



I Commands

- [icmp-echo](#), on page 17
- [icmpv6 cache disable](#), on page 18
- [icmpv6 cfs-queue](#), on page 19
- [icmpv6 library mts-queue](#), on page 20
- [icmpv6 mts-queue](#), on page 21
- [import](#), on page 22
- [import interface](#), on page 23
- [import map](#), on page 24
- [import running-config](#), on page 25
- [import vrf default map](#), on page 26
- [in-order-guarantee](#), on page 27
- [in-order-guarantee](#), on page 28
- [include profile](#), on page 29
- [include profile any](#), on page 30
- [index next](#), on page 31
- [ingress-replication](#), on page 32
- [ingress-replication protocol bgp](#), on page 33
- [ingress-replication protocol static](#), on page 34
- [ingress interface](#), on page 35
- [inherit peer-policy](#), on page 36
- [inherit peer-policy](#), on page 37
- [inherit peer-session](#), on page 38
- [inherit peer](#), on page 39
- [inherit port-profile](#), on page 40
- [inject-map exist-map](#), on page 41
- [install activate](#), on page 42
- [install add](#), on page 43
- [install all](#), on page 44
- [install commit](#), on page 45
- [install deactivate](#), on page 46
- [install epld](#), on page 47
- [install epld](#), on page 48
- [install epld](#), on page 49

- [install epld](#), on page 50
- [install epld psu](#), on page 51
- [install feature-set fcoe-npv](#), on page 52
- [install feature-set fex](#), on page 53
- [install feature-set mpls](#), on page 54
- [install license](#), on page 55
- [install module](#), on page 56
- [install remove](#), on page 57
- [instance-id](#), on page 58
- [instance](#), on page 59
- [instance](#), on page 60
- [instance vlan](#), on page 61
- [interface-vlan reset credits](#), on page 62
- [interface-vlan reset fsm](#), on page 63
- [interface](#), on page 64
- [interface](#), on page 65
- [interface](#), on page 66
- [interface](#), on page 67
- [interface](#), on page 68
- [interface](#), on page 69
- [interface](#), on page 70
- [interface](#), on page 71
- [interface](#), on page 72
- [interface](#), on page 73
- [interface](#), on page 74
- [interface breakout module](#), on page 75
- [interface breakout module](#), on page 76
- [interface breakout module port map](#), on page 77
- [interface breakout module port map](#), on page 78
- [interface down delay](#), on page 79
- [ip](#), on page 80
- [ip](#), on page 81
- [ip](#), on page 82
- [ip](#), on page 83
- [ip access-class](#), on page 84
- [ip access-group](#), on page 85
- [ip access-list](#), on page 86
- [ip access-list match-local-traffic](#), on page 87
- [ip address](#), on page 88
- [ip address dhcp](#), on page 89
- [ip address secondary](#), on page 90
- [ip adjacency cache disable](#), on page 91
- [ip adjacency forcedownload](#), on page 92
- [ip adjacency l2fm-reg](#), on page 93
- [ip adjacency notify interval](#), on page 94
- [ip adjacency peer-gmac](#), on page 95

- ip adjacency remote-adj, on page 96
- ip adjacency route distance, on page 97
- ip adjacency statistics collect, on page 98
- ip adjacency statistics interval, on page 99
- ip allow address-overlap, on page 100
- ip allow port, on page 101
- ip amt anycast-gateway-address, on page 102
- ip amt anycast-relay-prefix, on page 103
- ip amt gateway, on page 104
- ip amt gateway send-discovery, on page 105
- ip amt join-policy, on page 106
- ip amt qqic, on page 107
- ip amt relay-advertisement-address, on page 108
- ip amt relay, on page 109
- ip amt state-limit, on page 110
- ip amt tunnel-limit, on page 111
- ip arp, on page 112
- ip arp allow-static-arp-outside-subnet, on page 113
- ip arp am mts-batch, on page 114
- ip arp broadcast mac-mismatch, on page 115
- ip arp cache disable, on page 116
- ip arp cache limit, on page 117
- ip arp cfs-queue, on page 118
- ip arp event-history size, on page 119
- ip arp garp-storm, on page 121
- ip arp garp-storm timer count, on page 122
- ip arp gratuitous hsrp duplicate, on page 123
- ip arp gratuitous hsrp duplicate, on page 124
- ip arp gratuitous request, on page 125
- ip arp gratuitous update, on page 126
- ip arp inspection filter vlan, on page 127
- ip arp inspection log-buffer entries, on page 128
- ip arp inspection trust, on page 129
- ip arp inspection validate, on page 130
- ip arp inspection vlan, on page 131
- ip arp mts-queue, on page 132
- ip arp off-list timeout, on page 133
- ip arp rarp fabric-forwarding, on page 134
- ip arp rarp fabric-forwarding rate-limit, on page 135
- ip arp request, on page 136
- ip arp suppression-cache, on page 137
- ip arp suppression testnum, on page 138
- ip arp suppression timeout, on page 139
- ip arp synchronize, on page 140
- ip arp synchronize, on page 141
- ip arp synchronize, on page 142

- [ip arp test](#), on page 143
- [ip arp timeout](#), on page 144
- [ip arp timeout](#), on page 145
- [ip as-path access-list deny](#), on page 146
- [ip as-path access-list seq deny](#), on page 147
- [ip authentication](#), on page 148
- [ip auto-discard](#), on page 149
- [ip bandwidth-percent eigrp](#), on page 150
- [ip bandwidth eigrp](#), on page 151
- [ip cache disable](#), on page 152
- [ip community-list expanded deny](#), on page 153
- [ip community-list standard permit internet local-AS](#), on page 154
- [ip community-list standard seq permit internet local-AS](#), on page 155
- [ip default-gateway](#), on page 156
- [ip delay eigrp](#), on page 157
- [ip dhcp packet strict-validation](#), on page 158
- [ip dhcp relay](#), on page 159
- [ip dhcp relay address](#), on page 160
- [ip dhcp relay information option](#), on page 161
- [ip dhcp relay information option trust](#), on page 162
- [ip dhcp relay information option vpn](#), on page 163
- [ip dhcp relay information trust-all](#), on page 164
- [ip dhcp relay information trusted](#), on page 165
- [ip dhcp relay source-interface](#), on page 166
- [ip dhcp relay source-interface](#), on page 167
- [ip dhcp relay sub-option circuit-id customized](#), on page 168
- [ip dhcp relay sub-option circuit-id format-type string](#), on page 169
- [ip dhcp relay sub-option type cisco](#), on page 170
- [ip dhcp relay subnet-broadcast](#), on page 171
- [ip dhcp smart-relay](#), on page 172
- [ip dhcp smart-relay global](#), on page 173
- [ip dhcp snooping](#), on page 174
- [ip dhcp snooping information option](#), on page 175
- [ip dhcp snooping ipsg-excluded vlan](#), on page 176
- [ip dhcp snooping trust](#), on page 177
- [ip dhcp snooping verify mac-address](#), on page 178
- [ip dhcp snooping vlan](#), on page 179
- [ip directed-broadcast](#), on page 180
- [ip distribute-list eigrp](#), on page 181
- [ip dns source-interface](#), on page 182
- [ip domain-list](#), on page 183
- [ip domain-lookup](#), on page 184
- [ip domain-name](#), on page 185
- [ip drop-glean](#), on page 186
- [ip dscp-lop](#), on page 187
- [ip dscp](#), on page 188

- [ip eigrp bfd](#), on page 189
- [ip eigrp event-history bfd size](#), on page 190
- [ip eigrp event-history errors](#), on page 191
- [ip eigrp event-history size](#), on page 192
- [ip eigrp shutdown](#), on page 193
- [ip extcommunity-list expanded deny](#), on page 194
- [ip extcommunity-list standard permit](#), on page 195
- [ip flow monitor input](#), on page 196
- [ip flow monitor input](#), on page 197
- [ip flow monitor input](#), on page 198
- [ip flow monitor input](#), on page 199
- [ip flow monitor output](#), on page 200
- [ip flow monitor output](#), on page 201
- [ip forward](#), on page 202
- [ip ftp source-interface](#), on page 203
- [ip hello-interval eigrp](#), on page 204
- [ip hold-time eigrp](#), on page 205
- [ip host](#), on page 206
- [ip http source-interface](#), on page 207
- [ip icmp-errors source-interface](#), on page 208
- [ip igmp allow-v3-asm](#), on page 209
- [ip igmp any-query-destination](#), on page 210
- [ip igmp bootup-delay](#), on page 211
- [ip igmp enforce-router-alert](#), on page 212
- [ip igmp event-history cli](#), on page 213
- [ip igmp event-history ha](#), on page 214
- [ip igmp event-history igmp-internal](#), on page 215
- [ip igmp event-history interface](#), on page 216
- [ip igmp event-history interface](#), on page 217
- [ip igmp event-history mtrace](#), on page 218
- [ip igmp event-history policy](#), on page 219
- [ip igmp event-history vrf](#), on page 220
- [ip igmp file-debug](#), on page 221
- [ip igmp flush-routes](#), on page 222
- [ip igmp group-specific-strict](#), on page 223
- [ip igmp group-timeout](#), on page 224
- [ip igmp ha-stateful](#), on page 225
- [ip igmp immediate-leave](#), on page 226
- [ip igmp join-group](#), on page 227
- [ip igmp last-member-query-count](#), on page 228
- [ip igmp last-member-query-response-time](#), on page 229
- [ip igmp querier](#), on page 230
- [ip igmp query-interval](#), on page 231
- [ip igmp query-max-response-time](#), on page 232
- [ip igmp report-link-local-groups](#), on page 233
- [ip igmp report prefix-list](#), on page 234

- ip igmp robustness-variable, on page 235
- ip igmp snooping, on page 236
- ip igmp snooping, on page 237
- ip igmp snooping, on page 238
- ip igmp snooping, on page 239
- ip igmp snooping event-history igmp-snoop-internal, on page 240
- ip igmp snooping event-history mfdm-sum, on page 241
- ip igmp snooping event-history mfdm, on page 242
- ip igmp snooping event-history rib, on page 243
- ip igmp snooping event-history vlan-events, on page 244
- ip igmp snooping event-history vlan, on page 245
- ip igmp snooping event-history vpc, on page 246
- ip igmp snooping explicit-tracking, on page 247
- ip igmp snooping explicit-tracking, on page 248
- ip igmp snooping fast-leave, on page 249
- ip igmp snooping fast-leave, on page 250
- ip igmp snooping group-timeout, on page 251
- ip igmp snooping group-timeout, on page 252
- ip igmp snooping last-member-query-count, on page 253
- ip igmp snooping last-member-query-count, on page 254
- ip igmp snooping last-member-query-interval, on page 255
- ip igmp snooping last-member-query-interval, on page 256
- ip igmp snooping link-local-groups-suppression, on page 257
- ip igmp snooping link-local-groups-suppression, on page 258
- ip igmp snooping link-local-groups-suppression, on page 259
- ip igmp snooping max-gq-miss, on page 260
- ip igmp snooping mrouter interface, on page 261
- ip igmp snooping mrouter interface, on page 262
- ip igmp snooping mrouter vpc-peer-link, on page 263
- ip igmp snooping optimised-multicast-flood, on page 264
- ip igmp snooping proxy-leave use-group-address, on page 265
- ip igmp snooping proxy general-queries, on page 266
- ip igmp snooping proxy general-queries, on page 267
- ip igmp snooping querier-timeout, on page 268
- ip igmp snooping querier-timeout, on page 269
- ip igmp snooping querier, on page 270
- ip igmp snooping querier, on page 271
- ip igmp snooping query-interval, on page 272
- ip igmp snooping query-interval, on page 273
- ip igmp snooping query-max-response-time, on page 274
- ip igmp snooping query-max-response-time, on page 275
- ip igmp snooping report-flood all, on page 276
- ip igmp snooping report-suppression, on page 277
- ip igmp snooping report-suppression, on page 278
- ip igmp snooping report-suppression, on page 279
- ip igmp snooping report prefix interface, on page 280

- [ip igmp snooping robustness-variable](#), on page 281
- [ip igmp snooping robustness-variable](#), on page 282
- [ip igmp snooping self-mac-check](#), on page 283
- [ip igmp snooping startup-query-count](#), on page 284
- [ip igmp snooping startup-query-count](#), on page 285
- [ip igmp snooping startup-query-interval](#), on page 286
- [ip igmp snooping startup-query-interval](#), on page 287
- [ip igmp snooping static-group interface](#), on page 288
- [ip igmp snooping static-group interface](#), on page 289
- [ip igmp snooping syslog-threshold](#), on page 290
- [ip igmp snooping v3-report-suppression](#), on page 291
- [ip igmp snooping v3-report-suppression](#), on page 292
- [ip igmp snooping v3-report-suppression](#), on page 293
- [ip igmp snooping version](#), on page 294
- [ip igmp snooping version](#), on page 295
- [ip igmp snooping vpc](#), on page 296
- [ip igmp snooping vpc](#), on page 297
- [ip igmp snooping vpc peer-link-exclude](#), on page 298
- [ip igmp snooping vpc peer-routes-download](#), on page 299
- [ip igmp spoof-check](#), on page 300
- [ip igmp ssm-translate](#), on page 301
- [ip igmp startup-query-count](#), on page 302
- [ip igmp startup-query-interval](#), on page 303
- [ip igmp state-limit](#), on page 304
- [ip igmp static-oif](#), on page 305
- [ip igmp suppress v3-gsq](#), on page 306
- [ip igmp syslog-threshold](#), on page 307
- [ip igmp version](#), on page 308
- [ip load-sharing address](#), on page 309
- [ip load-sharing per-packet](#), on page 310
- [ip local-proxy-arp](#), on page 311
- [ip local policy route-map](#), on page 312
- [ip mfwd event-history cli](#), on page 313
- [ip mfwd event-history l2](#), on page 314
- [ip mfwd event-history packet](#), on page 315
- [ip mfwd event-history vrf](#), on page 316
- [ip mfwd mstatic register](#), on page 317
- [ip mroute](#), on page 318
- [ip msdp description](#), on page 319
- [ip msdp event-history cli](#), on page 320
- [ip msdp event-history events](#), on page 321
- [ip msdp event-history msdp-internal](#), on page 322
- [ip msdp event-history routes](#), on page 323
- [ip msdp event-history tcp](#), on page 324
- [ip msdp flush-routes](#), on page 325
- [ip msdp group-limit source](#), on page 326

- [ip msdp keepalive](#), on page 327
- [ip msdp mesh-group](#), on page 328
- [ip msdp no-sa-data](#), on page 329
- [ip msdp originator-id](#), on page 330
- [ip msdp password](#), on page 331
- [ip msdp peer connect-source](#), on page 332
- [ip msdp reconnect-interval](#), on page 333
- [ip msdp redistribute](#), on page 334
- [ip msdp sa-interval](#), on page 335
- [ip msdp sa-limit](#), on page 336
- [ip msdp sa-policy in](#), on page 337
- [ip msdp sa-policy out](#), on page 338
- [ip msdp shutdown](#), on page 339
- [ip mtu eigrp](#), on page 340
- [ip multicast last-hop-meter](#), on page 341
- [ip multicast multipath](#), on page 342
- [ip multicast multipath resilient](#), on page 343
- [ip multicast rpf-meter](#), on page 344
- [ip name-server](#), on page 345
- [ip nat inside](#), on page 347
- [ip nat inside source](#), on page 348
- [ip nat outside source](#), on page 350
- [ip nat pool netmask](#), on page 352
- [ip nat pool netmask](#), on page 353
- [ip nat translation](#), on page 354
- [ip nat translation max-entries](#), on page 355
- [ip nat translation sampling-timeout](#), on page 356
- [ip next-hop-self eigrp](#), on page 357
- [ip offset-list eigrp](#), on page 358
- [ip ospf advertise-subnet](#), on page 359
- [ip ospf authentication-key](#), on page 360
- [ip ospf authentication](#), on page 361
- [ip ospf authentication key-chain](#), on page 362
- [ip ospf bfd](#), on page 363
- [ip ospf cost](#), on page 364
- [ip ospf dead-interval](#), on page 365
- [ip ospf event-history](#), on page 366
- [ip ospf event-history cli](#), on page 367
- [ip ospf event-history cli size](#), on page 368
- [ip ospf event-history detail](#), on page 369
- [ip ospf event-history detail size](#), on page 370
- [ip ospf event-history size](#), on page 371
- [ip ospf flood-bw-percentage](#), on page 372
- [ip ospf hello-interval](#), on page 373
- [ip ospf message-digest-key md5](#), on page 374
- [ip ospf mtu-ignore](#), on page 375

- [ip ospf network broadcast](#), on page 376
- [ip ospf network point-to-point](#), on page 377
- [ip ospf passive-interface](#), on page 378
- [ip ospf priority](#), on page 379
- [ip ospf retransmit-interval](#), on page 380
- [ip ospf shutdown](#), on page 381
- [ip ospf transmit-delay](#), on page 382
- [ip passive-interface eigrp](#), on page 383
- [ip pim anycast-rp](#), on page 384
- [ip pim assert-rate-limit](#), on page 385
- [ip pim auto-enable](#), on page 386
- [ip pim auto-rp listen](#), on page 387
- [ip pim auto-rp mapping-agent-policy](#), on page 388
- [ip pim auto-rp mapping-agent send-rp-discovery](#), on page 389
- [ip pim auto-rp rp-candidate-policy](#), on page 390
- [ip pim auto-rp rp-candidate send-rp-announce group-list route-map prefix-list](#), on page 391
- [ip pim bfd-instance](#), on page 392
- [ip pim bfd](#), on page 393
- [ip pim bidir-rp-limit](#), on page 394
- [ip pim border](#), on page 395
- [ip pim bsr-candidate](#), on page 396
- [ip pim bsr bsr-policy](#), on page 397
- [ip pim bsr listen](#), on page 398
- [ip pim bsr rp-candidate-policy](#), on page 399
- [ip pim cpu-punt dr-only](#), on page 400
- [ip pim df-offer-burst-interval](#), on page 401
- [ip pim dr-delay](#), on page 402
- [ip pim dr-priority](#), on page 403
- [ip pim event-history assert-receive](#), on page 404
- [ip pim event-history bidir](#), on page 405
- [ip pim event-history cli](#), on page 406
- [ip pim event-history hello](#), on page 407
- [ip pim event-history join-prune-summary](#), on page 408
- [ip pim event-history join-prune](#), on page 409
- [ip pim event-history mvpn](#), on page 410
- [ip pim event-history null-register](#), on page 411
- [ip pim event-history packet](#), on page 412
- [ip pim event-history pim-internal](#), on page 413
- [ip pim event-history rp](#), on page 414
- [ip pim event-history vpc](#), on page 415
- [ip pim event-history vrf](#), on page 416
- [ip pim file-debug](#), on page 417
- [ip pim flush-routes](#), on page 418
- [ip pim group-list](#), on page 419
- [ip pim hello-authentication ah-md5](#), on page 420
- [ip pim hello-interval](#), on page 421

- [ip pim isolate](#), on page 422
- [ip pim jp-delay](#), on page 423
- [ip pim jp-interval](#), on page 424
- [ip pim jp-policy](#), on page 425
- [ip pim log-neighbor-changes](#), on page 426
- [ip pim mtu](#), on page 427
- [ip pim mtu](#), on page 428
- [ip pim neighbor-policy prefix-list](#), on page 429
- [ip pim non-dr flood](#), on page 430
- [ip pim null-reg-delay](#), on page 431
- [ip pim null-reg-routes](#), on page 432
- [ip pim passive](#), on page 433
- [ip pim pre-build-spt](#), on page 434
- [ip pim register-policy](#), on page 435
- [ip pim register-rate-limit](#), on page 436
- [ip pim register-replicate](#), on page 437
- [ip pim register-source](#), on page 438
- [ip pim register-until-stop](#), on page 439
- [ip pim rp-address](#), on page 440
- [ip pim rp-candidate group-list route-map prefix-list](#), on page 441
- [ip pim sg-expiry-timer infinity](#), on page 442
- [ip pim sparse-mode](#), on page 443
- [ip pim ssm](#), on page 444
- [ip pim state-limit](#), on page 445
- [ip ping source-interface](#), on page 446
- [ip policy match router-address](#), on page 447
- [ip policy route-map](#), on page 448
- [ip port-unreachable](#), on page 449
- [ip port access-group](#), on page 450
- [ip prefix-list description](#), on page 451
- [ip prefix-list permit](#), on page 452
- [ip prefix-list seq permit](#), on page 453
- [ip proxy-arp](#), on page 454
- [ip radius source-interface](#), on page 455
- [ip redirects](#), on page 456
- [ip rip authentication key-chain](#), on page 457
- [ip rip authentication mode text](#), on page 458
- [ip rip metric](#), on page 459
- [ip rip passive-interface](#), on page 460
- [ip rip poison-reverse](#), on page 461
- [ip rip route-filter route in](#), on page 462
- [ip rip summary-address](#), on page 463
- [ip route](#), on page 464
- [ip route static bfd](#), on page 465
- [ip router eigrp](#), on page 466
- [ip router isis](#), on page 467

- ip router ospf area, on page 468
- ip router ospf multi-area, on page 469
- ip router rip, on page 470
- ip routing download-on-convergence, on page 471
- ip routing event-history, on page 472
- ip routing multicast enforce-rpf, on page 473
- ip routing multicast event-history cli, on page 474
- ip routing multicast event-history mdt, on page 475
- ip routing multicast event-history mfdm-debug, on page 476
- ip routing multicast event-history mfdm-events, on page 477
- ip routing multicast event-history mfdm-stats, on page 478
- ip routing multicast event-history rib-summary, on page 479
- ip routing multicast event-history rib, on page 480
- ip routing multicast event-history vrf, on page 481
- ip routing multicast file-debug, on page 482
- ip routing multicast holddown, on page 483
- ip routing multicast software-replicate, on page 484
- ip sla, on page 485
- ip sla group schedule, on page 486
- ip sla logging traps, on page 488
- ip sla reaction-configuration react, on page 489
- ip sla reaction-trigger, on page 490
- ip sla reset, on page 491
- ip sla responder, on page 492
- ip sla restart, on page 493
- ip sla schedule, on page 494
- ip source-route, on page 496
- ip source binding vlan interface, on page 497
- ip source icmp-errors, on page 498
- ip split-horizon eigrp, on page 499
- ip ssh source-interface, on page 500
- ip sticky-arp, on page 501
- ip summary-address eigrp ipv6 summary-address eigrp, on page 502
- ip tacacs source-interface, on page 503
- ip tcp path-mtu-discovery, on page 504
- ip tcp synwait-time, on page 505
- ip telnet source-interface, on page 506
- ip tftp source-interface, on page 507
- ip traceroute source-interface, on page 508
- ip ttl, on page 509
- ip unnumbered, on page 510
- ip unreachable, on page 511
- ip verify source dhcp-snooping-vlan, on page 512
- ip verify unicast source reachable-via rx, on page 513
- ipv6, on page 514
- ipv6 access-class, on page 516

- [ipv6 access-list](#), on page 517
- [ipv6 access-list match-local-traffic](#), on page 518
- [ipv6 address](#), on page 519
- [ipv6 address dhcp](#), on page 520
- [ipv6 address secondary](#), on page 521
- [ipv6 address use-link-local-only](#), on page 522
- [ipv6 adjacency-stale-timer](#), on page 523
- [ipv6 adjacency forcedownload](#), on page 524
- [ipv6 adjacency l2fm-reg](#), on page 525
- [ipv6 adjacency peer-gmac](#), on page 526
- [ipv6 adjacency remote-adj](#), on page 527
- [ipv6 adjacency route distance](#), on page 528
- [ipv6 amt gateway](#), on page 529
- [ipv6 amt gateway send-discovery](#), on page 530
- [ipv6 amt relay](#), on page 531
- [ipv6 cache disable](#), on page 532
- [ipv6 dad](#), on page 533
- [ipv6 dhcp relay](#), on page 534
- [ipv6 dhcp relay address](#), on page 535
- [ipv6 dhcp relay address ipv6 dhcp relay address](#), on page 536
- [ipv6 dhcp relay option type cisco](#), on page 537
- [ipv6 dhcp relay option vpn](#), on page 538
- [ipv6 dhcp relay source-interface](#), on page 539
- [ipv6 dhcp relay source-interface](#), on page 540
- [ipv6 flood unknown ucast](#), on page 541
- [ipv6 flow monitor input](#), on page 542
- [ipv6 flow monitor input](#), on page 543
- [ipv6 flow monitor input](#), on page 544
- [ipv6 flow monitor input](#), on page 545
- [ipv6 flow monitor output](#), on page 546
- [ipv6 flow monitor output](#), on page 547
- [ipv6 forward](#), on page 548
- [ipv6 host](#), on page 549
- [ipv6 icmp test rfc-4884](#), on page 550
- [ipv6 icmp vip vmac protocol group](#), on page 551
- [ipv6 link-local](#), on page 552
- [ipv6 local policy route-map](#), on page 553
- [ipv6 mroute](#), on page 554
- [ipv6 multicast last-hop-meter](#), on page 555
- [ipv6 multicast notify-interval](#), on page 556
- [ipv6 multicast rpf-meter](#), on page 557
- [ipv6 nd cache limit](#), on page 558
- [ipv6 nd dad attempts](#), on page 559
- [ipv6 nd hop-limit](#), on page 560
- [ipv6 nd limit-incomplete-adjacency](#), on page 561
- [ipv6 nd limit_threshold_am_queue](#), on page 562

- [ipv6 nd mac-extract](#), on page 563
- [ipv6 nd managed-config-flag](#), on page 564
- [ipv6 nd mtu](#), on page 565
- [ipv6 nd ns-interval](#), on page 566
- [ipv6 nd off-list timeout](#), on page 567
- [ipv6 nd other-config-flag](#), on page 568
- [ipv6 nd prefix](#), on page 569
- [ipv6 nd prefix default](#), on page 570
- [ipv6 nd process adjacency statistics](#), on page 571
- [ipv6 nd ra-interval](#), on page 572
- [ipv6 nd ra-lifetime](#), on page 573
- [ipv6 nd ra dns search-list sequence](#), on page 574
- [ipv6 nd ra dns search-list suppress](#), on page 575
- [ipv6 nd ra dns server sequence](#), on page 576
- [ipv6 nd ra dns server suppress](#), on page 577
- [ipv6 nd ra route suppress](#), on page 578
- [ipv6 nd reachable-time](#), on page 579
- [ipv6 nd retrans-timer](#), on page 580
- [ipv6 nd route route-preference High Low Medium infinite](#), on page 581
- [ipv6 nd router-preference High Low Medium](#), on page 582
- [ipv6 nd solicit-na accept](#), on page 583
- [ipv6 nd suppress-ra](#), on page 584
- [ipv6 nd synchronize](#), on page 585
- [ipv6 nd synchronize](#), on page 586
- [ipv6 neighbor](#), on page 587
- [ipv6 pim anycast-rp](#), on page 588
- [ipv6 pim auto-rp listen](#), on page 589
- [ipv6 pim auto-rp mapping-agent-policy](#), on page 590
- [ipv6 pim auto-rp mapping-agent send-rp-discovery](#), on page 591
- [ipv6 pim auto-rp rp-candidate-policy](#), on page 592
- [ipv6 pim auto-rp rp-candidate send-rp-announce group](#), on page 593
- [ipv6 pim bidir-rp-limit](#), on page 594
- [ipv6 pim border](#), on page 595
- [ipv6 pim bsr-candidate](#), on page 596
- [ipv6 pim bsr bsr-policy](#), on page 597
- [ipv6 pim bsr listen](#), on page 598
- [ipv6 pim bsr rp-candidate-policy](#), on page 599
- [ipv6 pim dr-priority](#), on page 600
- [ipv6 pim event-history assert-receive](#), on page 601
- [ipv6 pim event-history bidir](#), on page 602
- [ipv6 pim event-history hello](#), on page 603
- [ipv6 pim event-history join-prune-summary](#), on page 604
- [ipv6 pim event-history join-prune](#), on page 605
- [ipv6 pim event-history null-register](#), on page 606
- [ipv6 pim event-history packet](#), on page 607
- [ipv6 pim event-history pim6-internal](#), on page 608

- [ipv6 pim event-history rp](#), on page 609
- [ipv6 pim event-history vrf](#), on page 610
- [ipv6 pim flush-routes](#), on page 611
- [ipv6 pim hello-authentication ah-md5](#), on page 612
- [ipv6 pim hello-interval](#), on page 613
- [ipv6 pim jp-delay](#), on page 614
- [ipv6 pim jp-policy](#), on page 615
- [ipv6 pim log-neighbor-changes](#), on page 616
- [ipv6 pim neighbor-policy](#), on page 617
- [ipv6 pim passive](#), on page 618
- [ipv6 pim register-policy](#), on page 619
- [ipv6 pim register-rate-limit](#), on page 620
- [ipv6 pim rp-address](#), on page 621
- [ipv6 pim rp-candidate group](#), on page 622
- [ipv6 pim sparse-mode](#), on page 623
- [ipv6 pim ssm](#), on page 624
- [ipv6 pim state-limit](#), on page 625
- [ipv6 pim use-shared-tree-only spt-threshold infinity group-list](#), on page 626
- [ipv6 policy route-map](#), on page 627
- [ipv6 port traffic-filter](#), on page 628
- [ipv6 prefix-list description](#), on page 629
- [ipv6 prefix-list permit](#), on page 630
- [ipv6 prefix-list seq permit](#), on page 631
- [ipv6 queue-packets-limit](#), on page 632
- [ipv6 queue-packets](#), on page 633
- [ipv6 redirects](#), on page 634
- [ipv6 route](#), on page 635
- [ipv6 route static bfd](#), on page 636
- [ipv6 router isis](#), on page 637
- [ipv6 router ospfv3 area](#), on page 638
- [ipv6 router ospfv3 multi-area](#), on page 639
- [ipv6 routing event-history size](#), on page 640
- [ipv6 routing multicast event-history cli](#), on page 641
- [ipv6 routing multicast event-history mfdm-debug](#), on page 642
- [ipv6 routing multicast event-history mfdm-events](#), on page 643
- [ipv6 routing multicast event-history mfdm-stats](#), on page 644
- [ipv6 routing multicast event-history rib-summary](#), on page 645
- [ipv6 routing multicast event-history rib](#), on page 646
- [ipv6 routing multicast event-history vrf](#), on page 647
- [ipv6 routing multicast holddown](#), on page 648
- [ipv6 routing multicast software-replication](#), on page 649
- [ipv6 source-route](#), on page 650
- [ipv6 switch-packets](#), on page 651
- [ipv6 traffic-filter](#), on page 652
- [ipv6 unreachable](#), on page 653
- [ipv6 verify unicast source reachable-via rx](#), on page 654

- `ipv6 vip`, on page 655
- `is-type`, on page 656
- `isshow cli find nodes`, on page 657
- `isshow cli modes`, on page 658
- `isshow cli nodes`, on page 659
- `isshow cli paths`, on page 660
- `isshow cli tags`, on page 661
- `isshow core backtrace`, on page 662
- `isis authentication-check`, on page 663
- `isis authentication-check level-1`, on page 664
- `isis authentication-check level-2`, on page 665
- `isis authentication-type cleartext`, on page 666
- `isis authentication-type cleartext`, on page 667
- `isis authentication key-chain`, on page 668
- `isis authentication key-chain`, on page 669
- `isis bfd`, on page 670
- `isis circuit-type`, on page 671
- `isis csnp-interval level`, on page 672
- `isis event-history adjacency`, on page 673
- `isis event-history cli`, on page 674
- `isis event-history csnp`, on page 675
- `isis event-history dis`, on page 676
- `isis event-history events`, on page 677
- `isis event-history graceful`, on page 678
- `isis event-history ha`, on page 679
- `isis event-history iih`, on page 680
- `isis event-history lsp-flood`, on page 681
- `isis event-history lsp-gen`, on page 682
- `isis event-history mtr`, on page 683
- `isis event-history psnp`, on page 684
- `isis event-history redist`, on page 685
- `isis event-history spf-leaf`, on page 686
- `isis event-history spf-tree`, on page 687
- `isis event-history tlv`, on page 688
- `isis event-history urib`, on page 689
- `isis hello-interval`, on page 690
- `isis hello-interval level`, on page 691
- `isis hello-multiplier`, on page 692
- `isis hello-multiplier level`, on page 693
- `isis hello-padding`, on page 694
- `isis hello-padding always`, on page 695
- `isis ipv6 bfd`, on page 696
- `isis ipv6 metric`, on page 697
- `isis lsp-interval`, on page 698
- `isis mesh-group`, on page 699
- `isis metric`, on page 700

- [isis mtu-check](#), on page 701
- [isis mtu-check level](#), on page 702
- [isis network point-to-point](#), on page 703
- [isis passive-interface](#), on page 704
- [isis priority level](#), on page 705
- [isis retransmit-interval](#), on page 706
- [isis retransmit-throttle-interval](#), on page 707
- [isis shutdown](#), on page 708
- [isolate](#), on page 709
- [isolate](#), on page 710
- [isolate](#), on page 711
- [isolate](#), on page 712
- [isolate](#), on page 713
- [isolate](#), on page 714
- [itd](#), on page 715
- [itd device-group](#), on page 716
- [itd session device-group](#), on page 717
- [itd statistics](#), on page 718

icmp-echo

```
[no] icmp-echo { <hostname> | <ip-address> } { [ source-ip { <source-ip-hostname> | <source-ip-address>
} ] | [ source-interface <if_index> ] }
```

Syntax Description

no	(Optional)
<i>source-ip</i>	(Optional) source-interface
icmp-echo	ICMP Echo Operation
<i>hostname</i>	Destination hostname, broadcast disallowed
<i>ip-address</i>	Destination IP address, broadcast disallowed
source-interface	(Optional) Source Interface (ingress icmp packet interface)
<i>if_index</i>	(Optional) Source Interface
<i>source-ip-hostname</i>	(Optional) source IP hostname, broadcast disallowed
<i>source-ip-address</i>	(Optional) source IP address, broadcast disallowed

Command Mode

- /exec/configure/ip-sla

icmpv6 cache disable

[no] icmpv6 cache disable

Syntax Description

no	(Optional) Negate a command or set its defaults
icmpv6	ICMPv6 Commands
cache	Disable cache
disable	Disable cache

