENT ipv6-ra-prefix-on-link (#PCDATA)>
<!ELEMENT ipv6-ra-prefix-on-link-conflict (#PCDATA)>
<!ELEMENT ipv6-ra-prefix-preferred-lifetime (#PCDATA)>
<!ELEMENT ipv6-ra-prefix-preferred-lifetime-conflict (#PCDATA)>
<!ELEMENT ipv6-ra-prefix-valid-lifetime (#PCDATA)>
<!ELEMENT ipv6-ra-prefix-valid-lifetime-conflict (#PCDATA)>
<!ELEMENT ipv6-ra-reachable-time (#PCDATA)>
<!ELEMENT ipv6-ra-reachable-time-conflict (#PCDATA)>
<!ELEMENT ipv6-ra-retransmit-timer (#PCDATA)>
<!ELEMENT ipv6-ra-retransmit-timer-conflict (#PCDATA)>
<!ELEMENT ipv6-ra-solicit-receive-time (#PCDATA)>
<!ATTLIST ipv6-ra-solicit-receive-time junos:seconds CDATA #IMPLIED>
<!ELEMENT ipv6-ra-solicits-received (#PCDATA)>
<!ELEMENT ipv6-ra-time-since (#PCDATA)>
<!ATTLIST ipv6-ra-time-since junos:seconds CDATA #IMPLIED>
<!ELEMENT ipv6-reachability-tlv (ipv6-address | metric | prefix-flags | prefix-extern | prefix-downflag |
subtlv-present | subtlv-size)*>
<!ATTLIST ipv6-reachability-tlv heading CDATA #IMPLIED>
<!ELEMENT ipv6-source-address (#PCDATA)>
<!ELEMENT ipv6address-tlv (address)*>
<!ELEMENT irib-active-count (#PCDATA)>
<!ELEMENT irib-hidden-count (#PCDATA)>
```

```

<!ELEMENT irib-holddown-count (#PCDATA)>
...
<!ELEMENT irib-name (#PCDATA)>
...
<!ELEMENT irib-route-count (#PCDATA)>
...
<!ELEMENT is-detour EMPTY>
...
<!ELEMENT is-fastreroute EMPTY>
...
<!ELEMENT is-neighbor-id (#PCDATA)>
...
<!ELEMENT is-primary EMPTY>
...
<!ELEMENT isis-adjacency (interface-name | system-name | not-remote-address | level | adjacency-state | holdtime | interface-priority | transition-count | last-transition-time | circuit-type | adjacency-restart-capable | adjacency-flag | adjacency-topologies | mac-address | lan-id | ip-address | ipv6-address | snpa | isis-adjacency-log)*>
...
<!ELEMENT isis-adjacency-information (isis-adjacency)*>
<!ATTLIST isis-adjacency-information junos:style CDATA #IMPLIED>
...
<!ELEMENT isis-adjacency-log (adjacency-when | adjacency-state | adjacency-event)*>
...
<!ELEMENT isis-database (level | isis-database-entry | lsp-count)*>
...
<!ELEMENT isis-database-entry (lsp-id | sequence-number | checksum | remaining-lifetime | lsp-attributes | isis-neighbor | isis-prefix | isis-header | isis-packet | lsp-stub | isis-tlv | transmission-status)*>
...
<!ELEMENT isis-database-information (isis-database)*>
<!ATTLIST isis-database-information junos:style CDATA #IMPLIED>
...
<!ELEMENT isis-header (lsp-id | pdu-length | allocated-length | router-id | remaining-lifetime | level | interface-index | estimated-free-bytes | actual-free-bytes | lsdb-timer-type | lsdb-expiration-time | needs-rebuild | protocol)*>
...
<!ELEMENT isis-hostname (system-id | system-name | isis-hostname-type)*>
...
<!ELEMENT isis-hostname-information (isis-hostname)*>
...
<!ELEMENT isis-hostname-type (#PCDATA)>
...
<!ELEMENT isis-interface (interface-name | circuit-type | circuit-id | isis-interface-state-one | isis-interface-state-two | interface-disabled-flag | dr-id-one | dr-id-two | metric-one | metric-two | interface-index | interface-state-value | lsp-interval | csnp-interval | system-name | mesh-group | interface-level-data)*>
<!ATTLIST isis-interface heading CDATA #IMPLIED>
...
<!ELEMENT isis-interface-information (isis-interface)*>
<!ATTLIST isis-interface-information junos:style CDATA #IMPLIED>
...
<!ELEMENT isis-interface-state-one (#PCDATA)>
...
<!ELEMENT isis-interface-state-two (#PCDATA)>
...
<!ELEMENT isis-neighbor (isis-topology-id | is-neighbor-id | metric | reachability-delay | reachability-expense | reachability-error)*>
...
<!ELEMENT isis-next-hop (#PCDATA)>
...

```

```
<!ELEMENT isis-packet (lsp-id | pdu-length | pdu-lifetime | checksum | sequence-number | lsp-attributes | nlp-id | mtid | lsp-length | pdu-version | system-id-length | isis-packet-type | packet-version | maximum-area)*>

<!ELEMENT isis-packet-type (#PCDATA)>

<!ELEMENT isis-pdu-type (#PCDATA)>

<!ELEMENT isis-prefix (protocol-name | isis-topology-id | address-prefix | metric | prefix-flag | reachability-delay | reachability-expense | reachability-error)*>

<!ELEMENT isis-reachability-subtlv (isis-subtlv-type | subtlv-length | max-bandwidth | max-reserve-bandwidth | current-bandwidth-header | current-reserve-bandwidth | admin-groups | bandwidth-priority | address | neighbor-prefix | address-prefix | prefix-err-message | te-metric)*>

<!ELEMENT isis-route (address-prefix | level | route-version | metric | metric-type | interface-name | isis-next-hop)*>

<!ELEMENT isis-route-information (isis-routing-table)*>

<!ELEMENT isis-routing-table (isis-topology-id | level-one-version | level-two-version | isis-route)*>

<!ELEMENT isis-spf (isis-spf-results-header | isis-spf-result | node-count | isis-spf-log-header | isis-spf-log)*>

<!ELEMENT isis-spf-information (isis-spf)*>

<!ELEMENT isis-spf-log (start-time | elapsed-time | spf-trigger-count | logging-reason | lsp-name | system-name | interface-name)*>

<!ELEMENT isis-spf-log-header (level | isis-topology-id)*>

<!ELEMENT isis-spf-result (node-id | disconnected | metric | no-first-fragment | next-hop-element | prefix-element)*>

<!ELEMENT isis-spf-results-header (level | isis-topology-id)*>

<!ELEMENT isis-statistics (system-name | isis-pdu-type | packets-received | packets-processed | packets-dropped | packets-sent | packets-retransmitted | totals-information | snp-queue-length | sdp-queue-drops | lsp-queue-length | lsp-queue-drops | spf-runs | fragments-rebuilt | lps-regenerated | purges-initiated)*>

<!ELEMENT isis-statistics-information (isis-statistics)*>

<!ELEMENT isis-subtlv-type (#PCDATA)>

<!ELEMENT isis-tlv (isis-tlv-overhead | area-address-tlv | protocols-tlv | mt-tlv | hostname-tlv | ipaddress-tlv | ipv6address-tlv | router-id-tlv | reachability-tlv | ipv6-reachability-tlv | isis-reachability-subtlv | authentication-tlv | idrp-tlv | ip-prefix-tlv | unknown-tlv | tlv-stragglers)*>
<!ATTLIST isis-tlv heading CDATA #IMPLIED>

<!ELEMENT isis-tlv-overhead (isis-tlv-type | tlv-length | bytes-left)*>

<!ELEMENT isis-tlv-type (#PCDATA)>

<!ELEMENT isis-topology-id (#PCDATA)>

<!ELEMENT keep-multiplier (#PCDATA)>

<!ELEMENT keepalive-interval (#PCDATA)>

<!ELEMENT l2circuit-connection-information (l2circuit-neighbor)*>
```

```

<!ELEMENT I2circuit-neighbor (neighbor-address | neighbor-display-error | connection)*>
<!ELEMENT I2vpn-connection-information (instance)*>
<!ELEMENT label-block (label-block-offset | label-block-range | label-block-base | label-block-status-vector)*>
<!ELEMENT label-block-base (#PCDATA)>
<!ELEMENT label-block-offset (#PCDATA)>
<!ELEMENT label-block-range (#PCDATA)>
<!ELEMENT label-block-status-vector (#PCDATA)>
<!ELEMENT label-in (#PCDATA)>
<!ELEMENT label-out (#PCDATA)>
<!ELEMENT lan-id (#PCDATA)>
<!ELEMENT last-active EMPTY>
<!ELEMENT last-change (#PCDATA)>
<!ELEMENT last-changed-time (#PCDATA)>
<!ATTLIST last-changed-time junos:seconds CDATA #IMPLIED>
<!ELEMENT last-checked (#PCDATA)>
<!ELEMENT last-error (#PCDATA)>
<!ELEMENT last-event (#PCDATA)>
<!ELEMENT last-merit (#PCDATA)>
<!ELEMENT last-received (#PCDATA)>
<!ELEMENT last-sent (#PCDATA)>
<!ELEMENT last-state (#PCDATA)>
<!ELEMENT last-transition-time (#PCDATA)>
<!ATTLIST last-transition-time junos:seconds CDATA #IMPLIED>
<!ELEMENT last-update (#PCDATA)>
<!ATTLIST last-update junos:seconds CDATA #IMPLIED>
<!ELEMENT ldp-binding (ldp-label | ldp-prefix | ldp-binding-filtered | ldp-binding-state | ldp-binding-queued)*>
<!ELEMENT ldp-binding-filtered EMPTY>
<!ELEMENT ldp-binding-queued EMPTY>
<!ELEMENT ldp-binding-state (#PCDATA)>
<!ELEMENT ldp-block-time (#PCDATA)>
<!ELEMENT ldp-config-sequence (#PCDATA)>
<!ELEMENT ldp-connection-state (#PCDATA)>

```

