



AMF Command Reference



Important

AMF does not support CLI command or command options that are not mentioned in this document; even though they are available in the command line. These unsupported CLI commands must not be used.

- [aaa](#), on page 12
- [amf-global](#), on page 13
- [amf-global call-control-policy default-nssai](#), on page 14
- [amf-global call-control-policy eir-check](#), on page 15
- [amf-global call-control-policy odbPacketServices](#), on page 16
- [amf-global call-control-policy ue-ambr](#), on page 17
- [amf-global dnn-policy](#), on page 18
- [amf-global dnn-policy network-element-profile-list](#), on page 19
- [amf-global load-profile](#), on page 20
- [amf-global location lmf-positioning](#), on page 21
- [amf-global nf-profile](#), on page 22
- [amf-global nf-profile nf-type-profile](#), on page 23
- [amf-global nf-profile nf-type-profile grpc-endpoint](#), on page 24
- [amf-global nf-profile nf-type-profile http-endpoint](#), on page 25
- [amf-global operator-policy](#), on page 26
- [amf-global operator-policy network-element-profile-list](#), on page 27
- [amf-global paging-algo](#), on page 29
- [amf-global paging-map](#), on page 30
- [amf-global paging-map precedence](#), on page 31
- [amf-global paging-profile](#), on page 33
- [amf-global paging-profile paging-stage](#), on page 34
- [amf-global plmn-policy](#), on page 35
- [amf-global supi-policy](#), on page 36
- [amf-global timers proc-timeout ue-registration](#), on page 37
- [amf-global uid-optimize](#), on page 38
- [amf-services api-root](#), on page 39
- [amf-services capacity](#), on page 40
- [amf-services priority](#), on page 41
- [amf-services peer-mme dns-discovery](#), on page 42

- [amf-services relative-amf-capacity](#), on page 43
- [amf-services stateless-proto-ep](#), on page 44
- [apn-groups](#), on page 45
- [apn-groups apns](#), on page 46
- [apn-profiles](#), on page 47
- [cdl clear sessions](#), on page 48
- [cdl kafka](#), on page 49
- [cdl show sessions](#), on page 50
- [cdl show status](#), on page 52
- [clear subscriber](#), on page 53
- [clear subscriber clear-opt ran-opt](#), on page 54
- [client http header](#), on page 55
- [client http ping](#), on page 56
- [client inbound interface](#), on page 57
- [client inbound interface limit overload](#), on page 58
- [client inbound interface limit pending](#), on page 59
- [client inbound limit overload](#), on page 60
- [client inbound limit pending](#), on page 61
- [client outbound host ping](#), on page 62
- [client outbound interface](#), on page 63
- [client outbound interface host ping](#), on page 64
- [client outbound interface limit consecutive failure](#), on page 65
- [client outbound interface limit pending](#), on page 66
- [client outbound limit consecutive failure](#), on page 67
- [client outbound limit pending](#), on page 68
- [commit](#), on page 69
- [compare](#), on page 70
- [config](#), on page 71
- [config-error info](#), on page 72
- [coverage](#), on page 73
- [datastore dbs](#), on page 74
- [datastore dbs endpoints](#), on page 75
- [datastore notification-ep](#), on page 76
- [datastore session-db](#), on page 77
- [datastore session-db endpoints](#), on page 78
- [debug-settings amf-ngap-ep](#), on page 79
- [debug-settings amf-rest-ep](#), on page 80
- [debug-settings amf-sctp-lb](#), on page 81
- [debug-settings amf-service](#), on page 82
- [deployment](#), on page 83
- [deployment resource](#), on page 84
- [describe](#), on page 85
- [diagnostics](#), on page 87
- [diagnostics info](#), on page 88
- [dump](#), on page 89
- [edr reporting](#), on page 90

- [edr all subscribers](#), on page 91
- [edr file transaction reporting](#) , on page 92
- [edr file transaction flush interval](#), on page 93
- [edr file transaction limit](#), on page 94
- [edr file transaction procedure](#), on page 95
- [edr file transaction rate](#) , on page 96
- [edr file transaction threshold](#), on page 97
- [edr file transaction collision reporting](#), on page 98
- [edr file transaction-collision flush interval](#), on page 99
- [edr file transaction-collision limit](#) , on page 100
- [show endpoint](#), on page 101
- [exit](#), on page 102
- [group nf-mgmt](#), on page 103
- [group nrf discovery](#), on page 104
- [group nrf discovery service type nrf](#), on page 105
- [group nrf discovery service type nrf endpoint-profile](#), on page 106
- [group nrf discovery service type nrf endpoint-profile endpoint-name](#), on page 107
- [group nrf discovery service type nrf endpoint-profile endpoint-name primary ip-address](#), on page 108
- [group nrf discovery service type nrf endpoint-profile endpoint-name secondary ip-address](#), on page 109
- [group nrf discovery service type nrf endpoint-profile endpoint-name tertiary ip-address](#), on page 110
- [group nrf discovery service type nrf endpoint-profile version uri-version](#), on page 111
- [group nrf mgmt](#), on page 112
- [group nrf mgmt service type nrf](#), on page 113
- [group nrf mgmt service type nrf endpoint-profile](#), on page 114
- [group nrf mgmt service type nrf endpoint-profile endpoint-name](#), on page 115
- [group nrf mgmt service type nrf endpoint-profile endpoint-name primary ip-address](#), on page 116
- [group nrf mgmt service type nrf endpoint-profile endpoint-name secondary ip-address](#), on page 117
- [group nrf mgmt service type nrf endpoint-profile endpoint-name tertiary ip-address](#), on page 118
- [group nrf mgmt service type nrf endpoint-profile version uri-version](#), on page 119
- [help](#), on page 120
- [history](#), on page 122
- [id](#), on page 123
- [idle-timeout](#), on page 124
- [ignore-leading-space](#), on page 125
- [infra metrics experimental](#), on page 126
- [infra metrics verbose verboseLevels](#), on page 127
- [infra transaction limit](#), on page 128
- [infra transaction limit consecutive same](#), on page 129
- [infra transaction loop](#), on page 130
- [infra transaction loop category](#), on page 131
- [infra transaction loop category threshold](#), on page 132
- [infra transaction loop category threshold thresholds](#), on page 133
- [instance instance-id](#), on page 134
- [instance instance-id endpoint ep](#), on page 135
- [instance instance-id endpoint gtp dscp](#), on page 137
- [instance instance-id endpoint sctp dscp](#), on page 138