Command Mode

- /exec/configure

icmpv6 cfs-queue

{ icmpv6 cfs-queue <size> } | { no icmpv6 cfs-queue }

Syntax Description

no	Negate a command or set its defaults
icmpv6	ICMPv6 Commands
cfs-queue	cfs-queue
<i>size</i>	Size for adjacencies to be sent in CFSOE payload

Command Mode

- /exec/configure

icmpv6 library mts-queue

{ icmpv6 library mts-queue <size> } | { no icmpv6 library mts-queue }

Syntax Description

no	Negate a command or set its defaults
icmpv6	ICMPv6 Commands
library	library data queue
mts-queue	mts-queue
<i>size</i>	Size for icmpv6 data sap qlimit

Command Mode

- /exec/configure

icmpv6 mts-queue

{ icmpv6 mts-queue <size> } | { no icmpv6 mts-queue }

Syntax Description

no	Negate a command or set its defaults
icmpv6	ICMPv6 Commands
mts-queue	mts-queue
<i>size</i>	Size for icmpv6 data sap qlimit

Command Mode

- /exec/configure

import

import

Syntax Description

import	import
--------	--------

Command Mode

- /exec/configure

import interface

import interface <if0>

Syntax Description

import	import
interface	Interface configuration
<i>if0</i>	interface type and number in module/slot format

Command Mode

- /exec/configure

import map

[no] import map <rmap-name>

Syntax Description

no	(Optional) Negate a command or set its defaults
import	VRF import
map	Route-map based VRF import
<i>rmap-name</i>	Route-map name

Command Mode

- /exec/configure/vrf-af-ipv4 /exec/configure/vrf-af-ipv6

import running-config

import running-config [exclude interface ethernet]

Syntax Description

import	import
running-config	running-config
exclude	(Optional) Exclude
interface	(Optional) Exclude all interfaces of this type
ethernet	(Optional) running-config excluding physical interfaces

Command Mode

- /exec/configure

import vrf default map

import vrf default [<prefix-limit>] map <rmap-name> | no import vrf default [<prefix-limit>] map <rmap-name>

Syntax Description

no	Negate a command or set its defaults
import	VRF import
vrf	Virtual Router Context
default	VRF name (default)
<i>prefix-limit</i>	(Optional) Maximum prefix limit
map	Route-map based VRF import
<i>rmap-name</i>	Route-map name

Command Mode

- /exec/configure/vrf-af-ipv4 /exec/configure/vrf-af-ipv6

in-order-guarantee

[no] in-order-guarantee [vsan <i0>]

Syntax Description

no	(Optional) Negate a command or set its defaults
in-order-guarantee	set in-order delivery guarantee
vsan	(Optional) VSAN id range
<i>i0</i>	(Optional) VSAN id range

Command Mode

- /exec/configure

in-order-guarantee

[no] in-order-guarantee

Syntax Description

no	(Optional) Negate a command or set its defaults
in-order-guarantee	Enable IOD

Command Mode

- /exec/configure/policy-map/type/uf/class

include profile

[no] include profile { <all_conf_profile_name> }

Syntax Description

no	(Optional) Negate a command or set its defaults
include	Include a port-profile
profile	config-profile
<i>all_conf_profile_name</i>	Enter the name of the profile

Command Mode

- /exec/configure

include profile any

[no] include profile any

Syntax Description

no	(Optional) Negate a command or set its defaults
include	Include a port-profile
profile	config-profile
any	dynamically include profile during apply

Command Mode

- /exec/configure

index next

```
{ { index <index> { next-address [ loose | strict ] <ipaddr> | exclude-address <ipaddr> } } | { no index <index> } }
```

Syntax Description

no	Negate a command or set its defaults
index	Specify the next entry index to add, edit (or delete)
<i>index</i>	Previous index number
next-address	Specify the next address in the path
loose	(Optional) Target address is loose
strict	(Optional) Target address is strict
exclude-address	Exclude an address from subsequent partial path segments
<i>ipaddr</i>	Enter IP address (A.B.C.D)

Command Mode

- /exec/configure/te/expl-path

ingress-replication

ingress-replication <addr>

Syntax Description

ingress-replication	Configure ingress replication
<i>addr</i>	Remote Peer IP Address

Command Mode

- /exec/configure/if-nve/vni

ingress-replication protocol bgp

[no] ingress-replication protocol bgp

Syntax Description

no	(Optional) Negate a command or set its defaults
ingress-replication	Configure ingress replication
protocol	Control protocol to use
bgp	Border Gateway Protocol

Command Mode

- /exec/configure/if-nve/vni

ingress-replication protocol static

[no] ingress-replication protocol static

Syntax Description

no	(Optional) Negate a command or set its defaults
ingress-replication	Configure ingress replication
protocol	Control protocol to use
static	Static End-point Configuration

Command Mode

- /exec/configure/if-nve/vni

ingress interface

[no] ingress interface <interface-ref> [next-hop <ip-addr>]

Syntax Description

no	(Optional) Negate a command or set its defaults
ingress	ITD ingress interface
interface	ITD ingress interface
<i>interface-ref</i>	
next-hop	(Optional) next hop ip address
<i>ip-addr</i>	(Optional) Next hop IPv4 address connected to ingress intrerface

Command Mode

- /exec/configure/itd /exec/configure/itd-inout

inherit peer-policy

[no] inherit peer-policy <peer-policy-template-name> <policy-preference>

Syntax Description

no	(Optional) Negate a command or set its defaults
inherit	Inherit a template
peer-policy	Inherit a peer-policy template
<i>peer-policy-template-name</i>	Template name
<i>policy-preference</i>	Sequence number

Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af

inherit peer-policy

[no] inherit peer-policy <peer-policy-template-name> <policy-preference>

Syntax Description

no	(Optional) Negate a command or set its defaults
inherit	Inherit a template
peer-policy	Inherit a peer-policy template
<i>peer-policy-template-name</i>	Template name
<i>policy-preference</i>	Sequence number

Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv4
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mdt
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-vpnv6
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-link-state
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-vpls
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-mvpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-l2vpn-evpn
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv4-label
- /exec/configure/router-bgp/router-bgp-neighbor/router-bgp-neighbor-af-ipv6-label

inherit peer-session

[no] inherit peer-session <peer-session-template-name>

Syntax Description

no	(Optional) Negate a command or set its defaults
inherit	Inherit a template
peer-session	Inherit a peer-session template
<i>peer-session-template-name</i>	Template name

Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor-sess

inherit peer

[no] inherit peer <peer-template-name>

Syntax Description

no	(Optional) Negate a command or set its defaults
inherit	Inherit a template
peer	Inherit a peer template
<i>peer-template-name</i>	Peer template name

Command Mode

- /exec/configure/router-bgp/router-bgp-neighbor /exec/configure/router-bgp/router-bgp-vrf-neighbor
/exec/configure/router-bgp/router-bgp-prefixneighbor
/exec/configure/router-bgp/router-bgp-vrf-prefixneighbor

inherit port-profile

[no] inherit port-profile { <s0> | <s1> }

Syntax Description

no	(Optional) Negate a command or set its defaults
inherit	Inherit a port-profile
port-profile	Inherit a port-profile
<i>s0</i>	Enter the name of the profile
<i>s1</i>	Enter the name of the profile

Command Mode

- /exec/configure/if-any /exec/configure/if-port-channel exec/configure/if-port-channel-range /exec/configure/if-ethernet-m /exec/configure/if-ethernet-switch-m

inject-map exist-map

[no] inject-map <inject-map-name> exist-map <exist-map-name> [copy-attributes]

Syntax Description

no	(Optional) Negate a command or set its defaults
inject-map	Routemap which specifies prefixes to inject
<i>inject-map-name</i>	Route-map name
exist-map	Routemap which specifies exist condition
<i>exist-map-name</i>	Route-map name
copy-attributes	(Optional) Copy attributes from aggregate

Command Mode

- /exec/configure/router-bgp/router-bgp-af

install activate

install activate <patch> + [forced]

Syntax Description

install	Install package
activate	Activate package
<i>patch</i>	Package Name
forced	(Optional) non-interactive

Command Mode

- /exec

install add

```
install add { <package-name> | <uri> } [ vrf <vrf-known-name> ] [ [ activate [ upgrade | downgrade ] ] [ forced ] ]
```

Syntax Description

install	Install package
add	Add package
<i>package-name</i>	Package name
<i>uri</i>	Enter package uri
vrf	(Optional) Display per-VRF information
<i>vrf-known-name</i>	(Optional) Known VRF name
activate	(Optional) Activate package
forced	(Optional) non-interactive
upgrade	(Optional) Upgrade package
downgrade	(Optional) Downgrade package

Command Mode

- /exec

install all

```
install { all [ nxos <uri> | kickstart <uri1> | system <uri3> | serial ] + [ non-disruptive | no-reload | noswitchover ] [ bios | no-save ] [ bios-force ] [ non-interruptive ] [ compact ] | force-all [ nxos <uri> | serial ] + [ non-disruptive ] }
```

Syntax Description

install	upgrade software
all	Upgrade the system
kickstart	(Optional) boot-variable name
<i>uri1</i>	(Optional) Enter image uri
system	(Optional) boot-variable name
<i>uri3</i>	(Optional) Enter image uri
no-reload	(Optional) Exit right before reload during install.
noswitchover	(Optional) Exit right before reload during install.
non-interruptive	(Optional) Non-Interruptive install.
no-save	(Optional) Config not saved. Manually save config before starting install all
bios	(Optional) BIOS Only
bios-force	(Optional) Forcefully upgrade bios.
non-disruptive	(Optional) Non-Disruptive install.
compact	(Optional) Compact image to make it nexus 3k only
nxos	(Optional) boot-variable name
<i>uri</i>	(Optional) Enter image uri
serial	(Optional) Upgrade linecards in serial
force-all	Force upgrade the system

Command Mode

- /exec

install commit

install commit [<patch>]

Syntax Description

install	Install package
commit	Commit software patch
<i>patch</i>	(Optional) Package Name

Command Mode

- /exec

install deactivate

install deactivate <patch> + [forced]

Syntax Description

install	Install package
deactivate	Deactivate package
<i>patch</i>	Package Name
forced	(Optional) non-interactive

Command Mode

- /exec

install epld

```
install epld <uri1> { { module { <module> } [ force ] } }
```

Syntax Description

install	upgrade software
epld	Install EPLD from EPLD image
<i>uri1</i>	Local URI containing EPLD Image
module	Upgrade the modules
<i>module</i>	Enter the module number to be upgraded
force	(Optional) Force Install EPLD from EPLD image

Command Mode

- /exec

install epld

```
install epld <uri> { { module { all } [ force ] } }
```

Syntax Description

install	upgrade software
epld	Install EPLD from EPLD image
<i>uri</i>	Local URI containing EPLD Image
module	Upgrade the modules
all	Install all the modules
force	(Optional) Force Install EPLD from EPLD image

Command Mode

- /exec

install epld

```
install epld <uri> { { module { <module> } { primary | golden } [ force ] } }
```

Syntax Description

install	upgrade software
epld	Install EPLD from EPLD image
<i>uri</i>	Local URI containing EPLD Image
module	Upgrade the modules
<i>module</i>	Enter the module number to be upgraded
primary	Upgrade primary fpga image
golden	Upgrade golden fpga image
force	(Optional) Force Install EPLD from EPLD image

Command Mode

- /exec

install epld

```
install epld <uri1> { { module { all } { primary | golden } [ force ] } }
```

Syntax Description

install	upgrade software
epld	Install EPLD from EPLD image
<i>uri1</i>	Local URI containing EPLD Image
module	Upgrade the modules
all	Install all the modules
primary	Upgrade primary fpga image
golden	Upgrade golden fpga image
force	(Optional) Force Install EPLD from EPLD image

Command Mode

- /exec

install epld psu

install epld <uri1> psu

Syntax Description

install	upgrade software
epld	Install EPLD from EPLD image
<i>uri1</i>	Local URI containing EPLD Image
psu	Upgrade PSU firmware

Command Mode

- /exec

install feature-set fcoe-npv

[no] install feature-set fcoe-npv

Syntax Description

no	(Optional) Negate a command or set its defaults
install	install a feature-set
feature-set	install feature-set
fcoe-npv	FCOE-NPV

Command Mode

- /exec/configure

install feature-set fex

[no] install feature-set fex

Syntax Description

no	(Optional) Negate a command or set its defaults
install	install a feature-set
feature-set	install feature-set
fex	FEX

Command Mode

- /exec/configure

install feature-set mpls

[no] install feature-set mpls

Syntax Description

no	(Optional) Negate a command or set its defaults
install	install a feature-set
feature-set	install feature-set
mpls	MPLS

Command Mode

- /exec/configure

install license

install license <uri0> [<s0>]

Syntax Description

install	upgrade software
license	install license
<i>uri0</i>	Specify URL for license file
<i>s0</i>	(Optional) Specify a target name for the license file

Command Mode

- /exec

install module

```
install module <module> { bios [ [ system <uri0> ] [ forced2 ] ] | bios [ primary | golden ] [ forced ] | image
[ { forced1 | system1 <uri1> } ] }
```

Syntax Description

install	upgrade software
module	Upgrade for module
<i>module</i>	Enter module index
bios	Upgrade module bios
system	(Optional) System Image
<i>uri0</i>	(Optional) Local URI containing the system Image
forced2	(Optional) Force install bios
primary	(Optional) Upgrade the Primary bios
golden	(Optional) Upgrade the Golden bios
forced	(Optional) Force install bios
image	Upgrade module image
forced1	(Optional) Bypass SRG check
system1	(Optional) System Image
<i>uri1</i>	(Optional) Local URI containing the system Image

Command Mode

- /exec

install remove

install remove { <patch> | inactive } [forced]

Syntax Description

install	Install package
remove	Remove package
<i>patch</i>	Package Name
inactive	All inactive except non-committed packages
forced	(Optional) Remove package

Command Mode

- /exec

instance-id

[no] instance-id <iid>

Syntax Description

no	(Optional) Negate a command or set its defaults
instance-id	Configures Instance-ID for global data-mappings
<i>iid</i>	24-bit instance-ID value

Command Mode

- /exec/configure/lisp-dynamic-eid /exec/configure/vrf/lisp-dynamic-eid

instance

[no] instance <plistinst> [cross-check] | instance <plistinst>

Syntax Description

no	Negate a command or set its defaults
instance	Configure a parameter list instance
<i>plistinst</i>	Enter the name of the parameter list instance
cross-check	(Optional) Explicitly search for referencing config profile

Command Mode

- /exec/configure/param-list

instance

[no] instance <instance-id> [vlan <vlan-list>]

Syntax Description

no	Negate a command or set its defaults
instance	Map vlans to an MST instance
<i>instance-id</i>	MST instance id
vlan	(Optional) Range of vlans to add to the instance mapping
<i>vlan-list</i>	(Optional) vlan range ex: 1-65, 72, 200 - 300

Command Mode

- /exec/configure/spanning-tree/mst/configuration

instance vlan

instance <instance-id> vlan <vlan-list>

Syntax Description

instance	Map vlans to an MST instance
<i>instance-id</i>	MST instance id
vlan	Range of vlans to add to the instance mapping
<i>vlan-list</i>	vlan range ex: 1-65, 72, 200 - 300

Command Mode

- /exec/configure/spanning-tree/mst/configuration

interface-vlan reset credits

interface-vlan reset credits [<count>]

Syntax Description

interface-vlan	Vlan Interface
reset	Reset SVI Credits
credits	SVI Credits
<i>count</i>	(Optional) Set SVI Credit Count

Command Mode

- /exec/configure

interface-vlan reset fsm

```
interface-vlan <vlan-id> reset fsm
```

Syntax Description

interface-vlan	Vlan Interface
<i>vlan-id</i>	VLAN Id
reset	Reset SVI Credits
fsm	SVI FSM

Command Mode

- /exec/configure

interface

[no] interface <intf>

Syntax Description

no	(Optional) Negate a command or set its defaults
interface	interface
<i>intf</i>	interfaces to allocate for ace service

Command Mode

- /exec/configure/agni-ace

interface

[no] interface <interface>

Syntax Description

no	(Optional) Negate a command or set its defaults
interface	Configure interfaces
<i>interface</i>	Interface Name

Command Mode

- /exec/configure

interface

[no] interface <interface>

Syntax Description

no	(Optional) Negate a command or set its defaults
interface	Configure interfaces
<i>interface</i>	Interface Name

Command Mode

- /exec/configure

interface

[no] interface <interface>

Syntax Description

no	(Optional) Negate a command or set its defaults
interface	Configure interfaces
<i>interface</i>	Interface Name

Command Mode

- /exec/configure

interface

[no] interface <interface>

Syntax Description

no	(Optional) Negate a command or set its defaults
interface	Configure interfaces
<i>interface</i>	Interface Name

Command Mode

- /exec/configure

interface

[no] interface <interface>

Syntax Description

no	(Optional) Negate a command or set its defaults
interface	Configure interfaces
<i>interface</i>	Interface Name

Command Mode

- /exec/configure

interface

[no] interface <interface>

Syntax Description

no	(Optional) Negate a command or set its defaults
interface	Configure interfaces
<i>interface</i>	Interface Name

Command Mode

- /exec/configure

interface

[no] interface <interface>

Syntax Description

no	(Optional) Negate a command or set its defaults
interface	Configure interfaces
<i>interface</i>	Interface Name

Command Mode

- /exec/configure

interface

interface <interface>

Syntax Description

interface	Configure interfaces
<i>interface</i>	Interface Name

Command Mode

- /exec/configure

interface

[no] interface <interface>

Syntax Description

no	Negate a command or set its defaults
interface	Configure interfaces
<i>interface</i>	Interface Name

Command Mode

- /exec/configure

interface

[no] interface <interface>

Syntax Description

no	(Optional) Negate a command or set its defaults
interface	Configure interfaces
<i>interface</i>	Interface Name

Command Mode

- /exec/configure

interface breakout module

interface breakout module <module>

Syntax Description

interface	Configure interfaces
breakout	Configuring the breakout for a module
module	High Bandwidth Module
<i>module</i>	High Bandwidth Module number

Command Mode

- /exec/configure

interface breakout module

[no] interface breakout module <module>

Syntax Description

no	Negate a command or set its defaults
interface	Configure interfaces
breakout	Configuring the breakout for a module
module	High Bandwidth Module
<i>module</i>	High Bandwidth Module number

Command Mode

- /exec/configure

interface breakout module port map

```
interface breakout module <module> port <port_num> map <breakout_map>
```

Syntax Description

interface	Configure interfaces
breakout	Configuring the breakout for an interface
module	High Bandwidth Module
<i>module</i>	High Bandwidth Module number
port	High Bandwidth Port(HBP)
<i>port_num</i>	Parent(HBP / Front-panel) port to be broken out
map	Breakout Map
<i>breakout_map</i>	Breakout Map to be applied to the parent port

Command Mode

- /exec/configure

interface breakout module port map

[no] interface breakout module <module> port <port_num> map <breakout_map>

Syntax Description

no	Negate a command or set its defaults
interface	Configure interfaces
breakout	Configuring the breakout for an interface
module	High Bandwidth Module
<i>module</i>	High Bandwidth Module number
port	High Bandwidth Port(HBP)
<i>port_num</i>	Parent(HBP / Front-panel) port to be broken out
map	Breakout Map
<i>breakout_map</i>	Breakout Map to be applied to the parent port

Command Mode

- /exec/configure

interface down delay

[no] interface down delay |

Syntax Description

<i>down</i>	delay
no	Negate a command or set its defaults
interface	Add tunnel interface config
delay	Tunnel interface down delay config

Command Mode

- /exec/configure/if-te

ip

ip [<ipaddress> [secondary]] | no ip [<ipaddress> [secondary]]

Syntax Description

no	Negate a command or set its defaults
ip	Enable HSRP IPv4 and set the virtual IP address
<i>ipaddress</i>	(Optional) Virtual IP address
secondary	(Optional) Make this IP address a secondary virtual IP address

Command Mode

- /exec/configure/if-eth-any/hsrp_ipv4

ip

ip { <ipv6address> | autoconfig } | no ip [{ <ipv6address> | autoconfig }]

Syntax Description

no	Negate a command or set its defaults
ip	Enable HSRP IPv6 and set the virtual IP address
autoconfig	Obtain address using autoconfiguration

Command Mode

- /exec/configure/if-eth-any/hsrp_ipv6

ip

[no] ip <ipaddr>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	ip address of redundancy group member
<i>ipaddr</i>	Redundancy-group node IP address

Command Mode

- /exec/configure/if-nve/rgrp

ip

[no] ip [<ipaddress> [secondary]]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Set Virtual IP address
<i>ipaddress</i>	(Optional) Virtual IP address
secondary	(Optional) Make this a secondary IP address

Command Mode

- /exec/configure/if-eth-any/glbp

ip access-class

[no] ip access-class <name> <inout>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
access-class	Specify IPv4 access control for packets
<i>name</i>	List name
<i>inout</i>	Traffic direction

Command Mode

- /exec/configure/line

ip access-group

[no] ip access-group <name> <inout>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
access-group	Specify access control for packets
<i>name</i>	List name
<i>inout</i>	Traffic direction

Command Mode

- /exec/configure/if-set-acl-l3

ip access-list

[no] ip access-list <name> [client <clienttype> <clientID>]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
access-list	Configure access list
<i>name</i>	List name
client	(Optional) set client type
<i>clienttype</i>	(Optional) CLI/ONEP
<i>clientID</i>	(Optional) client appID

Command Mode

- /exec/configure

ip access-list match-local-traffic

[no] ip access-list match-local-traffic | ip access-list match-local-traffic

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
access-list	Configure access list
match-local-traffic	Enable access-list matching for locally generated traffic

Command Mode

- /exec/configure

ip address

[no] ip address [{ <ip-addr> <ip-mask> | <ip-prefix> } [route-preference <pref>] [tag <tag>]] | ip address { <ip-addr> <ip-mask> | <ip-prefix> } [route-preference <pref>] [tag <tag>]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
address	Configure IP address on interface
<i>ip-addr</i>	(Optional) IP address in format i.i.i.i
<i>ip-mask</i>	(Optional) IP network mask in format m.m.m.m
<i>ip-prefix</i>	(Optional) IP prefix and network mask length in format x.x.x.x/m
route-preference	(Optional) URIB route preference for local/direct routes
<i>pref</i>	(Optional) Local/direct route preference
tag	(Optional) URIB route tag value for local/direct routes
<i>tag</i>	(Optional) Local/direct tag value

Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config /exec/configure/if-mpls-tunnel /exec/configure/if-gre-tunnel /exec/configure/if-vsant /exec/configure/if-cpp

ip address dhcp

[no] ip address dhcp

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
address	Configure IP address on interface
dhcp	Configure IP address from a dhcp server

Command Mode

- /exec/configure/if-vlan /exec/configure/if-ethernet /exec/configure/if-mgmt-config /exec/configure/if-ethernet-all /exec/configure/if-sub

ip address secondary

```
[no] ip address { <ip-addr> <ip-mask> | <ip-prefix> } secondary [ route-preference <pref> ] [ tag <tag> ] | ip
address { <ip-addr> <ip-mask> | <ip-prefix> } secondary [ route-preference <pref> ] [ tag <tag> ]
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
address	Configure IP address on interface
<i>ip-addr</i>	IP address in format i.i.i.i
<i>ip-mask</i>	IP network mask in format m.m.m.m
<i>ip-prefix</i>	IP prefix and network mask length in format x.x.x.x/m
secondary	Configure additional IP addresses on interface
route-preference	(Optional) URIB route preference for local/direct routes
<i>pref</i>	(Optional) Local/direct route preference
tag	(Optional) URIB route tag value for local/direct routes
<i>tag</i>	(Optional) Local/direct tag value

Command Mode

- /exec/configure/if-igmp /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config
/exec/configure/if-gre-tunnel /exec/configure/if-6to4-tunnel /exec/configure/if-vsant /exec/configure/if-cpp

ip adjacency cache disable

[no] ip adjacency cache disable

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
adjacency	Configure Adjmgr
cache	Disable cache
disable	Disable cache

Command Mode

- /exec/configure

ip adjacency forcedownload

```
ip adjacency [ vrf { <vrf-name> | <vrf-known-name> } ] { <interface> { * | <ip-addr> } | * } forcedownload
```

Syntax Description

ip	Configure IP features
adjacency	Configure Adjmgr
vrf	(Optional) Display per-VRF information
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name
<i>interface</i>	Display specific interface adjacencies only
<i>ip-addr</i>	IPV4 source address
*	for all adjacencies in this context
forcedownload	Create consistency in UFDM

Command Mode

- /exec/configure

ip adjacency l2fm-reg

```
[no] ip adjacency l2fm-reg { [ vrf <vrf-known-name> ] | <interface> }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
adjacency	Configure Adjmgr
l2fm-reg	Register with l2fm
vrf	(Optional) vrf name
<i>vrf-known-name</i>	(Optional) Known VRF name
<i>interface</i>	Interface name

Command Mode

- /exec/configure

ip adjacency notify interval

{ ip adjacency notify interval <time> } | { no ip adjacency notify interval }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
adjacency	Configure Adjmgr
notify	Notify URIB/FIB
interval	Time interval
<i>time</i>	value in milli seconds

Command Mode

- /exec/configure

ip adjacency peer-gmac

[no] ip adjacency [vrf { <vrf-name> | <vrf-known-name> }] { <interface> { * | <ip-addr> } | * } peer-gmac

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
adjacency	Configure Adjmgr
vrf	(Optional) Display per-VRF information
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name
<i>interface</i>	Display specific interface adjacencies only
<i>ip-addr</i>	IPV4 source address
*	for all adjacencies in this context
peer-gmac	Set/clear the peer-gmac bit

Command Mode

- /exec/configure

ip adjacency remote-adj

[no] ip adjacency [vrf { <vrf-name> | <vrf-known-name> }] { <interface> { * | <ip-addr> } | * } remote-adj

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
adjacency	Configure Adjmgr
vrf	(Optional) Display per-VRF information
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name
<i>interface</i>	Display specific interface adjacencies only
<i>ip-addr</i>	IPV4 source address
*	for all adjacencies in this context
remote-adj	Set/clear the remote-adj bit

Command Mode

- /exec/configure

ip adjacency route distance

{ ip adjacency route distance <pref> } | { no ip adjacency route distance }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
adjacency	Configure Adjmgr
route	route
distance	admin-distance
<i>pref</i>	preference

Command Mode

- /exec/configure

ip adjacency statistics collect

{ ip adjacency statistics collect } | { no ip adjacency statistics collect }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
adjacency	Configure Adjmgr
statistics	Statistics
collect	Collection

Command Mode

- /exec/configure

ip adjacency statistics interval

{ ip adjacency statistics interval <time> } | { no ip adjacency statistics interval }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
adjacency	Configure Adjmgr
statistics	Statistics
interval	Interval
<i>time</i>	Timer timeout value

Command Mode

- /exec/configure

ip allow address-overlap

[no] ip allow address-overlap

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
allow	Allow interface IP address overlap
address-overlap	Allow interface IP address overlap

Command Mode

- /exec/configure

ip allow port

```
{ ip allow port { <allow_ports> | none } | no ip allow port [ <allow_ports> | none ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	IP protocol
port	Well known UDP/TCP ports
allow	Restrict the set of allowed ports
<i>allow_ports</i>	Comma separated list of ports or ranges
none	Disallow binding to any ports

Command Mode

- /exec/configure/virt-serv

ip amt anycast-gateway-address

```
{ { ip amt anycast-gateway-address <address> } | { no ip amt anycast-gateway-address [ <address> ] } } | {
ipv6 amt anycast-gateway-address <address6> } | { no ipv6 amt anycast-gateway-address [ <address6> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
amt	AMT global configuration commands
anycast-gateway-address	Configure anycast address for AMT gateway
<i>address</i>	IP anycast address of AMT gateway

Command Mode

- /exec/configure /exec/configure/vrf

ip amt anycast-relay-prefix

{ { ip amt anycast-relay-prefix <prefix> } | { no ip amt anycast-relay-prefix [<prefix>] } } | { { ipv6 amt anycast-relay-prefix <prefix6> } | { no ipv6 amt anycast-relay-prefix [<prefix6>] } }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
amt	AMT global configuration commands
anycast-relay-prefix	Configure anycast prefix for AMT relay
<i>prefix</i>	IP anycast prefix for AMT relay

Command Mode

- /exec/configure /exec/configure/vrf

ip amt gateway

[no] ip amt gateway

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
amt	AMT global configuration commands
gateway	Configures IPv4 AMT gateway functionality

Command Mode

- /exec/configure /exec/configure/vrf

ip amt gateway send-discovery

[no] ip amt gateway send-discovery

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
amt	AMT global configuration commands
gateway	Configures IP AMT gateway functionality
send-discovery	Trigger a Discovery message to the Anycast address

Command Mode

- /exec/configure /exec/configure/vrf

ip amt join-policy

```
{ [ no ] { ip | ipv6 } amt join-policy <route-map> [ gateway <route-map> ] }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
amt	AMT global configuration commands
join-policy	Configures what (S,G) are allowed to be joined
<i>route-map</i>	Route-map describing (S,G) entries allowed
gateway	(Optional) Configure join-policy per gateway
<i>route-map</i>	(Optional) Route-map describing gateway or sets of gateways

Command Mode

- /exec/configure /exec/configure/vrf

ip amt qqic

[no] { ip | ipv6 } amt qqic <qqic-value>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
amt	AMT global configuration commands
qqic	Configure Querier's Query Interval Code
<i>qqic-value</i>	QQIC value

Command Mode

- /exec/configure /exec/configure/vrf

ip amt relay-advertisement-address

```
{ { ip amt relay-advertisement-address <address> } | { no ip amt relay-advertisement-address [ <address> ] } } | { { ipv6 amt relay-advertisement-address <address6> } | { no ipv6 amt relay-advertisement-address [ <address6> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
amt	AMT global configuration commands
relay-advertisement-address	Address to use by AMT relay
<i>address</i>	IP unicast address for AMT relay to use

Command Mode

- /exec/configure /exec/configure/vrf

ip amt relay

[no] ip amt relay

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
amt	AMT global configuration commands
relay	Configures IPv4 AMT relay functionality

Command Mode

- /exec/configure /exec/configure/vrf

ip amt state-limit

```
{ [ no ] { ip | ipv6 } amt state-limit <limit> [ gateway <route-map> ] }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
amt	AMT global configuration commands
state-limit	Configure the maximum number of (S,G) entries allowed
<i>limit</i>	Number of entries total or per AMT gateway
gateway	(Optional) Configure state limit per gateway
<i>route-map</i>	(Optional) Route-map describing gateway or sets of gateways

Command Mode

- /exec/configure /exec/configure/vrf

ip amt tunnel-limit

```
{ { { ip | ipv6 } amt tunnel-limit <limit> } | { no { ip | ipv6 } amt tunnel-limit [ <limit> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
amt	AMT global configuration commands
tunnel-limit	Configure the maximum tunnels allowed
<i>limit</i>	Number of tunnels

Command Mode

- /exec/configure /exec/configure/vrf

ip arp

```
{ ip arp <ip-address> <mac-address> | no ip arp <ip-address> [ <mac-address> ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
<i>ip-address</i>	IP address
<i>mac-address</i>	MAC address

Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config /exec/configure/if-vlan-common

ip arp allow-static-arp-outside-subnet

[no] ip arp allow-static-arp-outside-subnet

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
allow-static-arp-outside-subnet	Allow static ARP outside interface subnet

Command Mode

- /exec/configure

ip arp am mts-batch

```
{ ip arp am mts-batch <batch-timer> }
```

Syntax Description

ip	Configure IP features
arp	Configure ARP parameters
am	Adjacency Manager
mts-batch	Configure ARP-AM mts batch count
<i>batch-timer</i>	Interval in milliseconds

Command Mode

- /exec/configure

ip arp broadcast mac-mismatch

{ ip arp broadcast mac-mismatch } | { no ip arp broadcast mac-mismatch }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
broadcast	Enable/disable arp broadcast
mac-mismatch	when there is a smac mismatch

Command Mode

- /exec/configure

ip arp cache disable

[no] ip arp cache disable

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
cache	Disable cache
disable	Disable cache

Command Mode

- /exec/configure

ip arp cache limit

```
{ { ip arp cache limit <max> } | { no ip arp cache limit } } [ syslog <rate> ]
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
cache	ARP cache parameters
limit	Limit size of ARP adjacencies cache
<i>max</i>	Maximum number of ARP entries
syslog	(Optional) Syslog messages
<i>rate</i>	(Optional) Syslogs per second

Command Mode

- /exec/configure

ip arp cfs-queue

{ ip arp cfs-queue <size> } | { no ip arp cfs-queue }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	ARP
cfs-queue	cfs-queue
<i>size</i>	Size for adjacencies to be sent in CFSOE payload

Command Mode

- /exec/configure

ip arp event-history size

```
[no] ip arp event-history { packet | event | sync-event | ip-sync-event | control | ha | errors | lcache | lcache-errors
| client-event | client-errors | snmp | cli | suppression-event | suppression-errors | controller-errors } size {
<size_in_text> | <size_in_Kbytes> }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	IP events
arp	Configure ARP parameters
event-history	log debug events into event history buffer
packet	inst packet logs
event	Internal event logs
sync-event	CFS and MCECM related event logs
ip-sync-event	L3 over vpc events
control	ARP control event logs
ha	HA and GR logs
errors	inst error logs
lcache	lcache logs
lcache-errors	lcache_error logs
client-event	Client_event logs
client-errors	Client_error logs
cli	cli logs
snmp	SNMP logs
suppression-event	ARP suppression event logs
suppression-errors	ARP suppression error logs
controller-errors	Controller MAC-IP route error logs
size	Configure the size of the event-hist buffer
<i>size_in_text</i>	Buffer size
<i>size_in_Kbytes</i>	Size of the file in kbytes

Command Mode

- /exec/configure

ip arp garp-storm

{ ip arp garp-storm } | { no ip arp garp-storm }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
garp-storm	Configure timer values for garp-storm

Command Mode

- /exec/configure

ip arp garp-storm timer count

```
{ ip arp garp-storm timer <garp-timer> count <garp-count> } | { no ip arp garp-storm timer <garp-timer>
count <garp-count> }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
garp-storm	Configure timer values for garp-storm
timer	Set the garp-storm timer value in seconds
<i>garp-timer</i>	Timer value in seconds
count	Set the garp count value
<i>garp-count</i>	Timer value in seconds