```
<!ELEMENT ldp-database (ldp-database-type | ldp-session-id | ldp-binding)*>
<!ELEMENT ldp-database-information (ldp-database)*>
<!ELEMENT ldp-database-type (#PCDATA)>
<!ELEMENT ldp-egress-label EMPTY>
<!ELEMENT ldp-event-count (#PCDATA)>
<!ELEMENT ldp-event-count-5seconds (#PCDATA)>
<!ELEMENT ldp-event-statistics (ldp-event-type | ldp-event-count | ldp-event-count-5seconds)*>
<!ELEMENT ldp-event-type (#PCDATA)>
<!ELEMENT ldp-global-label (#PCDATA)>
<!ELEMENT ldp-hello-interval (#PCDATA)>
<!ELEMENT ldp-holddate (#PCDATA)>
<!ELEMENT ldp-ingress-label EMPTY>
<!ELEMENT ldp-inlib-label (#PCDATA)>
<!ELEMENT ldp-inlib-session (#PCDATA)>
<!ELEMENT ldp-interface (interface-name | ldp-label-space-id | ldp-neighbor-count | ldp-next-hello |
ldp-hello-interval | ldp-holddate | ldp-transport-address | ldp-interface-index | ldp-block-time)*>
<!ELEMENT ldp-interface-index (#PCDATA)>
<!ELEMENT ldp-interface-information (ldp-interface)*>
<!ELEMENT ldp-keepalive-interval (#PCDATA)>
<!ELEMENT ldp-keepalive-time (#PCDATA)>
<!ELEMENT ldp-label (#PCDATA)>
<!ELEMENT ldp-label-space-id (#PCDATA)>
<!ELEMENT ldp-local-address (#PCDATA)>
<!ELEMENT ldp-message-statistics (ldp-message-type | ldp-messages-sent | ldp-messages-received |
ldp-messages-sent-5seconds | ldp-messages-received-5seconds)*>
<!ELEMENT ldp-message-type (#PCDATA)>
<!ELEMENT ldp-messages-received (#PCDATA)>
<!ELEMENT ldp-messages-received-5seconds (#PCDATA)>
<!ELEMENT ldp-messages-sent (#PCDATA)>
<!ELEMENT ldp-messages-sent-5seconds (#PCDATA)>
<!ELEMENT ldp-neighbor (ldp-neighbor-address | interface-name | ldp-label-space-id | ldp-remaining-time |
ldp-transport-address | ldp-config-sequence | ldp-up-time | ldp-reference-count | ldp-holddate)*>
<!ELEMENT ldp-neighbor-address (#PCDATA)>
```

```

<!ELEMENT ldp-neighbor-count (#PCDATA)>
...
<!ELEMENT ldp-neighbor-information (ldp-neighbor)*>
...
<!ELEMENT ldp-next-hello (#PCDATA)>
...
<!ELEMENT ldp-nexthop (interface-name | lsp-name | interface-address | ldp-session-id)*>
...
<!ELEMENT ldp-no-label EMPTY>
...
<!ELEMENT ldp-outlib-label (#PCDATA)>
...
<!ELEMENT ldp-outlib-session (#PCDATA)>
...
<!ELEMENT ldp-path (ldp-outlib-session | ldp-outlib-label | ldp-ingress-label | ldp-inlib-session |
ldp-inlib-label | ldp-egress-label | ldp-path-route | ldp-reference-count | ldp-route-transit |
ldp-global-label)*>
...
<!ELEMENT ldp-path-information (ldp-path)*>
...
<!ELEMENT ldp-path-route (ldp-prefix | ldp-route-ingress)*>
...
<!ELEMENT ldp-prefix (#PCDATA)>
...
<!ELEMENT ldp-reference-count (#PCDATA)>
...
<!ELEMENT ldp-remaining-time (#PCDATA)>
...
<!ELEMENT ldp-remote-address (#PCDATA)>
...
<!ELEMENT ldp-retry-interval (#PCDATA)>
...
<!ELEMENT ldp-retry-time (#PCDATA)>
...
<!ELEMENT ldp-route (ldp-prefix | ldp-nexthop | ldp-label | ldp-no-label | ldp-topology-entry)*>
...
<!ELEMENT ldp-route-information (ldp-route)*>
...
<!ELEMENT ldp-route-ingress EMPTY>
...
<!ELEMENT ldp-route-transit EMPTY>
...
<!ELEMENT ldp-session (ldp-neighbor-address | ldp-session-state | ldp-connection-state |
ldp-remaining-time | ldp-session-id | ldp-retry-time | ldp-keepalive-time | ldp-session-role |
ldp-session-max-pdu | ldp-holdtime | ldp-neighbor-count | ldp-keepalive-interval | ldp-retry-interval |
ldp-local-address | ldp-remote-address | ldp-up-time | ldp-session-address | ldp-session-deleted |
ldp-session-connect-pending | ldp-session-close-pending | ldp-session-queue-depth |
ldp-session-read-pending | ldp-session-write-pending | ldp-session-receive-buffer-bytes |
ldp-session-transmit-buffer-bytes | ldp-session-no-connection)*>
...
<!ELEMENT ldp-session-address (interface-address | interface-name)*>
...
<!ELEMENT ldp-session-close-pending EMPTY>
...
<!ELEMENT ldp-session-connect-pending EMPTY>
...
<!ELEMENT ldp-session-deleted EMPTY>
...
<!ELEMENT ldp-session-id (#PCDATA)>
...
<!ELEMENT ldp-session-information (ldp-session)*>
<!ATTLIST ldp-session-information junos:style CDATA #IMPLIED>
...

```

```
• <!ELEMENT ldp-session-max-pdu (#PCDATA)>
• <!ELEMENT ldp-session-no-connection EMPTY>
• <!ELEMENT ldp-session-queue-depth (#PCDATA)>
• <!ELEMENT ldp-session-read-pending EMPTY>
• <!ELEMENT ldp-session-receive-buffer-bytes (#PCDATA)>
• <!ELEMENT ldp-session-role (#PCDATA)>
• <!ELEMENT ldp-session-state (#PCDATA)>
• <!ELEMENT ldp-session-transmit-buffer-bytes (#PCDATA)>
• <!ELEMENT ldp-session-write-pending EMPTY>
• <!ELEMENT ldp-statistics (ldp-message-statistics | ldp-event-statistics)*>
• <!ELEMENT ldp-statistics-information (ldp-statistics)*>
• <!ELEMENT ldp-topology-entry (#PCDATA)>
• <!ELEMENT ldp-traffic-error (#PCDATA)>
• <!ELEMENT ldp-traffic-multiple-fec (#PCDATA)>
• <!ELEMENT ldp-traffic-statistics (ldp-prefix | ldp-traffic-type | ldp-traffic-error |
• ldp-traffic-statistics-packet-count | ldp-traffic-statistics-byte-count | ldp-traffic-multiple-fec)*>
• <!ELEMENT ldp-traffic-statistics-byte-count (#PCDATA)>
• <!ELEMENT ldp-traffic-statistics-error (ldp-traffic-error)*>
• <!ELEMENT ldp-traffic-statistics-information (ldp-traffic-statistics | ldp-traffic-statistics-error)*>
• <!ELEMENT ldp-traffic-statistics-packet-count (#PCDATA)>
• <!ELEMENT ldp-traffic-type (#PCDATA)>
• <!ELEMENT ldp-transport-address (#PCDATA)>
• <!ELEMENT ldp-up-time (#PCDATA)>
• <!ATTLIST ldp-up-time junos:seconds CDATA #IMPLIED>
• <!ELEMENT learned-from (#PCDATA)>
• <!ELEMENT level (#PCDATA)>
• <!ELEMENT level-one-version (#PCDATA)>
• <!ELEMENT level-two-version (#PCDATA)>
• <!ELEMENT limit-action (#PCDATA)>
• <!ELEMENT link-count (#PCDATA)>
• <!ELEMENT link-data (#PCDATA)>
• <!ELEMENT link-id (#PCDATA)>
•
```