- [instance instance-id endpoint sctp replicas parameters](#), on page 139
- [instance instance-id endpoint sbi dscp](#), on page 140
- [instance instance-id endpoint ep interface](#), on page 141
- [instance instance-id endpoint ep interface dispatcher](#), on page 143
- [instance instance-id endpoint ep interface internal base-port](#), on page 145
- [instance instance-id endpoint ep interface sla](#), on page 146
- [instance instance-id endpoint ep interface vip](#), on page 147
- [instance instance-id endpoint ep interface vip6](#), on page 148
- [instance instance-id endpoint ep nodes nodes-count internal vip ip interface interface-name vip ip](#), on page 149
- [instance instance-id endpoint ep internal base-port](#), on page 150
- [instance instance-id endpoint ep internal-port](#), on page 151
- [instance instance-id endpoint ep system-health-level crash](#), on page 152
- [instance instance-id endpoint ep system-health-level critical](#), on page 153
- [instance instance-id endpoint ep system-health-level warn](#), on page 154
- [instance instance-id endpoint ep vip](#), on page 155
- [instance instance-id endpoint ep vip6](#), on page 156
- [instance instance-id vip-ip vip-port fqdn](#), on page 157
- [instances instance](#), on page 158
- [instance instance-id endpoint service](#), on page 159
- [instance instance-id endpoint service cpu](#), on page 160
- [instance instance-id endpoint service service-name](#), on page 161
- [instance instance-id endpoint service memory](#), on page 162
- [job](#), on page 163
- [k8 amf local etcd endpoint](#), on page 164
- [k8 label pod-group-config](#), on page 165
- [k8 label sctp-layer](#), on page 166
- [k8s single-node](#), on page 167
- [leaf-prompting](#), on page 168
- [license smart register](#), on page 169
- [license smart deregister](#), on page 170
- [license smart renew](#), on page 171
- [license smart status](#), on page 172
- [local-instance](#), on page 173
- [local-cause-code-map auth-failure](#), on page 174
- [local-cause-code-map clear-subscriber](#), on page 175
- [local-cause-code-map core-network-type-restriction](#), on page 176
- [local-cause-code-map ctxt-xfer-fail](#), on page 177
- [local-cause-code-map ctxt-xfer-fail-mme](#), on page 178
- [local-cause-code-map dnn-mismatch](#), on page 179
- [local-cause-code-map dnn-not-subscribed](#), on page 180
- [local-cause-code-map gw-unreachable](#), on page 181
- [local-cause-code-map ims-vops-failure](#), on page 182
- [local-cause-code-map inter-plmn-roaming](#), on page 183
- [local-cause-code-map odb-packet-services](#), on page 184
- [local-cause-code-map peer-node-unknown](#), on page 185

- local-cause-code-map rat-type-restriction, on page 186
- local-cause-code-map registration-restriction, on page 187
- local-cause-code-map restricted-zone-code, on page 188
- local-cause-code-map smf-selection-failure, on page 189
- local-cause-code-map udm-unavailable, on page 190
- logging async application enable, on page 191
- logging async monitor-subscriber enable, on page 192
- logging async tracing enable, on page 193
- logging async transaction enable, on page 194
- logging error, on page 195
- logging json logging, on page 196
- logging level, on page 197
- logging name, on page 199
- logging transaction, on page 200
- logging range name, on page 202
- logout, on page 203
- monitor protocol, on page 204
- monitor subscriber, on page 205
- no, on page 207
- nf-tls ca certificates, on page 208
- nf-tls certificates, on page 209
- show nrf, on page 210
- nrf registration-info, on page 211
- nrf subscription-info, on page 212
- operator-policy network-element-profile-list scp, on page 213
- paginate, on page 214
- patch amf-ngap-ep, on page 215
- patch amf-rest-ep, on page 216
- patch amf-sctp-lb, on page 217
- patch amf-service, on page 218
- peers, on page 219
- profile compliance, on page 220
- profile compliance service, on page 221
- profile compliance service version spec, on page 222
- profile emergency-profile emergency, on page 223
- profile emergency-profile emergency extended-emergency-num, on page 224
- profile emergency-profile emergency local-emergency-num, on page 225
- profile emergency-profile emergency nssai, on page 226
- profile load, on page 227
- profile network-element amf, on page 228
- profile network-element amf query-params, on page 229
- profile network-element ausf, on page 230
- profile network-element ausf query-params, on page 231
- profile network-element eir, on page 232
- profile network element eir query params, on page 233
- profile network-element gmlc, on page 234