Command Mode

- /exec/configure

ip arp gratuitous hsrp duplicate

{ ip arp gratuitous hsrp duplicate | no ip arp gratuitous hsrp duplicate }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
gratuitous	gratuitous
hsrp	hsrp
duplicate	duplicate address detection

Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config /exec/configure/if-vlan-common

ip arp gratuitous hsrp duplicate

{ ip arp gratuitous hsrp duplicate | no ip arp gratuitous hsrp duplicate }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
gratuitous	gratuitous
hsrp	hsrp
duplicate	duplicate address detection

Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config /exec/configure/if-vlan-common

ip arp gratuitous request

{ ip arp gratuitous request | no ip arp gratuitous request }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
gratuitous	gratuitous
request	Enable/Disable sending grat. arp request when duplicate address detected

Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config /exec/configure/if-vlan

ip arp gratuitous update

{ ip arp gratuitous update | no ip arp gratuitous update }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
gratuitous	gratuitous
update	Enable/Disable arp cache updates for gratuitous arp

Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config /exec/configure/if-vlan-common

ip arp inspection filter vlan

[no] ip arp inspection filter <arp-acl-name> vlan <vlan-range>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
inspection	Arp Inspection configuration
filter	Filter
<i>arp-acl-name</i>	Access list name
vlan	Vlan range
<i>vlan-range</i>	VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19

Command Mode

- /exec/configure

ip arp inspection log-buffer entries

[no] ip arp inspection log-buffer { entries <number1> }

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
inspection	Arp Inspection configuration
log-buffer	Log Buffer Configuration
entries	Number of entries for log buffer
<i>number1</i>	Number of entries for log buffer

Command Mode

- /exec/configure

ip arp inspection trust

[no] ip arp inspection trust

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
inspection	Arp Inspection configuration
trust	Configure trust state

Command Mode

- /exec/configure/if-switching

ip arp inspection validate

[no] ip arp inspection validate { src-mac | dst-mac | ip1 } +

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
inspection	Arp Inspection configuration
validate	Validate addresses
src-mac	Validate source MAC address
dst-mac	Validate destination MAC address
ip1	Validate IP addresses

Command Mode

- /exec/configure

ip arp inspection vlan

[no] ip arp inspection vlan <vlan-id> [logging { dhcp-bindings { permit | all | inone } }]

Syntax Description

<i>logging</i>	(Optional) dhcp-bindings
no	(Optional) Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
inspection	Arp Inspection configuration
vlan	Enable/Disable ARP Inspection on vlans
<i>vlan-id</i>	VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19
dhcp-bindings	(Optional) Logging of packet that match DHCP bindings
permit	(Optional) Log DHCP Binding Permitted packets
all	(Optional) Log all packets that match DHCP bindings
inone	(Optional) Do not log packets

Command Mode

- /exec/configure

ip arp mts-queue

{ ip arp mts-queue <size> } | { no ip arp mts-queue }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	ARP
mts-queue	mts-queue
<i>size</i>	Size for arp data sap qlimit

Command Mode

- /exec/configure

ip arp off-list timeout

{ ip arp off-list timeout <time> } | { no ip arp off-list timeout }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
off-list	off-list
timeout	Expire time
<i>time</i>	Expire time value in seconds

Command Mode

- /exec/configure

ip arp rarp fabric-forwarding

[no] ip arp rarp fabric-forwarding

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
rarp	Enable/Disable forwarding of RARP messages on fabric
fabric-forwarding	Forward RARP requests to the fabric

Command Mode

- /exec/configure

ip arp rarp fabric-forwarding rate-limit

[no] ip arp rarp fabric-forwarding rate-limit <rate>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
rarp	Enable/Disable forwarding of RARP messages on fabric
fabric-forwarding	Forward RARP requests to the fabric
rate-limit	Forwarding rate of the RARP frames
<i>rate</i>	RARP frames-per-second

Command Mode

- /exec/configure

ip arp request

ip arp request <ip-address>

Syntax Description

ip	Configure IP features
arp	Configure ARP parameters
request	Trigger ARP request
<i>ip-address</i>	IP address

Command Mode

- /exec/configure/if-igp

ip arp suppression-cache

```
ip arp suppression-cache { [ clear { local | remote } vlan <vlan-id> [ <ip-address> ] ] | [ download remote
vlan <vlan-id> [ <ip-address> ] ] }
```

Syntax Description

clear	(Optional) Reset functions
ip	Clear IP commands
download	(Optional) download local entires from ARP cache, remote from l2rib
arp	Clear ARP table and statistics
suppression-cache	ARP-suppression cache
local	(Optional) Local entries
remote	(Optional) Remote entries
vlan	(Optional) Vlan id
<i>vlan-id</i>	(Optional) Vlan
<i>ip-address</i>	(Optional) IP address

Command Mode

- /exec

ip arp suppression testnum

```
ip arp suppression testnum <testnum> [ { <ip-address> <mac-address> <vlan_id> <interface> <phy-interface>
} <count> ]
```

Syntax Description

ip	Configure IP features
arp	Configure ARP parameters
suppression	ARP-suppression based event
testnum	test case number
<i>testnum</i>	id of test (1-100)
<i>ip-address</i>	(Optional) IP address
<i>mac-address</i>	(Optional) MAC address
<i>vlan_id</i>	(Optional) Vlan
<i>interface</i>	(Optional) ARP interface
<i>phy-interface</i>	(Optional) ARP interface
<i>count</i>	(Optional) no of adjacencies needed

Command Mode

- /exec/configure

ip arp suppression timeout

{ ip arp suppression timeout <time-out> } | { no ip arp suppression timeout }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
suppression	ARP-suppression based event
timeout	ARP timeout
<i>time-out</i>	Time-out value in seconds. Time-out = 0 indicates disabled

Command Mode

- /exec/configure

ip arp synchronize

[no] ip arp synchronize

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
arp	ARP
synchronize	CFS synchronize

Command Mode

- /exec/configure/vpc-domain

ip arp synchronize

ip arp synchronize [pull | push]

Syntax Description

ip	Configure IP features
arp	ARP
synchronize	CFS synchronize
pull	(Optional) Initiate CFS pull request
push	(Optional) Initiate CFS push message

Command Mode

- /exec

ip arp synchronize

[no] ip arp synchronize

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
arp	ARP
synchronize	CFS synchronize

Command Mode

- /exec/configure/vpc-domain

ip arp test

```
{ ip arp test <ip-address> <mac-address> <mode> | no ip arp test <ip-address> [ <mac-address> ] <mode> }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
test	test command
<i>ip-address</i>	IP address
<i>mac-address</i>	MAC address
<i>mode</i>	Mode: 1 - Data plane, 2 - Control plane

Command Mode

- /exec/configure/if-vlan-common

ip arp timeout

{ ip arp timeout <time-out> } | { no ip arp timeout }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
timeout	ARP timeout
<i>time-out</i>	Time-out value in seconds

Command Mode

- /exec/configure

ip arp timeout

{ ip arp timeout <time-out> } | { no ip arp timeout }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
arp	Configure ARP parameters
timeout	ARP timeout
<i>time-out</i>	Time-out value in seconds

Command Mode

- /exec/configure/config-mgmt /exec/configure/if-igp

ip as-path access-list deny

```
{ ip as-path access-list <aspl-name> [ timeout <sec> ] [ { deny | permit } <line> } } | { no ip as-path access-list <aspl-name> [ timeout <sec> ] [ { deny | permit } <line> ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
as-path	BGP autonomous system path filter
access-list	Specify an access list name
<i>aspl-name</i>	AS path access list name
<i>aspl-name</i>	Known as-path access-list name
timeout	(Optional) Timeout to be used for checking regex cpu hog
<i>sec</i>	(Optional) No. of seconds used as timeout
deny	Specify packets to reject
permit	Specify packets to forward
<i>line</i>	A

Command Mode

- /exec/configure

ip as-path access-list seq deny

```
{ ip as-path access-list <aspl-name> seq <seq> [ timeout <sec> ] { { deny | permit } <line> } } | { no ip as-path access-list <aspl-name> seq <seq> [ timeout <sec> ] [ { deny | permit } <line> ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
as-path	BGP autonomous system path filter
access-list	Specify an access list name
<i>aspl-name</i>	AS path access list name
<i>aspl-name</i>	Known as-path access-list name
seq	Sequence number of an entry
<i>seq</i>	Sequence number
timeout	(Optional) Timeout to be used for checking regex cpu hog
<i>sec</i>	(Optional) No. of seconds used as timeout
deny	Specify packets to reject
permit	Specify packets to forward
<i>line</i>	A

Command Mode

- /exec/configure

ip authentication

```
[no] { ip | ipv6 } authentication { { key-chain eigrp <eigrp-ptag> <chain> } | { mode eigrp <eigrp-ptag> md5 } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
authentication	Configures EIGRP authentication subcommands
key-chain	key-chain
<i>eigrp-ptag</i>	Process tag
<i>chain</i>	name of key-chain
mode	mode
eigrp	EIGRP interface configuration commands
md5	Keyed message digest
<i>eigrp-ptag</i>	

Command Mode

- /exec/configure/if-igp

ip auto-discard

[no] ip auto-discard

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
auto-discard	Auto 0.0.0.0/0 discard route

Command Mode

- /exec/configure /exec/configure/vrf

ip bandwidth-percent eigrp

```
{ { { ip | ipv6 } bandwidth-percent eigrp <eigrp-ptag> <percent> } | { no { ip | ipv6 } bandwidth-percent eigrp <eigrp-ptag> [ <percent> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
bandwidth-percent	Configures IP-EIGRP bandwidth limit
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Process tag
<i>percent</i>	Maximum bandwidth percentage that EIGRP may use
<i>eigrp-ptag</i>	

Command Mode

- /exec/configure/if-igp

ip bandwidth eigrp

```
{ { { ip | ipv6 } bandwidth eigrp <eigrp-ptag> <bw> } | { no { ip | ipv6 } bandwidth eigrp <eigrp-ptag> [ <bw> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
bandwidth	Set bandwidth for interface used in EIGRP metric calculation
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Process tag
<i>bw</i>	Bandwidth in kilobits
<i>eigrp-ptag</i>	

Command Mode

- /exec/configure/if-igp

ip cache disable

[no] ip cache disable

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
cache	Disable cache
disable	Disable cache

Command Mode

- /exec/configure

ip community-list expanded deny

```
{ ip community-list expanded <name> [ timeout <sec> ] { deny | permit } <line> } | { no ip community-list
expanded <name> [ timeout <sec> ] [ { deny | permit } <line> ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
community-list	Add a community list entry
expanded	Add an expanded community list entry
<i>name</i>	Name of expanded community list
timeout	(Optional) Timeout to be used for checking regex cpu hog
<i>sec</i>	(Optional) No. of seconds used as timeout
deny	Specify community to reject
permit	Specify community to accept
<i>line</i>	Regular-expression(must

Command Mode

- /exec/configure

ip community-list standard permit internet local-AS

```
{ ip community-list standard <name> { permit | deny } { internet | local-AS | no-advertise | no-export | <aann>
| <number> | <hex_num> } + } | { no ip community-list standard <name> [ permit | deny ] [ { internet | local-AS
| no-advertise | no-export | <aann> | <number> | <hex_num> } + ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
community-list	Add a community list entry
standard	Add a standard Community list entry
<i>name</i>	Standard community list name
permit	Specify community to accept
deny	Specify community to reject
internet	Internet (well-known community)
local-AS	Do not send outside local AS (well-known community)
no-advertise	Do not advertise to any peer (well-known community)
no-export	Do not export to next AS (well-known community)
<i>aann</i>	Community number aa:nn format
<i>number</i>	Community number
<i>hex_num</i>	Community number in hex
<i>internet</i>	(Optional) local-AS

Command Mode

- /exec/configure

ip community-list standard seq permit internet local-AS

```
{ ip community-list standard <name> seq <seq> { permit | deny } { internet | local-AS | no-advertise | no-export
| <aann> | <number> | <hex_num> } + } | { no ip community-list standard <name> seq <seq> [ permit | deny
] [ { internet | local-AS | no-advertise | no-export | <aann> | <number> | <hex_num> } + ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
community-list	Add a community list entry
standard	Add a standard Community list entry
<i>name</i>	Standard community list name
seq	Sequence number of an entry
<i>seq</i>	Sequence number
permit	Specify community to accept
deny	Specify community to reject
internet	Internet (well-known community)
local-AS	Do not send outside local AS (well-known community)
no-advertise	Do not advertise to any peer (well-known community)
no-export	Do not export to next AS (well-known community)
<i>aann</i>	Community number aa:nn format
<i>number</i>	Community number
<i>hex_num</i>	Community number in hex
<i>internet</i>	(Optional) local-AS

Command Mode

- /exec/configure

ip default-gateway

[no] ip default-gateway <ip-addr> [vrf { <vrf-name> | <vrf-known-name> }]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
default-gateway	Configure default gateway
<i>ip-addr</i>	IP prefix in format i.i.i.i
vrf	(Optional) Display per-VRF information
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name

Command Mode

- /exec/configure /exec/configure/config-mgmt /exec/configure/vrf /exec/configure/if-gre-tunnel

ip delay eigrp

```
{ { { ip | ipv6 } delay eigrp <eigrp-ptag> <delay> [ picoseconds ] } | { no { ip | ipv6 } delay eigrp <eigrp-ptag> [ <delay> ] [ picoseconds ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
delay	Set delay for interface used in EIGRP metric calculation
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Process tag
<i>delay</i>	Throughput delay
picoseconds	(Optional) Delay units in picoseconds
<i>eigrp-ptag</i>	

Command Mode

- /exec/configure/if-igp

ip dhcp packet strict-validation

[no] ip dhcp packet strict-validation

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
packet	DHCP packet
strict-validation	DHCP packet strict validation

Command Mode

- /exec/configure/

ip dhcp relay

[no] ip dhcp relay

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
relay	Enable DHCP relay agent

Command Mode

- /exec/configure

ip dhcp relay address

[no] ip dhcp relay address [<ip-addr-val> [use-vrf <vrf-name>]]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
relay	Configure relay agent
address	Configure DHCP server to refer to
<i>ip-addr-val</i>	(Optional) IP address
use-vrf	(Optional) helper address VRF membership
<i>vrf-name</i>	(Optional) VRF name

Command Mode

- /exec/configure/if-igp /exec/configure/ppm-ethernet-switch /exec/configure/ppm-port-channel-switch

ip dhcp relay information option

[no] ip dhcp relay information option

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
relay	DHCP relay agent parameters
information	Relay agent information option
option	Insert relay information in BOOTREQUEST

Command Mode

- /exec/configure

ip dhcp relay information option trust

[no] ip dhcp relay information option trust

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
relay	DHCP relay agent parameters
information	Relay agent information option
option	Relay agent option
trust	Enable relay trust functionality on the system

Command Mode

- /exec/configure

ip dhcp relay information option vpn

[no] ip dhcp relay information option vpn

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
relay	DHCP relay agent parameters
information	Relay agent information option
option	Insert relay information in BOOTREQUEST
vpn	Enable relay support across VRFs

Command Mode

- /exec/configure

ip dhcp relay information trust-all

[no] ip dhcp relay information trust-all

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
relay	DHCP relay agent parameters
information	Relay agent information option
trust-all	Enable relay trust on all the interfaces

Command Mode

- /exec/configure

ip dhcp relay information trusted

[no] ip dhcp relay information trusted

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
relay	DHCP relay agent parameters
information	Relay agent information option
trusted	Enable relay trust on this interface

Command Mode

- /exec/configure/if-igp

ip dhcp relay source-interface

ip dhcp relay source-interface <interface-name>

Syntax Description

ip	Configure IP features
dhcp	Configure DHCP snooping or relay
relay	Configure relay agent
source-interface	Configure source interface for DHCP relay
<i>interface-name</i>	Source interface

Command Mode

- /exec/configure /exec/configure/if-igp

ip dhcp relay source-interface

[no] ip dhcp relay source-interface

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
relay	Configure relay agent
source-interface	Configure source interface for DHCP relay

Command Mode

- /exec/configure /exec/configure/if-igp

ip dhcp relay sub-option circuit-id customized

[no] ip dhcp relay sub-option circuit-id customized

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
relay	DHCP relay agent parameters
sub-option	Relay agent information option sub-option
circuit-id	sub-option of option82
customized	circuit id customized to include vlan id, slot and port info

Command Mode

- /exec/configure

ip dhcp relay sub-option circuit-id format-type string

[no] ip dhcp relay sub-option circuit-id format-type string [format <format-string>]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
relay	DHCP relay agent parameters
sub-option	Relay agent suboption
circuit-id	Relay agent circuit-id suboption
format-type	Specify suboption format type
string	Use string format for suboption
format	(Optional) Specify format string
<i>format-string</i>	(Optional) Format string

Command Mode

- /exec/configure

ip dhcp relay sub-option type cisco

[no] ip dhcp relay sub-option type cisco

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
relay	DHCP relay agent parameters
sub-option	Relay agent suboption
type	Relay agent suboption type
cisco	Use Cisco proprietary suboptions

Command Mode

- /exec/configure

ip dhcp relay subnet-broadcast

[no] ip dhcp relay subnet-broadcast

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
relay	Configure DHCP relay
subnet-broadcast	Configure DHCP relay subnet-broadcast on interface

Command Mode

- /exec/configure/if-igp

ip dhcp smart-relay

[no] ip dhcp smart-relay

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
smart-relay	Configure DHCP smart relay on interface

Command Mode

- /exec/configure/if-igp

ip dhcp smart-relay global

[no] ip dhcp smart-relay global

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
smart-relay	Configure DHCP smart relay
global	Configure DHCP smart relay globally

Command Mode

- /exec/configure

ip dhcp snooping

[no] ip dhcp snooping

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
snooping	DHCP Snooping

Command Mode

- /exec/configure/

ip dhcp snooping information option

[no] ip dhcp snooping information option

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
snooping	DHCP Snooping
information	DHCP Snooping information
option	DHCP Snooping information option

Command Mode

- /exec/configure/

ip dhcp snooping ipsg-excluded vlan

[no] ip dhcp snooping ipsg-excluded vlan <vlan-id10>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
snooping	DHCP Snooping
ipsg-excluded	exclude ipsg
vlan	DHCP Snooping ipsg excluded vlan
<i>vlan-id10</i>	VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19

Command Mode

- /exec/configure

ip dhcp snooping trust

[no] ip dhcp snooping trust

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
snooping	DHCP Snooping
trust	DHCP Snooping trust config

Command Mode

- /exec/configure/if-switching

ip dhcp snooping verify mac-address

[no] ip dhcp snooping verify mac-address

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
snooping	DHCP Snooping
verify	DHCP snooping verify
mac-address	DHCP snooping verify mac-address

Command Mode

- /exec/configure/

ip dhcp snooping vlan

[no] ip dhcp snooping vlan <vlan-id10>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dhcp	Configure DHCP snooping or relay
snooping	DHCP Snooping
vlan	DHCP Snooping vlan
<i>vlan-id10</i>	VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19

Command Mode

- /exec/configure

ip directed-broadcast

[no] ip directed-broadcast [<acl-name>]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
directed-broadcast	IP directed-broadcast
<i>acl-name</i>	(Optional) ACL policy name

Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config

ip distribute-list eigrp

```
[no] { ip | ipv6 } distribute-list eigrp <eigrp-ptag> { { route-map <map> } | { prefix-list <list> } } { in | out }
}
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
distribute-list	Filter networks in routing updates
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Process tag
route-map	Use a route-map for route filtering
<i>map</i>	Route-map name
prefix-list	Use a prefix-list for route filtering
<i>list</i>	Reference to prefix-list name
in	Filter incoming routing updates
out	Filter outgoing routing updates

Command Mode

- /exec/configure/if-igp

ip dns source-interface

[no] ip dns source-interface <ifnum> [vrf { <vrf-name> | <vrf-known-name> }]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
dns	Configure dns client
source-interface	Configure source interface feature for domain-lookup
<i>ifnum</i>	Source interface
vrf	(Optional) Configure VRF
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name

Command Mode

- /exec/configure

ip domain-list

```
[no] ip domain-list { <s0> | <s1> [ use-vrf { <vrf-name> | <vrf-known-name> } ] }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
domain-list	Add additional domain names
<i>s0</i>	Enter a domain
<i>s1</i>	Enter a domain
use-vrf	(Optional) Display per-VRF information
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name

Command Mode

- /exec/configure /exec/configure/vrf

ip domain-lookup

[no] ip domain-lookup

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
domain-lookup	Enable/Disable DNS

Command Mode

- /exec/configure

ip domain-name

```
[no] ip domain-name { <s0> | <s1> [ use-vrf { <vrf-name> | <vrf-known-name> } ] }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
domain-name	Specify default domain name
<i>s0</i>	Enter the default domain
<i>s1</i>	Enter the default domain
use-vrf	(Optional) Display per-VRF information
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name

Command Mode

- /exec/configure /exec/configure/vrf

ip drop-glean

[no] ip drop-glean

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
drop-glean	Installs the secondary subnet routes as Drop routes

Command Mode

- /exec/configure/if-vlan-common

ip dscp-lop

[no] ip dscp-lop | ip dscp-lop { <dscp-val> | <dscp-enum> }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
dscp-lop	Set DSCP to be used for locally originated packets for IPv4 and IPv6. Cos will not be set.
<i>dscp-val</i>	Specify DSCP value for Locally Originated packets for IPv4 and IPv6
<i>dscp-enum</i>	

Command Mode

- /exec/configure

ip dscp

[no] ip dscp <dscp_value>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Set ERSPAN IP options
dscp	Set the IP DSCP value
<i>dscp_value</i>	

Command Mode

- /exec/configure/config-monitor-erspan-src

ip eigrp bfd

[no] ip eigrp <eigrp-tag> bfd [disable]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
eigrp	EIGRP interface configuration commands
<i>eigrp-tag</i>	Process tag
bfd	Enable BFD on this interface
disable	(Optional) Disable BFD on this interface

Command Mode

- /exec/configure/if-igp

ip eigrp event-history bfd size

[no] ip eigrp [<eigrp-ptag>] event-history bfd size { <size_in_text> | <size_in_Kbytes> }

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Clear IP commands
eigrp	EIGRP clear commands
<i>eigrp-ptag</i>	(Optional) Process tag
event-history	Event History of EIGRP
bfd	Show bfd log of EIGRP
size	Configure the size of the event-hist buffer
<i>size_in_text</i>	Buffer size
<i>size_in_Kbytes</i>	Size of the file in kbytes

Command Mode

- /exec/configure

ip eigrp event-history errors

[no] { ip | ipv6 } eigrp [<eigrp-ptag>] event-history { errors | msgs }

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Clear IP commands
ipv6	Clear IPv6 commands
eigrp	EIGRP clear commands
<i>eigrp-ptag</i>	(Optional) Process tag
event-history	Event History of EIGRP
errors	Show error log of EIGRP
msgs	Show message log of EIGRP

Command Mode

- /exec/configure

ip eigrp event-history size

```
[no] { ip | ipv6 } eigrp [ <eigrp-ptag> ] event-history { fsm | packet | rib | cli } size { <size_in_text> | <size_in_Kbytes> }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Clear IP commands
ipv6	Clear IPv6 commands
eigrp	EIGRP clear commands
<i>eigrp-ptag</i>	(Optional) Process tag
event-history	Event History of EIGRP
fsm	FSM log of EIGRP
packet	Packet log of EIGRP
rib	RIB log of EIGRP
cli	EIGRP CLI related events
size	Configure the size of the event-hist buffer
<i>size_in_text</i>	Buffer size
<i>size_in_Kbytes</i>	Size of the file in kbytes

Command Mode

- /exec/configure

ip eigrp shutdown

[no] { ip | ipv6 } eigrp <eigrp-ptag> shutdown

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Process tag
shutdown	Shutdown EIGRP on this interface

Command Mode

- /exec/configure/if-igp

ip extcommunity-list expanded deny

```
{ ip extcommunity-list expanded <name> { deny | permit } <line> } | { no ip extcommunity-list expanded
<name> [ { deny | permit } <line> ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
extcommunity-list	Add a extcommunity list entry
expanded	Add an expanded extcommunity list entry
<i>name</i>	Name of expanded extcommunity list
deny	Specify extcommunity to reject
permit	Specify extcommunity to accept
<i>line</i>	Regular-expression(must

Command Mode

- /exec/configure

ip extcommunity-list standard permit

```
{ ip extcommunity-list standard <name> { permit | deny } { { 4byteas-generic { transitive
<ext-comm-gen-trans> | non-transitive <ext-comm-gen-nontrans> } } | { rt { <ext-comm-rt-aa2nn4> |
<ext-comm-rt-aa4nn2> } } | { soo { <ext-comm-soo-aa2nn4> | <ext-comm-soo-aa4nn2> } } } + | { no ip
extcommunity-list standard <name> [ permit | deny ] [ { 4byteas-generic { transitive <ext-comm-gen-trans>
| non-transitive <ext-comm-gen-nontrans> } } | { rt { <ext-comm-rt-aa2nn4> | <ext-comm-rt-aa4nn2> } } |
{ soo { <ext-comm-soo-aa2nn4> | <ext-comm-soo-aa4nn2> } } ] + } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
extcommunity-list	Add a extcommunity list entry
standard	Add a standard Extcommunity list entry
<i>name</i>	Standard extcommunity list name
permit	Specify extcommunity to accept
deny	Specify extcommunity to reject
4byteas-generic	Generic extended community
transitive	Transitive extcommunity
non-transitive	Non-Transitive extcommunity
rt	Router-Target
soo	Site-Of-Origin
<i>ext-comm-gen-trans</i>	Extcommunity number aa4:nn format
<i>ext-comm-gen-nontrans</i>	Extcommunity number aa4:nn format
<i>ext-comm-rt-aa2nn4</i>	Extcommunity number
<i>ext-comm-rt-aa4nn2</i>	Extcommunity number
<i>ext-comm-soo-aa2nn4</i>	Extcommunity number
<i>ext-comm-soo-aa4nn2</i>	Extcommunity number

Command Mode

- /exec/configure

ip flow monitor input

[no] ip flow monitor <monitorname> { input | output } [sampler <samplername>]

Syntax Description

ip	Configure IP features
flow	NetFlow related commands
monitor	Apply a Flow Monitor to this interface
<i>monitorname</i>	Name of Flow Monitor
input	Apply Flow Monitor on input traffic
output	Apply Flow Monitor on output traffic
sampler	(Optional) Optional Sampler to apply to this Flow Monitor
<i>samplername</i>	(Optional) Name of Sampler

Command Mode

- /exec/configure/if-routing /exec/configure/if-mgmt-ether /exec/configure/if-any-tunnel
/exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p

ip flow monitor input

[no] ip flow monitor <monitorname> { input | output } [sampler <samplername>]

Syntax Description

ip	Configure IP features
flow	NetFlow related commands
monitor	Apply a Flow Monitor to this interface
<i>monitorname</i>	Name of Flow Monitor
input	Apply Flow Monitor on input traffic
output	Apply Flow Monitor on output traffic
sampler	(Optional) Optional Sampler to apply to this Flow Monitor
<i>samplername</i>	(Optional) Name of Sampler

Command Mode

- /exec/configure/vlan

ip flow monitor input

```
[no] ip flow monitor <monitorname> input [ sampler <samplername> ]
```

Syntax Description

ip	Configure IP features
flow	NetFlow related commands
monitor	Apply a Flow Monitor to this interface
<i>monitorname</i>	Name of Flow Monitor
input	Apply Flow Monitor on input traffic
sampler	(Optional) Optional Sampler to apply to this Flow Monitor
<i>samplername</i>	(Optional) Name of Sampler

Command Mode

- /exec/configure/vlan-config

ip flow monitor input

[no] ip flow monitor <monitorname> { input | output } [sampler <samplername>]

Syntax Description

ip	Configure IP features
flow	NetFlow related commands
monitor	Apply a Flow Monitor to this interface
<i>monitorname</i>	Name of Flow Monitor
input	Apply Flow Monitor on input traffic
output	Apply Flow Monitor on output traffic
sampler	(Optional) Optional Sampler to apply to this Flow Monitor
<i>samplername</i>	(Optional) Name of Sampler

Command Mode

- /exec/configure/if-vlan-common

ip flow monitor output

```
ip flow monitor <monitorname> output [ sampler <samplername> ]
```

Syntax Description

ip	Configure IP features
flow	NetFlow related commands
monitor	Apply a Flow Monitor to this interface
<i>monitorname</i>	Name of Flow Monitor
output	Apply Flow Monitor on output traffic
sampler	(Optional) Optional Sampler to apply to this Flow Monitor
<i>samplername</i>	(Optional) Name of Sampler

Command Mode

- /exec/configure/vlan-config

ip flow monitor output

[no] ip flow monitor <monitorname> output [sampler <samplername>]

Syntax Description

ip	Configure IP features
flow	NetFlow related commands
monitor	Apply a Flow Monitor to this interface
<i>monitorname</i>	Name of Flow Monitor
output	Apply Flow Monitor on output traffic
sampler	(Optional) Optional Sampler to apply to this Flow Monitor
<i>samplername</i>	(Optional) Name of Sampler

Command Mode

- /exec/configure/vlan-config

ip forward

ip forward | no ip forward

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
forward	Enable ip forwarding on interface

Command Mode

- /exec/configure/if-vlan /exec/configure/if-vlan-range /exec/configure/if-igp

ip ftp source-interface

[no] ip ftp source-interface <ifnum> [vrf { <vrf-name> | <vrf-known-name> }]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ftp	Configure FTP client
source-interface	Configure source interface feature for FTP client
<i>ifnum</i>	Source interface
vrf	(Optional) Configure VRF
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name

Command Mode

- /exec/configure

ip hello-interval eigrp

```
{ { { ip | ipv6 } hello-interval eigrp <eigrp-ptag> <hello-interval> } | { no { ip | ipv6 } hello-interval eigrp <eigrp-ptag> [ <hello-interval> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
hello-interval	Configures IP-EIGRP hello interval
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Process tag
<i>hello-interval</i>	Seconds between hello transmissions
<i>eigrp-ptag</i>	

Command Mode

- /exec/configure/if-igp

ip hold-time eigrp

```
{ { { ip | ipv6 } hold-time eigrp <eigrp-ptag> <holdtime> } | { no { ip | ipv6 } hold-time eigrp <eigrp-ptag> [ <holdtime> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
hold-time	Configures IP-EIGRP hold time
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Process tag
<i>holdtime</i>	Seconds before neighbor is considered down
<i>eigrp-ptag</i>	

Command Mode

- /exec/configure/if-igp

ip host

[no] ip host <s0> <ipv4_0>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
host	Add an entry to the ip hostname table
s0	Name of Host
ipv4_0	Enter an IP address

Command Mode

- /exec/configure

ip http source-interface

[no] ip http source-interface <ifnum> [vrf { <vrf-name> | <vrf-known-name> }]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
http	Configure HTTP client
source-interface	Configure source interface feature for FTP client
<i>ifnum</i>	Source interface
vrf	(Optional) Configure VRF
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name

Command Mode

- /exec/configure

ip icmp-errors source-interface

[no] ip icmp-errors source-interface <interface> [<icmp_type>]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
icmp-errors	ICMP unreachable/TTL-exceeded/param-prob messages
source-interface	Configure source-address for applications
<i>interface</i>	Interface to pick source-address from
<i>icmp_type</i>	(Optional) ICMPv6 types

Command Mode

- /exec/configure /exec/configure/vrf

ip igmp allow-v3-asm

[no] ip igmp allow-v3-asm

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
allow-v3-asm	Accept IGMPv3 reports for non SSM groups

Command Mode

- /exec/configure/if-igp

ip igmp any-query-destination

[no] ip igmp any-query-destination

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
any-query-destination	Allow any destination-IP for General Queries

Command Mode

- /exec/configure

ip igmp bootup-delay

```
{ { no ip igmp bootup-delay [ <delay> ] } | { ip igmp bootup-delay <delay> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
bootup-delay	Configures bootup route add delay to RIB
<i>delay</i>	(Optional) Delay downloading in seconds

Command Mode

- /exec/configure

ip igmp enforce-router-alert

[no] ip igmp enforce-router-alert

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
enforce-router-alert	Enforce Router Alert option check for IGMPv2 and IGMPv3 packets

Command Mode

- /exec/configure

ip igmp event-history cli

[no] ip igmp event-history cli { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
event-history	Configure event-history buffers
cli	CLI events for IGMP
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip igmp event-history ha

```
[no] ip igmp event-history ha { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
event-history	Configure event-history buffers
ha	HA events for IGMP
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip igmp event-history igmp-internal

```
[no] ip igmp event-history igmp-internal { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
event-history	Configure event-history buffers
igmp-internal	Internal events for IGMP
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip igmp event-history interface

```
[no] ip igmp event-history { interface-events | group-events } { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
event-history	Configure event-history buffers
interface-events	Interface-events for IGMP
group-events	Group-events for IGMP
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip igmp event-history interface

```
[no] ip igmp event-history { interface-debug | group-debug } { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
event-history	Configure event-history buffers
interface-debug	Interface-debug for IGMP
group-debug	Group-debug for IGMP
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip igmp event-history mtrace

```
[no] ip igmp event-history mtrace { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
event-history	Configure event-history buffers
mtrace	Mtrace events for IGMP
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip igmp event-history policy

```
[no] ip igmp event-history policy { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
event-history	Configure event-history buffers
policy	Policy events for IGMP
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip igmp event-history vrf

```
[no] ip igmp event-history vrf { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
event-history	Configure event-history buffers
vrf	VRF events for IGMP
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip igmp file-debug

[no] ip igmp file-debug

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
file-debug	Collect all debugs to a file

Command Mode

- /exec/configure

ip igmp flush-routes

[no] ip igmp flush-routes

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
flush-routes	Remove routes when restarting IGMP

Command Mode

- /exec/configure

ip igmp group-specific-strict

[no] ip igmp group-specific-strict

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
group-specific-strict	Enable group specific consistency check