```

<!ELEMENT link-subtlv (tlv-type-name | tlv-type-value | tlv-length | bytes-left | formatted-tlv-data)*>
 ...
<!ELEMENT link-type-name (#PCDATA)>
 ...
<!ELEMENT link-type-value (#PCDATA)>
 ...
<!ELEMENT lm-avail-bandwidth (#PCDATA)>
 ...
<!ELEMENT lm-encoding (#PCDATA)>
 ...
<!ELEMENT lm-information (lm-peer-root-information | lm-te-link-root-information)*>
 ...
<!ELEMENT lm-local-address (#PCDATA)>
 ...
<!ELEMENT lm-local-id (#PCDATA)>
 ...
<!ELEMENT lm-max-bandwidth (#PCDATA)>
 ...
<!ELEMENT lm-min-bandwidth (#PCDATA)>
 ...
<!ELEMENT lm-peer-control-address (#PCDATA)>
 ...
<!ELEMENT lm-peer-control-channel (#PCDATA)>
 ...
<!ELEMENT lm-peer-information (lm-source | lm-sys-id | lm-peer-name | lm-state | lm-peer-control-address
 | lm-peer-control-channel | lm-peer-keepalive | lm-peer-te-links)*>
 ...
<!ELEMENT lm-peer-keepalive (#PCDATA)>
 ...
<!ELEMENT lm-peer-name (#PCDATA)>
 ...
<!ELEMENT lm-peer-root-information (lm-peer-information)*>
 ...
<!ELEMENT lm-peer-te-link (#PCDATA)>
 ...
<!ELEMENT lm-peer-te-links (lm-peer-te-link)*>
 ...
<!ELEMENT lm-remote-address (#PCDATA)>
 ...
<!ELEMENT lm-remote-id (#PCDATA)>
 ...
<!ELEMENT lm-res-bandwidth (#PCDATA)>
 ...
<!ELEMENT lm-res-in-use (#PCDATA)>
 ...
<!ELEMENT lm-res-local-addr (#PCDATA)>
 ...
<!ELEMENT lm-res-local-id (#PCDATA)>
 ...
<!ELEMENT lm-res-name (#PCDATA)>
 ...
<!ELEMENT lm-res-remote-addr (#PCDATA)>
 ...
<!ELEMENT lm-res-remote-id (#PCDATA)>
 ...
<!ELEMENT lm-source (#PCDATA)>
 ...
<!ELEMENT lm-state (#PCDATA)>
 ...
<!ELEMENT lm-sys-id (#PCDATA)>
 ...

```

```
<!ELEMENT lm-te-link-information (lm-te-link-name | lm-local-id | lm-remote-id | lm-state | lm-local-address | lm-remote-address | lm-encoding | lm-min-bandwidth | lm-max-bandwidth | lm-total-bandwidth | lm-avail-bandwidth | lm-te-link-resources)*>

<!ELEMENT lm-te-link-name (#PCDATA)>

<!ELEMENT lm-te-link-resources (lm-res-name | lm-res-local-id | lm-res-remote-id | lm-res-local-addr | lm-res-remote-addr | lm-res-bandwidth | lm-res-in-use)*>

<!ELEMENT lm-te-link-root-information (lm-te-link-information)*>

<!ELEMENT lm-total-bandwidth (#PCDATA)>

<!ELEMENT load-balance (#PCDATA)>

<!ELEMENT local-address (#PCDATA)>

<!ELEMENT local-as (#PCDATA)>

<!ELEMENT local-as-private EMPTY>

<!ELEMENT local-id (#PCDATA)>

<!ELEMENT local-interface (interface-name | interface-status | interface-encapsulation)*>

<!ELEMENT local-interface-index (#PCDATA)>

<!ELEMENT local-interface-name (#PCDATA)>

<!ELEMENT local-preference (#PCDATA)>

<!ELEMENT local-site-id (#PCDATA)>

<!ELEMENT local-system-as (#PCDATA)>

<!ELEMENT log (#PCDATA)>

<!ELEMENT log-element (timestamp | ospf-log-type | elapsed-time)*>

<!ELEMENT log-event (#PCDATA)>

<!ELEMENT log-time-stamp (#PCDATA)>

<!ELEMENT logging-reason (#PCDATA)>

<!ELEMENT loopback-address (#PCDATA)>

<!ELEMENT lsa-id (#PCDATA)>

<!ELEMENT lsa-length (#PCDATA)>

<!ELEMENT lsa-list (#PCDATA)>

<!ELEMENT lsa-type (#PCDATA)>

<!ELEMENT lsas-retransmit (#PCDATA)>

<!ELEMENT lsas-retransmit-5seconds (#PCDATA)>

<!ELEMENT lsdb-expiration-time (#PCDATA)>

<!ELEMENT lsdb-timer-type (#PCDATA)>
```

```

<!ELEMENT lsp-attributes (#PCDATA)>
<!ELEMENT lsp-count (#PCDATA)>
<!ELEMENT lsp-creation-time (#PCDATA)>
<!ELEMENT lsp-description (#PCDATA)>
<!ELEMENT lsp-id (#PCDATA)>
<!ELEMENT lsp-interval (#PCDATA)>
<!ELEMENT lsp-length (#PCDATA)>
<!ELEMENT lsp-name (#PCDATA)>
<!ELEMENT lsp-pktbytes (#PCDATA)>
<!ELEMENT lsp-queue-drops (#PCDATA)>
<!ELEMENT lsp-queue-length (#PCDATA)>
<!ELEMENT lsp-state (#PCDATA)>
<!ELEMENT lsp-stub EMPTY>
<!ELEMENT lsps-regenerated (#PCDATA)>
<!ELEMENT lsreq-active EMPTY>
<!ELEMENT lsreq-enqueued EMPTY>
<!ELEMENT lsreq-retransmit-time (#PCDATA)>
<!ELEMENT mac-address (#PCDATA)>
<!ELEMENT master-slave (#PCDATA)>
<!ELEMENT max-bandwidth (#PCDATA)>
<!ELEMENT max-reserve-bandwidth (#PCDATA)>
<!ELEMENT max-run (#PCDATA)>
<!ELEMENT maximum (#PCDATA)>
<!ELEMENT maximum-area (#PCDATA)>
<!ELEMENT maximum-bandwidth (#PCDATA)>
<!ELEMENT med (#PCDATA)>
<!ELEMENT med-action (#PCDATA)>
<!ELEMENT merit (#PCDATA)>
<!ELEMENT mesh-group (#PCDATA)>
<!ELEMENT message (#PCDATA)>
<!ELEMENT message-statistics (rsvp-message | messages-sent | messages-received |

 messages-sent-5seconds | messages-received-5seconds)*>

```

```
<!ELEMENT messages-received (#PCDATA)>
<!ELEMENT messages-received-5seconds (#PCDATA)>
<!ELEMENT messages-sent (#PCDATA)>
<!ELEMENT messages-sent-5seconds (#PCDATA)>
<!ELEMENT metric (#PCDATA)>
<!ELEMENT metric-one (#PCDATA)>
<!ELEMENT metric-out (#PCDATA)>
<!ELEMENT metric-two (#PCDATA)>
<!ELEMENT metric-type (#PCDATA)>
<!ELEMENT metric2 (#PCDATA)>
<!ELEMENT minimum-bandwidth (#PCDATA)>
<!ELEMENT monitor-lsp-bandwidth EMPTY>
<!ELEMENT mpls-admin-group (admin-group-name | index)*>
<!ELEMENT mpls-admin-group-information (mpls-admin-group)*>
<!ELEMENT mpls-cspf (cspf-queue | cspf-paths | cspf-timing)*>
<!ATTLIST mpls-cspf heading CDATA #IMPLIED>
<!ELEMENT mpls-cspf-information (mpls-cspf)*>
<!ELEMENT mpls-error (mpls-error-msg)*>
<!ELEMENT mpls-error-msg (#PCDATA)>
<!ELEMENT mpls-interface (interface-name | mpls-interface-state | no-group-flag | admin-group-name | admin-group-number)*>
<!ELEMENT mpls-interface-information (mpls-interface)*>
<!ELEMENT mpls-interface-state (#PCDATA)>
<!ELEMENT mpls-label (#PCDATA)>
<!ELEMENT mpls-lsp (destination-address | source-address | lsp-state | route-count | active-path | is-primary | name | bidirectional | lsp-description | lsp-pktbytes | no-statistics | is-fastreroute | load-balance | metric | admin-groups | lsp-creation-time | retry-timer | retry-limit | mpls-lsp-autobandwidth | mpls-lsp-path | mpls-lsp-attributes)*>
<!ELEMENT mpls-lsp-attributes (signal-type | encoding-type | switching-type | gpid | protection-type)*>
<!ELEMENT mpls-lsp-autobandwidth (monitor-lsp-bandwidth | minimum-bandwidth | maximum-bandwidth | adjust-timer | bandwidth | time-to-adjust | adjust-threshold)*>
<!ELEMENT mpls-lsp-information (rsvp-session-data)*>
<!ELEMENT mpls-lsp-path (path-active | title | name | path-state | cos | no-decrement-ttl | preference | setup-priority | hold-priority | bandwidth | path-adaptive | path-no-recordroute | hoplimit | optimize-timer | admin-groups | retry-timer | retry-limit | cspf-status | explicit-route | received-rro | path-history)*>
```

```

<!ELEMENT mpls-path (name | address | path-type)*>
...
<!ELEMENT mpls-path-information (mpls-path)*>
...
<!ELEMENT mt-tlv (mtid)*>
...
<!ELEMENT mtid (#PCDATA)>
...
<!ELEMENT mtu (#PCDATA)>
...
<!ELEMENT mtu-mismatch-error (#PCDATA)>
...
<!ELEMENT name (#PCDATA)>
...
<!ELEMENT needs-rebuild EMPTY>
...
<!ELEMENT neighbor-address (#PCDATA)>
...
<!ELEMENT neighbor-adjacency-time (#PCDATA)>
...
<!ELEMENT neighbor-count (#PCDATA)>
...
<!ELEMENT neighbor-display-error (#PCDATA)>
...
<!ELEMENT neighbor-down-count (#PCDATA)>
...
<!ELEMENT neighbor-id (#PCDATA)>
...
<!ELEMENT neighbor-idle (#PCDATA)>
<!ATTLIST neighbor-idle junos:seconds CDATA #IMPLIED>
...
<!ELEMENT neighbor-prefix (#PCDATA)>
...
<!ELEMENT neighbor-priority (#PCDATA)>
...
<!ELEMENT neighbor-up-count (#PCDATA)>
...
<!ELEMENT neighbor-up-time (#PCDATA)>
...
<!ELEMENT netmask-mismatch-error (#PCDATA)>
...
<!ELEMENT next-hop (#PCDATA)>
...
<!ELEMENT next-hop-address (interface-address | lsp-name)*>
...
<!ELEMENT next-hop-element (interface-name | isis-next-hop | snpa)*>
...
<!ELEMENT next-hop-name (interface-name | interface-link-name)*>
...
<!ELEMENT next-hop-type (#PCDATA)>
...
<!ELEMENT nh (selected-next-hop | weight | via | nh-local-interface | nh-table | to | lisp-name | mpls-label)*>
...
<!ELEMENT nh-local-interface (#PCDATA)>
...
<!ELEMENT nh-table (#PCDATA)>
...
<!ELEMENT nh-type (#PCDATA)>
...
<!ELEMENT nlp-id (#PCDATA)>
...

```

