## Index

### A

- address family command [RC-7, RC-262]
- address-family ipv4 command [RC-144]
- adjacencies, tuning [RC-296]
- administrative distance [RC-316]
- administrative distance, static routes [RC-415]
- aggregate-address command [RC-58, RC-106]
- allowas-in command [RC-107]
- apply command [RC-369]
- Area Border Routers (ABRs) [RC-171]
- area command [RC-189]
- as-override command [RC-107]
- attached bit on an IS-IS instance [RC-266]
- authentication
  - configuring (OSPFv2) [RC-198]
  - MD5 (OSPFv2) [RC-173]
  - route, key rollover (OSPFv2) [RC-174]
  - strategies [RC-173]
- authentication command (OSPFv2) [RC-199]
- authentication message-digest command [RC-205]
- Autonomous System Boundary Routers (ASBRs) [RC-172]
- autonomous system number format [RC-6]
- autonomous systems [RC-170]
- auto-summary command [RC-336]

### B

- backbone area [RC-171]
- bandwidth-percent command [RC-145]
- bestpath algorithm [RC-26]
- BGP (Border Gateway Protocol)
  - autonomous system number format [RC-6]
- BGP keychains [RC-39]
- bidirectional forwarding detection [RC-3]
- configuration
  - grouping [RC-8]
  - inheriting [RC-10]
- default address family [RC-37]
- description [RC-1]
- distributed BGP [RC-37]
- functional overview [RC-2]
- inheritance, monitoring [RC-14]
- MPLS VPN carrier supporting carrier [RC-38]
- multiprotocol [RC-31]
- neighbors, maximum limits on [RC-3]
- policy attach points
  - allocate label [RC-377]
  - clear policy [RC-379]
  - dampening [RC-372]
  - debug [RC-379]
  - default originate [RC-372]
  - export [RC-376]
  - import [RC-376]
  - neighbor export [RC-373]
  - neighbor import [RC-373]
  - neighbor-ori [RC-378]
  - network [RC-374]
  - next-hop [RC-378]
  - redistribute [RC-374]
  - retain route target [RC-377]
  - show bgp [RC-375]
  - policy attach points, aggregation [RC-371]
  - router identifier [RC-3]
  - routing policy
enforcing RC-19
update groups
description RC-21
example RC-125
bgp address family submode
  retain route-target command RC-104
  bgp bestpath as-path ignore command RC-54
  bgp bestpath compare-routerid command RC-55
  bgp bestpath med always command RC-54
  bgp bestpath med confed command RC-54
  bgp bestpath med missing-as-worst command RC-54
  bgp confederation identifier command RC-45
  bgp confederation peers command RC-46
  bgp cost community RC-22
  bgp dampening command RC-64
  bgp default local-preference command RC-49
  bgp global address family submode RC-7
    aggregate-address command RC-58
    bgp dampening command RC-64
    distance bgp command RC-70
    network command RC-56
    redistribute command RC-61
    See address family command
    table-policy command RC-68
  bgp neighbor address family submode RC-7, RC-262
    next-hop self command RC-80
    route-policy (BGP) command RC-77
    route-policy command RC-44, RC-72, RC-102
    route-reflector-client command RC-75
    See neighbor address family command
    send-community-ebgp command RC-82
    soft-reconfiguration inbound always command RC-89
    weight command RC-53
  bgp neighbor command RC-8
  bgp neighbor group submode RC-10, RC-72
    See neighbor-group command
  bgp neighbor submode RC-7, RC-8, RC-262
    keychain command RC-114
    password command RC-101
See bgp neighbor command
shutdown command RC-101, RC-115
timers command RC-101
update-source command RC-101
use command RC-72
bgp redistribute-internal command RC-59
bgp router-id command RC-94, RC-105
bgp router submode RC-7, RC-261
  bgp bestpath as-path ignore command RC-54
  bgp bestpath compare-routerid command RC-55
  bgp bestpath med always command RC-54
  bgp bestpath med confed command RC-54
  bgp bestpath med missing-as-worst command RC-54
  bgp confederation identifier command RC-45
  bgp confederation peers command RC-46
  bgp default local-preference command RC-49
  bgp redistribute-internal command RC-59
  bgp router-id command RC-94
  default-metric command RC-51
  See router bgp command
timers bgp command RC-47
bgp session group submode RC-9
BGP update groups example RC-125
bgp VPNv4 address family submode RC-8
BGP vrf address family submode
  export route-policy command RC-93
  import route-policy command RC-93
  import route-target command RC-93
  maximum prefix command RC-93
  bgp vrf address family submode RC-8
    aggregate-address command RC-106
    maximum-paths command RC-109
    redistribute command RC-99, RC-112
BGP VRF neighbor address family submode
  as-override command RC-107
  route-policy command RC-107
  site-of-origin command RC-107
  bgp VRF neighbor address family submode RC-8
  bgp vrf neighbor address family submode
allow-as-in command  RC-107
BGP VRF neighbor submode
  ebgp-multihop command  RC-106
bgp VRF neighbor submode  RC-8
bgp vrf neighbor submode
  password command  RC-106
BGP vrf submode
  rd command  RC-95
bgp vrf submode  RC-8
  bgp router-id command  RC-105
  label-allocation-mode per-ces command  RC-105
  bidirectional forwarding detection  RC-3
  broadcast-for-v2 command  RC-334