Command Mode

- /exec/configure

ip igmp group-timeout

```
{ { no ip igmp group-timeout [ <time> ] } | { ip igmp group-timeout <time> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
group-timeout	Configures group membership timeout for IGMPv2
<i>time</i>	(Optional) Time in seconds

Command Mode

- /exec/configure/if-igp

ip igmp ha-stateful

[no] ip igmp ha-stateful

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
ha-stateful	Enable stateful IGMP HA

Command Mode

- /exec/configure

ip igmp immediate-leave

[no] ip igmp immediate-leave

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
immediate-leave	Enable/Disable immediate leave

Command Mode

- /exec/configure/if-igp

ip igmp join-group

```
[no] ip igmp join-group { { <group> [ source <source> ] } | { route-map <route-map-name> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
join-group	Configures local group membership for router
<i>group</i>	Multicast group IP address
source	(Optional) Configures source address for IGMPv3 (S,G) Channel
<i>source</i>	(Optional) Source IP address
route-map	Join group policy
<i>route-map-name</i>	route-map name

Command Mode

- /exec/configure/if-igp

ip igmp last-member-query-count

```
{ { no ip igmp last-member-query-count [ <count> ] } | { ip igmp last-member-query-count <count> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
last-member-query-count	Configures number of group-specific Queries sent
<i>count</i>	(Optional) Count value

Command Mode

- /exec/configure/if-igp

ip igmp last-member-query-response-time

```
{ { no ip igmp last-member-query-response-time [ <interval> ] } | { ip igmp last-member-query-response-time <interval> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
last-member-query-response-time	Configures last member query response time
<i>interval</i>	(Optional) Interval in seconds

Command Mode

- /exec/configure/if-igp

ip igmp querier

```
{ { no ip igmp { querier-timeout | query-timeout } [ <time> ] } | { ip igmp { querier-timeout | query-timeout } <time> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
querier-timeout	Configures querier timeout for IGMPv2
query-timeout	Configures querier timeout for IGMPv2
<i>time</i>	(Optional) Time in seconds

Command Mode

- /exec/configure/if-igp

ip igmp query-interval

```
{ { no ip igmp query-interval [ <interval> ] } | { ip igmp query-interval <interval> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
query-interval	Configures interval between Query transmission
<i>interval</i>	(Optional) Interval in seconds

Command Mode

- /exec/configure/if-igp

ip igmp query-max-response-time

```
{ { no ip igmp query-max-response-time [ <time> ] } | { ip igmp query-max-response-time <time> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
query-max-response-time	Configures MRT for query messages
<i>time</i>	(Optional) Time in seconds

Command Mode

- /exec/configure/if-igp

ip igmp report-link-local-groups

[no] ip igmp report-link-local-groups

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
report-link-local-groups	Send Reports for groups in 224.0.0.0/24

Command Mode

- /exec/configure/if-igp

ip igmp report prefix-list

```
{ { ip igmp { report-policy | access-group } { <route-map-name> | prefix-list <prefix-list-name> } } | { no ip igmp { report-policy | access-group } [ <route-map-name> | prefix-list <prefix-list-name> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
report-policy	IGMP Report Policy
access-group	IGMP access-group
<i>route-map-name</i>	Route-map name
prefix-list	Prefix list policy
<i>prefix-list-name</i>	prefix-list name

Command Mode

- /exec/configure/if-igp

ip igmp robustness-variable

```
{ { no ip igmp robustness-variable [ <value> ] } | { ip igmp robustness-variable <value> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
robustness-variable	Configures RFC defined Robustness Variable
<i>value</i>	(Optional) Count value

Command Mode

- /exec/configure/if-igp

ip igmp snooping

{ { no ip igmp snooping } | { ip igmp snooping } }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping

```
{ { no ip igmp snooping } | { ip igmp snooping } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping

Command Mode

- /exec/configure/vlan

ip igmp snooping

{ { no ip igmp snooping } | { ip igmp snooping } }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping

Command Mode

- /exec/configure

ip igmp snooping

```
[no] ip igmp snooping { ha-stateful | cc-mode | m2rib-max-omfs <omf-count> | m2rib-max-omf-routes
<omf-route-count> | m2rib-max-routes <route-count> | m2rib-max-buffers <buf-count> }
```

Syntax Description

ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
no	(Optional) Negate a command or set its defaults
ha-stateful	Enable stateful IGMP-Snooping HA
cc-mode	Enter MFDM congestion-control mode
m2rib-max-omfs	Number of OMF entries in M2RIB buffer
m2rib-max-routes	Number of route entries in M2RIB buffer
m2rib-max-omf-routes	Number of omf route entries in M2RIB buffer
m2rib-max-buffers	Number of update buffers with M2RIB
<i>omf-count</i>	
<i>route-count</i>	
<i>buf-count</i>	
<i>omf-route-count</i>	

Command Mode

- /exec/configure

ip igmp snooping event-history igmp-snoop-internal

```
[no] ip igmp snooping event-history igmp-snoop-internal { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
event-history	Configure event-history buffers
igmp-snoop-internal	Internal events for IGMP-snoop
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip igmp snooping event-history mfdm-sum

```
[no] ip igmp snooping event-history mfdm-sum { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
event-history	Configure event-history buffers
mfdm-sum	MFDM-SUM events for IGMP-snoop
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip igmp snooping event-history mfdm

```
[no] ip igmp snooping event-history mfdm { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
event-history	Configure event-history buffers
mfdm	MFDM events for IGMP-snoop
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip igmp snooping event-history rib

```
[no] ip igmp snooping event-history rib { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
event-history	Configure event-history buffers
rib	RIB events for IGMP-snoop
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip igmp snooping event-history vlan-events

```
[no] ip igmp snooping event-history vlan-events { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
event-history	Configure event-history buffers
vlan-events	VLAN/BD events for IGMP-snoop
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip igmp snooping event-history vlan

```
[no] ip igmp snooping event-history vlan { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
event-history	Configure event-history buffers
vlan	VLAN/BD events for IGMP-snoop
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip igmp snooping event-history vpc

```
[no] ip igmp snooping event-history vpc { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
event-history	Configure event-history buffers
vpc	VPC events for IGMP-snoop
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip igmp snooping explicit-tracking

{ { no ip igmp snooping explicit-tracking } | { ip igmp snooping explicit-tracking } }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
explicit-tracking	Configures Explicit Host tracking for VLAN/BD

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping explicit-tracking

```
{ { no ip igmp snooping explicit-tracking } | { ip igmp snooping explicit-tracking } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
explicit-tracking	Configures Explicit Host tracking for VLAN/BD

Command Mode

- /exec/configure/vlan

ip igmp snooping fast-leave

{ { no ip igmp snooping fast-leave } | { ip igmp snooping fast-leave } }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
fast-leave	Configures Fast leave for the VLAN/BD

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping fast-leave

{ { no ip igmp snooping fast-leave } | { ip igmp snooping fast-leave } }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
fast-leave	Configures Fast leave for the VLAN/BD

Command Mode

- /exec/configure/vlan

ip igmp snooping group-timeout

[no] ip igmp snooping group-timeout { <timeout> | never }

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
group-timeout	Configures group membership timeout in VLAN/BD
<i>timeout</i>	Timeout in minutes
never	Never expire ports from group membership

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping group-timeout

[no] ip igmp snooping group-timeout { <timeout> | never }

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
group-timeout	Configures group membership timeout in all VLAN/BDs
<i>timeout</i>	Timeout in minutes
never	Never expire ports from group membership

Command Mode

- /exec/configure

ip igmp snooping last-member-query-count

```
{ { no ip igmp snooping last-member-query-count [ <count> ] } | { ip igmp snooping last-member-query-count <count> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
last-member-query-count	Configures number of group-specific queries sent
<i>count</i>	(Optional) Count value

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping last-member-query-count

```
{ { no ip igmp snooping last-member-query-count [ <count> ] } | { ip igmp snooping last-member-query-count <count> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
last-member-query-count	Configures number of group-specific queries sent
<i>count</i>	(Optional) Count value

Command Mode

- /exec/configure/vlan

ip igmp snooping last-member-query-interval

```
{ { no ip igmp snooping last-member-query-interval [ <interval> ] } | { ip igmp snooping  
last-member-query-interval <interval> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
last-member-query-interval	Configures interval between group-specific Query transmissions
<i>interval</i>	(Optional) Interval in seconds

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping last-member-query-interval

```
{ { no ip igmp snooping last-member-query-interval [ <interval> ] } | { ip igmp snooping
last-member-query-interval <interval> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
last-member-query-interval	Configures interval between group-specific Query transmissions
<i>interval</i>	(Optional) Interval in seconds

Command Mode

- /exec/configure/vlan

ip igmp snooping link-local-groups-suppression

[no] ip igmp snooping link-local-groups-suppression

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
link-local-groups-suppression	Configures VLAN/BD link-local groups suppression

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping link-local-groups-suppression

[no] ip igmp snooping link-local-groups-suppression

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
link-local-groups-suppression	Configures VLAN/BD link-local groups suppression

Command Mode

- /exec/configure/vlan

ip igmp snooping link-local-groups-suppression

[no] ip igmp snooping link-local-groups-suppression

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
link-local-groups-suppression	Configures Global link-local groups suppression

Command Mode

- /exec/configure

ip igmp snooping max-gq-miss

```
{ { no ip igmp snooping max-gq-miss } | { ip igmp snooping max-gq-miss <count> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
max-gq-miss	Configure general query miss count
<i>count</i>	Max number of GQ misses allowed

Command Mode

- /exec/configure

ip igmp snooping mrouter interface

```
{ { no ip igmp snooping mrouter interface <interface> } | { ip igmp snooping mrouter interface <interface> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
mrouter	Configures static multicast router interface
interface	Specify interface for static-mrouter
<i>interface</i>	Interface name

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping mrouter interface

```
{ { no ip igmp snooping mrouter interface <interface> } | { ip igmp snooping mrouter interface <interface> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
mrouter	Configures static multicast router interface
interface	Specify interface for static-mrouter
<i>interface</i>	Interface name

Command Mode

- /exec/configure/vlan

ip igmp snooping mrouter vpc-peer-link

[no] ip igmp snooping mrouter vpc-peer-link

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
mrouter	Configures static multicast router interface
vpc-peer-link	Specify vpc-peer-link as static mrouter for all VLAN/BDs

Command Mode

- /exec/configure

ip igmp snooping optimised-multicast-flood

[no] ip igmp snooping optimised-multicast-flood

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
optimised-multicast-flood	Configures Optimised Multicast Flood (OMF) on the VLAN/BD

Command Mode

- /exec/configure/vlan

ip igmp snooping proxy-leave use-group-address

```
{ { ip igmp snooping proxy-leave use-group-address } | { no ip igmp snooping proxy-leave use-group-address } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
proxy-leave	Proxy Leave
use-group-address	Use group address for proxy leave

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping proxy general-queries

[no] ip igmp snooping proxy general-queries [mrt <mrt>]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
proxy	Configures IGMP snooping proxy
general-queries	Configures proxy for general-queries
mrt	(Optional) Configure max-response-time for the switch's proxy general-queries
<i>mrt</i>	(Optional) MRT in seconds

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping proxy general-queries

[no] ip igmp snooping proxy general-queries [mrt <mrt>]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
proxy	Configures IGMP snooping proxy
general-queries	Configures proxy for general-queries
mrt	(Optional) Configure max-response-time for the switch's proxy general-queries
<i>mrt</i>	(Optional) MRT in seconds

Command Mode

- /exec/configure

ip igmp snooping querier-timeout

```
{ { no ip igmp snooping querier-timeout [ <time> ] } | { ip igmp snooping querier-timeout <time> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
querier-timeout	Configures querier timeout for IGMPv2
<i>time</i>	(Optional) Time in seconds

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping querier-timeout

```
{ { no ip igmp snooping querier-timeout [ <time> ] } | { ip igmp snooping querier-timeout <time> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
querier-timeout	Configures querier timeout for IGMPv2
<i>time</i>	(Optional) Time in seconds

Command Mode

- /exec/configure/vlan

ip igmp snooping querier

```
{ { no ip igmp snooping querier [ <querier> ] } | { ip igmp snooping querier <querier> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
querier	Enables snooping querier
<i>querier</i>	(Optional) Querier IP address

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping querier

```
{ { no ip igmp snooping querier [ <querier> ] } | { ip igmp snooping querier <querier> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
querier	Enables snooping querier
<i>querier</i>	(Optional) Querier IP address

Command Mode

- /exec/configure/vlan

ip igmp snooping query-interval

```
{ { no ip igmp snooping query-interval [ <interval> ] } | { ip igmp snooping query-interval <interval> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
query-interval	Configures interval between query transmission
<i>interval</i>	(Optional) Interval in seconds

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping query-interval

{ { no ip igmp snooping query-interval [<interval>] } | { ip igmp snooping query-interval <interval> } }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
query-interval	Configures interval between query transmission
<i>interval</i>	(Optional) Interval in seconds

Command Mode

- /exec/configure/vlan

ip igmp snooping query-max-response-time

```
{ { no ip igmp snooping query-max-response-time [ <time> ] } | { ip igmp snooping query-max-response-time <time> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
query-max-response-time	Configures MRT for query messages
<i>time</i>	(Optional) Time in seconds

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping query-max-response-time

```
{ { no ip igmp snooping query-max-response-time [ <time> ] } | { ip igmp snooping query-max-response-time <time> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
query-max-response-time	Configures MRT for query messages
<i>time</i>	(Optional) Time in seconds

Command Mode

- /exec/configure/vlan

ip igmp snooping report-flood all

```
{ { ip igmp snooping report-flood { all | interface <interface> } } | { no ip igmp snooping report-flood { all | interface <interface> } } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
report-flood	Configures Report flooding on a VLAN
interface	Specify interface for report flooding
all	Flood on ALL active ports of VLAN
<i>interface</i>	Interface name

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping report-suppression

{ { no ip igmp snooping report-suppression } | { ip igmp snooping report-suppression } }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
report-suppression	Configures IGMPv1/IGMPv2 Report Suppression for the VLAN/BD

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping report-suppression

{ { no ip igmp snooping report-suppression } | { ip igmp snooping report-suppression } }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
report-suppression	Configures IGMPv1/IGMPv2 Report Suppression for the VLAN/BD

Command Mode

- /exec/configure/vlan

ip igmp snooping report-suppression

{ { no ip igmp snooping report-suppression } | { ip igmp snooping report-suppression } }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
report-suppression	Configures Global IGMPv1/IGMPv2 Report Suppression

Command Mode

- /exec/configure

ip igmp snooping report prefix interface

```
{ [ no ] ip igmp snooping { report-policy | access-group } { prefix-list | route-map } <pname> interface
<interface> }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
report-policy	IGMP Report Policy
access-group	IGMP access-group
prefix-list	IPv4 Prefix-List Policy
route-map	Route-Map Policy
<i>pname</i>	Policy Name Name
interface	Specify interface for filtering
<i>interface</i>	Interface name

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping robustness-variable

```
{ { no ip igmp snooping robustness-variable [ <value> ] } | { ip igmp snooping robustness-variable <value> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
robustness-variable	Configures RFC defined Robustness Variable
<i>value</i>	(Optional) Count value

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping robustness-variable

```
{ { no ip igmp snooping robustness-variable [ <value> ] } | { ip igmp snooping robustness-variable <value> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
robustness-variable	Configures RFC defined Robustness Variable
<i>value</i>	(Optional) Count value

Command Mode

- /exec/configure/vlan

ip igmp snooping self-mac-check

[no] ip igmp snooping self-mac-check

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
self-mac-check	enable loopback packet check and drop it
snooping	Configures IGMP Snooping

Command Mode

- /exec/configure

ip igmp snooping startup-query-count

```
{ { no ip igmp snooping startup-query-count [ <count> ] } | { ip igmp snooping startup-query-count <count> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
startup-query-count	Configures number of queries sent at startup
<i>count</i>	(Optional) Count value

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping startup-query-count

```
{ { no ip igmp snooping startup-query-count [ <count> ] } | { ip igmp snooping startup-query-count <count> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
startup-query-count	Configures number of queries sent at startup
<i>count</i>	(Optional) Count value

Command Mode

- /exec/configure/vlan

ip igmp snooping startup-query-interval

```
{ { no ip igmp snooping startup-query-interval [ <interval> ] } | { ip igmp snooping startup-query-interval <interval> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
startup-query-interval	Configures query interval at startup
<i>interval</i>	(Optional) Interval in seconds

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping startup-query-interval

```
{ { no ip igmp snooping startup-query-interval [ <interval> ] } | { ip igmp snooping startup-query-interval <interval> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
startup-query-interval	Configures query interval at startup
<i>interval</i>	(Optional) Interval in seconds

Command Mode

- /exec/configure/vlan

ip igmp snooping static-group interface

```
{ { no ip igmp snooping static-group <group> [ source <source> ] interface <interface> } | { ip igmp snooping static-group <group> [ source <source> ] interface <interface> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
static-group	Configures static group membership
<i>group</i>	Group IP Address
source	(Optional) Configures static (S,G) channel
<i>source</i>	(Optional) Source IP Address
interface	Specify interface for static-group
<i>interface</i>	Interface name

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping static-group interface

```
{ { no ip igmp snooping static-group <group> [ source <source> ] interface <interface> } | { ip igmp snooping
static-group <group> [ source <source> ] interface <interface> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
static-group	Configures static group membership
<i>group</i>	Group IP Address
source	(Optional) Configures static (S,G) channel
<i>source</i>	(Optional) Source IP Address
interface	Specify interface for static-group
<i>interface</i>	Interface name

Command Mode

- /exec/configure/vlan

ip igmp snooping syslog-threshold

{ ip igmp snooping syslog-threshold <percentage> } | { no ip igmp snooping syslog-threshold }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
syslog-threshold	IGMP SNOOPING table syslog threshold
<i>percentage</i>	Percentage

Command Mode

- /exec/configure

ip igmp snooping v3-report-suppression

{ { no ip igmp snooping v3-report-suppression } | { ip igmp snooping v3-report-suppression } }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
v3-report-suppression	Configures IGMPv3 Report Suppression and Proxy Reporting for the VLAN/BD

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping v3-report-suppression

```
{ { no ip igmp snooping v3-report-suppression } | { ip igmp snooping v3-report-suppression } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
v3-report-suppression	Configures IGMPv3 Report Suppression and Proxy Reporting for the VLAN/BD

Command Mode

- /exec/configure/vlan

ip igmp snooping v3-report-suppression

```
{ { no ip igmp snooping v3-report-suppression } | { ip igmp snooping v3-report-suppression } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
v3-report-suppression	Configures Global IGMPv3 Report Suppression and Proxy Reporting

Command Mode

- /exec/configure

ip igmp snooping version

```
{ { no ip igmp snooping version [ <version> ] } | { ip igmp snooping version <version> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
version	Configures IGMP version number for VLAN/BD
<i>version</i>	(Optional) Version number value

Command Mode

- /exec/configure/vlan-config /exec/configure/bdomain

ip igmp snooping version

```
{ { no ip igmp snooping version [ <version> ] } | { ip igmp snooping version <version> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
version	Configures IGMP version number for VLAN/BD
<i>version</i>	(Optional) Version number value

Command Mode

- /exec/configure/vlan

ip igmp snooping vpc

ip igmp snooping vpc { clear-cfs-flag | clear-pending-flag | clear-native-flag }

Syntax Description

ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
vpc	vPC related command
clear-cfs-flag	clear cfs learnt flag from the routes / oifs
clear-native-flag	clear native learnt flag from the routes / oifs
clear-pending-flag	clear pending flag if set

Command Mode

- /exec

ip igmp snooping vpc

ip igmp snooping vpc [vpc-incremental | vpc-sync-only]

Syntax Description

ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
vpc	vPC related events
vpc-sync-only	(Optional) default - no vpc-incremental with route proxy disabled
vpc-incremental	(Optional) vpc-incremental mode with route proxy enabled

Command Mode

- /exec/configure

ip igmp snooping vpc peer-link-exclude

[no] ip igmp snooping vpc peer-link-exclude

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP configuration commands
snooping	Configures IGMP Snooping
vpc	Configures vPC
peer-link-exclude	Exclude vPC Peer-link for Routed multicast traffic

Command Mode

- /exec/configure

ip igmp snooping vpc peer-routes-download

ip igmp snooping vpc peer-routes-download [stale]

Syntax Description

ip	Configure IP features
igmp	IGMP global configuration commands
snooping	Configures IGMP Snooping
vpc	vPC related command
peer-routes-download	get peer-learnt routes
stale	(Optional) stale the cfs learnt entry, i.e. clear cfs_flag

Command Mode

- /exec

ip igmp spoof-check

[no] ip igmp spoof-check

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
spoof-check	Enable spoof check for IGMP

Command Mode

- /exec/configure

ip igmp ssm-translate

[no] ip igmp ssm-translate <group> <source>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP global configuration commands
ssm-translate	Translate IGMPv1/v2 reports to (S,G) route entries
<i>group</i>	IP Multicast group range
<i>source</i>	IP Multicast address source

Command Mode

- /exec/configure /exec/configure/vrf

ip igmp startup-query-count

```
{ { no ip igmp startup-query-count [ <count> ] } | { ip igmp startup-query-count <count> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
startup-query-count	Configures number of queries sent at startup
<i>count</i>	(Optional) Count value

Command Mode

- /exec/configure/if-igmp

ip igmp startup-query-interval

```
{ { no ip igmp startup-query-interval [ <interval> ] } | { ip igmp startup-query-interval <interval> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
startup-query-interval	Configures query interval at startup
<i>interval</i>	(Optional) Interval in seconds

Command Mode

- /exec/configure/if-igp

ip igmp state-limit

```
{ { ip igmp state-limit <max-states> [ reserved <route-map-name> <max-reserved> ] } | { no ip igmp state-limit [ <max-states> [ reserved <route-map-name> <max-reserved> ] ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
state-limit	Configures State limit
<i>max-states</i>	Maximum states allowed
reserved	(Optional) Reserve the states using route-map
<i>route-map-name</i>	(Optional) Route-map name
<i>max-reserved</i>	(Optional) Maximum (*,G)/(S,G) entires allowed on the interface

Command Mode

- /exec/configure/if-igp

ip igmp static-oif

```
[no] ip igmp static-oif { { <group> [ source <source> ] } | { route-map <route-map-name> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
static-oif	Configures static oif for a multicast forwarding entry
<i>group</i>	Multicast group IP address
source	(Optional) Configures source address for IGMPv3 (S,G) Channel
<i>source</i>	(Optional) Source IP address
route-map	Static group policy
<i>route-map-name</i>	route-map name

Command Mode

- /exec/configure/if-igp

ip igmp suppress v3-gsq

[no] ip igmp suppress v3-gsq

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
suppress	Suppress
v3-gsq	v3 GSQ

Command Mode

- /exec/configure/if-igp

ip igmp syslog-threshold

{ ip igmp syslog-threshold <percentage> } | { no ip igmp syslog-threshold }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP related events
syslog-threshold	IGMP table syslog threshold
<i>percentage</i>	Percentage

Command Mode

- /exec/configure

ip igmp version

```
{ { no ip igmp version [ <version> ] } | { ip igmp version <version> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
igmp	IGMP interface configuration commands
version	Configures IGMP version number for interface
<i>version</i>	(Optional) Version number value

Command Mode

- /exec/configure/if-igp

ip load-sharing address

[no] ip load-sharing address { source-destination [port source-destination2 | gre | gre-outer] | destination port2 destination2 | source } { [rotate <rotate>] | [concatenation] } + [universal-id <random-seed>]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
load-sharing	ECMP load-sharing
address	Configure source/destination addresses, port numbers and hash
source-destination	Use both source and destination values for address
port	(Optional) Use source-destination value for port
gre	(Optional) Use source-destination value for gre-key
gre-outer	(Optional) Use outer IPv4 header fields for GRE tunnel hashing
source-destination2	(Optional) Use both source and destination values for port
destination	Use destination address
port2	Use destination value for port
destination2	Use destination port
source	Use source address
rotate	(Optional) Offset to be used in the hash
<i>rotate</i>	(Optional) Value used for offset, default value is 32
concatenation	(Optional) Enable/Disable concatenation
universal-id	(Optional) Universal-id to randomize hash functions for load-balance
<i>random-seed</i>	(Optional) Value used to randomize hash

Command Mode

- /exec/configure

ip load-sharing per-packet

ip load-sharing per-packet | no ip load-sharing [per-packet]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
load-sharing	Style of load sharing
per-packet	Enable per-packet load balancing on interface

Command Mode

- /exec/configure/if-igp

ip local-proxy-arp

{ ip local-proxy-arp | no ip local-proxy-arp }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
local-proxy-arp	Configure local proxy ARP

Command Mode

- /exec/configure/if-igp /exec/configure/if-vlan-common

ip local policy route-map

ip local policy route-map <route-map-name> | no ip local policy route-map [<route-map-name> | <route-map-name>]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
local	Configure local PBR feature
policy	Configure PBR feature
route-map	Route-map for PBR
<i>route-map-name</i>	Route-map name
<i>route-map-name</i>	(Optional) Route-map name
<i>route-map-name</i>	(Optional) Known route-map name

Command Mode

- /exec/configure /exec/configure/vrf

ip mfwd event-history cli

```
[no] ip mfwd event-history cli { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
mfwd	Configures Global IP Multicast Forwarding
event-history	Configure event-history buffers
cli	CLI events for MCASTFWD
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip mfwd event-history l2

```
[no] ip mfwd event-history l2 { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
mfwd	Configures Global IP Multicast Forwarding
event-history	Configure event-history buffers
l2	Layer2 events for MCASTFWD
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip mfwd event-history packet

[no] ip mfwd event-history packet { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
mfwd	Configures Global IP Multicast Forwarding
event-history	Configure event-history buffers
packet	Packet events for Multicast forwarding
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip mfwd event-history vrf

```
[no] ip mfwd event-history vrf { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
mfwd	Configures Global IP Multicast Forwarding
event-history	Configure event-history buffers
vrf	VRF events for MCASTFWD
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbyte

Command Mode

- /exec/configure

ip mfwd mstatic register

[no] ip mfwd mstatic register

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
mfwd	Configures Global IP Multicast Forwarding
mstatic	Static Multicast Route
register	Register

Command Mode

- /exec/configure

ip mroute

```
[no] ip mroute { <ip-addr> <ip-mask> | <ip-prefix> } { { <next-hop> | <nh-prefix> } | <interface> } [ <pref> ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

Syntax Description

<code>no</code>	(Optional) Negate a command or set its defaults
<code>ip</code>	Configure IP features
<code>mroute</code>	Configure multicast RPF static route
<i>ip-addr</i>	IP prefix in format i.i.i.i
<i>ip-mask</i>	IP network mask in format m.m.m.m
<i>ip-prefix</i>	IP prefix and network mask length in format x.x.x.x/m
<i>next-hop</i>	IP next-hop address in format i.i.i.i
<i>nh-prefix</i>	IP next-hop prefix in format i.i.i.i/m
<i>interface</i>	Interface for interface static multicast routes
<i>pref</i>	(Optional) Route preference
<code>vrf</code>	(Optional) Display per-VRF information
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name

Command Mode

- /exec/configure /exec/configure/vrf

ip msdp description

ip msdp description <peer-address> <text> | no ip msdp description <peer-address> [<text>]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
description	Configure MSDP description for peer
<i>peer-address</i>	IP address of MSDP peer
<i>text</i>	Text description

Command Mode

- /exec/configure /exec/configure/vrf

ip msdp event-history cli

[no] ip msdp event-history cli { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
event-history	Configure event-history buffer
cli	CLI logs for MSDP
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip msdp event-history events

```
[no] ip msdp event-history events { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
event-history	Configure event-history buffer
events	Peer events for MSDP
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip msdp event-history msdp-internal

[no] ip msdp event-history msdp-internal { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
event-history	Configure event-history buffer
msdp-internal	Internal logs for MSDP
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip msdp event-history routes

```
[no] ip msdp event-history routes { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
event-history	Configure event-history buffer
routes	Route logs for MSDP
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip msdp event-history tcp

[no] ip msdp event-history tcp { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
event-history	Configure event-history buffer
tcp	TCP logs for MSDP
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip msdp flush-routes

[no] ip msdp flush-routes

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
flush-routes	Remove routes when restarting MSDP

Command Mode

- /exec/configure /exec/configure/vrf

ip msdp group-limit source

[no] ip msdp group-limit <limit> source <sprefix>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
group-limit	Limit the number of groups per source
<i>limit</i>	Limit on number of groups
source	Sources to limit groups to
<i>sprefix</i>	Prefix to match sources against

Command Mode

- /exec/configure /exec/configure/vrf

ip msdp keepalive

ip msdp keepalive <peer-address> <interval> <timeout> | no ip msdp keepalive <peer-address> [<interval> <timeout>]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
keepalive	Configure MSDP keepalive parameters for peer
<i>peer-address</i>	IP address of MSDP peer
<i>interval</i>	Keepalive interval in seconds
<i>timeout</i>	Keepalive timeout in seconds

Command Mode

- /exec/configure /exec/configure/vrf

ip msdp mesh-group

ip msdp mesh-group <peer-address> <name> | no ip msdp mesh-group <peer-address> [<name>]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
mesh-group	Configure member of mesh-group
<i>name</i>	Name of mesh-group
<i>peer-address</i>	IP address of MSDP peer in mesh-group

Command Mode

- /exec/configure /exec/configure/vrf

ip msdp no-sa-data

[no] ip msdp no-sa-data

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
no-sa-data	Don't send SA-encapsulated data

Command Mode

- /exec/configure /exec/configure/vrf

ip msdp originator-id

ip msdp originator-id <interface> | no ip msdp originator-id [<interface>]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
originator-id	Configure alternative router-id for MSDP
<i>interface</i>	Use IP address of interface for originator-id
<i>msdp</i>	

Command Mode

- /exec/configure /exec/configure/vrf

ip msdp password

ip msdp password <peer-address> <password> | no ip msdp password <peer-address> [<password>]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
password	Configure MD5 authentication password
<i>peer-address</i>	IP address of MSDP peer
<i>password</i>	MD5 password

Command Mode

- /exec/configure /exec/configure/vrf

ip msdp peer connect-source

```
{ { ip msdp peer <peer-address> connect-source <interface> [ remote-as <asn> ] } | { no ip msdp peer
<peer-address> [ connect-source <interface> ] [ remote-as <asn> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
peer	Configure MSDP peer
<i>peer-address</i>	IP address of MSDP peer
connect-source	Configure local IP address for TCP connection
<i>interface</i>	Use IP address of interface for peer address
remote-as	(Optional) Configure remote Autonomous System Number
<i>asn</i>	(Optional) AS number
<i>msdp</i>	

Command Mode

- /exec/configure /exec/configure/vrf

ip msdp reconnect-interval

ip msdp reconnect-interval <interval> | no ip msdp reconnect-interval [<interval>]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
reconnect-interval	Configure connection reconnect interval
<i>interval</i>	Interval in seconds

Command Mode

- /exec/configure /exec/configure/vrf

ip msdp redistribute

[no] ip msdp redistribute [route-map <route-map-name> | prefix-list <prefix-list-name>]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
redistribute	Configure SA policy for all MSDP peer
route-map	(Optional) route-map policy
<i>route-map-name</i>	(Optional) route-map policy name
prefix-list	(Optional) Prefix list policy
<i>prefix-list-name</i>	(Optional) prefix-list name

Command Mode

- /exec/configure /exec/configure/vrf

ip msdp sa-interval

ip msdp sa-interval <interval> | no ip msdp sa-interval [<interval>]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
sa-interval	Configure Source-Active message transmission interval
<i>interval</i>	Interval in seconds

Command Mode

- /exec/configure /exec/configure/vrf

ip msdp sa-limit

ip msdp sa-limit <peer-address> <limit> | no ip msdp sa-limit <peer-address> [<limit>]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
sa-limit	Configure maximum (S,G) entries allowed
<i>limit</i>	Number of (S,G) entries
<i>peer-address</i>	IP address of MSDP peer in mesh-group

Command Mode

- /exec/configure /exec/configure/vrf

ip msdp sa-policy in

```
[no] ip msdp sa-policy <peer-address> { <route-map-name> | prefix-list <prefix-list-name> | <rtr_pol_name> } in
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
sa-policy	Configure SA policy for MSDP peer
prefix-list	Prefix list policy
in	Input policy
<i>peer-address</i>	IP address of MSDP peer for SA policy
<i>route-map-name</i>	route-map policy name
<i>prefix-list-name</i>	prefix-list name
<i>rtr_pol_name</i>	An existing routing-rules policy

Command Mode

- /exec/configure /exec/configure/vrf

ip msdp sa-policy out

```
[no] ip msdp sa-policy <peer-address> { <route-map-name> | prefix-list <prefix-list-name> | <rtr_pol_name>
} out
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
sa-policy	Configure SA policy for MSDP peer
prefix-list	Prefix list policy
out	Output policy
<i>peer-address</i>	IP address of MSDP peer for SA policy
<i>route-map-name</i>	route-map policy name
<i>prefix-list-name</i>	prefix-list name
<i>rtr_pol_name</i>	An existing routing-rules policy

Command Mode

- /exec/configure /exec/configure/vrf

ip msdp shutdown

ip msdp shutdown <peer-address> | no ip msdp shutdown <peer-address>

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
msdp	MSDP global configuration commands
shutdown	Administratively shut down peer
<i>peer-address</i>	IP address of MSDP peer

Command Mode

- /exec/configure /exec/configure/vrf

ip mtu eigrp

```
{ { { ip | ipv6 } mtu eigrp <eigrp-ptag> <mtu> } | { no { ip | ipv6 } mtu eigrp <eigrp-ptag> [ <mtu> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
mtu	Set Max Packet Size to be used by EIGRP
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Process tag
<i>mtu</i>	Interface MTU
<i>eigrp-ptag</i>	