```
<!ELEMENT nlri-type (#PCDATA)>
<!ELEMENT nlri-type-peer (#PCDATA)>
<!ELEMENT nlri-type-session (#PCDATA)>
<!ELEMENT no-decrement-ttl EMPTY>
<!ELEMENT no-error EMPTY>
<!ELEMENT no-first-fragment EMPTY>
<!ELEMENT no-group-flag EMPTY>
<!ELEMENT no-interface-error (#PCDATA)>
<!ELEMENT no-route (#PCDATA)>
<!ELEMENT no-router-id-error (#PCDATA)>
<!ELEMENT no-statistics EMPTY>
<!ELEMENT node-count (#PCDATA)>
<!ELEMENT node-id (#PCDATA)>
<!ELEMENT not-remote-address EMPTY>
<!ELEMENT nssa-mismatch-error (#PCDATA)>
<!ELEMENT number (#PCDATA)>
<!ELEMENT number-events (#PCDATA)>
<!ELEMENT optimize-timer (#PCDATA)>
<!ELEMENT optional-capability (#PCDATA)>
<!ELEMENT options (#PCDATA)>
<!ELEMENT ospf-area (#PCDATA)>
<!ELEMENT ospf-area-header (ospf-area)*>
<!ELEMENT ospf-database ((ls-type | our-entry | ls-id | advertising-router | sequence-number | age | options | checksum | ls-length | ospf-router-lsa | ospf-network-lsa | ospf-opaque-area-lsa | ospf-opaque-link-local-lsa | ospf-summary-lsa | ospf-external-lsa | ospf-database-extensive)*)
<!ATTLIST ospf-database external-heading CDATA #IMPLIED>
<!ATTLIST ospf-database heading CDATA #IMPLIED>
<!ELEMENT ospf-database-extensive (generation-timer | aging-timer | installation-time | expiration-time | send-time | database-entry-state)*>
<!ELEMENT ospf-database-information (ospf-area-header | ospf-intf-header | ospf-database | ospf-database-summary)*>
<!ELEMENT ospf-database-summary (ospf-area | ospf-intf | ospf-lsa-count | ospf-lsa-type)*>
<!ATTLIST ospf-database-summary external-heading CDATA #IMPLIED>
```

```
<!ELEMENT ospf-errors (runt-header-error | short-packets-error | bad-version-error |
truncated-packets-error | checksum-error | subnet-mismatch-error | virtual-link-error |
area-mismatch-error | authentication-mismatch-error | authentication-failure-error | bad-packettype-error |
netmask-mismatch-error | hello-interval-mismatch-error | dead-interval-mismatch-error |
stub-area-mismatch-error | nssa-mismatch-error | mtu-mismatch-error | hello-received-error |
no-interface-error | no-router-id-error | no-error)*>

<!ELEMENT ospf-external-lsa (address-mask | type-value | tos-count | metric | forward-address | tag)*>

<!ELEMENT ospf-interface (interface-name | ospf-interface-state | ospf-area | dr-id | bdr-id |
neighbor-count | interface-type | interface-address | address-mask | mtu | interface-cost | dr-address |
bdr-address | adj-count | router-priority | passive | hello-interval | poll-interval | dead-interval |
retransmit-interval | ospf-stub-type | interface-flood-list-count | flood-list-count | lsa-list |
interface-description-list)*>

<!ELEMENT ospf-interface-information (ospf-interface)*>

<!ELEMENT ospf-interface-state (#PCDATA)>

<!ELEMENT ospf-intf (#PCDATA)>

<!ELEMENT ospf-intf-header (ospf-intf)*>

<!ELEMENT ospf-io-statistics (packets-read | average-per-run | max-run | ospf-errors)*>

<!ELEMENT ospf-io-statistics-information (ospf-io-statistics)*>

<!ELEMENT ospf-link (link-id | link-data | link-type-name | link-type-value | tos-count | tos-0-metric)*>

<!ELEMENT ospf-log-events (log-element | number-events)*>

<!ELEMENT ospf-log-information (ospf-log-instance | ospf-log-maximum-length | ospf-log-events)*>

<!ELEMENT ospf-log-instance (log-element)*>

<!ELEMENT ospf-log-maximum-length (log-element)*>

<!ELEMENT ospf-log-type (#PCDATA)>

<!ELEMENT ospf-lsa-count (#PCDATA)>

<!ELEMENT ospf-lsa-type (#PCDATA)>

<!ELEMENT ospf-neighbor (neighbor-address | interface-name | ospf-neighbor-state | neighbor-id |
neighbor-priority | activity-timer | ospf-area | options | dr-address | bdr-address | neighbor-up-time |
neighbor-adjacency-time | master-slave | sequence-number | dbd-retransmit-time | lsreq-retransmit-time |
lsreq-enqueued | lsreq-active | lsa-list)*>

<!ELEMENT ospf-neighbor-information (ospf-neighbor)*>

<!ELEMENT ospf-neighbor-state (#PCDATA)>

<!ELEMENT ospf-network-lsa (address-mask | attached-router)*>

<!ELEMENT ospf-opaque-area-lsa (tlv-block | link-subtlv)*>

<!ELEMENT ospf-opaque-link-local-lsa (tlv-grace-type-name | tlv-grace-value)*>

<!ELEMENT ospf-packet-type (#PCDATA)>
```

```
<!ELEMENT ospf-route (address-prefix | route-path-type | route-type | next-hop-type | interface-cost |
next-hop-name | next-hop-address | ospf-area | optional-capability | route-origin | type7 | pbit |
forward-nz)*>

<!ELEMENT ospf-route-information (ospf-route)*>

<!ELEMENT ospf-router-lsa (bits | link-count | ospf-link)*>

<!ELEMENT ospf-statistics (packet-statistics | lsas-retransmit | lsas-retransmit-5seconds |
flood-queue-depth | total-retransmits | total-database-summaries | total-linkstate-request |
ospf-errors)*>

<!ELEMENT ospf-statistics-information (ospf-statistics)*>

<!ELEMENT ospf-stub-type (#PCDATA)>

<!ELEMENT ospf-summary-lsa (address-mask | tos-count | metric)*>

<!ELEMENT our-entry EMPTY>

<!ELEMENT outbound-label (#PCDATA)>

<!ELEMENT outbound-timer (#PCDATA)>

<!ELEMENT output-messages (#PCDATA)>

<!ELEMENT output-octets (#PCDATA)>

<!ELEMENT output-refreshes (#PCDATA)>

<!ELEMENT output-updates (#PCDATA)>

<!ELEMENT packet-information (previous-hop | next-hop | interface-name | count)*>
<!ATTLIST packet-information heading CDATA #IMPLIED>

<!ELEMENT packet-statistics (ospf-packet-type | packets-sent | packets-received |
packets-sent-5seconds | packets-received-5seconds)*>

<!ELEMENT packet-version (#PCDATA)>

<!ELEMENT packets-dropped (#PCDATA)>

<!ELEMENT packets-processed (#PCDATA)>

<!ELEMENT packets-read (#PCDATA)>

<!ELEMENT packets-received (#PCDATA)>

<!ELEMENT packets-received-5seconds (#PCDATA)>

<!ELEMENT packets-retransmitted (#PCDATA)>

<!ELEMENT packets-sent (#PCDATA)>

<!ELEMENT packets-sent-5seconds (#PCDATA)>

<!ELEMENT passive (#PCDATA)>

<!ELEMENT path-active EMPTY>

<!ELEMENT path-adaptive EMPTY>
```

```

<!ELEMENT path-history (sequence-number | time | log | route)*>
<!ELEMENT path-no-recordroute EMPTY>
<!ELEMENT path-state (#PCDATA)>
<!ELEMENT path-type (#PCDATA)>
<!ELEMENT pbit EMPTY>
<!ELEMENT pdu-length (#PCDATA)>
<!ELEMENT pdu-lifetime (#PCDATA)>
<!ELEMENT pdu-version (#PCDATA)>
<!ELEMENT peer-address (#PCDATA)>
<!ELEMENT peer-as (#PCDATA)>
<!ELEMENT peer-count (#PCDATA)>
<!ELEMENT peer-end-of-rib-received (#PCDATA)>
<!ELEMENT peer-end-of-rib-scheduled (#PCDATA)>
<!ELEMENT peer-end-of-rib-sent (#PCDATA)>
<!ELEMENT peer-flags (#PCDATA)>
<!ELEMENT peer-id (#PCDATA)>
<!ELEMENT peer-no-refresh EMPTY>
<!ELEMENT peer-no-restart EMPTY>
<!ELEMENT peer-refresh-capability (#PCDATA)>
<!ELEMENT peer-restart-flags-received (#PCDATA)>
<!ELEMENT peer-restart-nlri-configured (#PCDATA)>
<!ELEMENT peer-restart-nlri-negotiated (#PCDATA)>
<!ELEMENT peer-restart-nlri-received (#PCDATA)>
<!ELEMENT peer-restart-nlri-state-saved (#PCDATA)>
<!ELEMENT peer-restart-time-configured (#PCDATA)>
<!ELEMENT peer-restart-time-received (#PCDATA)>
<!ELEMENT peer-stale-route-time-configured (#PCDATA)>
<!ELEMENT peer-state (#PCDATA)>
<!ELEMENT peer-type (#PCDATA)>
<!ELEMENT pending-prefix-count (#PCDATA)>
<!ELEMENT poll-interval (#PCDATA)>

```