circuit-type command  RC-274
clear bgp flap-statistics command  RC-65
clear bgp flap-statistics route-policy command  RC-66
clear bgp soft in command  RC-116, RC-117, RC-118, RC-119
clear bgp soft out command  RC-117
clear eigrp neighbors command  RC-160
clear eigrp topology command  RC-160
clear ospf command  RC-248
clear ospfv3 command  RC-248
configuring
  OSPFv3
    graceful restart  RC-222
cost community, BGP  RC-22
clear ospfv3 command  RC-285

dampening, route  RC-33
dead interval command  RC-195
default address family  RC-19
default-cost command  RC-192
default-information originate command  RC-302
default-metric command  RC-51, RC-144
distance bgp command  RC-70
distance command  RC-144, RC-303
distributed BGP  RC-37
draft-bonica-tcp-auth-05.txt  RC-128
draft-ietf-idr-as4bytes-12.txt  RC-128
draft-ietf-isd-avoid-transition-00.txt  RC-128
draft-ietf-idr-bgp4-24.txt, BGP  RC-128
draft-ietf-idr-bgp4-15.txt, BGP  RC-128
draft-ietf-idr-cease-subcode-05.txt  RC-128
draft-ietf-isis-igp-p2p-over-lan-05.txt, Point-to-point operation over LAN  RC-313
draft-ietf-isis-restart-04.txt, Restart Signalling for IS-IS  RC-313
draft-ietf-isis-traffic-05.txt, IS-IS Extensions for Traffic Engineering  RC-313
draft-ietf-isis-vl-multi-topology-06.txt, M-ISIS
  Multi Topology (MT) Routing in IS-IS  RC-313