Command Mode

- /exec/configure/if-igp

ip multicast last-hop-meter

```
ip multicast last-hop-meter <kbps> [ <burst-size> ] | no ip multicast last-hop-meter [ <kbps> [ <burst-size> ] ]
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
multicast	Configure IP multicast global parameters
last-hop-meter	RPF-failed meter
<i>kbps</i>	Rate in kilobits/sec
<i>burst-size</i>	(Optional) Burst size in kilobytes

Command Mode

- /exec/configure

ip multicast multipath

[no] ip multicast multipath { none | s-g-hash next-hop-based | nbm }

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
multicast	Configure IP multicast global parameters
multipath	Configure ECMP multicast load splitting
none	Disable ECMP multicast load splitting
s-g-hash	Configure hash based on source and group address
next-hop-based	Configure hash based on source, group, next-hop address
nbm	Configure NBM controlled RPF interface

Command Mode

- /exec/configure /exec/configure/vrf

ip multicast multipath resilient

[no] ip multicast multipath resilient

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
multicast	Configure IP multicast global parameters
multipath	Configure ECMP multicast load splitting
resilient	Configure resilient RPF interface

Command Mode

- /exec/configure /exec/configure/vrf

ip multicast rpf-meter

```
ip multicast rpf-meter { { <kbps> [ <burst-size> ] } | hardware-drop-all } | no ip multicast rpf-meter [ { <kbps>
[ <burst-size> ] } | hardware-drop-all ]
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
multicast	Configure IP multicast global parameters
rpf-meter	RPF-failed meter
<i>kbps</i>	Rate in kilobits/sec
<i>burst-size</i>	(Optional) Burst size in kilobytes
hardware-drop-all	Drop all RPF-failed packets in hardware

Command Mode

- /exec/configure

ip name-server

```
[no] ip name-server { { <ipv4_0> | <ipv6_1> } [ { <ipv4_2> | <ipv6_3> } [ { <ipv4_4> | <ipv6_5> } [ { <ipv4_6> | <ipv6_7> } [ { <ipv4_8> | <ipv6_9> } [ { <ipv4_10> | <ipv6_11> } ] ] ] ] ] | { <ipv4_12> | <ipv6_13> } [ use-vrf { <vrf-name> | <vrf-known-name> } ] | { <ipv4_14> | <ipv6_15> } [ { <ipv4_16> | <ipv6_17> } [ use-vrf { <vrf-name> | <vrf-known-name> } ] ] | { <ipv4_18> | <ipv6_19> } [ { <ipv4_20> | <ipv6_21> } [ { <ipv4_22> | <ipv6_23> } [ use-vrf { <vrf-name> | <vrf-known-name> } ] ] ] | { <ipv4_24> | <ipv6_25> } [ { <ipv4_26> | <ipv6_27> } [ { <ipv4_28> | <ipv6_29> } [ { <ipv4_30> | <ipv6_31> } [ use-vrf { <vrf-name> | <vrf-known-name> } ] ] ] ] | { <ipv4_32> | <ipv6_33> } [ { <ipv4_34> | <ipv6_35> } [ { <ipv4_36> | <ipv6_37> } [ { <ipv4_38> | <ipv6_39> } [ { <ipv4_40> | <ipv6_41> } [ use-vrf { <vrf-name> | <vrf-known-name> } ] ] ] ] ] | { <ipv4_42> | <ipv6_43> } [ { <ipv4_44> | <ipv6_45> } [ { <ipv4_46> | <ipv6_47> } [ { <ipv4_48> | <ipv6_49> } [ { <ipv4_50> | <ipv6_51> } [ { <ipv4_52> | <ipv6_53> } [ use-vrf { <vrf-name> | <vrf-known-name> } ] ] ] ] ] ] }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
name-server	Specify nameserver address
<i>ipv4_0</i>	Enter an IPv4 address
<i>ipv4_2</i>	(Optional) Enter an IPv4 address
<i>ipv4_4</i>	(Optional) Enter an IPv4 address
<i>ipv4_6</i>	(Optional) Enter an IPv4 address
<i>ipv4_8</i>	(Optional) Enter an IPv4 address
<i>ipv4_10</i>	(Optional) Enter an IPv4 address
<i>ipv4_12</i>	Enter an IPv4 address
use-vrf	(Optional) Display per-VRF information
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name
<i>ipv4_14</i>	Enter an IPv4 address
<i>ipv4_16</i>	(Optional) Enter an IPv4 address
<i>ipv4_18</i>	Enter an IPv4 address
<i>ipv4_20</i>	(Optional) Enter an IPv4 address
<i>ipv4_22</i>	(Optional) Enter an IPv4 address
<i>ipv4_24</i>	Enter an IPv4 address

<i>ipv4_26</i>	(Optional) Enter an IPv4 address
<i>ipv4_28</i>	(Optional) Enter an IPv4 address
<i>ipv4_30</i>	(Optional) Enter an IPv4 address
<i>ipv4_32</i>	Enter an IPv4 address
<i>ipv4_34</i>	(Optional) Enter an IPv4 address
<i>ipv4_36</i>	(Optional) Enter an IPv4 address
<i>ipv4_38</i>	(Optional) Enter an IPv4 address
<i>ipv4_40</i>	(Optional) Enter an IPv4 address
<i>ipv4_42</i>	Enter an IPv4 address
<i>ipv4_44</i>	(Optional) Enter an IPv4 address
<i>ipv4_46</i>	(Optional) Enter an IPv4 address
<i>ipv4_48</i>	(Optional) Enter an IPv4 address
<i>ipv4_50</i>	(Optional) Enter an IPv4 address
<i>ipv4_52</i>	(Optional) Enter an IPv4 address

Command Mode

- /exec/configure /exec/configure/vrf

ip nat inside

[no] ip nat { inside | outside }

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
nat	NAT interface commands
inside	Inside interface for address translation
outside	Outside interface for address translation

Command Mode

- /exec/configure/if-port-channel /exec/configure/if-vlan /exec/configure/if-remote-ethernet /exec/configure/if-igp /exec/configure/if-routing

ip nat inside source

```
[no] ip nat inside source { { static <insideLocalIP> <insideGlobalIP> [ vrf <vrf-name> [ match-in-vrf ] ] [
group <group-id> [ dynamic ] ] [ add-route ] } | { static { tcp | udp } <insideLocalIP> <insideLocalPort>
<insideGlobalIP> <insideGlobalPort> [ vrf <vrf-name> [ match-in-vrf ] ] [ group <group-id> [ dynamic ] ] [
add-route ] } | { list <acl-name> } { pool <pool-name> [ vrf <vrf-name> [ match-in-vrf ] ] [ overload ] |
interface <globalAddrInterface> [ vrf <vrf-name> [ match-in-vrf ] ] overload } [ group <group-id> dynamic
] [ add-route ] }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
nat	NAT configuration commands
inside	Inside address translation
source	Source address translation
static	Specify static local->global mapping
tcp	Transmission Control Protocol
udp	User Datagram Protocol
list	Specify access list describing local addresses
pool	Name pool of global addresses
interface	Specify interface for global address
vrf	(Optional) Specify vrf
match-in-vrf	(Optional) Match incoming vrf
dynamic	(Optional) Dynamic twice NAT group
<i>insideLocalIP</i>	Inside local IP address
<i>insideLocalPort</i>	Local UDP/TCP port
<i>insideGlobalIP</i>	Inside global IP address
<i>insideGlobalPort</i>	Global UDP/TCP port
group	(Optional) Specify group for the twice NAT
<i>group-id</i>	(Optional) Group ID for the twice NAT
<i>acl-name</i>	Access-list-name
<i>pool-name</i>	Pool name for global addresses

add-route	(Optional) Add a static route for outside local address
<i>vrf-name</i>	(Optional) vrf name
<i>globalAddrInterface</i>	interface type and number in module/slot format
overload	(Optional) Overload an address translation

Command Mode

- /exec/configure

ip nat outside source

```
[no] ip nat outside source { static <outsideGlobalIP> <outsideLocalIP> [ vrf <vrf-name> [ match-in-vrf ] ] [
group <group-id> [ dynamic ] ] [ add-route ] | static { tcp | udp } <outsideGlobalIP> <outsideGlobalPort>
<outsideLocalIP> <outsideLocalPort> [ vrf <vrf-name> [ match-in-vrf ] ] [ group <group-id> [ dynamic ] ]
[ add-route ] | list <acl-name> pool <pool-name> [ vrf <vrf-name> [ match-in-vrf ] ] [ group <group-id>
dynamic ] } [ add-route ]
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
nat	NAT configuration commands
outside	Outside address translation
source	Source address translation
static	Specify static global->local mapping
tcp	Transmission Control Protocol
udp	User Datagram Protocol
list	Specify access list describing local addresses
pool	Name pool of global addresses
vrf	(Optional) Specify vrf
match-in-vrf	(Optional) Match incoming vrf
<i>outsideGlobalIP</i>	Outside global IP address
<i>outsideGlobalPort</i>	Outside Global UDP/TCP port
<i>outsideLocalIP</i>	Outside local IP address
<i>outsideLocalPort</i>	Outside Local UDP/TCP port
group	(Optional) Specify group for the twice NAT
dynamic	(Optional) Dynamic twice NAT group
<i>group-id</i>	(Optional) Group ID for the twice NAT
<i>acl-name</i>	Access-list-name
<i>vrf-name</i>	(Optional) vrf name
<i>pool-name</i>	Pool name for global addresses
add-route	(Optional) Add a static route for outside local address

Command Mode

- /exec/configure

ip nat pool netmask

```
ip nat pool <pool-name> { netmask <netmask> | prefix-length <prefix-length> } [ no-alias ]
```

Syntax Description

ip	Configure IP features
nat	NAT configuration commands
pool	Define pool of addresses
netmask	Specify the network mask
prefix-length	Specify the prefix length
no-alias	(Optional) Do not create alias for these pool addresses
<i>pool-name</i>	Pool name
<i>netmask</i>	Network mask
<i>prefix-length</i>	Prefix length

Command Mode

- /exec/configure

ip nat pool netmask

```
ip nat pool <pool-name> <start-ip> <end-ip> { netmask <netmask> | prefix-length <prefix-length> } [ no-alias ] | no ip nat pool <pool-name>
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
nat	NAT configuration commands
pool	Define pool of addresses
netmask	Specify the network mask
prefix-length	Specify the prefix length
no-alias	(Optional) Do not create alias for these pool addresses
<i>pool-name</i>	Pool name
<i>start-ip</i>	Start IP address
<i>end-ip</i>	End IP address
<i>netmask</i>	Network mask
<i>prefix-length</i>	Prefix length

Command Mode

- /exec/configure

ip nat translation

[no] ip nat translation { tcp-timeout | udp-timeout | timeout } <timeout>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
nat	NAT configuration commands
translation	NAT translation entry configuration
tcp-timeout	Specify timeout for NAT TCP flows
udp-timeout	Specify timeout for NAT UDP flows
timeout	Specify timeout for dynamic NAT flows
<i>timeout</i>	Timeout in seconds

Command Mode

- /exec/configure

ip nat translation max-entries

ip nat translation max-entries [all-host] <max> | no ip nat translation max-entries [all-host]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
nat	NAT configuration commands
translation	NAT translation entry configuration
max-entries	Specify maximum number of NAT dynamic entries
all-host	(Optional) Specify maximum number of NAT entries for each host
<i>max</i>	Number of entries

Command Mode

- /exec/configure

ip nat translation sampling-timeout

[no] ip nat translation sampling-timeout <timeout>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
nat	NAT configuration commands
translation	NAT translation entry configuration
sampling-timeout	Specify timeout after which the checking for activity is done
<i>timeout</i>	Timeout in seconds (max: 2days)

Command Mode

- /exec/configure

ip next-hop-self eigrp

[no] { ip | ipv6 } next-hop-self eigrp <eigrp-ptag>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
next-hop-self	Configures IP-EIGRP next-hop-self
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Process tag

Command Mode

- /exec/configure/if-igp

ip offset-list eigrp

```
[no] { ip | ipv6 } offset-list eigrp <eigrp-ptag> { { route-map <map> } | { prefix-list <list> } } { in | out }
<offset>
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
offset-list	Add or subtract offset from EIGRP metrics
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Process tag
route-map	Use a route-map for offset-list selection
<i>map</i>	Route-map name
prefix-list	Use a prefix-list for offset-list selection
<i>list</i>	Reference to prefix-list name
in	Perform offset on incoming updates
out	Perform offset on outgoing updates
<i>offset</i>	Offset

Command Mode

- /exec/configure/if-igp

ip ospf advertise-subnet

[no] ip ospf advertise-subnet

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
advertise-subnet	Advertise loopback interface IP subnet in router LSA

Command Mode

- /exec/configure/if-loopback

ip ospf authentication-key

```
{ { ip ospf authentication-key <key> } | { no ip ospf authentication-key [ <key> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
authentication-key	Configure the authentication key for the interface
<i>key</i>	Authentication key

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

ip ospf authentication

[no] ip ospf authentication [message-digest | null]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
authentication	Authentication on the interface
message-digest	(Optional) Use message-digest authentication
null	(Optional) Use null(disable) authentication

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

ip ospf authentication key-chain

```
{ ip ospf authentication key-chain <keychain> } | { no ip ospf authentication key-chain [ <keychain> ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
authentication	Authentication on the interface
key-chain	Authentication password key-chain
<i>keychain</i>	Key-chain name

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel
/exec/configure/if-mgmt-config

ip ospf bfd

[no] ip ospf bfd [disable]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
bfd	Enable BFD on this interface
disable	(Optional) Disable BFD on this interface

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mgmt-config

ip ospf cost

{ ip ospf cost <cost> } | { no ip ospf cost [<cost>] }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
cost	Cost associated with interface
<i>cost</i>	Cost value

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

ip ospf dead-interval

```
{ ip ospf dead-interval <interval> } | { no ip ospf dead-interval [ <interval> ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
dead-interval	Dead interval
<i>interval</i>	(seconds)

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

ip ospf event-history

[no] ip ospf event-history { adjacency | event | ha | flooding | lsa | spf | redistribution | ldp | te | rib | hello | spf-trigger }

Syntax Description

no	Negate a command or set its defaults
ip	IP events
ospf	Debug OSPF events
event-history	log debug events into event history buffer
adjacency	Adjacency formation logs
event	Internal event logs
ha	HA and GR logs
flooding	LSA flooding logs
lsa	LSA generation and database logs
spf	SPF calculation logs
redistribution	Redistribution logs
ldp	LDP related logs
te	MPLS TE related logs
rib	RIB related logs
hello	HELLO related logs
spf-trigger	SPF TRIGGER related logs

Command Mode

- /exec/configure/router-ospf

ip ospf event-history cli

[no] ip ospf event-history cli

Syntax Description

no	Negate a command or set its defaults
ip	IP events
ospf	Debug OSPF events
event-history	log debug events into event history buffer
cli	Cli logs

Command Mode

- /exec/configure/router-ospf

ip ospf event-history cli size

ip ospf event-history cli size { <size_in_text> | <size_in_Kbytes> }

Syntax Description

ip	IP events
ospf	Debug OSPF events
event-history	log debug events into event history buffer
cli	Cli logs
size	Configure the size of the event-hist buffer
<i>size_in_text</i>	Buffer size
<i>size_in_Kbytes</i>	Size of the file in kbytes

Command Mode

- /exec/configure/router-ospf

ip ospf event-history detail

[no] ip ospf event-history detail

Syntax Description

no	Negate a command or set its defaults
ip	IP events
ospf	Debug OSPF events
event-history	log debug events into event history buffer
detail	Detailed event history buffer

Command Mode

- /exec/configure/router-ospf

ip ospf event-history detail size

ip ospf event-history detail size { <size_in_text> | <size_in_Kbytes> }

Syntax Description

ip	IP events
ospf	Debug OSPF events
event-history	log debug events into event history buffer
detail	Detailed event history buffer
size	Configure the size of the verbose event-hist buffer
<i>size_in_text</i>	Buffer size
<i>size_in_Kbytes</i>	Size of the file in kbytes

Command Mode

- /exec/configure/router-ospf

ip ospf event-history size

```
ip ospf event-history { adjacency | event | ha | flooding | lsa | spf | redistribution | ldp | te | rib | hello | spf-trigger
} size { <size_in_text> | <size_in_Kbytes> }
```

Syntax Description

ip	IP events
ospf	Debug OSPF events
event-history	log debug events into event history buffer
adjacency	Adjacency formation logs
event	Internal event logs
ha	HA and GR logs
flooding	LSA flooding logs
lsa	LSA generation and databse logs
spf	SPF calculation logs
redistribution	Redistribution logs
ldp	LDP related logs
te	MPLS TE related logs
rib	RIB related logs
hello	HELLO related logs
spf-trigger	SPF TRIGGER related logs
size	Configure the size of the event-hist buffer
<i>size_in_text</i>	Buffer size
<i>size_in_Kbytes</i>	Size of the file in kbytes

Command Mode

- /exec/configure/router-ospf

ip ospf flood-bw-percentage

[no] ip ospf flood-bw-percentage <percentage>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
flood-bw-percentage	Percentage of bandwidth used for flooding
<i>percentage</i>	Negate a command or set its defaults

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

ip ospf hello-interval

{ ip ospf hello-interval <interval> } | { no ip ospf hello-interval [<interval>] }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
hello-interval	Hello interval
<i>interval</i>	(seconds)

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

ip ospf message-digest-key md5

```
{ { ip ospf message-digest-key <keyid> md5 <key> } | { no ip ospf message-digest-key <keyid> [ md5 <key> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
message-digest-key	Message digest authentication password (key)
<i>keyid</i>	Key ID
md5	Use MD5 algorithm
<i>key</i>	The OSPF password (key)

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

ip ospf mtu-ignore

[no] ip ospf mtu-ignore

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
mtu-ignore	Disable OSPF MTU mismatch detection

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

ip ospf network broadcast

```
{ ip ospf network { broadcast | point-to-point } } | { no ip ospf network [ { broadcast | point-to-point } ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
network	Network type
broadcast	Specify OSPF broadcast multi-access network
point-to-point	Specify OSPF point-to-point network

Command Mode

- /exec/configure/if-broadcast /exec/configure/if-p2p /exec/configure/if-mgmt-config

ip ospf network point-to-point

{ ip ospf network point-to-point } | { no ip ospf network [point-to-point] }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
network	Network type
point-to-point	Specify OSPF point-to-point network

Command Mode

- /exec/configure/if-loopback

ip ospf passive-interface

[default | no] ip ospf passive-interface

Syntax Description

default	(Optional) Undo a command
no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
passive-interface	Suppress routing updates on the interface

Command Mode

- /exec/configure/if-broadcast /exec/configure/if-p2p /exec/configure/if-mgmt-config

ip ospf priority

{ ip ospf priority <prio> } | { no ip ospf priority [<prio>] }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
priority	Router priority
<i>prio</i>	Router priority

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

ip ospf retransmit-interval

{ ip ospf retransmit-interval <interval> } | { no ip ospf retransmit-interval [<interval>] }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
retransmit-interval	Packet retransmission interval
<i>interval</i>	(seconds)

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

ip ospf shutdown

[no] ip ospf shutdown

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
shutdown	shutdown ospf on this interface

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mgmt-config

ip ospf transmit-delay

{ ip ospf transmit-delay <delay> } | { no ip ospf transmit-delay [<delay>] }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ospf	OSPF configuration commands
transmit-delay	Packet transmission delay
<i>delay</i>	(seconds)

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

ip passive-interface eigrp

[default | no] { ip | ipv6 } passive-interface eigrp <eigrp-ptag>

Syntax Description

default	(Optional) Undo a command
no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
passive-interface	Suppress routing updates on an interface
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Process tag

Command Mode

- /exec/configure/if-igp

ip pim anycast-rp

[no] ip pim anycast-rp <anycast-rp> <rp-addr>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
anycast-rp	Configure an RP in an Anycast-RP set (using PIM)
<i>anycast-rp</i>	Address for the Anycast-RP address
<i>rp-addr</i>	Address of RP in the Anycast-RP set

Command Mode

- /exec/configure /exec/configure/vrf

ip pim assert-rate-limit

```
{ { ip pim assert-rate-limit <rate> } | { no ip pim assert-rate-limit [ <rate> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
assert-rate-limit	Rate limit for PIM Asserts
<i>rate</i>	Packets per second

Command Mode

- /exec/configure /exec/configure/vrf

ip pim auto-enable

{ { no ip pim auto-enable } | { ip pim auto-enable } }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
auto-enable	Auto-enable configure on the vrf

Command Mode

- /exec/configure /exec/configure/vrf

ip pim auto-rp listen

{ ip pim auto-rp { listen | forward } + } | { no ip pim auto-rp [{ listen | forward } +] }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
auto-rp	Auto-RP protocol RP-distribution configuration
listen	Listen to Auto-RP messages
forward	Forward Auto-RP messages

Command Mode

- /exec/configure /exec/configure/vrf

ip pim auto-rp mapping-agent-policy

```
{ ip pim auto-rp mapping-agent-policy { <route-map-name> | <rtr_pol_name> } | no ip pim auto-rp
mapping-agent-policy [ <route-map-name> | <rtr_pol_name> ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
auto-rp	Auto-RP protocol RP-distribution configuration
mapping-agent-policy	Specify policy for filtering Mapping Agent messages
<i>route-map-name</i>	A route-map name
<i>rtr_pol_name</i>	An existing routing-rules policy

Command Mode

- /exec/configure /exec/configure/vrf

ip pim auto-rp mapping-agent send-rp-discovery

```
{ { ip pim { { auto-rp mapping-agent } | send-rp-discovery } <interface> [ scope <ttl> ] } | { no ip pim { { auto-rp mapping-agent } | send-rp-discovery } [ <interface> ] [ scope <ttl> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
auto-rp	Auto-RP protocol RP-distribution configuration
send-rp-discovery	Configures router to send Auto-RP Discovery messages
mapping-agent	Configures router as an Auto-RP RP-mapping agent
<i>interface</i>	Use IP address of interface for Auto-RP Announce messages
scope	(Optional) Configure the scope of Auto-RP Discovery messages
<i>ttl</i>	(Optional) TTL value for scope

Command Mode

- /exec/configure /exec/configure/vrf

ip pim auto-rp rp-candidate-policy

```
{ ip pim auto-rp rp-candidate-policy { <route-map-name> | <rtr_pol_name> } | no ip pim auto-rp
rp-candidate-policy [ <route-map-name> | <rtr_pol_name> ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
auto-rp	Auto-RP protocol RP-distribution configuration
rp-candidate-policy	Specify policy for filtering RP candidate messages
<i>route-map-name</i>	A route-map name
<i>rtr_pol_name</i>	An existing routing-rules policy

Command Mode

- /exec/configure /exec/configure/vrf

ip pim auto-rp rp-candidate send-rp-announce group-list route-map prefix-list

```
{ { ip pim { auto-rp rp-candidate | send-rp-announce } { <interface> | <ipaddr> } { group-list <prefix> |
route-map <route-map-name> | prefix-list <prefix-list-name> } { [ scope <ttl> ] | [ interval <interval> ] | [
bidir ] } + } | { no ip pim { { auto-rp rp-candidate } | send-rp-announce } [ <interface> | <ipaddr> ] [ group-list
<prefix> | route-map <route-map-name> | prefix-list <prefix-list-name> ] { [ scope <ttl> ] | [ interval <interval>
] | [ bidir ] } } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
auto-rp	Auto-RP protocol RP-distribution configuration
send-rp-announce	Configures router to send Auto-RP Announce messages
rp-candidate	Configures router to be an Auto-RP candidate RP
<i>interface</i>	Use IP address of interface for Auto-RP Announce messages
<i>ipaddr</i>	IP address of RP for group
group-list	Group range list
<i>prefix</i>	Prefix of group range
route-map	Group range policy for Auto-RP Candidate RP
<i>route-map-name</i>	route-map name
prefix-list	Prefix List policy for Auto-RP Candidate RP
<i>prefix-list-name</i>	prefix-list name
scope	(Optional) Configure the scope of Auto-RP Announce messages
<i>ttl</i>	(Optional) TTL value for scope
interval	(Optional) Auto-RP Announce message transmission interval
<i>interval</i>	(Optional) Interval in seconds
bidir	(Optional) Group range advertised in PIM bidirectional mode

Command Mode

- /exec/configure /exec/configure/vrf

ip pim bfd-instance

[no] ip pim bfd-instance [disable]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM interface configuration commands
bfd-instance	Configures BFD on interface
disable	(Optional) Disable BFD on interface

Command Mode

- /exec/configure/if-igp

ip pim bfd

[no] ip pim bfd

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
bfd	Enable / Disable BFD for all PIM interfaces in the VRF

Command Mode

- /exec/configure /exec/configure/vrf

ip pim bidir-rp-limit

[no] ip pim bidir-rp-limit <limit>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
bidir-rp-limit	Configures maximum Bidir RPs for IPv4 PIM in this VRF
<i>limit</i>	Set limit for Bidir RPs permitted in IPv4 PIM

Command Mode

- /exec/configure /exec/configure/vrf

ip pim border

[no] ip pim border

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM interface configuration commands
border	Configures interface to be a boundary of a PIM domain

Command Mode

- /exec/configure/if-igp

ip pim bsr-candidate

```
{ { ip pim [ bsr ] bsr-candidate <interface> [ hash-len <hash-len> ] [ priority <priority> ] [ interval <interval> ] } | { no ip pim [ bsr ] bsr-candidate [ <interface> ] [ hash-len <hash-len> ] [ priority <priority> ] [ interval <interval> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
bsr	(Optional) Bootstrap protocol RP-distribution configuration
bsr-candidate	Configure router as a Bootstrap Router candidate
<i>interface</i>	Use IP address of interface for Bootstrap messages
hash-len	(Optional) Hash mask length used in Bootstrap messages
<i>hash-len</i>	(Optional) Hash mask length value
priority	(Optional) BSR priority used in Bootstrap messages
<i>priority</i>	(Optional) BSR priority value
interval	(Optional) Bootstrap message transmission interval
<i>interval</i>	(Optional) Interval in seconds

Command Mode

- /exec/configure /exec/configure/vrf

ip pim bsr bsr-policy

```
{ ip pim bsr bsr-policy { <route-map-name> | <rtr_pol_name> } | no ip pim bsr bsr-policy [ <route-map-name> | <rtr_pol_name> ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
bsr	Bootstrap protocol RP-distribution configuration
bsr-policy	Specify policy for filtering BSR messages
<i>route-map-name</i>	A route-map name
<i>rtr_pol_name</i>	An existing routing-rules policy

Command Mode

- /exec/configure /exec/configure/vrf

ip pim bsr listen

{ ip pim bsr { listen | forward } + } | { no ip pim bsr [{ listen | forward } +] }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
bsr	Bootstrap protocol RP-distribution configuration
listen	Listen to Bootstrap/Candidate-RP messages
forward	Forward Bootstrap/Candidate-RP messages

Command Mode

- /exec/configure /exec/configure/vrf

ip pim bsr rp-candidate-policy

```
{ ip pim bsr rp-candidate-policy { <route-map-name> | <rtr_pol_name> } | no ip pim bsr rp-candidate-policy  
[ <route-map-name> | <rtr_pol_name> ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
bsr	Bootstrap protocol RP-distribution configuration
rp-candidate-policy	Specify policy for filtering RP candidate messages
<i>route-map-name</i>	A route-map name
<i>rtr_pol_name</i>	An existing routing-rules policy

Command Mode

- /exec/configure /exec/configure/vrf

ip pim cpu-punt dr-only

{ { no ip pim cpu-punt dr-only } | { ip pim cpu-punt dr-only } }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
cpu-punt	Disable PIM NON-DR copy-to-cpu on RPF check failure
dr-only	Disable PIM NON-DR copy-to-cpu on RPF check failure

Command Mode

- /exec/configure /exec/configure/vrf

ip pim df-offer-burst-interval

[no] ip pim df-offer-burst-interval <burst-interval>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
df-offer-burst-interval	Interval between DF offer bursts
<i>burst-interval</i>	Interval in milliseconds

Command Mode

- /exec/configure /exec/configure/vrf

ip pim dr-delay

```
{ { ip pim dr-delay <delay> } | { no ip pim dr-delay [ <delay> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM interface configuration commands
dr-delay	Configures delay for PIM DR election on interface
<i>delay</i>	Delay value

Command Mode

- /exec/configure/if-igp

ip pim dr-priority

```
{ { ip pim dr-priority <priority> } | { no ip pim dr-priority [ <priority> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM interface configuration commands
dr-priority	Configures priority for PIM DR election on interface
<i>priority</i>	Priority value

Command Mode

- /exec/configure/if-igp

ip pim event-history assert-receive

```
[no] ip pim event-history assert-receive { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
assert-receive	Assert receive events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip pim event-history bidir

```
[no] ip pim event-history bidir { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
bidir	Bidir events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip pim event-history cli

```
[no] ip pim event-history cli { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
cli	CLI events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip pim event-history hello

```
[no] ip pim event-history hello { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
hello	Hello events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip pim event-history join-prune-summary

```
[no] ip pim event-history join-prune-summary { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
join-prune-summary	JoinPrune-Summary for PIM
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip pim event-history join-prune

```
[no] ip pim event-history join-prune { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
join-prune	Join Prune events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip pim event-history mvpn

```
[no] ip pim event-history mvpn { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	Configure PIM event history
event-history	Configure event-history buffer
mvpn	MVPN events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip pim event-history null-register

```
[no] ip pim event-history null-register { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
null-register	Null register events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip pim event-history packet

```
[no] ip pim event-history packet { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
packet	Packet events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip pim event-history pim-internal

```
[no] ip pim event-history pim-internal { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
pim-internal	Internal events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip pim event-history rp

```
[no] ip pim event-history rp { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
rp	RP events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip pim event-history vpc

```
[no] ip pim event-history vpc { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	Configure PIM event history
event-history	Configure event-history buffer
vpc	vPC events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip pim event-history vrf

```
[no] ip pim event-history vrf { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
event-history	Configure event-history buffer
vrf	VRF events for PIM
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip pim file-debug

[no] ip pim file-debug

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
file-debug	Collect all debugs to a file

Command Mode

- /exec/configure

ip pim flush-routes

[no] ip pim flush-routes

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
flush-routes	Remove routes when restarting PIM

Command Mode

- /exec/configure /exec/configure/vrf

ip pim group-list

```
[no] ip pim { use-shared-tree-only | spt-threshold infinity } group-list { <route-map-name> | prefix-list
<prefix-list-name> }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
use-shared-tree-only	Use (*,G) only state, no source state is created
spt-threshold	Source-tree switching threshold
infinity	Never switch to source-tree
group-list	Specify group ranges through policy
<i>route-map-name</i>	route-map name
prefix-list	Prefix List policy
<i>prefix-list-name</i>	prefix-list name

Command Mode

- /exec/configure /exec/configure/vrf

ip pim hello-authentication ah-md5

```
{ ip pim hello-authentication ah-md5 <auth-key> | no ip pim hello-authentication ah-md5 [ <auth-key> ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM interface configuration commands
hello-authentication	Add AH header option to Hellos
ah-md5	Use MD5 HMAC
<i>auth-key</i>	MD5 authentication key

Command Mode

- /exec/configure/if-igp

ip pim hello-interval

```
{ { ip pim hello-interval <interval> } | { no ip pim hello-interval [ <interval> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM interface configuration commands
hello-interval	Configures the Hello interval for interface
<i>interval</i>	Interval in milliseconds

Command Mode

- /exec/configure/if-igp

ip pim isolate

[no] ip pim isolate

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
isolate	Isolate this router from PIM perspective

Command Mode

- /exec/configure

ip pim jp-delay

```
{ { ip pim jp-delay <delay> } | { no ip pim jp-delay [ <delay> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
jp-delay	Join-Prune message inter-packet delay
<i>delay</i>	Delay value in microseconds

Command Mode

- /exec/configure /exec/configure/vrf

ip pim jp-interval

[no] ip pim jp-interval <interval>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM interface configuration commands
jp-interval	Join-Prune interval used between peers
<i>interval</i>	Interval in seconds

Command Mode

- /exec/configure/if-igp

ip pim jp-policy

```
{ ip pim jp-policy { <route-map-name> | prefix-list <prefix-list-name> } [ in | out ] | no ip pim jp-policy {
<route-map-name> | prefix-list <prefix-list-name> } [ in | out ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM interface configuration commands
jp-policy	Specify policy for receiving Join-Prune messages
<i>route-map-name</i>	route-map name
prefix-list	Prefix List policy for static RP
<i>prefix-list-name</i>	prefix-list name
in	(Optional) Inbound
out	(Optional) Outbound

Command Mode

- /exec/configure/if-igp

ip pim log-neighbor-changes

[no] ip pim log-neighbor-changes

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
log-neighbor-changes	Log up/down PIM neighbor transitions

Command Mode

- /exec/configure /exec/configure/vrf

ip pim mtu

[no] ip pim mtu <size>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
mtu	MTU for IP PIM packet
<i>size</i>	MTU

Command Mode

- /exec/configure

ip pim mtu

[no] ip pim mtu <size>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
mtu	MTU for IP PIM packet
<i>size</i>	MTU

Command Mode

- /exec/configure

ip pim neighbor-policy prefix-list

```
{ { ip pim neighbor-policy { <route-map-name> | prefix-list <prefix-list-name> } } | { no ip pim neighbor-policy [ <route-map-name> | prefix-list <prefix-list-name> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM interface configuration commands
neighbor-policy	Configures a neighbor policy for filtering adjacencies
<i>route-map-name</i>	route-map name
prefix-list	Prefix List policy for neighbor
<i>prefix-list-name</i>	prefix-list name

Command Mode

- /exec/configure/if-igp

ip pim non-dr flood

```
{ { no ip pim non-dr flood } | { ip pim non-dr flood } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
non-dr	Enable PIM NON-DR flood on vlan
flood	Enable PIM NON-DR flood on vlan

Command Mode

- /exec/configure /exec/configure/vrf

ip pim null-reg-delay

```
{ { ip pim null-reg-delay <delay> } | { no ip pim null-reg-delay [ <delay> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
null-reg-delay	Null registers inter-batch delay
<i>delay</i>	Delay value in microseconds

Command Mode

- /exec/configure /exec/configure/vrf

ip pim null-reg-routes

```
{ { ip pim null-reg-routes <num> } | { no ip pim null-reg-routes [ <num> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
null-reg-routes	Null registers number of routes
<i>num</i>	Numerical value

Command Mode

- /exec/configure /exec/configure/vrf

ip pim passive

{ ip pim passive | no ip pim passive }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM interface configuration commands
passive	Interface in passive mode. No send/rcv

Command Mode

- /exec/configure/if-igp

ip pim pre-build-spt

{ { ip pim pre-build-spt [force] } | { no ip pim pre-build-spt } }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
pre-build-spt	Pre construct PIM trees for all known (S,G)s
force	(Optional) Enable pre-build-spt irrespective of (*,G) state