- [profile network-element gmlc query-params](#), on page 235
- [profile network-element lmf](#), on page 236
- [profile network-element lmf query-params](#), on page 237
- [profile network-element nf-selection-model-priority](#), on page 238
- [profile network-element nssf](#), on page 239
- [profile network-element nssf query-params](#), on page 240
- [profile network-element pcf](#), on page 241
- [profile network-element pcf query-params](#), on page 242
- [profile network-element scp endpoint-profile endpoint-name primary-ip-address port](#), on page 243
- [profile network-element scp](#), on page 245
- [profile network-element smf](#), on page 246
- [profile network-element smf query-params](#), on page 247
- [profile network-element udm](#), on page 248
- [profile network-element udm query-params](#), on page 249
- [profile nf-client nf-type amf amf-profile](#), on page 250
- [profile nf-client nf-type amf amf-profile locality](#), on page 251
- [profile nf-client nf-type amf amf-profile locality service name type](#), on page 252
- [profile nf-client nf-type amf amf-profile locality service name type endpoint-profile](#), on page 253
- [profile nf-client nf-type amf amf-profile locality service name type endpoint-profile endpoint-name](#), on page 255
- [profile nf-client nf-type amf amf-profile locality service name type endpoint-profile endpoint-name primary ip-address](#), on page 256
- [profile nf-client nf-type amf amf-profile locality service name type endpoint-profile endpoint-name secondary ip-address](#), on page 257
- [profile nf-client nf-type amf amf-profile locality service name type endpoint-profile endpoint-name tertiary ip-address](#), on page 258
- [profile nf-client nf-type amf amf-profile locality service name type endpoint-profile version uri-version](#), on page 259
- [profile nf-client nf-type ausf ausf-profile](#), on page 260
- [profile nf-client nf-type ausf ausf-profile locality](#), on page 261
- [profile nf-client nf-type ausf ausf-profile locality service name type](#), on page 262
- [profile nf-client nf-type ausf ausf-profile locality service name type endpoint-profile](#), on page 263
- [profile nf-client nf-type ausf ausf-profile locality service name type endpoint-profile endpoint-name](#), on page 265
- [profile nf-client nf-type ausf ausf-profile locality service name type endpoint-profile endpoint-name primary ip-address](#), on page 266
- [profile nf-client nf-type ausf ausf-profile locality service name type endpoint-profile endpoint-name secondary ip-address](#), on page 267
- [profile nf-client nf-type ausf ausf-profile locality service name type endpoint-profile endpoint-name tertiary ip-address](#), on page 268
- [profile nf-client nf-type ausf ausf-profile locality service name type endpoint-profile version uri-version](#), on page 269
- [profile nf-client nf-type eir eir-profile](#), on page 270
- [profile nf-client nf-type eir eir-profile locality](#), on page 271
- [profile nf-client nf-type eir eir-profile locality service name type](#), on page 272
- [profile nf-client nf-type eir eir-profile locality service name type endpoint-profile](#), on page 273

- [profile nf-client nf-type eir eir-profile locality service name type endpoint-profile endpoint-name](#), on page 275
- [profile nf-client nf-type eir eir-profile locality service name type endpoint-profile endpoint-name primary ip-address](#), on page 276
- [profile nf-client nf-type eir eir-profile locality service name type endpoint-profile endpoint-name secondary ip-address](#), on page 277
- [profile nf-client nf-type eir eir-profile locality service name type endpoint-profile endpoint-name tertiary ip-address](#), on page 278
- [profile nf-client nf-type eir eir-profile locality service name type endpoint-profile version uri-version](#), on page 279
- [profile nf-client nf-type group nrf auth service type nrf oauth2](#), on page 280
- [profile nf-client nf-type gmlc gmlc-profile](#), on page 282
- [profile nf-client nf-type gmlc gmlc-profile locality](#), on page 283
- [profile nf-client nf-type gmlc gmlc-profile locality service name type](#), on page 284
- [profile nf-client nf-type gmlc gmlc-profile locality service name type ngmlc-loc endpoint-profile](#), on page 285
- [profile nf-client nf-type gmlc gmlc-profile locality service name type endpoint-profile endpoint-name](#), on page 286
- [profile nf-client nf-type gmlc gmlc-profile locality service name type endpoint-profile endpoint-name default-notification-subscriptions](#), on page 287
- [profile nf-client nf-type gmlc gmlc-profile locality service name type endpoint-profile endpoint-name primary ip-address](#), on page 288
- [profile nf-client nf-type lmf lmf-profile](#), on page 289
- [profile nf-client nf-type lmf lmf-profile locality](#), on page 290
- [profile nf-client nf-type lmf lmf-profile locality service name type](#), on page 291
- [profile nf-client nf-type lmf lmf-profile locality service name type endpoint-profile](#), on page 292
- [profile nf-client nf-type lmf lmf-profile locality service name type endpoint-profile endpoint-name](#), on page 293
- [profile nf-client nf-type lmf lmf-profile locality service name type endpoint-profile endpoint-name default-notification-subscriptions](#), on page 294
- [profile nf-client nf-type lmf lmf-profile locality service name type endpoint-profile endpoint-name primary ip-address](#), on page 296
- [profile nf-client nf-type lmf lmf-profile locality service name type endpoint-profile version uri-version](#), on page 297
- [profile nf-client nf-type nssf nssf-profile](#), on page 298
- [profile nf-client nf-type nssf nssf-profile locality](#), on page 299
- [profile nf-client nf-type nssf nssf-profile locality service name type](#), on page 300
- [profile nf-client nf-type nssf nssf-profile locality service name type endpoint-profile](#), on page 301
- [profile nf-client nf-type nssf nssf-profile locality service name type endpoint-profile endpoint-name](#), on page 303
- [profile nf-client nf-type nssf nssf-profile locality service name type endpoint-profile endpoint-name primary ip-address](#), on page 304
- [profile nf-client nf-type nssf nssf-profile locality service name type endpoint-profile endpoint-name secondary ip-address](#), on page 305
- [profile nf-client nf-type nssf nssf-profile locality service name type endpoint-profile endpoint-name tertiary ip-address](#), on page 306
- [profile nf-client nf-type nssf nssf-profile locality service name type endpoint-profile version uri-version](#), on page 307