ebgp-multihop command  RC-106
edit command  RC-408
EIGRP ()
  policy attach points
    default-accept-in  RC-396
EIGRP (Enhanced Interior Gateway Routing Protocol)
  features  RC-133
  hello interval and hold time  RC-140
  overview  RC-133
  policy attach points
    default-accept-out  RC-396
    if-policy-in  RC-397
    if-policy-out  RC-397
    policy-in  RC-396
    policy-out  RC-397
    redistribute  RC-397
    restrictions  RC-152
    routing policy options  RC-141
<table>
<thead>
<tr>
<th>Command</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>split horizon</td>
<td>RC-139</td>
</tr>
<tr>
<td>stub routing</td>
<td>RC-140</td>
</tr>
<tr>
<td>end-policy command</td>
<td>RC-42</td>
</tr>
<tr>
<td>EXEC mode</td>
<td>RC-16, RC-161</td>
</tr>
<tr>
<td>clear bgp flap statistics command</td>
<td>RC-65</td>
</tr>
<tr>
<td>clear bgp flap statistics route-policy command</td>
<td>RC-66</td>
</tr>
<tr>
<td>clear bgp soft in command</td>
<td>RC-116, RC-117, RC-118, RC-119</td>
</tr>
<tr>
<td>clear bgp soft out command</td>
<td>RC-117</td>
</tr>
<tr>
<td>clear eigrp neighbors command</td>
<td>RC-160</td>
</tr>
<tr>
<td>clear eigrp topology command</td>
<td>RC-160</td>
</tr>
<tr>
<td>clear ospf command</td>
<td>RC-248</td>
</tr>
<tr>
<td>clear ospfv3 command</td>
<td>RC-248</td>
</tr>
<tr>
<td>edit command</td>
<td>RC-408</td>
</tr>
<tr>
<td>show bgp af-group command</td>
<td>RC-15, RC-16</td>
</tr>
<tr>
<td>show bgp cidr-only command</td>
<td>RC-120, RC-121</td>
</tr>
<tr>
<td>show bgp community command</td>
<td>RC-120, RC-121, RC-122</td>
</tr>
<tr>
<td>show bgp count-only command</td>
<td>RC-121</td>
</tr>
<tr>
<td>show bgp flap-statistics command</td>
<td>RC-64</td>
</tr>
<tr>
<td>show bgp flap statistics route-policy command</td>
<td>RC-65</td>
</tr>
<tr>
<td>show bgp inheritance command</td>
<td>RC-15</td>
</tr>
<tr>
<td>show bgp neighbor command</td>
<td>RC-14</td>
</tr>
<tr>
<td>show bgp neighbor-group command</td>
<td>RC-17, RC-121</td>
</tr>
<tr>
<td>show bgp neighbors command</td>
<td>RC-120</td>
</tr>
<tr>
<td>show bgp paths command</td>
<td>RC-120</td>
</tr>
<tr>
<td>show bgp reexp command</td>
<td>RC-120</td>
</tr>
<tr>
<td>show bgp summary command</td>
<td>RC-121</td>
</tr>
<tr>
<td>show eigrp accounting command</td>
<td>RC-160</td>
</tr>
<tr>
<td>show eigrp interfaces command</td>
<td>RC-160</td>
</tr>
<tr>
<td>show eigrp neighbors command</td>
<td>RC-154, RC-161</td>
</tr>
<tr>
<td>show eigrp topology command</td>
<td>RC-161</td>
</tr>
<tr>
<td>show eigrp traffic command</td>
<td>RC-161</td>
</tr>
<tr>
<td>show isis command</td>
<td>RC-272</td>
</tr>
<tr>
<td>show isis database command</td>
<td>RC-286</td>
</tr>
<tr>
<td>show isis database-log command</td>
<td>RC-286</td>
</tr>
<tr>
<td>show isis interface command</td>
<td>RC-299</td>
</tr>
<tr>
<td>show isis lsp-log command</td>
<td>RC-286</td>
</tr>
<tr>
<td>show isis mpls command</td>
<td>RC-295</td>
</tr>
<tr>
<td>show isis mpls traffic-eng adjacency-log command</td>
<td>RC-295</td>
</tr>
<tr>
<td>show isis mpls traffic-eng advertisements command</td>
<td>RC-295</td>
</tr>
<tr>
<td>show isis neighbors command</td>
<td>RC-299</td>
</tr>
<tr>
<td>show isis spf-log command</td>
<td>RC-301</td>
</tr>
<tr>
<td>show isis topology command</td>
<td>RC-275</td>
</tr>
<tr>
<td>show protocols eigrp command</td>
<td>RC-161</td>
</tr>
<tr>
<td>show rpl route-policy command</td>
<td>RC-408</td>
</tr>
<tr>
<td>show running-config command</td>
<td>RC-288</td>
</tr>
<tr>
<td>export route-policy command</td>
<td>RC-93</td>
</tr>
<tr>
<td>export route-target command</td>
<td>RC-93</td>
</tr>
<tr>
<td>forwarding adjacency</td>
<td>RC-269</td>
</tr>
<tr>
<td>Generalized TTL Security Mechanism (GTSM)</td>
<td>RC-186</td>
</tr>
<tr>
<td>configuring virtual links</td>
<td>RC-186</td>
</tr>
<tr>
<td>Generalized TTL Security Mechanism (GTSM), RFC 3682 TTL value</td>
<td>RC-186</td>
</tr>
<tr>
<td>global parameters</td>
<td>RC-360</td>
</tr>
<tr>
<td>graceful restart</td>
<td>RC-222</td>
</tr>
<tr>
<td>graceful-restart helper command</td>
<td>RC-182</td>
</tr>
<tr>
<td>graceful-restart interval command</td>
<td>RC-182</td>
</tr>
<tr>
<td>graceful-restart lifetime command</td>
<td>RC-182</td>
</tr>
<tr>
<td>hello-interval (IS-IS) command</td>
<td>RC-297</td>
</tr>
<tr>
<td>hello interval (OSPF) command</td>
<td>RC-195</td>
</tr>
<tr>
<td>hello-multiplier command</td>
<td>RC-297</td>
</tr>
<tr>
<td>hello-padding command</td>
<td>RC-297</td>
</tr>
<tr>
<td>hello-password command</td>
<td>RC-291, RC-293, RC-298</td>
</tr>
<tr>
<td>holdtime command</td>
<td>RC-145</td>
</tr>
</tbody>
</table>
if submode
  ipv4 address command  RC-226, RC-232
ignore-lsp-errors command  RC-285
import route-policy command  RC-93
import route-target command  RC-93
inheritance
  configurations (BGP)  RC-10
  monitoring  RC-14
interarea tunnels  RC-269
interface command  RC-145, RC-335
interior routers  RC-172
ipv4 address command
  10 Gigabit Ethernet  RC-226, RC-232
IPv6
  RIB support  RC-317
IPv6 and IPv6 VPN provider edge transport over MPLS  RC-318
IS-IS (Intermediate System-to-Intermediate System)
  adjacencies, tuning  RC-296
  attached bit on an instance  RC-266
  authentication, configuring  RC-289, RC-291
Cisco IOS and Cisco IOS XR software differences, configuration
  grouped  RC-261
configuration
  grouped configuration  RC-261
Level 1 or Level 2 routing  RC-270
  multitopology  RC-283
  restrictions  RC-260
  single topology  RC-272
customizing routes  RC-301
default routes  RC-266
description  RC-259
enabling  RC-270
enabling multicast-intact  RC-305
functional overview  RC-260
grouped configuration  RC-261