Command Mode

- /exec/configure /exec/configure/vrf

ip pim register-policy

```
{ ip pim register-policy { <route-map-name> | prefix-list <prefix-list-name> } | no ip pim register-policy [ <route-map-name> | prefix-list <prefix-list-name> ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
register-policy	Specify policy for receiving Register messages
<i>route-map-name</i>	A route-map name
prefix-list	Prefix List policy for Registers
<i>prefix-list-name</i>	prefix-list name

Command Mode

- /exec/configure /exec/configure/vrf

ip pim register-rate-limit

```
{ { ip pim register-rate-limit <rate> } | { no ip pim register-rate-limit [ <rate> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
register-rate-limit	Rate limit for PIM data registers
<i>rate</i>	Packets per second

Command Mode

- /exec/configure /exec/configure/vrf

ip pim register-replicate

[no] ip pim register-replicate

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
register-replicate	Enable software replication of decapsulated PIM Register packets

Command Mode

- /exec/configure

ip pim register-source

```
{ { ip pim register-source { <src-interface> } } | { no ip pim register-source [ <src-interface> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
register-source	Configure source address for Register messages
<i>src-interface</i>	Use IP address of this interface for Register messages

Command Mode

- /exec/configure /exec/configure/vrf

ip pim register-until-stop

[no] ip pim register-until-stop

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
register-until-stop	Send Data Registers till Register Stop is received

Command Mode

- /exec/configure

ip pim rp-address

```
{ { ip pim rp-address <rp-address> [ group-list <prefix> | route-map <route-map-name> | prefix-list
<prefix-list-name> ] [ bidir ] [ override ] } | { no ip pim rp-address <rp-address> [ group-list <prefix> |
route-map <route-map-name> | prefix-list <prefix-list-name> ] [ bidir ] [ override ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
rp-address	Configure static RP for group range
<i>rp-address</i>	IP address of router which is RP for group range
group-list	(Optional) Group range for static RP
<i>prefix</i>	(Optional) Group range prefix
route-map	(Optional) Route Map policy for static RP
<i>route-map-name</i>	(Optional) route-map name
prefix-list	(Optional) Prefix List policy for static RP
<i>prefix-list-name</i>	(Optional) prefix-list name
bidir	(Optional) Group range is treated in PIM bidirectional mode
override	(Optional) RP address will override the dynamically learnt RPs

Command Mode

- /exec/configure /exec/configure/vrf

ip pim rp-candidate group-list route-map prefix-list

```
{ { ip pim [ bsr ] rp-candidate <interface> { group-list <prefix> | route-map <route-map-name> | prefix-list
<prefix-list-name> } [ priority <priority> ] [ interval <interval> ] [ bidir ] } | { no ip pim [ bsr ] rp-candidate
[ <interface> ] [ group-list <prefix> ] [ route-map <route-map-name> ] [ prefix-list <prefix-list-name> ] [
priority <priority> ] [ interval <interval> ] [ bidir ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
bsr	(Optional) Bootstrap protocol RP-distribution configuration
rp-candidate	Configure router as a Rendezvous Point (RP) candidate
<i>interface</i>	Use IP address of interface for Candidate-RP messages
group-list	Group range list
<i>prefix</i>	Prefix of group range
route-map	Group range policy for Candidate RP
<i>route-map-name</i>	route-map name
prefix-list	Prefix List policy for Candidate RP
<i>prefix-list-name</i>	prefix-list name
priority	(Optional) RP priority used in Candidate-RP messages
<i>priority</i>	(Optional) RP priority value
interval	(Optional) Bootstrap message transmission interval
<i>interval</i>	(Optional) Interval in seconds
bidir	(Optional) Group range advertised in PIM bidirectional mode

Command Mode

- /exec/configure /exec/configure/vrf

ip pim sg-expiry-timer infinity

```
{ { ip pim [ sparse ] sg-expiry-timer { <expiry-time> | infinity } [ sg-list <route-map-name> | prefix-list
<prefix-list-name> ] } | { no ip pim [ sparse ] sg-expiry-timer { <expiry-time> | infinity } [ sg-list
<route-map-name> | prefix-list <prefix-list-name> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
sparse	(Optional) PIM ASM
sg-expiry-timer	Adjust expiry time for PIM ASM (S,G) routes
<i>expiry-time</i>	Expiry timer interval in seconds
infinity	Never expire (S,G) route due to data inactivity
sg-list	(Optional) Specifies route-map for (S,G)s to apply the expiry timer
<i>route-map-name</i>	(Optional) Route-map name
prefix-list	(Optional) Specifies prefix-list for (S,G)s to apply the expiry timer
<i>prefix-list-name</i>	(Optional) prefix-list name

Command Mode

- /exec/configure /exec/configure/vrf

ip pim sparse-mode

ip pim sparse-mode | no ip pim [sparse-mode]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM interface configuration commands
sparse-mode	Configures sparse-mode PIM on interface
<i>pim</i>	

Command Mode

- /exec/configure/if-igp

ip pim ssm

```
{ ip pim ssm { { range { <group> + | none } } | { route-map <route-map-name> } | { prefix-list
<prefix-list-name> } } | no ip pim ssm { { range { <group> + | none } } | { route-map <route-map-name> }
| { prefix-list <prefix-list-name> } } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
ssm	Source Specific Multicast (SSM) groups
range	Configure explicit group ranges
<i>group</i>	List of group range prefixes
route-map	Group range route-map policy for SSM range
<i>route-map-name</i>	A route-map name
prefix-list	Group range prefix-list policy for SSM range
<i>prefix-list-name</i>	A prefix-list name
none	Remove all SSM group ranges

Command Mode

- /exec/configure /exec/configure/vrf

ip pim state-limit

```
{ { ip pim state-limit <max-states> [ reserved <route-map-name> <max-reserved> ] } | { no ip pim state-limit [ <max-states> [ reserved <route-map-name> <max-reserved> ] ] } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
pim	PIM global configuration commands
state-limit	Configures State limit
<i>max-states</i>	Maximum (*,G)/(S,G) entries allowed in this VRF
reserved	(Optional) Configures Reserved limit
<i>route-map-name</i>	(Optional) Route-map name
<i>max-reserved</i>	(Optional) Maximum reserved (*,G)/(S,G) entries allowed in this VRF

Command Mode

- /exec/configure /exec/configure/vrf

ip ping source-interface

[no] ip ping source-interface <ifnum> [vrf { <vrf-name> | <vrf-known-name> }]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ping	Configure ping client
source-interface	Configure source interface feature for ping client
<i>ifnum</i>	Source interface
vrf	(Optional) Configure VRF
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name

Command Mode

- /exec/configure

ip policy match router-address

[no] ip policy match router-address

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
policy	Configure PBR feature
match	Match values
router-address	Router's IP address

Command Mode

- /exec/configure

ip policy route-map

ip policy route-map <route-map-name> | no ip policy route-map [<route-map-name> | <route-map-name>]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
policy	Configure PBR feature
route-map	Route-map for PBR
<i>route-map-name</i>	Route-map name
<i>route-map-name</i>	(Optional) Route-map name
<i>route-map-name</i>	(Optional) Known route-map name

Command Mode

- /exec/configure/if-igp

ip port-unreachable

[no] ip port-unreachable

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
port-unreachable	Enable sending ICMP port-unreachable

Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config

ip port access-group

[no] ip port access-group <name> <inout>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
port	Port policy
access-group	Specify access control for packets
<i>name</i>	List name
<i>inout</i>	Traffic direction

Command Mode

- /exec/configure/if-set-acl-l2

ip prefix-list description

```
{ ip prefix-list <ipv4-pfl-name> description <line> } | { no ip prefix-list <ipv4-pfl-name> description }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
prefix-list	Build a prefix list
<i>ipv4-pfl-name</i>	Name of prefix-list
<i>ipv4-pfl-name</i>	Known prefix-list name
description	Description of the IP prefix list
<i>line</i>	IP prefix-list description string

Command Mode

- /exec/configure

ip prefix-list permit

```
{ ip prefix-list <ipv4-pfl-name> { permit | deny } <prefix> { [ eq <equal> ] | [ ge <greater> ] [ le <lesser> ]
} [ mask <mask> ] } | { no ip prefix-list { <ipv4-pfl-name> | <ipv4-pfl-name> } [ { permit | deny } <prefix>
{ [ eq <equal> ] | [ ge <greater> ] [ le <lesser> ] } [ mask <mask> ] ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
prefix-list	Build a prefix list
<i>ipv4-pfl-name</i>	Name of prefix-list
<i>ipv4-pfl-name</i>	Name of prefix-list
<i>ipv4-pfl-name</i>	Known prefix-list name
permit	Specify routes to forward
deny	Specify routes to reject
<i>prefix</i>	IP prefix network/length, e.g., 35.0.0.0/8
eq	(Optional) Exact prefix length to be matched
<i>equal</i>	(Optional) Exact prefix length
ge	(Optional) Minimum prefix length to be matched
<i>greater</i>	(Optional) Minimum prefix length
le	(Optional) Maximum prefix length to be matched
<i>lesser</i>	(Optional) Maximum prefix length
mask	(Optional) Explicit match mask
<i>mask</i>	(Optional) Mask to use with the prefix

Command Mode

- /exec/configure

ip prefix-list seq permit

```
{ ip prefix-list <ipv4-pfl-name> seq <seq> { permit | deny } <prefix> { [ eq <equal> ] | [ ge <greater> ] [ le <lesser> ] } [ mask <mask> ] } | { no ip prefix-list { <ipv4-pfl-name> | <ipv4-pfl-name> } seq <seq> [ { permit | deny } <prefix> { [ eq <equal> ] | [ ge <greater> ] [ le <lesser> ] } [ mask <mask> ] ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
prefix-list	Build a prefix list
<i>ipv4-pfl-name</i>	Name of prefix-list
<i>ipv4-pfl-name</i>	Name of prefix-list
<i>ipv4-pfl-name</i>	Known prefix-list name
seq	Sequence number of an entry
<i>seq</i>	Sequence number
permit	Specify routes to forward
deny	Specify routes to reject
<i>prefix</i>	IP prefix network/length, e.g., 35.0.0.0/8
eq	(Optional) Exact prefix length to be matched
<i>equal</i>	(Optional) Exact prefix length
ge	(Optional) Minimum prefix length to be matched
<i>greater</i>	(Optional) Minimum prefix length
le	(Optional) Maximum prefix length to be matched
<i>lesser</i>	(Optional) Maximum prefix length
mask	(Optional) Explicit match mask
<i>mask</i>	(Optional) Mask to use with the prefix

Command Mode

- /exec/configure

ip proxy-arp

{ ip proxy-arp | no ip proxy-arp }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
proxy-arp	Configure proxy ARP

Command Mode

- /exec/configure/if-igp /exec/configure/if-vlan-common

ip radius source-interface

[no] ip radius source-interface | ip radius source-interface <interface>

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
radius	Radius server
source-interface	Source interface to be used to reach radius server
<i>interface</i>	Interface Description

Command Mode

- /exec/configure

ip redirects

ip redirects | no ip redirects

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
redirects	Send ICMP Redirect messages

Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config

ip rip authentication key-chain

```
{ ip rip authentication key-chain <keychain> | no ip rip authentication key-chain [ <keychain> ] }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
rip	RIP configuration commands
authentication	Authentication control
key-chain	Set authentication key-chain
<i>keychain</i>	Name of key-chain

Command Mode

- /exec/configure/if-igp

ip rip authentication mode text

{ ip rip authentication mode { text | md5 } | no ip rip authentication mode [{ text | md5 }] }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
rip	RIP configuration commands
authentication	RIP authentication control
mode	Set authentication mode
text	Clear text authentication
md5	Keyed message digest

Command Mode

- /exec/configure/if-igp

ip rip metric

```
{ ipv6 | ip } rip { metric-offset | offset-list } <metric> | no { ipv6 | ip } rip { metric-offset | offset-list } [ <metric> ]
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
ip	Configure IP features
rip	RIP configuration commands
metric-offset	RIP metric for interface
offset-list	RIP metric for interface
<i>metric</i>	RIP metric value

Command Mode

- /exec/configure/if-igp

ip rip passive-interface

[no] { ipv6 | ip } rip passive-interface

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
ip	Configure IP features
rip	RIP configuration commands
passive-interface	RIP passive interface

Command Mode

- /exec/configure/if-igp

ip rip poison-reverse

[no] { ipv6 | ip } rip poison-reverse

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
ip	Configure IP features
rip	RIP configuration commands
poison-reverse	RIP poison reverse (default split-horizon)

Command Mode

- /exec/configure/if-igp

ip rip route-filter route in

[no] { ipv6 | ip } rip route-filter { route-map <map> | prefix-list <list> } { in | out }

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
ip	Configure IP features
rip	RIP configuration commands
route-filter	RIP route filtering
route-map	route-map policy to constrain route filtering
prefix-list	prefix-list policy to constrain route filtering
<i>map</i>	Route-map name
<i>list</i>	prefix-list name
in	inbound
out	outbound

Command Mode

- /exec/configure/if-igp

ip rip summary-address

[no] ip rip summary-address <ip-prefix> | no ipv6 rip summary-address <ipv6-prefix> | ipv6 rip summary-address <ipv6-prefix>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
rip	RIP configuration commands
summary-address	RIP summarization address
<i>ip-prefix</i>	Exact prefix

Command Mode

- /exec/configure/if-igp

ip route

```
[no] ip route { <ip-addr> <ip-mask> | <ip-prefix> } { <interface> | { { <pin-interface> <next-hop> } | { <next-hop> | <nh-prefix> } | { <vlan-interface> } } [ vrf { <vrf-name> | <vrf-known-name> } ] [ track <object-num> ] [ name <rt-name> ] [ tag <tag-value> | <pref> ] +
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
route	Route information
<i>ip-addr</i>	IP prefix in format i.i.i.i
<i>ip-mask</i>	IP network mask in format m.m.m.m
<i>ip-prefix</i>	IP prefix and network mask length in format x.x.x.x/m
<i>pin-interface</i>	Pin interface
<i>next-hop</i>	IP next-hop address in format i.i.i.i
<i>nh-prefix</i>	IP next-hop prefix in format i.i.i.i/m
<i>interface</i>	Interface for interface static routes
<i>vlan-interface</i>	vlan interface
track	(Optional) Specify the Object to be Tracked
<i>object-num</i>	(Optional) Track Object Number
name	(Optional) Specify name of the next hop
<i>rt-name</i>	(Optional) Name of next hop
<i>pref</i>	(Optional) Route preference
tag	(Optional) Supply tag value with static route
<i>tag-value</i>	(Optional) 32-bit value for tag
vrf	(Optional) VRF for next-hop if different from this vrf
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name

Command Mode

- /exec/configure /exec/configure/config-mgmt /exec/configure/vrf

ip route static bfd

[no] ip route static bfd <pin-interface> <next-hop>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
route	Route information
static	Static route based configuration
bfd	Enable bfd detection on static route
<i>pin-interface</i>	Interface on which bfd has to be enabled
<i>next-hop</i>	IP next-hop address in format i.i.i.i

Command Mode

- /exec/configure /exec/configure/config-mgmt /exec/configure/vrf

ip router eigrp

[no] { ip | ipv6 } router eigrp <eigrp-ptag>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
router	Enable a routing process
eigrp	Configure an EIGRP routing process on interface
<i>eigrp-ptag</i>	Process tag

Command Mode

- /exec/configure/if-igp

ip router isis

[no] ip router isis <tag>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
router	Enable a routing process
isis	Intermediate System to Intermediate System (IS-IS)
<i>tag</i>	Process tag

Command Mode

- /exec/configure/if-igp

ip router ospf area

[no] ip router ospf <tag> area { <area-id-ip> | <area-id-int> } [secondaries none]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
router	Enable a routing process
ospf	OSPF configuration commands
<i>tag</i>	Process tag
area	Area associated with interface
<i>area-id-ip</i>	OSPF area ID in IP address format
<i>area-id-int</i>	OSPF area ID as a decimal format
secondaries	(Optional) Do not include secondary IP addresses
none	(Optional) Do not include secondary IP addresses

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

ip router ospf multi-area

[no] ip router ospf <tag> multi-area <area-id-ip>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
router	Enable a routing process
ospf	OSPF configuration commands
<i>tag</i>	Process tag
multi-area	Multi area associated with interface
<i>area-id-ip</i>	Area Id as an integer or ip address

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

ip router rip

[no] { ipv6 | ip } router rip <tag>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
router	Enable a routing process
rip	Routing Information Protocol (RIP)
<i>tag</i>	Process tag

Command Mode

- /exec/configure/if-igp

ip routing download-on-convergence

[no] ip routing download-on-convergence

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	IP events
routing	Enable debugging for routing events
download-on-convergence	Download Routes/RNHs after Table Convergence

Command Mode

- /exec/configure

ip routing event-history

```
[no] ip routing event-history { add-route | cli | delete-route | detail | errors | general | ha | loop-detection |
modify-route | notifications | recursive-next-hop | summary | ufdm | ufdm-detail | ufdm-summary } size {
<size_in_text> | <size_in_bytes> }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
event-history	Configure routing event log
add-route	Add route
cli	CLI
delete-route	Delete route
detail	Detail
errors	Errors
general	General
ha	HA
loop-detection	Loop detection
modify-route	Modify route
notifications	Notification
recursive-next-hop	Recursive next hop
summary	Summary
ufdm	UFDM
ufdm-detail	UFDM Detail
ufdm-summary	UFDM Summary
size	Size of buffer
<i>size_in_text</i>	Buffer size
<i>size_in_bytes</i>	Enter an integer value for the event history buffer

Command Mode

- /exec/configure

ip routing multicast enforce-rpf

[no] ip routing multicast enforce-rpf

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
routing	Configure routing information
multicast	Configure multicast
enforce-rpf	Enforce RPF Check

Command Mode

- /exec/configure

ip routing multicast event-history cli

```
[no] ip routing multicast event-history cli { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure multicast
event-history	Configure event history buffers
cli	CLI events for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip routing multicast event-history mdt

```
[no] ip routing multicast event-history mdt { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure multicast
event-history	Configure event history buffers
mdt	MDT events for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip routing multicast event-history mfdm-debug

```
[no] ip routing multicast event-history mfdm-debug { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure multicast
event-history	Configure event history buffers
mfdm-debug	MFDM debugs for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip routing multicast event-history mfdm-events

```
[no] ip routing multicast event-history mfdm-events { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure mfdm-stats event-history buffer
event-history	Configure event history buffers
mfdm-events	Non-periodic MFDM events in MRIB
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip routing multicast event-history mfdm-stats

```
[no] ip routing multicast event-history mfdm-stats { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure multicast
event-history	Configure event history buffers
mfdm-stats	MFDM-Stats events for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip routing multicast event-history rib-summary

```
[no] ip routing multicast event-history rib-summary { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure multicast
event-history	Configure event-history buffers
rib-summary	RIB events for MRIB-summary
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip routing multicast event-history rib

```
[no] ip routing multicast event-history rib { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure multicast
event-history	Configure event-history buffers
rib	RIB events for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip routing multicast event-history vrf

[no] ip routing multicast event-history vrf { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure multicast
event-history	Configure event history buffers
vrf	VRF events for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ip routing multicast file-debug

[no] { ip | ipv4 } routing multicast file-debug

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ipv4	Configure IP features
routing	Routing information
multicast	Configure multicast
file-debug	Collect all debugs to a file

Command Mode

- /exec/configure

ip routing multicast holddown

{ ip | ipv4 } routing multicast holddown { <route-holddown-sec> | <none> } | no { ip | ipv4 } routing multicast holddown [<route-holddown-sec> | <none>]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
ipv4	Configure IP features
routing	Routing information
multicast	Configure multicast
holddown	Initial holddown period
<i>route-holddown-sec</i>	Delay in seconds
<i>none</i>	Disable holddown

Command Mode

- /exec/configure

ip routing multicast software-replicate

[no] ip routing multicast software-replicate

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
routing	Routing information
multicast	Configure multicast
software-replicate	Enable software replication of PIM ASM leak packets

Command Mode

- /exec/configure

ip sla

[no] ip sla <index>

Syntax Description

no	(Optional)
ip	
sla	Service Level Agreement (SLA)
<i>index</i>	Entry Number

Command Mode

- /exec/configure

ip sla group schedule

```
{ no ip sla group schedule <group-id> | ip sla group schedule <group-id> { { add <operation-ids> | delete
<operation-ids> } | { <operation-ids> schedule-period <schedule-period-seconds> { [ ageout <ageout-seconds>
] [ frequency { <frequency-seconds> | range <random-frequency-range> } ] [ life { forever | <life-seconds>
} ] [ start-time { <hhmm> [ { January | February | March | April | May | June | July | August | September |
October | November | December } <day> | <day> [ January | February | March | April | May | June | July |
August | September | October | November | December ] ] | pending | now | after <hhmm> } ] } + } | reschedule
} }
```

Syntax Description

no	
<i>add</i>	delete
<i>start-time</i>	(Optional) January
<i>October</i>	(Optional) November
<i>operation-ids</i>	<schedule-period-seconds>
<i>random-frequency-range</i>	(Optional) <ageout-seconds>
ip	
sla	Service Level Agreement (SLA)
group	Group Configuration or Group Scheduling
schedule	Group scheduling
<i>group-id</i>	Group schedule entry number
delete	Delete probes from existing group
reschedule	Reschedule the group using previous config
<i>operation-ids</i>	Multiple probe ID's to be group scheduled
schedule-period	Group schedule period range
<i>schedule-period-seconds</i>	seconds
frequency	(Optional) Group operation frequency
range	(Optional) Group operation frequency-range for random scheduling
<i>frequency-seconds</i>	(Optional) Specify frequency in seconds
ageout	(Optional) How long to keep this Entry when inactive
<i>ageout-seconds</i>	(Optional) Ageout Seconds
life	(Optional) Length of time to execute in seconds

<i>life-seconds</i>	(Optional) Life seconds (default 3600)
forever	(Optional) continue running forever
after	(Optional) Start after a certain amount of time from now
<i>hmm</i>	(Optional) Start time (hh:mm)
January	(Optional) Month of year
February	(Optional) Month of year
March	(Optional) Month of year
April	(Optional) Month of year
May	(Optional) Month of year
June	(Optional) Month of year
July	(Optional) Month of year
August	(Optional) Month of year
September	(Optional) Month of year
October	(Optional) Month of year
November	(Optional) Month of year
December	(Optional) Month of year
<i>day</i>	(Optional) Day of month
now	(Optional) Start now
pending	(Optional) Start pending

Command Mode

- /exec/configure

ip sla logging traps

[no] ip sla logging traps

Syntax Description

no	(Optional)
ip	
sla	Service Level Agreement (SLA)
logging	Enable Syslog
traps	Enable syslog traps

Command Mode

- /exec/configure

ip sla reaction-configuration react

```
[no] ip sla reaction-configuration <react-cfg-entry-num> react <monitored-element> | ip sla
reaction-configuration <react-cfg-entry-num> react <monitored-element> { [ action-type <action> ] [
threshold-value <rising-value> <falling-value> ] [ threshold-type { <neverImmed> | <consecutive> [
<consecutive-occurrences> ] | <xOfy> [ <x-value> <y-value> ] | <average> [ <n-attempts> ] } ] } +
```

Syntax Description

no	
<i>action-type</i>	(Optional) threshold-value
<i>falling-value</i>	(Optional) <neverImmed>
<i>consecutive-occurrences</i>	(Optional) <x-value>
ip	
sla	Service Level Agreement (SLA)
reaction-configuration	IP SLAs Reaction-Configuration
<i>react-cfg-entry-num</i>	Entry Number
react	Reaction variable to be configured
<i>monitored-element</i>	monitored element
<i>action</i>	(Optional)
threshold-value	(Optional) Threshold Value
<i>rising-value</i>	(Optional) Upper limit for Threshold
threshold-type	(Optional) Threshold Type
<i>neverImmed</i>	(Optional)
<i>consecutive</i>	(Optional)
<i>xOfy</i>	(Optional)
<i>average</i>	(Optional)
<i>x-value</i>	(Optional) X value
<i>y-value</i>	(Optional) Y value
<i>n-attempts</i>	(Optional) N Value

Command Mode

- /exec/configure

ip sla reaction-trigger

[no] ip sla reaction-trigger <entry-num> <target-entry>

Syntax Description

no	(Optional)
ip	
sla	Service Level Agreement (SLA)
reaction-trigger	IP SLAs Trigger Assignment
<i>entry-num</i>	Entry Number
<i>target-entry</i>	Target entry Number

Command Mode

- /exec/configure

ip sla reset

ip sla reset

Syntax Description

ip	
sla	Service Level Agreement (SLA)
reset	IP SLAs Reset

Command Mode

- /exec/configure

ip sla responder

```
[no] ip sla responder [ { tcp-connect [ ipaddress<tcp-ip> ] port <tcp-port> } | { udp-echo [ ipaddress <udp-ip> ] port <udp-port> } ]
```

Syntax Description

<i>tcp-connect</i>	(Optional) ipaddress
no	(Optional)
ip	
sla	
responder	Enable IP SLAs Responder
ipaddress	(Optional) Permanent address
port	(Optional) Permanent port
<i>tcp-port</i>	(Optional) Port Number
udp-echo	(Optional) Setup udp-echo responder
<i>udp-ip</i>	(Optional) IP Address or IP HostName
<i>udp-port</i>	(Optional) Port Number

Command Mode

- /exec/configure

ip sla restart

ip sla restart <index>

Syntax Description

ip	
sla	Service Level Agreement (SLA)
restart	Restart An Active Entry
<i>index</i>	Entry Number

Command Mode

- /exec/configure

ip sla schedule

```
{ no ip sla schedule <index> | ip sla schedule <index> { [ life { <life-seconds> | forever } ] [ start-time {
<hhmm> [ { January | February | March | April | May | June | July | August | September | October | November
| December } <day> | <day> [ January | February | March | April | May | June | July | August | September |
October | November | December ] ] | pending | now | { after <hhmm> } } ] [ ageout <ageout-seconds> ] [
recurring ] } + }
```

Syntax Description

no	
<i>life</i>	(Optional) forever
<i>August</i>	(Optional) September
<i>recurring</i>	(Optional) <life-seconds>
ip	
sla	Service Level Agreement (SLA)
schedule	Entry Scheduling
<i>index</i>	Entry Number
<i>life-seconds</i>	(Optional) Life seconds (default 3600)
forever	(Optional) continue running forever
start-time	(Optional) When to start this entry
<i>hhmm</i>	(Optional) Start time (hh:mm)
January	(Optional) Month of year
February	(Optional) Month of year
March	(Optional) Month of year
April	(Optional) Month of year
May	(Optional) Month of year
June	(Optional) Month of year
July	(Optional) Month of year
August	(Optional) Month of year
September	(Optional) Month of year
October	(Optional) Month of year
November	(Optional) Month of year

December	(Optional) Month of year
<i>day</i>	(Optional) Day of month
now	(Optional) Start now
after	(Optional) Start after a certain amount of time from now
pending	(Optional) Start pending
ageout	(Optional) How long to keep this Entry when inactive
<i>ageout-seconds</i>	(Optional) Ageout Seconds

Command Mode

- /exec/configure

ip source-route

[no] ip source-route

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
source-route	IP source routing option

Command Mode

- /exec/configure

ip source binding vlan interface

[no] ip source binding <ipaddr1> <macaddr> vlan <vlanid> interface <interface1>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
source	IP source
binding	Static binding
<i>ipaddr1</i>	IP address
<i>macaddr</i>	MAC address
vlan	VLAN
<i>vlanid</i>	VLAN id
interface	interface
<i>interface1</i>	interface

Command Mode

- /exec/configure

ip source icmp-errors

[no] ip source <interface> icmp-errors

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
source	Configure source-address for applications
<i>interface</i>	Interface to pick source-address from
icmp-errors	ICMP unreachable/TTL-exceeded/param-prob messages

Command Mode

- /exec/configure /exec/configure/vrf

ip split-horizon eigrp

[no] { ip | ipv6 } split-horizon eigrp <eigrp-ptag>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
split-horizon	Configures IP-EIGRP split-horizon on interface
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Process tag

Command Mode

- /exec/configure/if-igp

ip ssh source-interface

[no] ip ssh source-interface <ifnum> [vrf { <vrf-name> | <vrf-known-name> }]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ssh	Configure ssh
source-interface	Configure source interface feature for domain-lookup
<i>ifnum</i>	Source interface
vrf	(Optional) Configure VRF
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name

Command Mode

- /exec/configure

ip sticky-arp

{ ip sticky-arp [ignore] | no ip sticky-arp ignore }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
sticky-arp	Configure sticky ARP
ignore	(Optional) Ignore previously configured sticky ARP

Command Mode

- /exec/configure/if-igp /exec/configure/if-vlan-common

ip summary-address eigrp ipv6 summary-address eigrp

```
{ [ no ] ip summary-address eigrp <eigrp-ptag> { { <address> <mask> } | { <prefix> } } [ <distance> ] [
leak-map <leak-map> ] | [ no ] ipv6 summary-address eigrp <eigrp-ptag> <ipv6-prefix> [ <distance> ] [
leak-map <leak-map> ] }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
ipv6	Configure IPv6 features
summary-address	Configures IP-EIGRP summary address on interface
eigrp	EIGRP interface configuration commands
<i>eigrp-ptag</i>	Process tag
<i>address</i>	IP address
<i>mask</i>	IP network mask
<i>prefix</i>	IP prefix in slash format
<i>distance</i>	(Optional) Administrative distance
leak-map	(Optional) Allow dynamic prefixes based on the leak-map
<i>leak-map</i>	(Optional) leak-map name
<i>eigrp-ptag</i>	

Command Mode

- /exec/configure/if-igp

ip tacacs source-interface

[no] ip tacacs source-interface | ip tacacs source-interface <interface>

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
tacacs	Tacacs server
source-interface	Source interface to be used to reach tacacs server
<i>interface</i>	Interface Description

Command Mode

- /exec/configure

ip tcp path-mtu-discovery

{ { ip tcp path-mtu-discovery } | { no ip tcp path-mtu-discovery } }

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
tcp	Global TCP parameters
path-mtu-discovery	Enable path-MTU discovery on TCP

Command Mode

- /exec/configure /exec/configure/config-mgmt

ip tcp synwait-time

```
{ { no ip tcp synwait-time } | { ip tcp synwait-time <time> } }
```

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
tcp	Global TCP parameters
synwait-time	Set time to wait on new TCP connections
<i>time</i>	Wait time

Command Mode

- /exec/configure /exec/configure/config-mgmt

ip telnet source-interface

[no] ip telnet source-interface <ifnum> [vrf { <vrf-name> | <vrf-known-name> }]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
telnet	Configure telnet
source-interface	Configure source interface feature for domain-lookup
<i>ifnum</i>	Source interface
vrf	(Optional) Configure VRF
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name

Command Mode

- /exec/configure

ip tftp source-interface

```
[no] ip tftp source-interface <ifnum> [ vrf { <vrf-name> | <vrf-known-name> } ]
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
tftp	Configure TFTP client
source-interface	Configure source interface feature for TFTP client
<i>ifnum</i>	Source interface
vrf	(Optional) Configure VRF
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name

Command Mode

- /exec/configure

ip traceroute source-interface

[no] ip traceroute source-interface <ifnum> [vrf { <vrf-name> | <vrf-known-name> }]

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
traceroute	Configure traceroute client
source-interface	Configure source interface feature for traceroute
<i>ifnum</i>	Source interface
vrf	(Optional) Configure VRF
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name

Command Mode

- /exec/configure

ip ttl

[no] ip ttl <ttl_value>

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Set ERSPAN IP options
ttl	Set the IP time-to-live value
<i>ttl_value</i>	

Command Mode

- /exec/configure/config-monitor-erspan-src

ip unnumbered

ip unnumbered <interface> | no ip unnumbered [<interface>]

Syntax Description

no	Negate a command or set its defaults
ip	Configure IP features
unnumbered	Configure interface as unnumbered
<i>interface</i>	Interface with IP address

Command Mode

- /exec/configure/ppm-ethernet-switch /exec/configure/if-ether-sub-p2p /exec/configure/if-ethernet-p2p

ip unreachable

[no] ip unreachable

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
unreachables	Enable sending ICMP unreachable (other than port-unreachable)

Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config

ip verify source dhcp-snooping-vlan

[no] ip verify source dhcp-snooping-vlan

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
verify	Configure Unicast Reverse Path Forwarding or IP Source Guard
source	IP Source Guard related commands
dhcp-snooping-vlan	Vlans on which snooping is enabled

Command Mode

- /exec/configure/if-switching

ip verify unicast source reachable-via rx

```
[no] ip verify unicast source reachable-via { rx | any [ allow-default ] } [ policy { <policy-name> | <acl_pol_name> } ]
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ip	Configure IP features
verify	Configure Unicast Reverse Path Forwarding or IP Source Guard
unicast	Unicast Reverse Path Forwarding
source	Validation of source address
reachable-via	Specify reachability check to apply to the source address
rx	Source is reachable via interface on which packet was received
any	Source is reachable via any interface
allow-default	(Optional) Loose Default Route Unicast Reverse Path Forwarding
policy	(Optional) Unicast Reverse Path Forwarding fail policy
<i>policy-name</i>	(Optional) An uRPF fail policy name
<i>acl_pol_name</i>	(Optional) An existing access-rules policy

Command Mode

- /exec/configure/if-igp

ipv6