```
• <!ELEMENT preemption-count (#PCDATA)>
• <!ELEMENT preemption-type (#PCDATA)>
• <!ELEMENT preference (#PCDATA)>
• <!ELEMENT preference2 (#PCDATA)>
• <!ELEMENT prefix-count (#PCDATA)>
• <!ELEMENT prefix-downflag EMPTY>
• <!ELEMENT prefix-element (address-prefix | prefix-metric | external-prefix-metric)*>
• <!ELEMENT prefix-err-message EMPTY>
• <!ELEMENT prefix-extern EMPTY>
• <!ELEMENT prefix-flag (#PCDATA)>
• <!ELEMENT prefix-flags (#PCDATA)>
• <!ELEMENT prefix-limit (nlri-type | prefix-count | limit-action | warning-percentage)*>
• <!ELEMENT prefix-metric (#PCDATA)>
• <!ELEMENT prefix-status (#PCDATA)>
• <!ELEMENT previous-hop (#PCDATA)>
• <!ELEMENT prib-active-count (#PCDATA)>
• <!ELEMENT prib-hidden-count (#PCDATA)>
• <!ELEMENT prib-holddown-count (#PCDATA)>
• <!ELEMENT prib-name (#PCDATA)>
• <!ELEMENT prib-route-count (#PCDATA)>
• <!ELEMENT protect-flag (#PCDATA)>
• <!ELEMENT protection-type (#PCDATA)>
• <!ELEMENT proto-id (#PCDATA)>
• <!ELEMENT protocol (#PCDATA)>
• <!ELEMENT protocol-name (#PCDATA)>
• <!ELEMENT protocol-nh (to | metric | indirect-nh | mpls-label | forwarding-nh-count | nh)*>
• <!ELEMENT protocol-route-count (#PCDATA)>
• <!ELEMENT protocols (protocol-name | protocol-route-count | active-route-count)*>
• <!ELEMENT protocols-tlv (protocol)*>
• <!ELEMENT psb-creation-time (#PCDATA)>
• <!ELEMENT psb-lifetime (#PCDATA)>
•
```

```

<!ELEMENT purges-initiated (#PCDATA)>
...
<!ELEMENT reachability-delay EMPTY>
...
<!ELEMENT reachability-error EMPTY>
...
<!ELEMENT reachability-expense EMPTY>
...
<!ELEMENT reachability-tlv (isis-topology-id | address-prefix | metric | prefix-flag | reachability-delay |
reachability-expense | reachability-error | address | neighbor-prefix | tlv-length)*>
<!ATTLIST reachability-tlv heading CDATA #IMPLIED>
...
<!ELEMENT receive-buffer-size (#PCDATA)>
...
<!ELEMENT receive-count (#PCDATA)>
...
<!ELEMENT receive-mode-ripng (#PCDATA)>
...
<!ELEMENT receive-mode-ripv2 (#PCDATA)>
...
<!ELEMENT received-prefix-count (#PCDATA)>
...
<!ELEMENT received-rro (#PCDATA)>
...
<!ELEMENT record-route (address | self | incomplete)*>
<!ATTLIST record-route heading CDATA #IMPLIED>
...
<!ELEMENT reference-count (#PCDATA)>
...
<!ELEMENT reference-site (local-site-id | remote-site-id | interface | label-block | connection)*>
...
<!ELEMENT refresh-timer (#PCDATA)>
...
<!ELEMENT remaining-lifetime (#PCDATA)>
...
<!ELEMENT remote-interface (interface-name | interface-status | interface-encapsulation)*>
...
<!ELEMENT remote-pe (#PCDATA)>
...
<!ELEMENT remote-site-id (#PCDATA)>
...
<!ELEMENT reserved-bandwidth (bandwidth-priority | total-reserved-bandwidth)*>
...
<!ELEMENT resv-style (#PCDATA)>
...
<!ELEMENT retransmit-interval (#PCDATA)>
...
<!ELEMENT retry-limit (#PCDATA)>
...
<!ELEMENT retry-timer (#PCDATA)>
...
<!ELEMENT reuse-preference (#PCDATA)>
...
<!ELEMENT reuse-time (#PCDATA)>
<!ATTLIST reuse-time junos:seconds CDATA #IMPLIED>
...
<!ELEMENT rib-bit (#PCDATA)>
...
<!ELEMENT rib-state (#PCDATA)>
...
<!ELEMENT rip-bad-messages (#PCDATA)>
...

```

```
• <!ELEMENT rip-current-memory (#PCDATA)>
• <!ELEMENT rip-error (rip-error-message)*>
• <!ELEMENT rip-error-message (#PCDATA)>
• <!ELEMENT rip-general-statistics (rip-protocol-name | rip-bad-messages | rip-interface-count | rip-current-memory | rip-maximum-memory)*>
• <!ELEMENT rip-general-statistics-information (rip-general-statistics)*>
• <!ELEMENT rip-global-statistics (rip-routes-learned | rip-routes-holddown | rip-requests-dropped | rip-responses-dropped)*>
• <!ELEMENT rip-holddown (#PCDATA)>
• <!ELEMENT rip-interface-count (#PCDATA)>
• <!ELEMENT rip-local-address-ipv4 (#PCDATA)>
• <!ELEMENT rip-local-address-ipv6 (#PCDATA)>
• <!ELEMENT rip-maximum-memory (#PCDATA)>
• <!ELEMENT rip-message (#PCDATA)>
• <!ELEMENT rip-message-last-5minutes (#PCDATA)>
• <!ELEMENT rip-message-last-minute (#PCDATA)>
• <!ELEMENT rip-message-statistics (rip-message | rip-message-total | rip-message-last-5minutes | rip-message-last-minute)*>
• <!ELEMENT rip-message-total (#PCDATA)>
• <!ELEMENT rip-neighbor (rip-neighbor-name | rip-neighbor-state | rip-neighbor-metric-in | rip-local-address-ipv4 | rip-remote-address-ipv4 | send-mode-ripv2 | receive-mode-ripv2 | rip-local-address-ipv6 | rip-remote-address-ipv6 | send-mode-ripng | receive-mode-ripng)*>
• <!ATTLIST rip-neighbor junos:style CDATA #IMPLIED>
• <!ELEMENT rip-neighbor-advertised-routes (#PCDATA)>
• <!ELEMENT rip-neighbor-information (rip-neighbor)*>
• <!ELEMENT rip-neighbor-learnt-routes (#PCDATA)>
• <!ELEMENT rip-neighbor-metric-in (#PCDATA)>
• <!ELEMENT rip-neighbor-name (#PCDATA)>
• <!ELEMENT rip-neighbor-state (#PCDATA)>
• <!ELEMENT rip-neighbor-statistics (rip-neighbor-name | rip-neighbor-learnt-routes | rip-neighbor-advertised-routes | rip-message-statistics)*>
• <!ELEMENT rip-port (#PCDATA)>
• <!ELEMENT rip-protocol-name (#PCDATA)>
• <!ELEMENT rip-remote-address-ipv4 (#PCDATA)>
• <!ELEMENT rip-remote-address-ipv6 (#PCDATA)>
```

```

<!ELEMENT rip-requests-dropped (#PCDATA)>
...
<!ELEMENT rip-responses-dropped (#PCDATA)>
...
<!ELEMENT rip-routes-holddown (#PCDATA)>
...
<!ELEMENT rip-routes-learned (#PCDATA)>
...
<!ELEMENT rip-statistics-information (rip-timer-values | rip-global-statistics | rip-neighbor-statistics)*>
...
<!ELEMENT rip-timeout (#PCDATA)>
...
<!ELEMENT rip-timer-values (rip-protocol-name | rip-port | rip-update-interval | rip-holddown | rip-timeout)*>
...
<!ELEMENT rip-update-interval (#PCDATA)>
...
<!ELEMENT route (#PCDATA)>
...
<!ELEMENT route-count (#PCDATA)>
...
<!ELEMENT route-distinguisher (#PCDATA)>
...
<!ELEMENT route-filter (address | flags | extended-information)*>
...
<!ELEMENT route-flap-count (#PCDATA)>
...
<!ELEMENT route-flap-damping (merit | last-merit | damping-parameters | default-damping-parameters | last-update | first-update | route-flap-count | suppressed | reuse-time | reuse-preference | expire-time)*>
...
<!ELEMENT route-information (as-number | router-id | route-table | rt-martians | rt-test-policy)*>
...
<!ELEMENT route-origin (#PCDATA)>
...
<!ELEMENT route-path-type (#PCDATA)>
...
<!ELEMENT route-queue (timer | state | element)*>
...
<!ELEMENT route-queue-count (#PCDATA)>
...
<!ELEMENT route-reflector-client EMPTY>
...
<!ELEMENT route-summary-information (as-number | router-id | route-table)*>
...
<!ELEMENT route-table (protocols | table-name | destination-count | total-route-count | active-route-count | holddown-route-count | hidden-route-count | rt)*>
...
<!ELEMENT route-type (#PCDATA)>
...
<!ELEMENT route-version (#PCDATA)>
...
<!ELEMENT router-id (#PCDATA)>
...
<!ELEMENT router-id-tlv (router-id)*>
...
<!ELEMENT router-priority (#PCDATA)>
...
<!ELEMENT rpd-time (#PCDATA)>
...
<!ELEMENT rsb-count (#PCDATA)>
...
<!ELEMENT rsvp-error (error-message | error-count | error-count-5seconds)*>
...

```