Level 1 or Level 2 routing, configuration  RC-270
LSP flooding
  controlling  RC-283
  lifetime maximum  RC-263
  limiting  RC-262
MPLS LDP IS-IS synchronization  RC-304
MPLS TE
  configuring  RC-293
  description  RC-265
multi-instance IS-IS  RC-265
multitopology, configuring  RC-283
nonstop forwarding  RC-264
  configuring  RC-287
overload bit
  on router  RC-265
policy attach points
  default originate  RC-394
  inter-area-propagate  RC-395
  redistribute  RC-394
priority for prefixes added to RIB  RC-308
restrictions, configuring  RC-260
set SPF interval  RC-299
single topology
  configuring  RC-272
tagging IS-IS interface routes  RC-306
IS-IS address family submode  RC-262
IS-IS Overload Bit Avoidance  RC-266
ispf command  RC-300
is-type command  RC-271

K

keychain command  RC-114
keychains  RC-39

L

label-allocation-mode per-ce command  RC-105
link-state advertisement (LSA)
  OSPFv2  RC-175
  OSPFv3  RC-175, RC-183
log adjacency changes command  RC-190, RC-244, RC-297
log-neighbor-changes command  RC-159
log-neighbor-warnings command  RC-159
lsp-check-interval command  RC-284
LSP flooding
  controlling  RC-283
  lifetime maximum  RC-263
  limiting  RC-262
  mesh group configuration  RC-263
  on specific interfaces  RC-263
lsp-gen-interval command  RC-284
lsp-interval command  RC-285
lsp-mtu command  RC-284
lsp-password command  RC-290, RC-292
lsp-refresh-interval command  RC-284

M
maximum paths command  RC-149
maximum-paths command  RC-109, RC-303
maximum prefix command  RC-93
maximum-prefix command  RC-149
max-lsp-lifetime command  RC-284
mesh-group command  RC-285
Message Digest 5 (MD5) authentication  RC-186
message-digest-key command  RC-199
message statistics  RC-317
metric-style wide command  RC-295, RC-307, RC-309
metro-zero-accept command  RC-337
MPLS LDP IGP synchronization  RC-267
MPLS LDP IS-IS synchronization  RC-304
mpls ldp sync command  RC-305
MPLS TE (Multiprotocol Label Switching traffic engineering) configuring
  IS-IS  RC-293
  OSPFv2  RC-217
MPLS TE forwarding adjacency  RC-269
MPLS TE interarea tunnels  RC-269
mpls traffic-eng area command  RC-219
mpls traffic-eng command  RC-294
mpls traffic-engineering multicast-intact command  RC-306
mpls traffic-eng router-id command  RC-219, RC-295
MPLS VPN carrier supporting carrier  RC-38
multi-area adjacency
  configuring  RC-237
  interface attributes and limitations  RC-184
  overview  RC-184
multi-area-interface command  RC-238
multicast-intact  RC-267
OSPFv2  RC-183
multicast topology  RC-267
multi-instance IS-IS  RC-265
multiprotocol BGP  RC-31
multitopology
  configuring  RC-283
Multitopology Routing  RC-276