- [profile nf-client nf-type pcf pcf-profile, on page 308](#)
- [profile nf-client nf-type pcf pcf-profile locality, on page 309](#)
- [profile nf-client nf-type pcf pcf-profile locality service name type, on page 310](#)
- [profile nf-client nf-type pcf pcf-profile locality service name type endpoint-profile, on page 311](#)
- [profile nf-client nf-type pcf pcf-profile locality service name type endpoint-profile endpoint-name, on page 313](#)
- [profile nf-client nf-type pcf pcf-profile locality service name type endpoint-profile endpoint-name primary ip-address, on page 314](#)
- [profile nf-client nf-type pcf pcf-profile locality service name type endpoint-profile endpoint-name secondary ip-address, on page 315](#)
- [profile nf-client nf-type pcf pcf-profile locality service name type endpoint-profile endpoint-name tertiary ip-address, on page 316](#)
- [profile nf-client nf-type pcf pcf-profile locality service name type endpoint-profile version uri-version, on page 317](#)
- [profile nf-client nf-type smf smf-profile, on page 318](#)
- [profile nf-client nf-type smf smf-profile locality, on page 319](#)
- [profile nf-client nf-type smf smf-profile locality service name type, on page 320](#)
- [profile nf-client nf-type smf smf-profile locality service name type endpoint-profile, on page 321](#)
- [profile nf-client nf-type smf smf-profile locality service name type endpoint-profile endpoint-name, on page 323](#)
- [profile nf-client nf-type smf smf-profile locality service name type endpoint-profile endpoint-name primary ip-address, on page 324](#)
- [profile nf-client nf-type smf smf-profile locality service name type endpoint-profile endpoint-name secondary ip-address, on page 325](#)
- [profile nf-client nf-type smf smf-profile locality service name type endpoint-profile endpoint-name tertiary ip-address, on page 326](#)
- [profile nf-client nf-type smf smf-profile locality service name type endpoint-profile version uri-version, on page 327](#)
- [profile nf-client nf-type smsf, on page 328](#)
- [profile nf-client nf-type udm udm-profile, on page 330](#)
- [profile nf-client nf-type udm udm-profile locality, on page 331](#)
- [profile nf-client nf-type udm udm-profile locality service name type, on page 332](#)
- [profile nf-client nf-type udm udm-profile locality service name type endpoint-profile, on page 333](#)
- [profile nf-client nf-type udm udm-profile locality service name type endpoint-profile endpoint-name, on page 335](#)
- [profile nf-client nf-type udm udm-profile locality service name type endpoint-profile endpoint-name primary ip-address, on page 336](#)
- [profile nf-client nf-type udm udm-profile locality service name type endpoint-profile endpoint-name secondary ip-address, on page 337](#)
- [profile nf-client nf-type udm udm-profile locality service name type endpoint-profile endpoint-name tertiary ip-address, on page 338](#)
- [profile nf-client nf-type udm udm-profile locality service name type endpoint-profile version uri-version, on page 339](#)
- [profile nf-client-failure nf-type amf, on page 340](#)
- [profile nf-client-failure nf-type amf profile failure-handling, on page 341](#)
- [profile nf-client-failure nf-type amf profile failure-handling service name type, on page 342](#)