```
<!ELEMENT rsvp-interface (interface-name | rsvp-status | active-control-channel |
control-channel-unusable | index | authentication-flag | aggregate-flag | ack-flag | protect-flag |
hello-interval | forward-rsvp | interface-address | loopback-address | rsvp-telink | message-statistics |
reserved-bandwidth | detour-bandwidth)*>
<!ATTLIST rsvp-interface junos:style CDATA #IMPLIED>

<!ELEMENT rsvp-interface-information (active-count | rsvp-interface)*>

<!ELEMENT rsvp-link-protect-status (#PCDATA)>

<!ELEMENT rsvp-link-protection-bypass-status (#PCDATA)>

<!ELEMENT rsvp-lp-backup-lsp-cnt (#PCDATA)>

<!ELEMENT rsvp-lp-backup-route-cnt (#PCDATA)>

<!ELEMENT rsvp-lp-bypass-name (#PCDATA)>

<!ELEMENT rsvp-message (#PCDATA)>

<!ELEMENT rsvp-neighbor (rsvp-neighbor-address | rsvp-neighbor-interface | rsvp-neighbor-status |
neighbor-idle | neighbor-up-count | neighbor-down-count | last-changed-time | hello-interval | hellos-sent |
hellos-received | messages-received | rsvp-neighbor-remote-instance | rsvp-neighbor-local-instance |
rsvp-message | rsvp-refresh-reduct-status | rsvp-refresh-reduct-remote-status |
rsvp-refresh-reduct-ack-status | rsvp-link-protect-status | rsvp-lp-bypass-name |
rsvp-link-protection-bypass-status | rsvp-lp-backup-route-cnt | rsvp-lp-backup-lsp-cnt | explicit-route)*>
<!ATTLIST rsvp-neighbor heading CDATA #IMPLIED>
<!ATTLIST rsvp-neighbor junos:style CDATA #IMPLIED>

<!ELEMENT rsvp-neighbor-address (#PCDATA)>

<!ELEMENT rsvp-neighbor-count (#PCDATA)>

<!ELEMENT rsvp-neighbor-information (rsvp-neighbor-count | rsvp-neighbor)*>

<!ELEMENT rsvp-neighbor-interface (#PCDATA)>

<!ELEMENT rsvp-neighbor-local-instance (#PCDATA)>

<!ELEMENT rsvp-neighbor-remote-instance (#PCDATA)>

<!ELEMENT rsvp-neighbor-status (#PCDATA)>

<!ELEMENT rsvp-path-status (#PCDATA)>

<!ELEMENT rsvp-refresh-reduct-ack-status (#PCDATA)>

<!ELEMENT rsvp-refresh-reduct-remote-status (#PCDATA)>

<!ELEMENT rsvp-refresh-reduct-status (#PCDATA)>

<!ELEMENT rsvp-session (destination-address | is-detour | source-address | lsp-state | lsp-pktbytes |
no-statistics | route-count | rsb-count | resv-style | label-in | label-out | name | bidirectional |
upstream-label-in | upstream-label-out | suggested-label-in | suggested-label-out | psb-lifetime |
psb-creation-time | sender-tspec | lsp-id | tunnel-id | proto-id | is-fastreroute | rsvp-path-status |
packet-information | explicit-route | record-route | detour | detour-branch | mpls-lsp)*>
<!ATTLIST rsvp-session junos:style CDATA #IMPLIED>

<!ELEMENT rsvp-session-data (session-type | count | display-count | up-count | down-count | detours |
rsvp-session)*>

<!ELEMENT rsvp-session-information (rsvp-session-data)*>
```

```

<!ELEMENT rsvp-statistics-information (message-statistics | rsvp-error)*>
<!--ELEMENT rsvp-status (#PCDATA)>

<!ELEMENT rsvp-telink (telink-name | telink-local-id | active-reservation | subscription | static-bandwidth |
available-bandwidth | total-reserved-bandwidth | high-watermark | preemption-count | update-threshold |
reserved-bandwidth | detour-bandwidth)*>
<!ELEMENT rsvp-version (rsvp-status | refresh-timer | keep-multiplier | preemption-type)*>
<!ELEMENT rsvp-version-information (rsvp-version)*>
<!ELEMENT rt (rtib-primary | rtib-secondary | rt-destination | rt-prefix-length | rt-entry-count |
rt-announced-count | rt-state | rt-entry | ts)*>
<!ATTLIST rt junos:style CDATA #IMPLIED>
<!ELEMENT rt-announced-count (#PCDATA)>
<!ELEMENT rt-destination (#PCDATA)>
<!ELEMENT rt-entry (active-tag | last-active | current-active | protocol-name | preference | preference2 |
route-distinguisher | color | color2 | age | metric | metric2 | rt-tag | rt-tag2 | learned-from | peer-as |
local-as | rt-entry-state | inactive-reason | task-name | announce-bits | announce-tasks | as-path |
local-preference | med | peer-id | route-flap-damping | aggregate | gateway | indirect-nh-count | nh-type | |
nh | protocol-nh)*>
<!ELEMENT rt-entry-count (#PCDATA)>
<!ELEMENT rt-entry-state (#PCDATA)>
<!ELEMENT rt-martian-table-name (#PCDATA)>
<!ELEMENT rt-martians (rt-martian-table-name | route-filter)*>
<!ELEMENT rt-policy-name (#PCDATA)>
<!ELEMENT rt-prefix-length (#PCDATA)>
<!ELEMENT rt-route-accepted (#PCDATA)>
<!ELEMENT rt-route-rejected (#PCDATA)>
<!ELEMENT rt-state (#PCDATA)>
<!ELEMENT rt-tag (#PCDATA)>
<!ELEMENT rt-tag2 (#PCDATA)>
<!ELEMENT rt-test-policy (rt-policy-name | rt-route-accepted | rt-route-rejected)*>
<!ELEMENT rte-instance (instance-name | rte-instance-type | instance-flags | instance-options |
import-policy | export-policy)*>
<!ATTLIST rte-instance junos:style CDATA #IMPLIED>
<!ELEMENT rte-instance-type (#PCDATA)>
<!ELEMENT rte-table (table-name | table-export-on | import-list | table-flags | table-usage)*>
<!ATTLIST rte-table junos:style CDATA #IMPLIED>
<!ELEMENT rte-target (target-string | family | subaf | import-count | export-count | import-list |
export-list)*>
<!ATTLIST rte-target junos:style CDATA #IMPLIED>

```

```
• <!ELEMENT rte-export-table-information (rte-table | rte-target | rte-instance)*>
• <!ELEMENT rtrib-primary (#PCDATA)>
• <!ELEMENT rtrib-secondary (#PCDATA)>
• <!ELEMENT runt-header-error (#PCDATA)>
• <!ELEMENT selected-next-hop EMPTY>
• <!ELEMENT self EMPTY>
• <!ELEMENT send-buffer-size (#PCDATA)>
• <!ELEMENT send-count (#PCDATA)>
• <!ELEMENT send-mode-ripng (#PCDATA)>
• <!ELEMENT send-mode-ripv2 (#PCDATA)>
• <!ELEMENT send-state (#PCDATA)>
• <!ELEMENT send-time (#PCDATA)>
• <!ELEMENT sender-tspec (#PCDATA)>
• <!ELEMENT sequence-number (#PCDATA)>
• <!ELEMENT session-type (#PCDATA)>
• <!ELEMENT setup-priority (#PCDATA)>
• <!ELEMENT short-packets-error (#PCDATA)>
• <!ELEMENT signal-type (#PCDATA)>
• <!ELEMENT skip-address (#PCDATA)>
• <!ELEMENT snp-queue-drops (#PCDATA)>
• <!ELEMENT snp-queue-length (#PCDATA)>
• <!ELEMENT snpa (#PCDATA)>
• <!ELEMENT source-address (#PCDATA)>
• <!ELEMENT spf-runs (#PCDATA)>
• <!ELEMENT spf-trigger-count (#PCDATA)>
• <!ELEMENT start-time (#PCDATA)>
• <!ATTLIST start-time junos:seconds CDATA #IMPLIED>
• <!ELEMENT state (#PCDATA)>
• <!ELEMENT static-bandwidth (#PCDATA)>
• <!ELEMENT stub-area-mismatch-error (#PCDATA)>
• <!ELEMENT subaf (#PCDATA)>
• <!ELEMENT subnet-mismatch-error (#PCDATA)>
•
```