N
NBMA networks  RC-173
neighbor address family command  RC-7, RC-262
neighbor command  RC-7, RC-262, RC-334
neighbor command (OSPFv2, OSPFv3)  RC-196
neighbor-group command  RC-72
neighbors
  adjacency (OSPFv2)  RC-174
  maximum limits (BGP)  RC-3
net command  RC-271
network command  RC-56, RC-195
next-hop-self command  RC-80
nonstop forwarding, configuring (OSPFv2)  RC-215
not-so-stubby area  RC-171
nsf command  RC-287, RC-336
nsf interface-expires command  RC-288
<table>
<thead>
<tr>
<th>Command/Configuration</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>nsf interface-timer command</td>
<td>RC-288</td>
</tr>
<tr>
<td>nsf interval command</td>
<td>RC-217</td>
</tr>
<tr>
<td>nsf lifetime command</td>
<td>RC-288</td>
</tr>
<tr>
<td>nssa command</td>
<td>RC-192</td>
</tr>
<tr>
<td>ospf area configuration submode</td>
<td></td>
</tr>
<tr>
<td>dead-interval command</td>
<td>RC-195</td>
</tr>
<tr>
<td>default-cost command</td>
<td>RC-192</td>
</tr>
<tr>
<td>hello interval command</td>
<td>RC-195</td>
</tr>
<tr>
<td>interface command</td>
<td>RC-189</td>
</tr>
<tr>
<td>network command</td>
<td>RC-195</td>
</tr>
<tr>
<td>nssa command</td>
<td>RC-192</td>
</tr>
<tr>
<td>range command</td>
<td>RC-208</td>
</tr>
<tr>
<td>stub command</td>
<td>RC-192</td>
</tr>
<tr>
<td>ospf area submode</td>
<td></td>
</tr>
<tr>
<td>authentication message-digest command</td>
<td>RC-205</td>
</tr>
<tr>
<td>virtual-link command</td>
<td>RC-205</td>
</tr>
<tr>
<td>ospf interface configuration submode</td>
<td></td>
</tr>
<tr>
<td>log adjacency changes</td>
<td>RC-190, RC-244</td>
</tr>
<tr>
<td>neighbor command</td>
<td>RC-196</td>
</tr>
<tr>
<td>OSPFv2 (Open Shortest Path First Version 2)</td>
<td></td>
</tr>
<tr>
<td>authentication, configuring</td>
<td>RC-198</td>
</tr>
<tr>
<td>Cisco IOS XR OSPFv3 and OSPFv2 differences</td>
<td>RC-169</td>
</tr>
<tr>
<td>CLI (command-line interface) inheritance</td>
<td>RC-169</td>
</tr>
<tr>
<td>OSPFv2 (Open Shortest Path First version 2)</td>
<td></td>
</tr>
<tr>
<td>enabling multicast-intact</td>
<td>RC-230</td>
</tr>
<tr>
<td>OSPFv3 (Open Shortest Path First Version 3)</td>
<td>RC-213</td>
</tr>
</tbody>
</table>
Cisco IOS XR OSPFv3 and OSPFv2 differences | RC-169
---|---
CLI inheritance | RC-169
configuration neighbors, nonbroadcast networks | RC-193
SPF throttling | RC-213
configuration and operation, verifying default route | RC-247
description | RC-165
enabling | RC-188
functional overview | RC-167
graceful restart | RC-222
instance and router ID | RC-172
load balancing | RC-184
LSA controlling frequency | RC-201
on an OSPF ABR | RC-207
types | RC-175
neighbors nonbroadcast networks, configuring | RC-193
policy attach points default originate | RC-392
redistribute | RC-390, RC-393
routes, redistribute | RC-209
SPF (Shortest Path First) throttling configuring | RC-213
stub and not-so-stubby area types, configuring | RC-190
virtual link, description | RC-176
ospfv3 area configuration submode dead-interval command | RC-195
default-cost command | RC-192
hello interval command | RC-195
interface command | RC-189
network command | RC-195
nssa command | RC-192
range command | RC-208
stub command | RC-192
OSPFv3 Graceful Restart feature | RC-181
adjacency | RC-182
displaying information | RC-225
ospfv3 interface configuration submode log adjacency changes | RC-190, RC-244
neighbor command | RC-196
output-delay command | RC-336
overload bit on router | RC-265

P

passive-interface command | RC-339
password command | RC-101, RC-106
PCE extensions to OSPFv2 | RC-187
PIM | RC-267
point-to-point networks | RC-173
poison-reverse command | RC-337
policy, modifying attached | RC-401
nonattached | RC-401