- [profile nf-client-failure nf-type amf profile failure-handling service name type message type, on page 343](#)
- [profile nf-client-failure nf-type amf profile failure-handling service name type message type status-code, on page 344](#)
- [profile nf-client-failure nf-type any, on page 346](#)
- [profile nf-client-failure nf-type any profile failure-handling, on page 347](#)
- [profile nf-client-failure nf-type any profile failure-handling service name type, on page 348](#)
- [profile nf-client-failure nf-type any profile failure-handling service name type message type, on page 349](#)
- [profile nf-client-failure nf-type any profile failure-handling service name type message type status-code, on page 350](#)
- [profile nf-client-failure nf-type ausf, on page 352](#)
- [profile nf-client-failure nf-type ausf profile failure-handling, on page 353](#)
- [profile nf-client-failure nf-type ausf profile failure-handling service name type, on page 354](#)
- [profile nf-client-failure nf-type ausf profile failure-handling service name type message type, on page 355](#)
- [profile nf-client-failure nf-type ausf profile failure-handling service name type message type status-code httpv2, on page 356](#)
- [profile nf-client-failure nf-type eir, on page 358](#)
- [profile nf-client-failure nf-type eir profile failure-handling, on page 359](#)
- [profile nf-client-failure nf-type eir profile failure-handling service name type, on page 360](#)
- [profile nf-client-failure nf-type eir profile failure-handling service name type message type, on page 361](#)
- [profile nf-client-failure nf-type eir profile failure-handling service name type message type status-code, on page 362](#)
- [profile nf-client-failure nf-type gmlc, on page 364](#)
- [profile nf-client-failure nf-type gmlc profile failure-handling, on page 365](#)
- [profile nf-client-failure nf-type gmlc profile failure-handling service name type, on page 366](#)
- [profile nf-client-failure nf-type gmlc profile failure-handling service name type message type, on page 367](#)
- [profile nf-client-failure nf-type gmlc profile failure-handling service name type message type status-code, on page 368](#)
- [profile nf-client-failure nf-type lmf, on page 370](#)
- [profile nf-client-failure nf-type lmf profile failure-handling, on page 371](#)
- [profile nf-client-failure nf-type lmf profile failure-handling service name type, on page 372](#)
- [profile nf-client-failure nf-type lmf profile failure-handling service name type message type, on page 373](#)
- [profile nf-client-failure nf-type lmf profile failure-handling service name type message type status-code, on page 374](#)
- [profile nf-client-failure nf-type nssf, on page 375](#)
- [profile nf-client-failure nf-type nssf profile failure-handling, on page 376](#)
- [profile nf-client-failure nf-type nssf profile failure-handling service name type, on page 377](#)
- [profile nf-client-failure nf-type nssf profile failure-handling service name type message type, on page 378](#)
- [profile nf-client-failure nf-type nssf profile failure-handling service name type message type status-code, on page 379](#)
- [profile nf-client-failure nf-type pcf, on page 381](#)
- [profile nf-client-failure nf-type pcf profile failure-handling, on page 382](#)
- [profile nf-client-failure nf-type pcf profile failure-handling service name type, on page 383](#)
- [profile nf-client-failure nf-type pcf profile failure-handling service name type message type, on page 384](#)

- [profile nf-client-failure nf-type pcf profile failure-handling service name type message type status-code](#), on page 385
- [profile nf-client-failure nf-type scp](#), on page 387
- [profile nf-client-failure nf-type smf](#), on page 388
- [profile nf-client-failure nf-type smf profile failure-handling](#), on page 389
- [profile nf-client-failure nf-type smf profile failure-handling service name type](#), on page 390
- [profile nf-client-failure nf-type smf profile failure-handling service name type message type](#), on page 391
- [profile nf-client-failure nf-type smf profile failure-handling service name type message type status-code](#), on page 392
- [profile nf-client-failure nf-type udm](#), on page 394
- [profile nf-client-failure nf-type udm profile failure-handling](#), on page 395
- [profile nf-client-failure nf-type udm profile failure-handling service name type](#), on page 396
- [profile nf-client-failure nf-type udm profile failure-handling service name type message type](#), on page 397
- [profile nf-client-failure nf-type udm profile failure-handling service name type message type status-code](#), on page 398
- [profile nf-client-failure nf-type smsf](#), on page 400
- [profile nf-client-failure nf-type smsf profile failure-handling](#), on page 401
- [profile nf-client-failure nf-type smsf profile failure-handling service name type](#), on page 402
- [profile nf-client-failure nf-type smsf profile failure-handling service name type message type status-code](#), on page 403
- [profile nf-pair nf-type](#), on page 404
- [profile nf-pair nf-type cache invalidation true](#), on page 406
- [profile nf-pair nf-type locality](#), on page 407
- [profile nf-pair nf-type nrf-auth-group nrf-discovery-group](#), on page 408
- [quit](#), on page 409
- [resource pod](#), on page 410
- [resource pod cpu](#), on page 411
- [resource pod labels](#), on page 412
- [resource pod memory](#), on page 413
- [resources](#), on page 414
- [resources info](#), on page 415
- [router bgplist](#), on page 416
- [router bgplist bfd](#), on page 417
- [router bgplist interfaceList](#), on page 418
- [router bgplist interfaceList bondingInterfaces](#), on page 419
- [router bgplist interfaceList neighbors](#), on page 420
- [router bgplist policies](#), on page 421
- [running-status](#), on page 423
- [running-status info](#), on page 424
- [screen-length](#), on page 425
- [screen-width](#), on page 426
- [sctp-parameter-profile parameters](#), on page 427
- [search](#), on page 428
- [send](#), on page 429

- sessions, on page 430
- sessions affinity, on page 431
- sessions commit-pending, on page 432
- show, on page 433
- show edr, on page 434
- show geo-maintenance-mode, on page 435
- show georeplication, on page 436
- show local-interface-status, on page 437
- show role, on page 438
- show rpc, on page 439
- show subscriber, on page 440
- show subscriber ran-opt, on page 442
- show-defaults, on page 443
- smiuser, on page 444
- system, on page 445
- tai-group, on page 446
- tai-group timezone, on page 447
- tai-group network name, on page 448
- tai-group tais, on page 449
- tai-group tais tailist, on page 450
- tai-group tais tailist tac, on page 451
- tai-group tais tailist tac range, on page 452
- tai-group tais tailist timezone, on page 453
- tai-group tais tailist network name, on page 454
- terminal, on page 455
- timestamp, on page 456
- tracing, on page 457
- tracing endpoint, on page 458
- who, on page 459

aaa

Configures the AAA-based user management parameters.