```
{ [ <seqno> ] | no } <permitdeny> { ipv6 | <proto> | <ipv6_other_proto> } { <src_any> | { <src_addr>
<src_wild> } | <src_prefix> | { src_key_host <src_host> } | { src_key_addrgrp <src_addrgrp_name> } } {
<dst_any> | { <dst_addr> <dst_wild> } | <dst_prefix> | { dst_key_host <dst_host> } | { dst_key_addrgrp
<dst_addrgrp_name> } } [ { dscp { <dscp_num> | <dscp_str> } } ] [ { flow-label <flow_num> } ] [ fragments
] [ log ] [ time-range <time_range_name> ] [ packet-length { <plen_op> <plen0> | <plen_range> <plen1>
<plen2> } } ] + [ capture session <session-id> ]
```

Syntax Description

<i>seqno</i>	(Optional) Sequence number
no	Negate a command or set its defaults
<i>permitdeny</i>	Permit/deny
ipv6	Any IPV6 protocol
<i>proto</i>	A protocol number
<i>ipv6_other_proto</i>	ipv6_other_proto
<i>src_any</i>	Any
src_key_host	A single source host
src_key_addrgrp	Source address group
<i>src_addrgrp_name</i>	Address group name
<i>dst_any</i>	Any
dst_key_host	A single destination host
dst_key_addrgrp	Destination address group
<i>dst_addrgrp_name</i>	Address group name
dscp	(Optional) Match packets with given dscp value
<i>dscp_num</i>	(Optional) Differentiated services codepoint value
<i>dscp_str</i>	(Optional) Differentiated services codepoint label
flow-label	(Optional) Flow label
<i>flow_num</i>	(Optional) Flow label value
fragments	(Optional) Check non-initial fragments
log	(Optional) Log matches against this entry
time-range	(Optional) Specify a time range

<i>time_range_name</i>	(Optional) Time range name
packet-length	(Optional) Match packets based on layer 3 packet length
<i>plen_op</i>	(Optional) Packet-length operator
<i>plen_range</i>	(Optional) Packet-length range
<i>plen0</i>	(Optional) Packet length
<i>plen1</i>	(Optional) Lower packet length
<i>plen2</i>	(Optional) Higher packet length
capture	(Optional) Enable packet capture on this filter for session
session	(Optional) Session ID <1-48> for this session
<i>session-id</i>	(Optional) Session ID <1-48> for this session

Command Mode

- /exec/configure/ipv6acl

ipv6 access-class

[no] ipv6 access-class <name> <inout>

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
access-class	Specify IPv6 access control for packets
<i>name</i>	List name
<i>inout</i>	Traffic direction

Command Mode

- /exec/configure/line

ipv6 access-list

[no] ipv6 access-list <name> [client <clienttype> <clientID>]

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
access-list	Configure access list
<i>name</i>	List name
client	(Optional) set client type
<i>clienttype</i>	(Optional) CLI/ONEP
<i>clientID</i>	(Optional) client appID

Command Mode

- /exec/configure

ipv6 access-list match-local-traffic

[no] ipv6 access-list match-local-traffic | ipv6 access-list match-local-traffic

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
access-list	Configure access list
match-local-traffic	Enable access-list matching for locally generated traffic

Command Mode

- /exec/configure

ipv6 address

[no] ipv6 address [<ipv6-prefix> [eui64] [route-preference <pref>] [tag <tag>] [anycast]] | ipv6 address <ipv6-prefix> [eui64] [route-preference <pref>] [tag <tag>] [anycast]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
address	Configure IPv6 address on interface
eui64	(Optional) Configure Extended Unique Identifier for the low-order 64 bits
anycast	(Optional) Configure IPv6 anycast address on interface
route-preference	(Optional) U6RIB route preference for local/direct routes
<i>pref</i>	(Optional) Local/direct route preference
tag	(Optional) U6RIB route tag value for local/direct routes
<i>tag</i>	(Optional) Local/direct tag value

Command Mode

- /exec/configure/if-igp /exec/configure/if-any-tunnel /exec/configure/if-vsan /exec/configure/if-mgmt-config

ipv6 address dhcp

[no] ipv6 address dhcp

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
address	Configure IPv6 address on interface
dhcp	Configure IPv6 address from a dhcp server

Command Mode

- /exec/configure/if-vlan /exec/configure/if-ethernet /exec/configure/if-mgmt-config /exec/configure/if-ethernet-all /exec/configure/if-sub

ipv6 address secondary

ipv6 address <ipv6-prefix> [eui64] secondary

Syntax Description

ipv6	Configure IPv6 features
address	Configure IPv6 address on interface
eui64	(Optional) Configure Extended Unique Identifier for the low-order 64 bits
secondary	Configures additional addresses on interface

Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config /exec/configure/if-gre-tunnel /exec/configure/if-6to4-tunnel /exec/configure/if-vsan

ipv6 address use-link-local-only

[no] ipv6 address use-link-local-only | ipv6 address use-link-local-only

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
address	Configure IPv6 address on interface
use-link-local-only	Enable IPv6 on interface using only a single link-local address

Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config /exec/configure/if-gre-tunnel /exec/configure/if-6to4-tunnel /exec/configure/if-vsan

ipv6 adjacency-stale-timer

```
{ { ipv6 [ icmp ] adjacency-stale-timer <stale-time> } | { no ipv6 [ icmp ] adjacency-stale-timer [ <stale-time> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
icmp	(Optional) Configure icmp parameters
adjacency-stale-timer	When probing for an adjacency begins
<i>stale-time</i>	Seconds after adjacency uptime

Command Mode

- /exec/configure

ipv6 adjacency forcedownload

```
ipv6 adjacency [ vrf { <vrf-name> | <vrf-known-name> } ] { <interface> { * | <ipv6-addr> } | * } forcedownload
```

Syntax Description

ipv6	Configure IPv6 features
adjacency	Configure Adjmgr
vrf	(Optional) Display per-VRF information
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name
<i>interface</i>	Display specific interface adjacencies only
*	for all adjacencies in this context
forcedownload	Create consistency in UFDM

Command Mode

- /exec/configure

ipv6 adjacency l2fm-reg

[no] ipv6 adjacency l2fm-reg { [vrf <vrf-known-name>] | <interface> }

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
adjacency	Configure Adjmgr
l2fm-reg	Register with l2fm
vrf	(Optional) vrf name
<i>vrf-known-name</i>	(Optional) Known VRF name
<i>interface</i>	Interface name

Command Mode

- /exec/configure

ipv6 adjacency peer-gmac

```
[no] ipv6 adjacency [ vrf { <vrf-name> | <vrf-known-name> } ] { <interface> { * | <ipv6-addr> } | * }
peer-gmac
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
adjacency	Configure Adjmgr
vrf	(Optional) Display per-VRF information
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name
<i>interface</i>	Display specific interface adjacencies only
*	for all adjacencies in this context
peer-gmac	Set/clear the peer-gmac bit

Command Mode

- /exec/configure

ipv6 adjacency remote-adj

```
[no] ipv6 adjacency [ vrf { <vrf-name> | <vrf-known-name> } ] { <interface> { * | <ipv6-addr> } | * }
remote-adj
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
adjacency	Configure Adjmgr
vrf	(Optional) Display per-VRF information
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name
<i>interface</i>	Display specific interface adjacencies only
*	for all adjacencies in this context
remote-adj	Set/clear the remote-adj bit

Command Mode

- /exec/configure

ipv6 adjacency route distance

{ ipv6 adjacency route distance <pref> } | { no ipv6 adjacency route distance }

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
adjacency	Configure Adjmgr
route	route
distance	admin-distance
<i>pref</i>	preference

Command Mode

- /exec/configure

ipv6 amt gateway

[no] ipv6 amt gateway

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
amt	AMT global configuration commands
gateway	Configures IPv6 AMT gateway functionality

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 amt gateway send-discovery

[no] ipv6 amt gateway send-discovery

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
amt	AMT global configuration commands
gateway	Configures IPv6 AMT gateway functionality
send-discovery	Trigger a Discovery message to the Anycast address

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 amt relay

[no] ipv6 amt relay

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
amt	AMT global configuration commands
relay	Configures IPv6 AMT relay functionality

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 cache disable

[no] ipv6 cache disable

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
cache	Disable cache
disable	Disable cache

Command Mode

- /exec/configure

ipv6 dad

ipv6 dad { skip-results | force-dad | address <ipv6-prefix> } | no ipv6 dad skip-results

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
dad	Duplicate Address Detection
skip-results	Skip DAD results
force-dad	Does force DAD on given interface
address	Address to verify duplicate address in LAN

Command Mode

- /exec/configure/if-igp

ipv6 dhcp relay

[no] ipv6 dhcp relay

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
dhcp	Configure DHCPv6 relay
relay	Configure DHCPv6 relay agent

Command Mode

- /exec/configure

ipv6 dhcp relay address

[no] ipv6 dhcp relay address [<ip-addr-val> [use-vrf <vrf-name>] [interface <interface-name>]] | no ipv6 dhcp relay address [<ip-addr-val> [interface <interface-name>] [use-vrf <vrf-name>]]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
dhcp	Configure DHCPv6 relay
relay	Configure DHCPv6 relay agent
address	Configure DHCPv6 server relay address
use-vrf	(Optional) server address VRF membership
<i>vrf-name</i>	(Optional) VRF name
interface	(Optional) Destination interface for the relay address
<i>interface-name</i>	(Optional) Destination interface

Command Mode

- /exec/configure/if-igp

ipv6 dhcp relay address ipv6 dhcp relay address

ipv6 dhcp relay address <ip-addr-val> [use-vrf <vrf-name>] [interface <interface-name>] | ipv6 dhcp relay address <ip-addr-val> [interface <interface-name>] [use-vrf <vrf-name>]

Syntax Description

ipv6	Configure IPv6 features
dhcp	Configure DHCPv6 relay
relay	Configure DHCPv6 relay agent
address	Configure DHCPv6 server relay address
use-vrf	(Optional) server address VRF membership
<i>vrf-name</i>	(Optional) VRF name
interface	(Optional) Destination interface for the relay address
<i>interface-name</i>	(Optional) Destination interface

Command Mode

- /exec/configure/if-igp /exec/configure/ppm-ethernet-switch /exec/configure/ppm-port-channel-switch

ipv6 dhcp relay option type cisco

[no] ipv6 dhcp relay option type cisco

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
dhcp	Configure DHCPv6 relay
relay	DHCPv6 relay agent parameters
option	Relay agent option
type	Relay agent option type
cisco	Use Cisco proprietary options

Command Mode

- /exec/configure

ipv6 dhcp relay option vpn

[no] ipv6 dhcp relay option vpn

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
dhcp	Configure DHCPv6 relay
relay	DHCPv6 relay agent parameters
option	Insert DHCPv6 relay information in Relay forward
vpn	Enable DHCPv6 relay support across VRFs

Command Mode

- /exec/configure

ipv6 dhcp relay source-interface

ipv6 dhcp relay source-interface <interface-name>

Syntax Description

ipv6	Configure IPv6 features
dhcp	Configure DHCPv6 relay
relay	Configure DHCPv6 relay agent
source-interface	Configure source interface for DHCPv6 relay
<i>interface-name</i>	Source interface

Command Mode

- /exec/configure /exec/configure/if-igp

ipv6 dhcp relay source-interface

[no] ipv6 dhcp relay source-interface

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
dhcp	Configure DHCPv6 relay
relay	Configure DHCPv6 relay agent
source-interface	Configure source interface for DHCPv6 relay

Command Mode

- /exec/configure /exec/configure/if-igp

ipv6 flood unknown ucast

[no] ipv6 flood unknown ucast

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
flood	Enable flood unknown ucast
unknown	Enable flood unknown ucast
uicast	Enable flood unknown ucast

Command Mode

- /exec/configure

ipv6 flow monitor input

[no] ipv6 flow monitor <monitorname> { input | output } [sampler <samplername>]

Syntax Description

ipv6	Configure IPv6 features
flow	NetFlow related commands
monitor	Apply a Flow Monitor to this interface
<i>monitorname</i>	Name of Flow Monitor
input	Apply Flow Monitor on input traffic
output	Apply Flow Monitor on output traffic
sampler	(Optional) Optional Sampler to apply to this Flow Monitor
<i>samplername</i>	(Optional) Name of Sampler

Command Mode

- /exec/configure/if-routing /exec/configure/if-mgmt-ether /exec/configure/if-any-tunnel
/exec/configure/if-eth-port-channel /exec/configure/if-eth-port-channel-p2p

ipv6 flow monitor input

```
[no] ipv6 flow monitor <monitorname> { input | output } [ sampler <samplername> ]
```

Syntax Description

ipv6	Configure IPv6 features
flow	NetFlow related commands
monitor	Apply a Flow Monitor to this interface
<i>monitorname</i>	Name of Flow Monitor
input	Apply Flow Monitor on input traffic
output	Apply Flow Monitor on output traffic
sampler	(Optional) Optional Sampler to apply to this Flow Monitor
<i>samplername</i>	(Optional) Name of Sampler

Command Mode

- /exec/configure/vlan

ipv6 flow monitor input

```
[no] ipv6 flow monitor <monitorname> input [ sampler <samplername> ]
```

Syntax Description

ipv6	Configure IPv6 features
flow	NetFlow related commands
monitor	Apply a Flow Monitor to this interface
<i>monitorname</i>	Name of Flow Monitor
input	Apply Flow Monitor on input traffic
sampler	(Optional) Optional Sampler to apply to this Flow Monitor
<i>samplername</i>	(Optional) Name of Sampler

Command Mode

- /exec/configure/vlan-config

ipv6 flow monitor input

```
[no] ipv6 flow monitor <monitorname> { input | output } [ sampler <samplername> ]
```

Syntax Description

ipv6	Configure IPv6 features
flow	NetFlow related commands
monitor	Apply a Flow Monitor to this interface
<i>monitorname</i>	Name of Flow Monitor
input	Apply Flow Monitor on input traffic
output	Apply Flow Monitor on output traffic
sampler	(Optional) Optional Sampler to apply to this Flow Monitor
<i>samplername</i>	(Optional) Name of Sampler

Command Mode

- /exec/configure/if-vlan-common

ipv6 flow monitor output

```
ipv6 flow monitor <monitorname> output [ sampler <samplername> ]
```

Syntax Description

ipv6	Configure IPv6 features
flow	NetFlow related commands
monitor	Apply a Flow Monitor to this interface
<i>monitorname</i>	Name of Flow Monitor
output	Apply Flow Monitor on output traffic
sampler	(Optional) Optional Sampler to apply to this Flow Monitor
<i>samplername</i>	(Optional) Name of Sampler

Command Mode

- /exec/configure/vlan-config

ipv6 flow monitor output

[no] ipv6 flow monitor <monitorname> output [sampler <samplername>]

Syntax Description

ipv6	Configure IPv6 features
flow	NetFlow related commands
monitor	Apply a Flow Monitor to this interface
<i>monitorname</i>	Name of Flow Monitor
output	Apply Flow Monitor on output traffic
sampler	(Optional) Optional Sampler to apply to this Flow Monitor
<i>samplername</i>	(Optional) Name of Sampler

Command Mode

- /exec/configure/vlan-config

ipv6 forward

ipv6 forward | no ipv6 forward

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
forward	Enable ipv6 forwarding on interface

Command Mode

- /exec/configure/if-vlan /exec/configure/if-vlan-range

ipv6 host

[no] ipv6 host <s0> <ipv6_0>

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
host	Add an entry to the ip hostname table
s0	Name of Host

Command Mode

- /exec/configure

ipv6 icmp test rfc-4884

ipv6 icmp test rfc-4884 <pkt_size>

Syntax Description

ipv6	Configure IPv6 features
icmp	ICMPv6 commands
test	test command
rfc-4884	RFC
<i>pkt_size</i>	ipv6 pkt size

Command Mode

- /exec/configure/if-igp

ipv6 icmp vip vmac protocol group

[no] ipv6 icmp vip <ipv6-addr> vmac <mac-addr> protocol <prot> group <id>

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
icmp	ICMPv6 commands
vip	Virtual IPv6 address
vmac	Virtual MAC address
<i>mac-addr</i>	Layer-2 MAC address
protocol	FHRP protocol
<i>prot</i>	HSRP VRRP GLBP
group	Group id
<i>id</i>	Group id

Command Mode

- /exec/configure/if-igp

ipv6 link-local

[no] ipv6 link-local [<ipv6-addr>] | ipv6 link-local <ipv6-addr>

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
link-local	Change format of link-local address

Command Mode

- /exec/configure/if-vlan /exec/configure/if-mgmt-config /exec/configure/if-gre-tunnel /exec/configure/if-6to4-tunnel /exec/configure/if-igp /exec/configure/if-vsan

ipv6 local policy route-map

ipv6 local policy route-map <route-map-name> | no ipv6 local policy route-map [<route-map-name> | <route-map-name>]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
local	Configure local PBR feature
policy	Configure PBR feature
route-map	Route-map for PBR
<i>route-map-name</i>	Route-map name
<i>route-map-name</i>	(Optional) Route-map name
<i>route-map-name</i>	(Optional) Known route-map name

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 mroute

```
[no] ipv6 mroute <ipv6-prefix> { { <next-hop> | <nh-prefix> } | <interface> } [ <pref> ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
mroute	Configure multicast RPF static route
<i>interface</i>	Interface for interface static multicast routes
<i>pref</i>	(Optional) Route preference
vrf	(Optional) Display per-VRF information
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 multicast last-hop-meter

```
ipv6 multicast last-hop-meter <kbps> [ <burst-size> ] | no ipv6 multicast last-hop-meter [ <kbps> [ <burst-size> ] ]
```

Syntax Description

no	Negate a command or set its defaults
ipv6	IPV6 protocol events
multicast	Configure IPV6 multicast global parameters
last-hop-meter	RPF-failed meter
<i>kbps</i>	Rate in kilobits/sec
<i>burst-size</i>	(Optional) Burst size in kilobytes

Command Mode

- /exec/configure

ipv6 multicast notify-interval

ipv6 multicast notify-interval <interval> | no ipv6 multicast notify-interval [<interval>]

Syntax Description

no	Negate a command or set its defaults
ipv6	IPV6 protocol events
multicast	Configure IPV6 multicast global parameters
notify-interval	M6RIB notification interval
<i>interval</i>	Timer interval in milliseconds

Command Mode

- /exec/configure

ipv6 multicast rpf-meter

```
ipv6 multicast rpf-meter { { <kbps> [ <burst-size> ] } | hardware-drop-all } | no ipv6 multicast rpf-meter [ {
<kbps> [ <burst-size> ] } | hardware-drop-all ]
```

Syntax Description

no	Negate a command or set its defaults
ipv6	IPV6 protocol events
multicast	Configure IPV6 multicast global parameters
rpf-meter	RPF-failed meter
<i>kbps</i>	Rate in kilobits/sec
<i>burst-size</i>	(Optional) Burst size in kilobytes
hardware-drop-all	Drop all RPF-failed packets in hardware

Command Mode

- /exec/configure

ipv6 nd cache limit

```
{ { ipv6 nd cache limit <max> } | { no ipv6 nd cache limit } } [ syslog <rate> ]
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
cache	ND cache parameters
limit	Limit size of ND adjacencies cache
<i>max</i>	Max no of ND adjacencies configured
syslog	(Optional) Syslog messages
<i>rate</i>	(Optional) Syslogs per second

Command Mode

- /exec/configure

ipv6 nd dad attempts

ipv6 nd dad attempts <attempt> | no ipv6 nd dad attempts

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
dad	Duplicate Address Detection
attempts	Set IPv6 Duplicate Address Detection Transmits
<i>attempt</i>	Number of attempts

Command Mode

- /exec/configure/if-igp

ipv6 nd hop-limit

```
{ { ipv6 nd hop-limit <hop-limit> } | { no ipv6 nd hop-limit [ <hop-limit> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
hop-limit	Sent in RA messages, tells hosts what hop-limit to use when originating IPv6 packets
<i>hop-limit</i>	Hop limit in IPv6 header

Command Mode

- /exec/configure/if-igp

ipv6 nd limit-incomplete-adjacency

```
{ { ipv6 nd limit-incomplete-adjacency <count> } | { no ipv6 nd limit-incomplete-adjacency [ <count> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
limit-incomplete-adjacency	Number of incomplete adjacencies
<i>count</i>	Count

Command Mode

- /exec/configure

ipv6 nd limit_threshold_am_queue

```
{ { ipv6 nd limit_threshold_am_queue <count> } | { no ipv6 nd limit_threshold_am_queue [ <count> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
limit_threshold_am_queue	Threshold AM queue
<i>count</i>	Count

Command Mode

- /exec/configure

ipv6 nd mac-extract

[no] ipv6 nd mac-extract [exclude nud-phase]

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
mac-extract	Extract next hop MAC address embedded in IPV6 address
exclude	(Optional) Exclude
nud-phase	(Optional) during NUD phase

Command Mode

- /exec/configure/if-igp

ipv6 nd managed-config-flag

[no] ipv6 nd managed-config-flag

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
managed-config-flag	Sent in RA messages, tells hosts to use stateful address auto-configuration to obtain address information

Command Mode

- /exec/configure/if-igp

ipv6 nd mtu

```
{ { ipv6 nd mtu <mtu> } | { no ipv6 nd mtu [ <mtu> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
mtu	Sent in RA messages, tells hosts what MTU to use on this link
<i>mtu</i>	MTU in bytes

Command Mode

- /exec/configure/if-igp

ipv6 nd ns-interval

```
{ { ipv6 nd ns-interval <interval> [ <retry-count> ] } | { no ipv6 nd ns-interval [ <interval> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
ns-interval	Retransmission interval between sending Neighbor-Solicitation messages
<i>interval</i>	Interval in milliseconds
<i>retry-count</i>	(Optional) NS Retry count

Command Mode

- /exec/configure/if-igp

ipv6 nd off-list timeout

{ ipv6 nd off-list timeout <time> } | { no ipv6 nd off-list timeout }

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	Display Neighbor Discovery interface information
off-list	off-list
timeout	Expire time
<i>time</i>	Expire time value in seconds

Command Mode

- /exec/configure

ipv6 nd other-config-flag

[no] ipv6 nd other-config-flag

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
other-config-flag	Sent in RA messages, tells hosts to use stateful auto-configuration to obtain non-address related information

Command Mode

- /exec/configure/if-igp

ipv6 nd prefix

```
{ { ipv6 nd prefix <prefix> [ { <val-life> | infinite } { <perf-life> | infinite } [ [ no-autoconfig ] [ no-onlink ]
[ no-rtr-address ] [ off-link ] ] | no-advertise ] } | { no ipv6 nd prefix <prefix> } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
prefix	IPv6 Prefix to advertise in RA
<i>val-life</i>	(Optional) Valid Lifetime (secs)
infinite	(Optional) Infinite Valid Lifetime
no-advertise	(Optional) Do not advertise prefix
<i>perf-life</i>	(Optional) Preferred Lifetime (secs)
infinite	(Optional) Infinite Preferred Lifetime
no-autoconfig	(Optional) Do not use prefix for autoconfiguration
no-onlink	(Optional) Do not use prefix for onlink determination
no-rtr-address	(Optional) Do not send full router address in prefix advert
off-link	(Optional) Prefix is offlink

Command Mode

- /exec/configure/if-igp

ipv6 nd prefix default

```
{ { ipv6 nd prefix default [ { <val-life> | infinite } { <perf-life> | infinite } [ [ no-autoconfig ] [ no-onlink ] [ no-rtr-address ] [ off-link ] ] | no-advertise ] } | { no ipv6 nd prefix default } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
prefix	IPv6 Prefix to advertise in RA
default	Specify prefix default parameters
<i>val-life</i>	(Optional) Valid Lifetime (secs)
infinite	(Optional) Infinite Valid Lifetime
no-advertise	(Optional) Do not advertise prefix
<i>perf-life</i>	(Optional) Preferred Lifetime (secs)
infinite	(Optional) Infinite Preferred Lifetime
no-autoconfig	(Optional) Do not use prefix for autoconfiguration
no-onlink	(Optional) Do not use prefix for onlink determination
no-rtr-address	(Optional) Do not send full router address in prefix advert
off-link	(Optional) Prefix is offlink

Command Mode

- /exec/configure/if-igp

ipv6 nd process adjacency statistics

[no] ipv6 nd process adjacency statistics

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
process	Process Adjacency Statistics
adjacency	Adjacency
statistics	Statistics

Command Mode

- /exec/configure

ipv6 nd ra-interval

```
ipv6 nd ra-interval <interval> [ min <min-interval> ] | no ipv6 nd ra-interval [ <interval> ] [ min <min-interval> ]
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
ra-interval	Interval between sending Router-Advertisement messages
<i>interval</i>	Interval in seconds
min	(Optional) Minimum interval between sending RA messages
<i>min-interval</i>	(Optional) Interval in seconds

Command Mode

- /exec/configure/if-igp

ipv6 nd ra-lifetime

```
{ { ipv6 nd ra-lifetime <lifetime> } | { no ipv6 nd ra-lifetime [ <lifetime> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
ra-lifetime	Sent in RA messages, Router Lifetime of a default router, 0 means this router will not be the default router
<i>lifetime</i>	Lifetime in seconds

Command Mode

- /exec/configure/if-igp

ipv6 nd ra dns search-list sequence

[no] ipv6 nd ra dns search-list <dnssl> [{ <dnssl_life> | infinite }] sequence <seqno>

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
ra	Router Advertisement
dns	Domain Name System
search-list	DNS Search List
<i>dnssl</i>	Configure DNS Search List to advertise in RA
<i>dnssl_life</i>	(Optional) Configure IPv6 DNS Search list life time
infinite	(Optional) Configure IPv6 DNS Search list life time with infinite
sequence	Sequence of Search List
<i>seqno</i>	Sequence number

Command Mode

- /exec/configure/if-igp

ipv6 nd ra dns search-list suppress

[no] ipv6 nd ra dns search-list suppress

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
ra	Router Advertisement
dns	Domain Name System
search-list	DNS Search List
suppress	Disable sending DNSSL in Router-Advertisement messages

Command Mode

- /exec/configure/if-igp

ipv6 nd ra dns server sequence

[no] ipv6 nd ra dns server <ipv6_addr> [{ <rdnss_life> | infinite }] sequence <seqno>

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
ra	Router Advertisement
dns	Domain Name System
server	Domain Name System Server
<i>rdnss_life</i>	(Optional) Configure IPv6 DNS Server life time
infinite	(Optional) Configure IPv6 DNS Server life time with infinite
sequence	Sequence of Server
<i>seqno</i>	Sequence number

Command Mode

- /exec/configure/if-igp

ipv6 nd ra dns server suppress

[no] ipv6 nd ra dns server suppress

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
ra	Router Advertisement
dns	Domain Name System
server	Domain Name System Server
suppress	Disable sending RDNSS in Router-Advertisement messages

Command Mode

- /exec/configure/if-igp

ipv6 nd ra route suppress

[no] ipv6 nd ra route suppress

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
ra	Router Advertisement
route	Route Information Option in RFC 4191
suppress	Disable sending Route Information Options in RA messages

Command Mode

- /exec/configure/if-igp

ipv6 nd reachable-time

```
{ { ipv6 nd reachable-time <time> } | { no ipv6 nd reachable-time [ <time> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
reachable-time	Sent in RA messages, advertised time when a node considers a neighbor up after receiving a reachability confirmation
<i>time</i>	Time in milliseconds

Command Mode

- /exec/configure/if-igp

ipv6 nd retrans-timer

```
{ { ipv6 nd retrans-timer <time> } | { no ipv6 nd retrans-timer [ <time> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
retrans-timer	Sent in RA messages, advertised time between NS messages
<i>time</i>	Time in milliseconds

Command Mode

- /exec/configure/if-igp

ipv6 nd route route-preference High Low Medium infinite

```
{ { ipv6 nd route <prefix> route-preference { High | Low | Medium } { <lifetime> | infinite } [ {
verify-reachability } ] } | { no ipv6 nd route { <prefix> | all } route-preference } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
route	Route Information Option in RFC 4191
route-preference	Route preference value
High	High router preference
Low	Low router preference
Medium	Medium router preference
<i>lifetime</i>	Lifetime (secs)
infinite	Infinite lifetime of prefix
verify-reachability	(Optional) Verify if route is present in Route table
all	Remove all the Router Preference prefixes

Command Mode

- /exec/configure/if-igp

ipv6 nd router-preference High Low Medium

```
{ { ipv6 nd router-preference { High | Low | Medium } } | { no ipv6 nd router-preference } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
router-preference	Set default router preference value
High	High default router preference
Low	Low default router preference
Medium	Medium default router preference

Command Mode

- /exec/configure/if-igp

ipv6 nd solicit-na accept

```
{ ipv6 nd solicit-na { { accept [ no-probe | <interval> ] | [ no-accept ] } | { accept1 [ no-probe1 | <interval1> ] | [ no-accept1 ] } } } | { no ipv6 nd solicit-na }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
solicit-na	Solicited Neighbor Advertisemen
accept	Accept Solicit NA without incomplete entry
no-probe	(Optional) Do not probe, create a Reachable Entry
<i>interval</i>	(Optional) Probe Interval in Seconds
no-accept	(Optional) Do not accept Solicit NA without incomplete entry
accept1	Accept Solicit NA without incomplete entry
no-probe1	(Optional) Do not probe, create a Reachable Entry
<i>interval1</i>	(Optional) Probe Interval in Seconds
no-accept1	(Optional) Do not accept Solicit NA without incomplete entry

Command Mode

- /exec/configure

ipv6 nd suppress-ra

[no] ipv6 nd suppress-ra [mtu]

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	ICMPv6 Neighbor Discovery commands
suppress-ra	Disable sending Router-Advertisement messages
mtu	(Optional) Disable sending MTU in Router-Advertisement messages

Command Mode

- /exec/configure/if-igp

ipv6 nd synchronize

[no] ipv6 nd synchronize

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	Display Neighbor Discovery interface information
synchronize	CFS synchronize

Command Mode

- /exec/configure/vpc-domain

ipv6 nd synchronize

ipv6 nd synchronize [pull | push]

Syntax Description

ipv6	Configure IPv6 features
nd	Display Neighbor Discovery interface information
synchronize	CFS synchronize
pull	(Optional) Initiate CFS pull request
push	(Optional) Initiate CFS push message

Command Mode

- /exec

ipv6 neighbor

[no] ipv6 neighbor <ipv6-addr> [<mac-addr>] | ipv6 neighbor <ipv6-addr> <mac-addr>

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
neighbor	Configure IPv6 address to layer-2 address mapping
<i>mac-addr</i>	(Optional) Layer-2 MAC address

Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config /exec/configure/if-vlan-common

ipv6 pim anycast-rp

[no] ipv6 pim anycast-rp <anycast-rp> <rp-addr>

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
anycast-rp	Configure an RP in an Anycast-RP set (using PIM6)

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim auto-rp listen

{ ipv6 pim auto-rp { listen | forward } + } | { no ipv6 pim auto-rp [{ listen | forward } +] }

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
auto-rp	Enable listening or forwarding of Auto-RP messages
listen	Listen to Auto-RP messages
forward	Forward Auto-RP messages

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim auto-rp mapping-agent-policy

```
{ ipv6 pim auto-rp mapping-agent-policy { <route-map-name> | <rtr_pol_name> } | no ipv6 pim auto-rp
mapping-agent-policy [ <route-map-name> | <rtr_pol_name> ] }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
auto-rp	Auto-RP protocol RP-distribution configuration
mapping-agent-policy	Specify policy for filtering Mapping Agent messages
<i>route-map-name</i>	A route-map name
<i>rtr_pol_name</i>	An existing routing-rules policy

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim auto-rp mapping-agent send-rp-discovery

```
{ { ipv6 pim { { auto-rp mapping-agent } | send-rp-discovery } <interface> [ scope <ttl> ] } | { no ipv6 pim
{ { auto-rp mapping-agent } | send-rp-discovery } [ <interface> ] [ scope <ttl> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
auto-rp	Auto-RP protocol RP-distribution configuration
pim	PIM6 global configuration commands
send-rp-discovery	Configures router to send Auto-RP Discovery messages
mapping-agent	Configures router as an Auto-RP RP-mapping agent
<i>interface</i>	IPv6 address of interface for Auto-RP Announce messages
scope	(Optional) Configure the scope of Auto-RP Discovery messages
<i>ttl</i>	(Optional) TTL value for scope

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim auto-rp rp-candidate-policy

```
{ ipv6 pim auto-rp rp-candidate-policy { <route-map-name> | <rtr_pol_name> } | no ipv6 pim auto-rp
rp-candidate-policy [ <route-map-name> | <rtr_pol_name> ] }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
auto-rp	Auto-RP protocol RP-distribution configuration
rp-candidate-policy	Specify policy for filtering RP candidate messages
<i>route-map-name</i>	A route-map name
<i>rtr_pol_name</i>	An existing routing-rules policy

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim auto-rp rp-candidate send-rp-announce group

```
{ { ipv6 pim { { auto-rp rp-candidate } | send-rp-announce } <interface> { group-list <prefix> | route-map
<route-map-name> } { [ scope <ttl> ] | [ interval <interval> ] | [ bidir ] } + } | { no ipv6 pim { { auto-rp
rp-candidate } | send-rp-announce } [ <interface> ] [ group-list <prefix> ] [ route-map <route-map-name> ]
{ [ scope <ttl> ] | [ interval <interval> ] | [ bidir ] } } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
auto-rp	Auto-RP protocol RP-distribution configuration
send-rp-announce	Configures router to send Auto-RP Announce messages
rp-candidate	Configures router to be an Auto-RP candidate RP
<i>interface</i>	IPv6 address of interface for announce messages
group-list	Group range list
route-map	Group range policy for Auto-RP Candidate RP
<i>route-map-name</i>	route-map name
scope	(Optional) Configure the scope of Auto-RP Announce messages
<i>ttl</i>	(Optional) TTL value for scope
interval	(Optional) Auto-RP Announce message transmission interval
<i>interval</i>	(Optional) Interval in seconds
bidir	(Optional) Group range advertised in PIM6 bidirectional mode

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim bidir-rp-limit

[no] ipv6 pim bidir-rp-limit <limit>

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
bidir-rp-limit	Configures maximum Bidir RPs for IPv6 PIM in this VRF
<i>limit</i>	Set limit for Bidir RPs permitted in IPv6 PIM

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim border

[no] ipv6 pim border

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 interface configuration commands
border	Configures interface to be a boundary of a PIM6 domain

Command Mode

- /exec/configure/if-igp

ipv6 pim bsr-candidate

```
{ { ipv6 pim [ bsr ] bsr-candidate <interface> [ hash-len <hash-len> ] [ priority <priority> ] } | { no ipv6 pim [ bsr ] bsr-candidate [ <interface> ] [ hash-len <hash-len> ] [ priority <priority> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
bsr	(Optional) Bootstrap protocol RP-distribution configuration
bsr-candidate	Configure router as a Bootstrap Router candidate
<i>interface</i>	Use IPV6 address of interface for Bootstrap messages
hash-len	(Optional) Hash mask length used in Bootstrap messages
<i>hash-len</i>	(Optional) Hash mask length value
priority	(Optional) BSR priority used in Bootstrap messages
<i>priority</i>	(Optional) BSR priority value

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim bsr bsr-policy