R

range command | RC-208
rd command | RC-95
receive version command | RC-335
redistribute isis command | RC-302
redistribute maximum-prefix command | RC-148
retain route-target command | RC-104
retransmit-interval command | RC-285
retransmit-throttle-interval command | RC-285
RFC 1142, OSI IS-IS Intra-domain Routing Protocol | RC-314
RFC 1195, Use of OSI IS-IS for Routing in TCP/IP and Dual Environments | RC-314
RFC 1587, Not So Stubby Area (NSSA) | RC-256
RFC 1700, Assigned Numbers | RC-129
RFC 1771 | RC-412
RFC 1793, OSPF over demand circuit  RC-256
RFC 1997, BGP Communities Attribute  RC-129
RFC 2328, OSPF Version 2  RC-168, RC-256
RFC 2370, LSA  RC-256
RFC 2385, Protection of BGP Sessions via the TCP MD5 Signature Option  RC-129
RFC 2439, BGP Route Flap Damping  RC-129
RFC 2453, RIP Version 2  RC-330, RC-347
RFC 2545, Use of BGP-4 Multiprotocol Extensions for IPv6 Inter-Domain Routing  RC-129
RFC 2740, OSPFv3  RC-256
RFC 2740 OSPFv3  RC-168
RFC 2763, Dynamic Hostname Exchange Mechanism for IS-IS  RC-314
RFC 2796, BGP Route Reflection - An Alternative to Full Mesh IBGP  RC-129
RFC 2858, Multiprotocol Extensions for BGP-4  RC-129
RFC 2918, Route Refresh Capability for BGP-4  RC-129
RFC 2966, Domain-wide Prefix Distribution with Two-Level IS-IS  RC-314
RFC 2973, IS-IS Mesh Groups  RC-314
RFC 3065, Autonomous System Confederations for BGP  RC-129
RFC 3137, Router Advertisement  RC-256
RFC 3277, IS-IS Transient Blackhole Avoidance  RC-314
RFC 3373, Three-Way Handshake for IS-IS Point-to-Point Adjacencies  RC-314
RFC 3392, Capabilities Advertisement with BGP-4  RC-129
RFC 3509  RC-256
RFC 3567, IS-IS Cryptographic Authentication  RC-314
RFC 3623, OSPFv3  RC-256
RFC 4136, OSPF  RC-256
RFC 4271  RC-129
RFC 4360  RC-412
RFC 4364, BGP/MPLS IP Virtual Private Networks (VPNs)  RC-129
RFC 4576, L3VPN  RC-256
RFC 4577, Sham Link  RC-256
RFC 4724, Graceful Restart Mechanisms for BGP  RC-129
RFC 4750, OSPF Version 2  RC-256
RFC 4811, OSPF  RC-256
RFC 4812, OSPF  RC-256
RFC 4813, OSPF  RC-256
RIB (Routing Information Base)
administrative distance  RC-316
data structures in BGP and other protocols  RC-316
deploying  RC-319
description  RC-315
textual  RC-322
functional overview  RC-316
IPv4 and IPv6 support  RC-317
monitoring  RC-319
RIB quarantining  RC-318
RIB statistics  RC-317
RIP (Routing Information Protocol)
policy attach points
  global-inbound  RC-399
RIP (Routing Information Protocol)
administrative distance  RC-332
bandwidth  RC-338
benefits  RC-331
CIDR  RC-330
column or prevent routing updates  RC-338
filter network updates  RC-338
hop count  RC-330
metrics  RC-330
policy attach points
default-information originate  RC-399
global-inbound  RC-399
interface-inbound  RC-400
interface-outbound  RC-400
redistribute  RC-399
redistribution  RC-332
route policy creation  RC-340
route timers  RC-331
routing loops  RC-338
routing policy options  RC-333
split horizon, enabling IP  RC-331
VLSMs (variable-length subnet masks)  RC-330
WAN link RC-338
RIP v2 supported features RC-330
route dampening RC-33
route-policy (BGP) command RC-44, RC-72, RC-77
route-policy configuration submode
  set eigrp-metric command RC-150
  set rip-metric command RC-341
route-policy pass-all command RC-19
route policy submode RC-42
  end-policy command RC-42
See route-policy command
router bgp command RC-7, RC-261
router bgp neighbor group address family configuration mode
  address family command RC-10
route redistribution (OSPFv2, OSPFv3) RC-179
route-reflector-client command RC-75
route reflectors RC-34
router eigrp address family configuration submode RC-153
  default-metric command RC-144
  distance command RC-144
  log-neighbor-changes command RC-159
  log-neighbor-warnings command RC-159
  maximum paths command RC-149
  maximum-prefix command RC-149
  redistribute command RC-148, RC-155, RC-157
  redistribute maximum-prefix command RC-148
  timers nsf route-hold command RC-148
router eigrp command RC-144
router eigrp configuration mode
  route-policy command RC-146
router eigrp configuration submode
  address-family ipv4 command RC-144
  interface command RC-145
router eigrp interface configuration submode
  bandwidth-percent command RC-145
  holdtime command RC-145
summary-address command RC-147
router-id command RC-189
router identifier RC-3
router isis address family submode
  default-information originate command RC-302
  distance command RC-303
  ispf command RC-300
  maximum-paths command RC-303
  metric-style wide command RC-295, RC-307, RC-309
  mpls ldp sync command RC-305
  mpls traffic-eng command RC-294
  mpls traffic-eng multicast-intact command RC-306
  mpls traffic-eng router-id command RC-295
  redistribute isis command RC-302
  set-attached-bit command RC-303
  spf-interval command RC-300
  spf prefix-priority command RC-310
  summary-prefix command RC-303
router isis configuration submode
  ignore-lsp-errors command RC-285
  is-type command RC-271
  log adjacency changes command RC-297
  lsp-check-interval command RC-284
  lsp-gen-interval command RC-284
  lsp-mtu command RC-284
  lsp-password command RC-290, RC-292
  lsp-refresh-interval command RC-284
  max-lsp-lifetime command RC-284
  net command RC-271
  nsf command RC-287
  nsf interface-expires command RC-288
  nsf interface-timer command RC-288
  nsf lifetime command RC-288
  set-overload-bit command RC-302
router isis interface address family submode
  tag command RC-308
router isis interface configuration submode
  address-family command RC-274
  circuit-type command RC-274
Index