```

<!ELEMENT subscription (#PCDATA)>
<!ELEMENT subtlv-length (#PCDATA)>
<!ELEMENT subtlv-present EMPTY>
<!ELEMENT subtlv-size (#PCDATA)>
<!ELEMENT successful (#PCDATA)>
<!ELEMENT suggested-label-in (#PCDATA)>
<!ELEMENT suggested-label-out (#PCDATA)>
<!ELEMENT suppressed EMPTY>
<!ELEMENT suppressed-prefix-count (#PCDATA)>
<!ELEMENT switching-type (#PCDATA)>
<!ELEMENT sys-error (#PCDATA)>
<!ELEMENT system-id (#PCDATA)>
<!ELEMENT system-id-length (#PCDATA)>
<!ELEMENT system-name (#PCDATA)>
<!ELEMENT table-export-on (#PCDATA)>
<!ELEMENT table-flags (#PCDATA)>
<!ELEMENT table-name (#PCDATA)>
<!ELEMENT table-usage (#PCDATA)>
<!ELEMENT tag (#PCDATA)>
<!ELEMENT target-string (#PCDATA)>
<!ELEMENT task (task-name | task-no-information)*>
<!ELEMENT task-information (task)*>
<!ELEMENT task-name (#PCDATA)>
<!ELEMENT task-no-information EMPTY>
<!ELEMENT te-metric (#PCDATA)>
<!ELEMENT ted-database (ted-database-id | ted-database-id-overload | ted-database-type |

ted-database-age | ted-database-link-in | ted-database-link-out | ted-database-protocol | ted-link)*>
<!ATTLIST ted-database junos:style CDATA #IMPLIED>
<!ELEMENT ted-database-age (#PCDATA)>
<!ELEMENT ted-database-id (#PCDATA)>
<!ELEMENT ted-database-id-overload (#PCDATA)>
<!ELEMENT ted-database-inet-count (#PCDATA)>

```

```
• <!ELEMENT ted-database-information (ted-database-summary | ted-database)*>
• <!ELEMENT ted-database-iso-count (#PCDATA)>
• <!ELEMENT ted-database-link-in (#PCDATA)>
• <!ELEMENT ted-database-link-out (#PCDATA)>
• <!ELEMENT ted-database-protocol (#PCDATA)>
• <!ELEMENT ted-database-summary (ted-database-iso-count | ted-database-inet-count)*>
• <!ELEMENT ted-database-type (#PCDATA)>
• <!ELEMENT ted-link (ted-link-from | ted-link-to | ted-link-local-address | ted-link-remote-address | admin-groups | ted-link-metric | ted-link-link-out | ted-link-static-bandwidth | ted-link-reservable-bandwidth | ted-link-local-bw0 | ted-link-local-bw1 | ted-link-local-bw2 | ted-link-local-bw3 | ted-link-local-bw4 | ted-link-local-bw5 | ted-link-local-bw6 | ted-link-local-bw7 | ted-link-avail-bw0 | ted-link-avail-bw1 | ted-link-avail-bw2 | ted-link-avail-bw3 | ted-link-avail-bw4 | ted-link-avail-bw5 | ted-link-avail-bw6 | ted-link-avail-bw7)*>
• <!ATTLIST ted-link junos:style CDATA #IMPLIED>
• <!ELEMENT ted-link-avail-bw0 (#PCDATA)>
• <!ELEMENT ted-link-avail-bw1 (#PCDATA)>
• <!ELEMENT ted-link-avail-bw2 (#PCDATA)>
• <!ELEMENT ted-link-avail-bw3 (#PCDATA)>
• <!ELEMENT ted-link-avail-bw4 (#PCDATA)>
• <!ELEMENT ted-link-avail-bw5 (#PCDATA)>
• <!ELEMENT ted-link-avail-bw6 (#PCDATA)>
• <!ELEMENT ted-link-avail-bw7 (#PCDATA)>
• <!ELEMENT ted-link-from (#PCDATA)>
• <!ELEMENT ted-link-information (ted-link)*>
• <!ELEMENT ted-link-link-out (#PCDATA)>
• <!ELEMENT ted-link-local-address (#PCDATA)>
• <!ELEMENT ted-link-local-bw0 (#PCDATA)>
• <!ELEMENT ted-link-local-bw1 (#PCDATA)>
• <!ELEMENT ted-link-local-bw2 (#PCDATA)>
• <!ELEMENT ted-link-local-bw3 (#PCDATA)>
• <!ELEMENT ted-link-local-bw4 (#PCDATA)>
• <!ELEMENT ted-link-local-bw5 (#PCDATA)>
• <!ELEMENT ted-link-local-bw6 (#PCDATA)>
• <!ELEMENT ted-link-local-bw7 (#PCDATA)>
```

```

<!ELEMENT ted-link-metric (#PCDATA)>
...
<!ELEMENT ted-link-remote-address (#PCDATA)>
...
<!ELEMENT ted-link-reservable-bandwidth (#PCDATA)>
...
<!ELEMENT ted-link-static-bandwidth (#PCDATA)>
...
<!ELEMENT ted-link-to (#PCDATA)>
...
<!ELEMENT ted-protocol (ted-protocol-name | ted-protocol-credibility | ted-protocol-self-node)*>
...
<!ELEMENT ted-protocol-credibility (#PCDATA)>
...
<!ELEMENT ted-protocol-information (ted-protocol)*>
...
<!ELEMENT ted-protocol-name (#PCDATA)>
...
<!ELEMENT ted-protocol-self-node (#PCDATA)>
...
<!ELEMENT telink-local-id (#PCDATA)>
...
<!ELEMENT telink-name (#PCDATA)>
...
<!ELEMENT time (#PCDATA)>
...
<!ELEMENT time-to-adjust (#PCDATA)>
...
<!ELEMENT timer (#PCDATA)>
...
<!ELEMENT timestamp (#PCDATA)>
...
<!ELEMENT title (#PCDATA)>
...
<!ELEMENT tlv-block (tlv-type-name | tlv-type-value | tlv-length | bytes-left | formatted-tlv-data)*>
...
<!ELEMENT tlv-grace-type-name (#PCDATA)>
...
<!ELEMENT tlv-grace-value (#PCDATA)>
...
<!ELEMENT tlv-length (#PCDATA)>
...
<!ELEMENT tlv-stragglers (bytes-left)*>
...
<!ELEMENT tlv-type-name (#PCDATA)>
...
<!ELEMENT tlv-type-value (#PCDATA)>
...
<!ELEMENT to (#PCDATA)>
...
<!ELEMENT tos-0-metric (#PCDATA)>
...
<!ELEMENT tos-count (#PCDATA)>
...
<!ELEMENT total-database-summaries (#PCDATA)>
...
<!ELEMENT total-linkstate-request (#PCDATA)>
...
<!ELEMENT total-paths (#PCDATA)>
...
<!ELEMENT total-prefix-count (#PCDATA)>
...

```

```
• <!ELEMENT total-reserved-bandwidth (#PCDATA)>
• <!ELEMENT total-retransmits (#PCDATA)>
• <!ELEMENT total-route-count (#PCDATA)>
• <!ELEMENT total-time (#PCDATA)>
• <!ELEMENT totals-information (packets-received | packets-sent)*>
• <!ELEMENT tracing-information (flags | filename | filesize | filelimit)*>
• <!ELEMENT transition-count (#PCDATA)>
• <!ELEMENT transmission-status (transmit-count | message | interface-name | transmit-time)*>
• <!ELEMENT transmit-count (#PCDATA)>
• <!ELEMENT transmit-time (#PCDATA)>
• <!ATTLIST transmit-time junos:seconds CDATA #IMPLIED>
• <!ELEMENT truncated-packets-error (#PCDATA)>
• <!ELEMENT tsi (#PCDATA)>
• <!ELEMENT tunnel-id (#PCDATA)>
• <!ELEMENT type (#PCDATA)>
• <!ELEMENT type-value (#PCDATA)>
• <!ELEMENT type7 EMPTY>
• <!ELEMENT unconfigured-peer-count (#PCDATA)>
• <!ELEMENT unconfigured-peers (route-filter)*>
• <!ELEMENT unknown-tlv (isis-tlv-type | tlv-length)*>
• <!ELEMENT up-count (#PCDATA)>
• <!ELEMENT up-transitions (#PCDATA)>
• <!ELEMENT update-threshold (#PCDATA)>
• <!ELEMENT upstream-label-in (#PCDATA)>
• <!ELEMENT upstream-label-out (#PCDATA)>
• <!ELEMENT via (#PCDATA)>
• <!ELEMENT virtual-link-error (#PCDATA)>
• <!ELEMENT vrf-export (#PCDATA)>
• <!ELEMENT vrf-import (#PCDATA)>
• <!ELEMENT warning-percentage (#PCDATA)>
• <!ELEMENT weight (#PCDATA)>
•
```

# Chapter 17

## DTD for SNMP Response Tags

This chapter contains the document type definition (DTD) called `junos-snmp.dtd`, which lists the tags returned by the JUNOScript server to describe Simple Network Management Protocol (SNMP) settings. The associated XML namespace is <http://xml.juniper.net/junos/5.4R1/junos-snmp>. To review reference pages for the tags, see “Summary of SNMP Response Tags” on page 293.