```
{ ipv6 pim bsr bsr-policy { <route-map-name> | <rtr_pol_name> } | no ipv6 pim bsr bsr-policy [ <route-map-name> | <rtr_pol_name> ] }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
bsr	Bootstrap protocol RP-distribution configuration
bsr-policy	Specify policy for filtering BSR messages
<i>route-map-name</i>	A route-map name
<i>rtr_pol_name</i>	An existing routing-rules policy

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim bsr listen

{ ipv6 pim bsr { listen | forward } + } | { no ipv6 pim bsr [{ listen | forward } +] }

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
bsr	Bootstrap protocol RP-distribution configuration
listen	Listen to Bootstrap/Candidate-RP messages
forward	Forward Bootstrap/Candidate-RP messages

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim bsr rp-candidate-policy

```
{ ipv6 pim bsr rp-candidate-policy { <route-map-name> | <rtr_pol_name> } | no ipv6 pim bsr  
rp-candidate-policy [ <route-map-name> | <rtr_pol_name> ] }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
bsr	Bootstrap protocol RP-distribution configuration
rp-candidate-policy	Specify policy for filtering RP candidate messages
<i>route-map-name</i>	A route-map name
<i>rtr_pol_name</i>	An existing routing-rules policy

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim dr-priority

```
{ { ipv6 pim dr-priority <priority> } | { no ipv6 pim dr-priority [ <priority> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 interface configuration commands
dr-priority	Configures priority for PIM6 DR election on interface
<i>priority</i>	Priority value

Command Mode

- /exec/configure/if-igp

ipv6 pim event-history assert-receive

```
[no] ipv6 pim event-history assert-receive { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
assert-receive	Assert-receive events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 pim event-history bidir

```
[no] ipv6 pim event-history bidir { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
bidir	Bidir events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 pim event-history hello

```
[no] ipv6 pim event-history hello { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
hello	Hello events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 pim event-history join-prune-summary

```
[no] ipv6 pim event-history join-prune-summary { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
join-prune-summary	Join/Prune-Summary events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 pim event-history join-prune

```
[no] ipv6 pim event-history join-prune { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
join-prune	Join/Prune events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 pim event-history null-register

```
[no] ipv6 pim event-history null-register { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
null-register	Reg events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 pim event-history packet

```
[no] ipv6 pim event-history packet { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
packet	Packet events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 pim event-history pim6-internal

```
[no] ipv6 pim event-history pim6-internal { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
pim6-internal	Internal events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 pim event-history rp

```
[no] ipv6 pim event-history rp { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
rp	RP events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 pim event-history vrf

```
[no] ipv6 pim event-history vrf { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
event-history	Configure event-history buffer
vrf	VRF events for PIM6
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 pim flush-routes

[no] ipv6 pim flush-routes

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
flush-routes	Remove routes when restarting PIM6

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim hello-authentication ah-md5

```
{ ipv6 pim hello-authentication ah-md5 <auth-key> | no ipv6 pim hello-authentication ah-md5 [ <auth-key>
] }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 interface configuration commands
hello-authentication	Add AH header option to Hellos
ah-md5	Use MD5 HMAC
<i>auth-key</i>	MD5 authentication key

Command Mode

- /exec/configure/if-igp

ipv6 pim hello-interval

```
{ { ipv6 pim hello-interval { <interval-min> | <interval-max> } } | { no ipv6 pim hello-interval [ <interval-min> | <interval-max> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 interface configuration commands
hello-interval	Configures the Hello interval for interface
<i>interval-min</i>	Interval in milliseconds
<i>interval-max</i>	Interval in milliseconds

Command Mode

- /exec/configure/if-igp

ipv6 pim jp-delay

```
{ { ipv6 pim jp-delay <delay> } | { no ipv6 pim jp-delay [ <delay> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
jp-delay	Join-Prune message inter-packet delay
<i>delay</i>	Delay value in microseconds

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim jp-policy

```
{ ipv6 pim jp-policy { <route-map-name> | <rtr_pol_name> } [ in | out ] | no ipv6 pim jp-policy [ <route-map-name> | <rtr_pol_name> ] [ in | out ] }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 interface configuration commands
jp-policy	Specify policy for receiving Join-Prune messages
<i>route-map-name</i>	A route-map name
<i>rtr_pol_name</i>	An existing routing-rules policy
in	(Optional) Inbound
out	(Optional) Outbound

Command Mode

- /exec/configure/if-igp

ipv6 pim log-neighbor-changes

[no] ipv6 pim log-neighbor-changes

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
log-neighbor-changes	Log up/down PIM6 neighbor transitions

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim neighbor-policy

```
{ ipv6 pim neighbor-policy <route-map-name> | no ipv6 pim neighbor-policy [ <route-map-name> ] }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 interface configuration commands
neighbor-policy	Configures a neighbor policy for filtering adjacencies
<i>route-map-name</i>	A route-map name

Command Mode

- /exec/configure/if-igp

ipv6 pim passive

[no] ipv6 pim passive

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 interface configuration commands
passive	Interface in passive mode. No send/recv

Command Mode

- /exec/configure/if-igp

ipv6 pim register-policy

```
{ ipv6 pim register-policy { <route-map-name> | <rtr_pol_name> } | no ipv6 pim register-policy [ <route-map-name> | <rtr_pol_name> ] }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
register-policy	Specify policy for receiving Register messages
<i>route-map-name</i>	A route-map name
<i>rtr_pol_name</i>	An existing routing-rules policy

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim register-rate-limit

```
{ { ipv6 pim register-rate-limit <rate> } | { no ipv6 pim register-rate-limit [ <rate> ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
register-rate-limit	Rate limit for PIM data registers
<i>rate</i>	Packets per second

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim rp-address

```
{ { ipv6 pim rp-address <rp-address> [ group-list <prefix> | route-map <route-map-name> | prefix-list
<prefix-list-name> ] [ bidir ] [ override ] } | { no ipv6 pim rp-address <rp-address> [ group-list <prefix> |
route-map <route-map-name> | prefix-list <prefix-list-name> ] [ bidir ] [ override ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
rp-address	Configure static RP for group range
group-list	(Optional) Group range for static RP
route-map	(Optional) Route Map policy for static RP
<i>route-map-name</i>	(Optional) route-map name
prefix-list	(Optional) Prefix List policy for static RP
<i>prefix-list-name</i>	(Optional) prefix-list name
bidir	(Optional) Group range is treated in PIM6 bidirectional mode
override	(Optional) Overrides the dynamically learnt RPs

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim rp-candidate group

```
{ { ipv6 pim [ bsr ] rp-candidate <interface> { group-list <prefix> | route-map <route-map-name> } [ priority
<priority> ] [ interval <interval> ] [ bidir ] } | { no ipv6 pim [ bsr ] rp-candidate [ <interface> ] [ group-list
<prefix> ] [ route-map <route-map-name> ] [ priority <priority> ] [ interval <interval> ] [ bidir ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
bsr	(Optional) Bootstrap protocol RP-distribution configuration
rp-candidate	Configure router as a Rendezvous Point (RP) candidate
<i>interface</i>	IPv6 address of interface for Candidate-RP messages
group-list	Group range list
route-map	Group range policy for Candidate RP
<i>route-map-name</i>	route-map name
priority	(Optional) RP priority used in Candidate-RP messages
<i>priority</i>	(Optional) RP priority value
interval	(Optional) Bootstrap message transmission interval
<i>interval</i>	(Optional) Interval in seconds
bidir	(Optional) Group range advertised in PIM6 bidirectional mode

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim sparse-mode

ipv6 pim sparse-mode | no ipv6 pim [sparse-mode]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 interface configuration commands
sparse-mode	Configures sparse-mode PIMv6 on interface

Command Mode

- /exec/configure/if-igp

ipv6 pim ssm

```
{ ipv6 pim ssm { { range { <group> + | none } } | { route-map <route-map-name> } } | no ipv6 pim ssm { { range { <group> + | none } } | { route-map <route-map-name> } } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
ssm	Source Specific Multicast (SSM) groups
range	Configure explicit group ranges
none	Remove all SSM group ranges
route-map	Group range policy for SSM range
<i>route-map-name</i>	A route-map name

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim state-limit

```
{ { ipv6 pim state-limit <max-states> [ reserved <route-map-name> <max-reserved> ] } | { no ipv6 pim state-limit [ <max-states> [ reserved <route-map-name> <max-reserved> ] ] } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
state-limit	Configures State limit
<i>max-states</i>	Maximum (*,G)/(S,G) entries allowed in this VRF
reserved	(Optional) Configures Reserved limit
<i>route-map-name</i>	(Optional) Route-map name
<i>max-reserved</i>	(Optional) Maximum reserved (*,G)/(S,G) entries allowed in this VRF

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 pim use-shared-tree-only spt-threshold infinity group-list

```
{ ipv6 pim { use-shared-tree-only | spt-threshold infinity } group-list <route-map-name> } | { no ipv6 pim {
use-shared-tree-only | spt-threshold infinity } [ group-list <route-map-name> ] }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
pim	PIM6 global configuration commands
use-shared-tree-only	Use (*,G) only state, no source state is created
spt-threshold	Source-tree switching threshold
infinity	Never switch to source-tree
group-list	Specify group ranges through policy
<i>route-map-name</i>	Route-map name

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 policy route-map

```
ipv6 policy route-map <route-map-name> | no ipv6 policy route-map [ <route-map-name> | <route-map-name> ]
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
policy	Configure PBR feature
route-map	Route-map for PBR
<i>route-map-name</i>	Route-map name
<i>route-map-name</i>	(Optional) Route-map name
<i>route-map-name</i>	(Optional) Known route-map name

Command Mode

- /exec/configure/if-igp

ipv6 port traffic-filter

[no] ipv6 port traffic-filter <name> <inout>

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
port	Port policy
traffic-filter	Specify access control for packets
<i>name</i>	List name
<i>inout</i>	Traffic direction

Command Mode

- /exec/configure/if-set-acl-l2

ipv6 prefix-list description

```
{ ipv6 prefix-list <ipv6-pfl-name> description <line> } | { no ipv6 prefix-list <ipv6-pfl-name> description }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
prefix-list	Build a prefix list
<i>ipv6-pfl-name</i>	Name of prefix-list
<i>ipv6-pfl-name</i>	Known prefix-list name
description	Description of the IPv6 prefix list
<i>line</i>	IPv6 prefix-list description string

Command Mode

- /exec/configure

ipv6 prefix-list permit

```
{ ipv6 prefix-list <ipv6-pfl-name> { permit | deny } <prefix> { [ eq <equal> ] [ ge <greater> ] [ le <lesser> ] } } | { no ipv6 prefix-list { <ipv6-pfl-name> | <ipv6-pfl-name> } [ { permit | deny } <prefix> { [ eq <equal> ] [ ge <greater> ] [ le <lesser> ] } ] }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
prefix-list	Build a prefix list
<i>ipv6-pfl-name</i>	Name of prefix-list
<i>ipv6-pfl-name</i>	Name of prefix-list
<i>ipv6-pfl-name</i>	Known prefix-list name
permit	Specify routes to forward
deny	Specify routes to reject
eq	(Optional) Exact prefix length to be matched
<i>equal</i>	(Optional) Exact prefix length
ge	(Optional) Minimum prefix length to be matched
<i>greater</i>	(Optional) Minimum prefix length
le	(Optional) Maximum prefix length to be matched
<i>lesser</i>	(Optional) Maximum prefix length

Command Mode

- /exec/configure

ipv6 prefix-list seq permit

```
{ ipv6 prefix-list <ipv6-pfl-name> seq <seq> { permit | deny } <prefix> { [ eq <equal> ] | [ ge <greater> ] | [ le <lesser> ] } } | { no ipv6 prefix-list { <ipv6-pfl-name> | <ipv6-pfl-name> } seq <seq> [ { permit | deny } <prefix> { [ eq <equal> ] | [ ge <greater> ] | [ le <lesser> ] } } }
```

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
prefix-list	Build a prefix list
<i>ipv6-pfl-name</i>	Name of prefix-list
<i>ipv6-pfl-name</i>	Name of prefix-list
<i>ipv6-pfl-name</i>	Known prefix-list name
seq	Sequence number of an entry
<i>seq</i>	Sequence number
permit	Specify routes to forward
deny	Specify routes to reject
eq	(Optional) Exact prefix length to be matched
<i>equal</i>	(Optional) Exact prefix length
ge	(Optional) Minimum prefix length to be matched
<i>greater</i>	(Optional) Minimum prefix length
le	(Optional) Maximum prefix length to be matched
<i>lesser</i>	(Optional) Maximum prefix length

Command Mode

- /exec/configure

ipv6 queue-packets-limit

[no] ipv6 queue-packets-limit [<limit>]

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
queue-packets-limit	Maximum number of queue packets for unresolved NDS
<i>limit</i>	(Optional) Unresolved ND queue packet limit

Command Mode

- /exec/configure

ipv6 queue-packets

[no] ipv6 queue-packets

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
queue-packets	Queue 1 packet when triggered NS is sent

Command Mode

- /exec/configure

ipv6 redirects

ipv6 [nd] redirects | no ipv6 [nd] redirects

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
nd	(Optional) ICMPv6 Neighbor Discovery commands
redirects	Enable sending ICMPv6 Redirect messages

Command Mode

- /exec/configure/if-igp /exec/configure/if-mgmt-config

ipv6 route

```
[no] ipv6 route <ipv6-prefix> { <interface> | { { <link-local> <interface-link-local> } | { <pin-interface>
<next-hop> } | { <next-hop> | <nh-prefix> } | { <vlan-interface> } } [ vrf { <vrf-name> | <vrf-known-name>
} ] ] [ track <object-num> ] [ name <rt-name> ] [ <pref> | tag <tag-value> ] +
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
route	Configure IPv6 unicast static route
<i>interface</i>	Interface for interface static routes
<i>vlan-interface</i>	vlan interface
name	(Optional) Specify name of the next hop
<i>rt-name</i>	(Optional) Name of next hop
<i>pin-interface</i>	Pin interface
<i>interface-link-local</i>	Interface for interface static routes
track	(Optional) Specify the Object to be Tracked
<i>object-num</i>	(Optional) Track Object Number
vrf	(Optional) VRF for next-hop if different from this vrf
<i>vrf-name</i>	(Optional) VRF name
<i>vrf-known-name</i>	(Optional) Known VRF name
<i>pref</i>	(Optional) Route preference
tag	(Optional) Supply tag value with static route
<i>tag-value</i>	(Optional) 32-bit value for tag

Command Mode

- /exec/configure /exec/configure/vrf

ipv6 route static bfd

[no] ipv6 route static bfd <pin-interface> <next-hop>

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IP features
route	Route information
static	Static route based configuration
bfd	Enable bfd detection on static route
<i>pin-interface</i>	Interface on which bfd has to be enabled

Command Mode

- /exec/configure /exec/configure/config-mgmt /exec/configure/vrf

ipv6 router isis

[no] ipv6 router isis <tag>

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
router	Enable a routing process
isis	Intermediate System to Intermediate System (IS-IS)
<i>tag</i>	Process tag

Command Mode

- /exec/configure/if-igp

ipv6 router ospfv3 area

[no] ipv6 router ospfv3 <tag> area { <area-id-ip> | <area-id-int> } [secondaries none]

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
router	Enable a routing process
ospfv3	OSPFv3 configuration commands
<i>tag</i>	Process tag
area	Area associated with interface
<i>area-id-ip</i>	OSPFv3 area ID in IP address format
<i>area-id-int</i>	OSPFv3 area ID as a decimal format
secondaries	(Optional) Do not include secondary IPv6 addresses
none	(Optional) Do not include secondary IPv6 addresses

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

ipv6 router ospfv3 multi-area

[no] ipv6 router ospfv3 <tag> multi-area <area-id-ip>

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
router	Enable a routing process
ospfv3	OSPFv3 configuration commands
<i>tag</i>	Process tag
multi-area	Multi-Area associated with interface
<i>area-id-ip</i>	Area Id as an integer or ip address

Command Mode

- /exec/configure/if-igp /exec/configure/if-gre-tunnel /exec/configure/if-mpls-tunnel /exec/configure/if-mgmt-config

ipv6 routing event-history size

[no] ipv6 routing event-history { am | cli | detail | errors | general | ha | lfe | recursive-next-hop | summary | ufdm | ufdm-detail | ufdm-summary } size { <size_in_text> | <size_in_bytes> }

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
routing	Routing information
event-history	Configure routing event log
am	AM
cli	CLI
detail	Detail
errors	Errors
general	General
ha	HA
lfe	LFE
recursive-next-hop	Recursive next hop
summary	Summary
ufdm	UFDM
ufdm-detail	UFDM Detail
ufdm-summary	UFDM Summary
size	Size of buffer
<i>size_in_text</i>	Buffer size
<i>size_in_bytes</i>	Enter an integer value for the event history buffer

Command Mode

- /exec/configure

ipv6 routing multicast event-history cli

[no] ipv6 routing multicast event-history cli { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
routing	Routing information
multicast	Configure multicast
event-history	Configure event history buffers
cli	CLI events for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 routing multicast event-history mfdm-debug

```
[no] ipv6 routing multicast event-history mfdm-debug { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
routing	Routing information
multicast	Configure multicast
event-history	Configure event history buffers
mfdm-debug	MFDM events for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 routing multicast event-history mfdm-events

```
[no] ipv6 routing multicast event-history mfdm-events { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
routing	Routing information
multicast	Configure multicast
event-history	Configure event history buffers
mfdm-events	Non-periodic MFDM events in MRIB
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 routing multicast event-history mfdm-stats

```
[no] ipv6 routing multicast event-history mfdm-stats { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
routing	Routing information
multicast	Configure multicast
event-history	Configure event history buffers
mfdm-stats	MFDM-stats events for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 routing multicast event-history rib-summary

```
[no] ipv6 routing multicast event-history rib-summary { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
routing	Routing information
multicast	Configure multicast
event-history	Configure event-history buffers
rib-summary	RIB events for MRIB-summary
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 routing multicast event-history rib

[no] ipv6 routing multicast event-history rib { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
routing	Routing information
multicast	Configure multicast
event-history	Configure event history buffers
rib	RIB events for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 routing multicast event-history vrf

```
[no] ipv6 routing multicast event-history vrf { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
routing	Routing information
multicast	Configure multicast
event-history	Configure event history buffers
vrf	VRF events for MRIB
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure

ipv6 routing multicast holddown

ipv6 routing multicast holddown { <route-holddown-sec> | <none> } | no ipv6 routing multicast holddown [<route-holddown-sec> | <none>]

Syntax Description

no	Negate a command or set its defaults
ipv6	Configure IPv6 features
routing	Routing information
multicast	Configure multicast
holddown	Initial holddown period
<i>route-holddown-sec</i>	Delay in seconds
<i>none</i>	Disable holddown

Command Mode

- /exec/configure

ipv6 routing multicast software-replication

[no] ipv6 routing multicast software-replication

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
routing	Routing information
multicast	Configure multicast
software-replication	Enable software replication of PIM ASM leak packets

Command Mode

- /exec/configure

ipv6 source-route

[no] ipv6 source-route [rh0]

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
source-route	Process IPv6 Routing Header
rh0	(Optional) Process IPv6 Routing Header - Type 0 (RH0)

Command Mode

- /exec/configure

ipv6 switch-packets

[no] ipv6 switch-packets [lla]

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
switch-packets	Switch ND packets received on core ports
lla	(Optional) Switch ND packets targeted to Link local address on core ports

Command Mode

- /exec/configure

ipv6 traffic-filter

[no] ipv6 traffic-filter <name> <inout>

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
traffic-filter	Specify access control for packets
<i>name</i>	List name
<i>inout</i>	Traffic direction

Command Mode

- /exec/configure/if-set-acl-l3

ipv6 unreachable

[no] ipv6 [icmp] unreachable

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
icmp	(Optional) ICMPv6 commands
unreachables	Enable sending ICMPv6 Unreachable messages (port-unreachables are always rate-limit enabled)

Command Mode

- /exec/configure/if-igp

ipv6 verify unicast source reachable-via rx

[no] ipv6 verify unicast source reachable-via { rx | any [allow-default] }

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
verify	Unicast Reverse Path Forwarding
unicast	Unicast Reverse Path Forwarding
source	Validation of source address
reachable-via	Specify reachability check to apply to the source address
rx	Source is reachable via interface on which packet was received
any	Source is reachable via any interface
allow-default	(Optional) Loose Default Route Unicast Reverse Path Forwarding

Command Mode

- /exec/configure/if-igp

ipv6 vip

[no] ipv6 vip <ipv6-addr>

Syntax Description

no	(Optional) Negate a command or set its defaults
ipv6	Configure IPv6 features
vip	Virtual IPv6 address

Command Mode

- /exec/configure/if-igp

is-type

is-type <is-type> | no is-type [<is-type>]

Syntax Description

no	Negate a command or set its defaults
is-type	IS type for this IS-IS process
<i>is-type</i>	IS-IS IS type

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

ishow cli find nodes

ishow cli find nodes [<component>] [recurse]

Syntax Description

ishow	Show internal information
cli	Show CLI information
find	
nodes	display
<i>component</i>	(Optional) display
recurse	(Optional) go

Command Mode

- /exec

ishow cli modes

ishow cli modes

Syntax Description

ishow	Show internal information
cli	Show CLI information
modes	show

Command Mode

- /exec

ishow cli nodes

ishow cli nodes [<mode>]

Syntax Description

ishow	Show internal information
cli	Show CLI information
nodes	show
<i>mode</i>	(Optional) mode

Command Mode

- /exec

ishow cli paths

ishow cli paths <component> [<type>]

Syntax Description

ishow	Show internal information
cli	Show CLI information
paths	show
<i>component</i>	component
<i>type</i>	(Optional)

Command Mode

- /exec

ishow cli tags

ishow cli tags

Syntax Description

ishow	Show internal information
cli	Show CLI information
tags	

Command Mode

- /exec

ishow core backtrace

ishow core <pid> backtrace

Syntax Description

ishow	Show internal information
core	display info from core file
<i>pid</i>	PID from 'show cores
backtrace	display backtrace -- needs enough space to unzip the core file!

Command Mode

- /exec

isis authentication-check

[no] isis authentication-check

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
authentication-check	Check authentication on received hellos

Command Mode

- /exec/configure/if-p2p

isis authentication-check level-1

[no] isis authentication-check level-1

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
authentication-check	Check authentication on received hellos
level-1	Configure authentication check for level-1 IIHs

Command Mode

- /exec/configure/if-ma

isis authentication-check level-2

[no] isis authentication-check level-2

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
authentication-check	Check authentication on received hellos
level-2	Configure authentication check for level-2 IIHs

Command Mode

- /exec/configure/if-ma

isis authentication-type cleartext

```
{ isis authentication-type { cleartext | md5 } | no isis authentication-type [ { cleartext | md5 } ] }
```

Syntax Description

no	Negate a command or set its defaults
isis	IS-IS configuration commands
authentication-type	Set hello authentication type
cleartext	Cleartext
md5	HMAC-MD5

Command Mode

- /exec/configure/if-p2p

isis authentication-type cleartext

```
{ isis authentication-type { cleartext | md5 } <level> | no isis authentication-type [ { cleartext | md5 } ] <level>
}
```

Syntax Description

no	Negate a command or set its defaults
isis	IS-IS configuration commands
authentication-type	Set hello authentication type
cleartext	Cleartext
md5	HMAC-MD5
<i>level</i>	IS-IS level

Command Mode

- /exec/configure/if-ma

isis authentication key-chain

```
{ isis authentication key-chain <auth-keychain> | no isis authentication key-chain [ <auth-keychain> ] }
```

Syntax Description

no	Negate a command or set its defaults
isis	IS-IS configuration commands
authentication	Set hello authentication keychain
key-chain	Set hello authentication keychain
<i>auth-keychain</i>	authentication keychain

Command Mode

- /exec/configure/if-p2p

isis authentication key-chain

```
{ isis authentication key-chain <auth-keychain> <level> | no isis authentication key-chain [ <auth-keychain> ] <level> }
```

Syntax Description

no	Negate a command or set its defaults
isis	IS-IS configuration commands
authentication	Set hello authentication keychain
key-chain	Set hello authentication keychain
<i>auth-keychain</i>	authentication keychain
<i>level</i>	IS-IS level

Command Mode

- /exec/configure/if-ma

isis bfd

[no] isis bfd [disable]

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
bfd	Interface BFD configuration
disable	(Optional) Disable BFD on interface

Command Mode

- /exec/configure/if-igp

isis circuit-type

isis circuit-type <circuit-type> | no isis circuit-type [<circuit-type>]

Syntax Description

no	Negate a command or set its defaults
isis	IS-IS configuration commands
circuit-type	Configure circuit type for interface
<i>circuit-type</i>	IS-IS circuit type

Command Mode

- /exec/configure/if-igp

isis csnp-interval level

[no] isis csnp-interval <sec> { level-1 | level-2 }

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
csnp-interval	Set CSNP interval in seconds
<i>sec</i>	CSNP interval value
level-1	Specify interval for level-1 CSNPs
level-2	Specify interval for level-2 CSNPs

Command Mode

- /exec/configure/if-igp

isis event-history adjacency

[no] isis event-history adjacency { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
adjacency	Adjacency events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis event-history cli

```
[no] isis event-history cli { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
cli	CLI events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis event-history csnp

[no] isis event-history csnp { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
csnp	CSNP events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis event-history dis

[no] isis event-history dis { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
dis	Dis events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis event-history events

[no] isis event-history events { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
events	Events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis event-history graceful

[no] isis event-history graceful { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
graceful	Graceful Restart events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis event-history ha

[no] isis event-history ha { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
ha	HA events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis event-history iih

```
[no] isis event-history iih { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
iih	IIH events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis event-history lsp-flood

```
[no] isis event-history lsp-flood { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
lsp-flood	LSP-flood events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis event-history lsp-gen

```
[no] isis event-history lsp-gen { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
lsp-gen	LSP-Gen events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis event-history mtr

[no] isis event-history mtr { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
mtr	MTR events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis event-history psnp

[no] isis event-history psnp { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
psnp	PSNP events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis event-history redist

[no] isis event-history redist { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
redist	Redist events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis event-history spf-leaf

[no] isis event-history spf-leaf { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
spf-leaf	Shortest path first events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis event-history spf-tree

```
[no] isis event-history spf-tree { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
spf-tree	SPF-Tree events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis event-history tlv

```
[no] isis event-history tlv { size { <size_in_text> | <size_in_kbytes> } }
```

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
tlv	TLV events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis event-history urib

[no] isis event-history urib { size { <size_in_text> | <size_in_kbytes> } }

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	Event-history buffers for IS-IS
event-history	Configure event-history buffers
urib	URIB events for IS-IS
size	Configure size
<i>size_in_text</i>	Buffer size
<i>size_in_kbytes</i>	Size in kbytes

Command Mode

- /exec/configure/router-isis/router-isis-vrf-common

isis hello-interval

[no] isis hello-interval <sec>

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
hello-interval	Set Hello interval in seconds
<i>sec</i>	Hello interval value

Command Mode

- /exec/configure/if-p2p

isis hello-interval level

[no] isis hello-interval <sec> { level-1 | level-2 }

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
hello-interval	Set Hello interval in seconds
<i>sec</i>	Hello interval value
level-1	Specify hello-interval for level-1 IIHs
level-2	Specify hello-interval for level-2 IIHs

Command Mode

- /exec/configure/if-ma

isis hello-multiplier

[no] isis hello-multiplier <multi>

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
hello-multiplier	Set multiplier for Hello holding time
<i>multi</i>	Hello multiplier value

Command Mode

- /exec/configure/if-p2p

isis hello-multiplier level

[no] isis hello-multiplier <multi> { level-1 | level-2 }

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
hello-multiplier	Set multiplier for Hello holding time
<i>multi</i>	Hello multiplier value
level-1	Specify hello multiplier for level-1 IIHs
level-2	Specify hello multiplier for level-2 IIHs

Command Mode

- /exec/configure/if-ma

isis hello-padding

```
{ isis hello-padding | no isis hello-padding [ always ] }
```

Syntax Description

no	Negate a command or set its defaults
isis	IS-IS configuration commands
hello-padding	Pad IS-IS hello PDUs to full MTU
always	(Optional) Pad every hello

Command Mode

- /exec/configure/if-igp

isis hello-padding always

isis hello-padding always

Syntax Description

isis	IS-IS configuration commands
hello-padding	Pad IS-IS hello PDUs to full MTU
always	Pad every hello

Command Mode

- /exec/configure/if-igp

isis ipv6 bfd

[no] isis ipv6 bfd [disable]

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
ipv6	Enable BFD for ipv6
bfd	Interface BFD configuration
disable	(Optional) Disable BFD on interface

Command Mode

- /exec/configure/if-igp

isis ipv6 metric

[no] isis ipv6 metric <metric> <level>

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
metric	Configure metric for IPV6 topology
ipv6	Configure metric for IPV6 topology
<i>metric</i>	Default metric
<i>level</i>	IS-IS level

Command Mode

- /exec/configure/if-igp /exec/configure/router-isis/router-isis-af-ipv6

isis lsp-interval

[no] isis lsp-interval <msec>

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
lsp-interval	Set LSP transmission interval
<i>msec</i>	LSP transmission interval (milliseconds)

Command Mode

- /exec/configure/if-igp

isis mesh-group

```
{ isis mesh-group { blocked | <mesh-id> } | no isis mesh-group [ { blocked | <mesh-id> } ] }
```

Syntax Description

no	Negate a command or set its defaults
isis	IS-IS configuration commands
mesh-group	Set IS-IS mesh group
<i>mesh-id</i>	Mesh group number
blocked	Block LSPs on this interface

Command Mode

- /exec/configure/if-igp

isis metric

[no] isis metric <metric> <level>

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
metric	Configure the metric for interface
<i>metric</i>	Default metric
<i>level</i>	IS-IS level

Command Mode

- /exec/configure/if-igp /exec/configure/if-mpls-tunnel

isis mtu-check

[no] isis mtu-check

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
mtu-check	Check mtu on received hellos, if its padded

Command Mode

- /exec/configure/if-p2p

isis mtu-check level

[no] isis mtu-check { level-1 | level-2 }

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
mtu-check	Check mtu on received hellos, if its padded
level-1	Configure mtu-check for level-1
level-2	Configure mtu-check for level-2

Command Mode

- /exec/configure/if-ma

isis network point-to-point

[no] isis network point-to-point

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
network	Change interface medium to p2p
point-to-point	Change interface medium to p2p

Command Mode

- /exec/configure/if-igp /exec/configure/if-mpls-tunnel

isis passive-interface

isis passive-interface <level> | no isis passive-interface [<level>] | default isis passive-interface [<level>]

Syntax Description

no	Negate a command or set its defaults
isis	IS-IS configuration commands
passive-interface	Suppress IS-IS PDU
default	Undo a command
<i>level</i>	Level to suppress

Command Mode

- /exec/configure/if-igp

isis priority level

[no] isis priority <priority> { level-1 | level-2 }

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
priority	Set priority for DIS election
<i>priority</i>	Priority value
level-1	Specify priority for level-1 routing
level-2	Specify priority for level-2 routing

Command Mode

- /exec/configure/if-ma

isis retransmit-interval

[no] isis retransmit-interval <sec>

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
retransmit-interval	Set per-LSP retransmission interval
<i>sec</i>	Interval between retransmissions of the same LSP (seconds)

Command Mode

- /exec/configure/if-p2p

isis retransmit-throttle-interval

[no] isis retransmit-throttle-interval <msec>

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
retransmit-throttle-interval	Set interface LSP retransmission interval
<i>msec</i>	Delay between retransmitted LSPs (milliseconds)

Command Mode

- /exec/configure/if-p2p

isis shutdown

[no] isis shutdown

Syntax Description

no	(Optional) Negate a command or set its defaults
isis	IS-IS configuration commands
shutdown	Graceful shutdown IS-IS functionality on the interface

Command Mode

- /exec/configure/if-igp

isolate

[no] isolate

Syntax Description

no	(Optional) Negate a command or set its defaults
isolate	Isolate this router from RIP perspective

Command Mode

- /exec/configure/router-rip

isolate

[no] isolate

Syntax Description

no	(Optional) Negate a command or set its defaults
isolate	Isolate this router from BGP perspective

Command Mode

- /exec/configure/router-bgp

isolate

[no] isolate

Syntax Description

no	(Optional) Negate a command or set its defaults
isolate	Isolate this router from OSPF perspective

Command Mode

- /exec/configure/router-ospf

isolate

[no] isolate

Syntax Description

no	(Optional) Negate a command or set its defaults
isolate	Isolate this router from ISIS perspective

Command Mode

- /exec/configure/router-isis

isolate

[no] isolate

Syntax Description

no	(Optional) Negate a command or set its defaults
isolate	Isolate this router from OSPFV3 perspective

Command Mode

- /exec/configure/router-ospf3

isolate

[no] isolate

Syntax Description

no	(Optional) Negate a command or set its defaults
isolate	Isolate this router from EIGRP perspective

Command Mode

- /exec/configure/router-eigrp

itd

{ itd <service-name> } | { no itd <service-name> }

Syntax Description

no	Negate a command or set its defaults
itd	ITD service
<i>service-name</i>	ITD service-name

Command Mode

- /exec/configure

itd device-group

{ itd device-group <svc-name> } | { no itd device-group <svc-name> }

Syntax Description

no	Negate a command or set its defaults
itd	ITD service
device-group	ITD device group
<i>svc-name</i>	service-name

Command Mode

- /exec/configure

itd session device-group

{ itd session device-group <svc-name> } | { no itd session device-group <svc-name> }

Syntax Description

no	Negate a command or set its defaults
itd	ITD service
session	ITD session
device-group	ITD device group
<i>svc-name</i>	service-name

Command Mode

- /exec/configure

itd statistics

{ itd statistics <service-name> } | { no itd statistics <service-name> }

Syntax Description

no	Negate a command or set its defaults
itd	ITD service
statistics	ITD statistics
<i>service-name</i>	ITD service-name

Command Mode

- /exec/configure