- csnp-interval command: RC-285
- hello-interval command: RC-297
- hello-multiplier command: RC-297
- hello-padding command: RC-297
- hello-password command: RC-291, RC-293, RC-298
- lsp-interval command: RC-285
- mesh-group command: RC-285
- retransmit-interval command: RC-285
- retransmit-throttle-interval command: RC-285
- router isis interface submode
  - mesh-group command: RC-285
- router ospf command: RC-188
- router ospf configuration submode: RC-188
  - area command: RC-189
  - authentication command: RC-199
  - message-digest-key command: RC-199
  - mpls traffic-eng area command: RC-219
  - mpls traffic-eng router-id command: RC-219
  - nsf interval command: RC-217
  - redistribute command: RC-211
  - router-id command: RC-189
  - summary-prefix command: RC-212
  - timers lsa gen-interval command: RC-202
  - timers lsa group-pacing command: RC-203
  - timers lsa min-interval command: RC-202
  - timers throttle spf command: RC-214, RC-245
- router ospfv3 command: RC-188
- router ospfv3 configuration submode
  - area command: RC-189
  - redistribute command: RC-211
  - router-id command: RC-189
  - summary-prefix command: RC-212
  - timers lsa gen-interval command: RC-202
  - timers lsa group-pacing command: RC-203
  - timers lsa min-interval command: RC-202
  - timers throttle spf command: RC-214, RC-245
- router rib command: RC-322
- router rib configuration submode
  - address-family command: RC-322
- router rip command: RC-334
- router rip configuration submode
  - auto-summary command: RC-336
  - broadcast-for-v2 command: RC-334
  - interface command: RC-335
  - neighbor command: RC-334
  - nsf command: RC-336
  - output-delay command: RC-336
  - timers basic command: RC-336
- router rip interface configuration submode
  - metro-zero-accept command: RC-337
  - passive-interface command: RC-339
  - poison-reverse command: RC-337
  - receive version command: RC-335
  - route-policy command: RC-340
  - send version command: RC-335
  - split-horizon disable command: RC-337
- router static command: RC-422
- routes
  - customizing (IS-IS): RC-301
  - default
    - IS-IS: RC-266
    - OSPFv2: RC-174
  - redistribute (OSPFv2, OSPFv3): RC-209
  - redistribute IS-IS routes example: RC-311
- route tags: RC-267
- routing components
  - Area Border Routers (ABRs): RC-171
  - Autonomous System Boundary Routers (ASBRs): RC-172
  - autonomous systems: RC-170
  - backbone area: RC-171
  - Designated Router (DR): RC-174
  - interior routers: RC-172
  - not-so-stubby area: RC-171
  - stub area: RC-171
- routing domain confederation: RC-34
- routing policy: RC-19
  - attaching to BGP neighbor: RC-405