Command Modes

Exec

Syntax Description

```
aaa authentication users user admin change-password { old-password  
old_password | new-password new_password | confirm-password new_password }
```

old-password *old_password*

Specify the current password.

Must be a string.

new-password *new_password*

Specify the new password.

Must be a string.

confirm-password *new_password*

Specify the new password once again to change the password.

Must be a string.

Usage Guidelines

Use this command to configure the AAA-based user management parameters.

amf-global

Configures global AMF parameters.

Command Modes	Exec > Global Configuration (config)
----------------------	--------------------------------------

Syntax Description	amf-global amf-name <i>amf_name</i>
---------------------------	---

amf-name *amf_name*

Specify name of the AMF.

Must be a string.

Usage Guidelines	Use this command to configure global AMF parameters. The CLI prompt changes to the AMF Global Configuration mode (config-amf-global).
-------------------------	---

amf-global call-control-policy default-nssai

Configures default slice for the subscriber.

Command Modes

Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global) > AMF Call Control Policy (config-call-control-policy-*policy_name*)

Syntax Description

```
default-nssai name nssai_name [ sst slice_service_type { sdt slice_differentiator_type } ]
```

default-nssai name

Specify name of the slice.

Must be a string.

sdt slice_differentiator_type

Specify the Slice Differentiator Type (SDT).

Must be a string in the octet-string24 pattern. For information on the octet-string24 pattern, see the Input Pattern Types section.

sst slice_service_type

Specify the Slice Service Type (SST).

Must be an integer in the range of 0-255.

Usage Guidelines

Use this command to configure the default Network Slice Selection Assistance Information (NSSAI) that is assigned to a UE or a subscriber by the network.

amf-global call-control-policy eir-check

Configures the EIR check parameters for the UE.

Command Modes	Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global) > AMF Call Control Policy Configuration (config-call-control-policy-policy_name)
Syntax Description	eir-check enabled { emergency-registration deny-greylisted initial-registration } enabled Enables the EIR check for initial and mobility registration. emergency-registration Enables the EIR check specifically for emergency registered UE's and emergency registration scenarios. By default, EIR check is not done for emergency registration. deny-greylisted This option configures the AMF to deny registration requests from devices that are greylisted. initial-registration This option selects only initial registrations for EIR checks. Without this configuration, the system selects both initial registrations and mobility registrations involving an MME/AMF change for EIR checks.
Usage Guidelines	Use this command to configure the EIR check for the UE.

amf-global call-control-policy odbPacketServices

Configures Operator Determined Barring (ODB) parameters.

Command Modes

Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global) > AMF Call Control Policy Configuration (config-call-control-policy-policy_name)

Syntax Description

{ odbPacketServices { all-packet-services | none }

{ odbPacketServices { all-packet-services | none }

Specifies whether Operator Determined Barring (ODB) applies to all packet services or none; this setting affects only new subscribers and new PDU establishment requests.

Usage Guidelines

Use this command to configure call control policy parameters related to initial CSR registration and packet service barring for new subscribers and PDU requests.

amf-global call-control-policy ue-ambr

Configures UE-AMBR uplink and downlink values.

Command Modes	Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global) > AMF Call Control Policy Configuration (config-call-control-policy- <i>policy_name</i>)
Syntax Description	ue-ambr uplink <i>uplink_value</i> downlink <i>downlink_value</i> override-udm-ue-ambr ue-ambr uplink <i>uplink_value</i> downlink <i>downlink_value</i> override-udm-ue-ambr Configures the User Equipment Aggregate Maximum Bit Rate (UE-AMBR) for uplink and downlink; when <i>override-udm-ue-ambr</i> is set, the UE-AMBR value received from UDM is ignored and the CLI-configured value is applied. Changes take effect when the UE transitions from idle to connected state. If no value is configured, a default of 256000 is used for both uplink and downlink.
Usage Guidelines	Use this command to configure UE-AMBR uplink and downlink values.

amf-global dnn-policy

Configures the DNN policy parameter.

Command Modes

Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global)

Syntax Description

dnn-policy *dnn_name* [[**ims-enabled** { **false** | **true** }] [**lbo-roaming-allowed** { **false** | **true** }] [**nf-profile-name** *nf_profile_name*]]

dnn-policy *dnn_name*

Specify name of the DNN.

Must be a string.

ims-enabled { **false** | **true** }

Specify whether IMS is enabled for DNN.

Must be one of the following:

- **false**
- **true**

Default Value: false.

lbo-roaming-allowed { **false** | **true** }

Specify whether Local Breakout Roaming is supported.

Must be one of the following:

- **false**
- **true**

Default Value: false.

nf-profile-name *nf_profile_name*

Specify name of the NF profile.

Must be a string.

Usage Guidelines

Use this command to configure DNN policy parameter.

amf-global dnn-policy network-element-profile-list

Configures the network element profile list.

Command Modes	Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global) > DNN Policy Configuration (config-dnn-policy- <i>policy_name</i>)
----------------------	---

Syntax Description	network-element-profile-list smf <i>smf_profile_name</i>
---------------------------	---

smf *smf_profile_name*

Specify name of the SMF network element profile.