```
<!-- Copyright (c) 2000-2002, Juniper Networks, Inc. -->
<!-- All rights reserved. -->
<!-- junos-snmp.dtd -->

<!ELEMENT alarm-creator (#PCDATA)>
<!ELEMENT alarm-index (#PCDATA)>
<!ELEMENT alarm-interval (#PCDATA)>
<!ELEMENT alarm-owner (#PCDATA)>
<!ELEMENT alarm-state (#PCDATA)>
<!ELEMENT alarm-value (#PCDATA)>
<!ELEMENT asn-parse-errors (#PCDATA)>
<!ELEMENT bad-community-names (#PCDATA)>
<!ELEMENT bad-community-uses (#PCDATA)>
<!ELEMENT bad-values (#PCDATA)>
<!ELEMENT bad-versions (#PCDATA)>
<!ELEMENT community (#PCDATA)>
<!ELEMENT currently-active (#PCDATA)>
<!ELEMENT event-creator (#PCDATA)>
<!ELEMENT event-descr (#PCDATA)>
<!ELEMENT event-index (#PCDATA)>
<!ELEMENT event-owner (#PCDATA)>
<!ELEMENT event-state (#PCDATA)>
```

```
<!ELEMENT event-type (#PCDATA)>
<!ELEMENT falling-event-index (#PCDATA)>
<!ELEMENT falling-threshold (#PCDATA)>
<!ELEMENT general-errors (#PCDATA)>
<!ELEMENT get-nexts (#PCDATA)>
<!ELEMENT get-requests (#PCDATA)>
<!ELEMENT get-responses (#PCDATA)>
<!ELEMENT group-deregisters (#PCDATA)>
<!ELEMENT group-registers (#PCDATA)>
<!ELEMENT group-removes (#PCDATA)>
<!ELEMENT last-time-sent (#PCDATA)>
<!ATTLIST last-time-sent junos:seconds CDATA #IMPLIED>
<!ELEMENT max-active (#PCDATA)>
<!ELEMENT max-latency (#PCDATA)>
<!ELEMENT no-such-names (#PCDATA)>
<!ELEMENT not-found (#PCDATA)>
<!ELEMENT packets (#PCDATA)>
<!ELEMENT proxy-drops (#PCDATA)>
<!ELEMENT read-onlys (#PCDATA)>
<!ELEMENT rising-event-index (#PCDATA)>
<!ELEMENT rising-threshold (#PCDATA)>
<!ELEMENT rmon-alarm (alarm-index | var-name | var-oid | sample-type | alarm-value | startup |
alarm-interval | rising-threshold | falling-threshold | rising-event-index | falling-event-index | alarm-owner |
alarm-creator | alarm-state)*>
<!ELEMENT rmon-alarm-information (rmon-alarm)*>
<!ATTLIST rmon-alarm-information junos:style CDATA #IMPLIED>
<!ELEMENT rmon-event (event-index | event-descr | event-type | community | last-time-sent | event-owner |
event-creator | event-state)*>
<!ELEMENT rmon-event-information (rmon-event)*>
<!ATTLIST rmon-event-information junos:style CDATA #IMPLIED>
<!ELEMENT rmon-information (rmon-alarm-information | rmon-event-information)*>
<!ELEMENT sample-type (#PCDATA)>
<!ELEMENT set-requests (#PCDATA)>
<!ELEMENT silent-drops (#PCDATA)>
```

```
<!ELEMENT snmp-input-statistics (packets | bad-versions | bad-community-names | bad-community-uses
| asn-parse-errors | too-bigs | no-such-names | bad-values | read-onlys | general-errors |
total-request-varbinds | total-set-varbinds | get-requests | get-nexsts | set-requests | get-responses | traps
| silent-drops | proxy-drops)*>

<!ELEMENT snmp-output-statistics (packets | too-bigs | no-such-names | bad-values | general-errors |
get-requests | get-nexsts | set-requests | get-responses | traps)*>

<!ELEMENT snmp-statistics (snmp-input-statistics | snmp-output-statistics | sub-agent-control-blocks |
sub-agent-registration)*>

<!ELEMENT startup (#PCDATA)>

<!ELEMENT sub-agent-control-blocks (total | currently-active | max-active | not-found | timed-out |
max-latency)*>

<!ELEMENT sub-agent-registration (group-registers | group-deregisters | group-removes)*>

<!ELEMENT timed-out (#PCDATA)>

<!ELEMENT too-bigs (#PCDATA)>

<!ELEMENT total (#PCDATA)>

<!ELEMENT total-request-varbinds (#PCDATA)>

<!ELEMENT total-set-varbinds (#PCDATA)>

<!ELEMENT traps (#PCDATA)>

<!ELEMENT var-name (#PCDATA)>

<!ELEMENT var-oid (#PCDATA)>
```



# Chapter 18

## DTD for UDP Forwarding Helper Response Tags

This chapter contains the document type definition (DTD) called `junos-helper.dtd`, which lists the tags returned by the JUNOScript server to describe output from the User Datagram Protocol (UDP) forwarding helper. The associated XML namespace is `http://xml.juniper.net/junos/5.4R1/junos-helper`. To review reference pages for the tags, see “Summary of UDP Forwarding Helper Response Tags” on page 298.

```
<!-- Copyright (c) 2000-2002, Juniper Networks, Inc. -->
<!-- All rights reserved. -->
<!-- junos-helper.dtd -->

<!ELEMENT dropped-packets (#PCDATA)>
<!ELEMENT dropped-packets-badread (#PCDATA)>
<!ELEMENT dropped-packets-badsend (#PCDATA)>
<!ELEMENT dropped-packets-nointerface (#PCDATA)>
<!ELEMENT forwarded-packets (#PCDATA)>
<!ELEMENT helper-statistics-information (helper-statistics-service-information)*>
<!ELEMENT helper-statistics-service-information (service-name | received-packets | forwarded-packets |
dropped-packets | dropped-packets-nointerface | dropped-packets-badread |
dropped-packets-badsend)*>
<!ELEMENT received-packets (#PCDATA)>
<!ELEMENT service-name (#PCDATA)>
```



# Part 3

## Index

■ Index on page 1577





# Index

## Index

The Index does not list reference pages for individual tags. Access them through the “Table of Contents” on page v.

### A

accounting information response tags	
DTD .....	1483
reference pages.....	68
alarm information response tags	
DTD .....	1487
reference pages.....	75

### C

chassis information response tags	
DTD .....	1489
reference pages.....	76
class of service information response tags	
DTD .....	1495
reference pages.....	92
CLI commands, mapping to tags .....	20
configuration tags, reference pages .....	301
conventions	
documentation.....	lxv
tag reference pages .....	lxvi
customer support, requesting.....	lxvii

### D

documentation conventions .....	lxv
DTD	
accounting information response tags.....	1483
alarm information response tags.....	1487
chassis information response tags.....	1489
class of service information response tags .....	1495
firewall filter response tags.....	1501
forwarding and routing table response tags.....	1503
interface information response tags .....	1505
IPSec response tags.....	1527
IPv6 neighbor discovery response tags.....	1531
routing protocols response tags.....	1533
session control response tags.....	1481
SNMP settings response tags.....	1569
UDP forwarding helper response tags .....	1573

### F

files	
junos.dtd .....	1481
junos-accounting.dtd .....	1483
junos-alarm.dtd .....	1487
junos-chassis.dtd .....	1489
junos-cos.dtd .....	1495
junos-filter.dtd .....	1501
junos-helper.dtd .....	1573
junos-interface.dtd.....	1505
junos-ipsec.dtd .....	1527
junos-ipv6-nd.dtd .....	1531
junos-routing.dtd .....	1533
junos-rtinfo.dtd.....	1503
junos-snmp.dtd .....	1569
firewall filter response tags	
DTD.....	1501
reference pages .....	112
forwarding and routing table response tags	
DTD.....	1503
reference pages .....	114

### I

interface information response tags	
DTD.....	1505
reference pages .....	117
IPSec response tags	
DTD.....	1527
reference pages .....	172
IPv6 neighbor discovery response tags	
DTD.....	1531
reference pages .....	177

### J

junos.dtd file.....	1481
junos-accounting.dtd file.....	1483
junos-alarm.dtd file.....	1487
junos-chassis.dtd file.....	1489

junos-cos.dtd file .....	1495
junos-filter.dtd file .....	1501
junos-helper.dtd file .....	1573
junos-interface.dtd file .....	1505
junos-ipsec.dtd file .....	1527
junos-ipv6-nd.dtd file .....	1531
junos-routing.dtd file .....	1533
junos-rtinfo.dtd file .....	1503
junos-snmp.dtd file .....	1569
<b>M</b>	
<b>mapping</b>	
CLI commands to tags, summary .....	20
tags to CLI commands, summary .....	17
<b>R</b>	
<b>reference pages</b>	
configuration .....	301
notational conventions .....	lxvi
operational requests .....	25
operational responses	
accounting information .....	68
alarm information .....	75
chassis information .....	76
class of service information .....	92
firewall filter information .....	112
forwarding and routing table information .....	114
interface information .....	117
IPSec .....	172
IPv6 neighbor discovery .....	177
routing protocols .....	179
SNMP settings .....	293
UDP forwarding helper output .....	298
session control .....	3
<b>request tags</b>	
mapping to CLI commands and response tags .....	17
reference pages	
operational .....	25
session control .....	3
<b>response tags</b>	
accounting information	
DTD .....	1483
reference pages .....	68
alarm information	
DTD .....	1487
reference pages .....	75
chassis information	
DTD .....	1489
reference pages .....	76
class of service information	
DTD .....	1495
reference pages .....	92
<b>S</b>	
<b>session control tags</b>	
DTD .....	1481
reference pages .....	3
<b>SNMP settings response tags</b>	
DTD .....	1569
reference pages .....	293
<b>support, technical, requesting</b>	
lxviii	
<b>T</b>	
<b>tags</b>	
accounting response .....	68
alarm response .....	75
chassis response .....	76
class of service information response .....	92
configuration, reference pages .....	301
firewall filter response .....	112
forwarding and routing table response .....	114
interface information response .....	117
IPSec response .....	172
IPv6 neighbor discovery response .....	177

request *See* request tags  
response *See* response tags  
routing protocols response ..... 179  
session control *See* session control tags  
SNMP settings response ..... 293  
UDP forwarding helper response ..... 298  
technical support, contacting ..... lxviii  
typefaces, use of in documentation ..... lxv

**U**

UDP forwarding helper response tags  
    DTD ..... 1573  
    reference pages ..... 298