Cisco ASR 9000 Series Aggregation Services Router Routing Configuration Guide
configuration elements, editing RC-402

defining RC-404
defining (example) RC-408

enforcing, BGP RC-19

implementing
    prerequisites RC-350

inbound (example) RC-409

modifying RC-407

modular inbound (example) RC-410

statements
    action RC-367
    disposition RC-366
    elseif RC-368
    if RC-367
    remark RC-365

RPL (routing policy language)

Boolean operators, types RC-368

components RC-356

overview RC-350

policy
    Boolean operator precedence RC-361
    configuration basics RC-358
    default drop disposition RC-363
    definitions RC-358
    statement processing RC-363
    statements, types RC-365
    verification RC-364

structure
    as-path-set, inline set form RC-353
    as-path-set, named set form RC-352
    community-set, inline set form RC-353
    community-set, named set form RC-353
    extended community set, inline form RC-353
    extended community set, named form RC-354
    names RC-351
    prefix-set RC-354
    sets RC-351

S

security ttl command RC-245
send-community-ebgp command RC-82
send version command RC-335
set-attached-bit command RC-303
set eigrp-metric command RC-150
set-overload-bit command RC-302
set rip-metric command RC-341

sham-links RC-225

show bgp af-group command RC-15, RC-16
show bgp cidr-only command RC-120, RC-121
show bgp community command RC-120, RC-121, RC-122
show bgp count-only command RC-121
show bgp flap-statistics command RC-64
show bgp flap-statistics route-policy command RC-65
show bgp inheritance command RC-15
show bgp neighbor command RC-14
show bgp neighbor-group command RC-17, RC-121
show bgp neighbors command RC-120

show bgp paths command RC-120
show bgp reexp command RC-120
show bgp session-group command RC-16
show bgp summary command RC-121
show eigrp accounting command RC-160
show eigrp interfaces command RC-160
show eigrp neighbors command RC-154, RC-161
show eigrp topology command RC-161
show eigrp traffic command RC-161
show ip route connected command RC-324
show isis command RC-272
show isis database command RC-286
show isis database-log command RC-286
show isis interface command RC-299
show isis lsp-log command RC-286
show isis mpls command RC-295
show isis mpls traffic-eng adjacency-log command RC-295
show isis mpls traffic-eng advertisements command  RC-295
show isis neighbors command  RC-299
show isis spf-log command  RC-301
show isis topology command  RC-275
show ospf command  RC-205
show ospfv3 command  RC-205
show protocols eigrp command  RC-161
show rpl route-policy command  RC-408
show running-config command  RC-288
shutdown command  RC-101, RC-115

single-topology
  set SPF interval  RC-299
site-of-origin command  RC-107
soft-reconfiguration inbound always command  RC-89
spf-interval command  RC-300
spf prefix-priority command  RC-310

SPF throttling, configuring
  OSPFv2 (Open Shortest Path First Version 2)  RC-213
split-horizon disable command  RC-337
static router submode
  address-family command  RC-418, RC-419, RC-421, RC-424
  maximum path command  RC-423
  vrf command  RC-418, RC-419, RC-421, RC-424
static routes
  administrative distance  RC-415
  associating with VRF  RC-423
  connected  RC-415
  defined  RC-414
  floating  RC-416, RC-419, RC-420
  maximum number of routes  RC-422
  MPLS layer 3 VPN  RC-414
  recursive  RC-415
  specified  RC-416
stub area  RC-171
stub area types, configuring (OSPFv3)  RC-190
stub command  RC-153, RC-192
summary-address command  RC-147
summary-prefix command  RC-212, RC-303
synchronization
  MPLS LDP IGP  RC-267

T

table-policy command  RC-68
tag command  RC-308
timers basic command  RC-336
timers bgp command  RC-47
timers command  RC-101
timers lsa gen-interval command  RC-202
timers lsa group-pacing command  RC-203
timers lsa min-interval command  RC-202
timers nsf route-hold command  RC-148
timers throttle spf command  RC-214, RC-245

U

update groups
  BGP configuration  RC-21
  BGP update generation  RC-21
  monitor  RC-122
update-source command  RC-101
use command  RC-72

V

virtual link
  transit area (OSPFv2)  RC-176
virtual-link command  RC-205
VPNv4 address family command  RC-8
VRF address family command  RC-8
vrf address family submode
  export route-target command  RC-93
VRF command  RC-8
VRF neighbor address family command  RC-8
VRF neighbor command  RC-8
weight command  RC-53