Must be a string.

Usage Guidelines	Use this command to configure the network element profile list.
-------------------------	---

amf-global load-profile

Configures the load profile to be used in the AMF global configuration.

Command Modes

Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global)

Syntax Description

load-profile *load_profile_name*

load-profile *load_profile_name*

Specify the name of the load profile to be used in the AMF global configuration.

Usage Guidelines

Use this command to associate a load profile to be used in the AMF global configuration.

amf-global location lmf-positioning

Configures location services.

Command Modes

Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global)

Syntax Description

amf-global location { ngran-reporting enabled | lmf-positioning { mt-lr | ni-lr } | positioning }

amf-global location { ngran-reporting enabled | lmf-positioning { mt-lr | ni-lr } | positioning }

- **ngran-reporting enabled**—Enables the UE location reporting.
- **lmf-positioning { mt-lr | ni-lr }**—Enables MT-LR or NI-LR depending on the selected configuration.
- **positioning**—Enables or configures the general positioning service capabilities within the AMF.

Usage Guidelines

Use this command to configure location services.

amf-global nf-profile

Configures NF profile parameters.

Command Modes

Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global)

Syntax Description

nf-profile *nf_profile_name*

nf_profile_name

Specify name of the NF profile.

Must be a string.

Usage Guidelines

Use this command to configure NF profile parameters. The CLI prompt changes to the NF Profile Configuration mode (config-nf-profile-<profile_name>).

amf-global nf-profile nf-type-profile

Configures the NF profile type parameter.

Command Modes Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global) > NF Profile Configuration (config-nf-profile-*profile_name*)

Syntax Description **nf-type-profile type** *nf_profile_type*

type *nf_profile_type*

Specify the NF profile type.

Must be one of the following:

- **ausf**
- **lmf**
- **nrf**
- **nssf**
- **pcf**
- **smf**
- **smsf**
- **udm**
- **scp**
- **gmlc**

Usage Guidelines Use this command to configure the NF profile type parameter. The CLI prompt changes to the NF Type Profile Configuration mode (config-nf-type-profile-<type>).

amf-global nf-profile nf-type-profile grpc-endpoint

Configures GRPC endpoint parameters.

Command Modes

Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global) > NF Profile Name Configuration (config-nf-profile-*nf_profile_name*) > NF Profile Type Configuration (config-nf-type-profile-*profile_name*)

Syntax Description

grpc-endpoint **host** *host_name* **port** *port_number*

host *host_name*

Specify the host name.

Must be a string.

port *port_number*

Specify the port number.

Must be an integer.

Usage Guidelines

Use this command to configure GRPC endpoint parameters.

amf-global nf-profile nf-type-profile http-endpoint

Configures HTTP endpoint parameters.

Command Modes

Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global) > NF Profile Name Configuration (config-nf-profile-*nf_profile_name*) > NF Profile Type Configuration (config-nf-type-profile-*profile_name*)

Syntax Description

http-endpoint **base-url** *base_url*

base-url *base_url*

Specify the base URL.

Must be a string.

Usage Guidelines

Use this command to configure HTTP endpoint parameters.

amf-global operator-policy

Configures the operator policy.

Command Modes

Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global)

Syntax Description

operator-policy *policy_name* [[**ccp-name** *ccp_name*] [**nf-profile-name** *nf_profile_name*] [**paging-map-name** *paging_map_name*]]

ccp-name *ccp_name*

Specify name of the CCP.

Must be a string.

emergency-profile-name *emergency_profile_name*

Specify name of the emergency profile.

nf-profile-name *nf_profile_name*

Specify name of the NF profile.

Must be a string.

operator-policy *policy_name*

Specify name of the operator policy.

Must be a string.

paging-map-name *paging_map_name*

Specify name of the 5G paging map.

Must be a string of 1-64 characters.

Usage Guidelines

Use this command to configure the operator policy.

amf-global operator-policy network-element-profile-list

Configures network element profiles.

Command Modes

Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global) > Operator Policy Configuration (config-operator-policy-policy_name)

Syntax Description

```
network-element-profile-list { amf amf_ne_profile_name | ausf ausf_ne_profile_name
| eir eir_ne_profile_list_name | gmlc gmlc_ne_profile_name | lmf lmf_ne_profile_name
| nssf nssf_ne_profile_name | pcf pcf_ne_profile_name | smf smf_ne_profile_name | smsf
smsf_ne_profile_name | udm udm_ne_profile_name }
```

amf amf_ne_profile_name

Specify name of the AMF network element profile.

Must be a string.

ausf ausf_ne_profile_name

Specify name of the AUSF network element profile.

Must be a string.

eir eir_ne_profile_name

Specify the new EIR element to be added in the network element profile list.

Must be a string.

gmlc gmlc_ne_profile_name

Specify name of the GMLC network element profile.

Must be a string.

lmf lmf_ne_profile_name

Specify name of the LMF network element profile.

Must be a string.

nssf nssf_ne_profile_name

Specify name of the NSSF network element profile.

Must be a string.

pcf pcf_ne_profile_name

Specify name of the PCF network element profile.

Must be a string.

smf smf_ne_profile_name

Specify name of the SMF network element profile.

Must be a string.

smsf smsf_ne_profile_name

Specify the name of SMSF with the network element profile.

.

Must be a string.

udm udm_ne_profile_name

Specify name of the UDM network element profile.

Must be a string.

Usage Guidelines

Use this command to configure network element profiles.

amf-global paging-algo

Configures the paging algorithm.

Command Modes	Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global)
Syntax Description	paging-algo <i>algorithm_name</i> [[action <i>action</i>] [max-n-gnb <i>max_gnbs_to_page</i>] [t3513-timeout <i>paging_timeout</i>] [max-paging-attempts <i>max_paging_attempts</i>]] action <i>action</i> Specify the action. Must be one of the following: • all_gnb_all_tai • all_gnb_last_tai • all_gnb_remaining_tai_all • all_gnb_remaining_tai_seq • last_gnb_last_tai • last_n_gnb_last_tai max-n-gnb <i>max_gnbs_to_page</i> Specify the max number of gNBs to page. Must be an integer in the range of 1-5. max-paging-attempts <i>max_paging_attempts</i> Specify the maximum number of paging attempts. Must be an integer in the range of 1-5. paging-algo <i>paging_algorithm_name</i> Specify name of the paging algorithm. Must be a string of 1-64 characters. t3513-timeout <i>paging_timeout</i> Specify the paging timeout value in seconds. Must be an integer in the range of 1-10.
Usage Guidelines	Use this command to configure the paging algorithm.

amf-global paging-map

Configures the paging map parameters.

Command Modes

Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global)

Syntax Description

paging-map *paging_map_name*

paging_map_name

Specify name of the 5G paging map.

Must be a string of 1-64 characters.

Usage Guidelines

Use this command to configure the paging map parameters.

amf-global paging-map precedence

Configures the paging map precedence parameter.

Command Modes

Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global)

Syntax Description

paging-map *map_name* [**precedence** *map_precedence_level* [[**paging-profile-name** *paging_profile_name*] [**trigger-type** *trigger_type*]]]

arp-value *arp_value*

Specify the Allocation and Retention Priority (ARP) value.

Must be an integer in the range of 1-15.

dereg-value *deregistration_trigger_value*

Specify the deregistration trigger value.

Must be one of the following:

- **amf_init**
- **udm_init**

dnn-value *dnn_value*

Specify the Data Network Name (DNN) value.

Must be a string of 1-64 characters.

fiveqi-value *5qi_value*

Specify the 5G QoS Indicator value.

Must be an integer in the range of 1-85.

paging-profile-name *paging_profile_name*

Specify name of the 5G paging profile.

Must be a string of 1-64 characters.

ppi-value *ppi_value*

Specify the Paging Policy Indicator (PPI) value.

Must be an integer in the range of 1-7.

precedence *map_precedence_level*

Specify the map precedence level.

Must be an integer in the range of 1-255.

trigger-type *trigger_type*

Specify the paging trigger type.

Must be one of the following:

- **5qi**
- **arp**
- **dereg**
- **dnn**
- **location**
- **ppi**
- **sms**
- **sor**
- **uecfg**
- **uecfg**

Usage Guidelines

Use this command to configure the paging map precedence parameter.

amf-global paging-profile

Configures paging profile parameters.

Command Modes	Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global)
----------------------	---

Syntax Description	paging-profile <i>paging_profile_name</i>
---------------------------	--

paging_profile_name

Specify name of the 5G paging profile.

Must be a string of 1-64 characters.

Usage Guidelines	Use this command to configure paging profile parameters. The CLI prompt changes to the Paging Profile Configuration mode (config-paging-profile-<profile_name>).
-------------------------	--

amf-global paging-profile paging-stage

Configures paging stage information.

Command Modes

Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global) > Paging Profile Configuration (config-paging-profile-*profile_name*)

Syntax Description

paging-stage *paging_stage_precedence* [**paging-algo** *paging_algorighthm_name*]

paging-algo *paging_algorighthm_name*

Specify name of the paging algorithgm.

Must be a string of 1-64 characters.

paging_stage_precedence

Specify the stage.

Must be an integer in the range of 1-5.

Usage Guidelines

Use this command to configure paging stage.

amf-global plmn-policy

Configures the operator policy.

Command Modes	Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global)
----------------------	---

Syntax Description	plmn-policy <i>plmn_name</i> operator-policy-name <i>operator_policy_name</i>
---------------------------	---

operator-policy-name *operator_policy_name*

Specify name of the operator policy.

Must be a string.

plmn-policy *plmn_name*

Specify name of the PLMN.

Must be a string of 5-6 characters in the plmn-string pattern. For information on the plmn-string pattern, see the Input Pattern Types section.

Usage Guidelines	Use this command to configure the operator policy.
-------------------------	--

amf-global supi-policy

Configures SUPI policy information.

Command Modes

Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global)

Syntax Description

supi-policy *supi_prefix* **operator-policy-name** *operator_policy_name*

operator-policy-name *operator_policy_name*

Specify name of the operator policy.

Must be a string.

supi-policy *supi_prefix*

Specify the SUPI prefix.

Must be a string of 1-15 characters in the supi-string pattern. For information on the supi-string pattern, see the Input Pattern Types section.

Usage Guidelines

Use this command to configure SUPI policy parameters.

amf-global timers proc-timeout ue-registration

Configures timeout value for registration.

Command Modes	Exec > Global Configuration (config) > AMF Global Configuration (config-amf-global)
----------------------	---

Syntax Description	timers proc-timeout ue-registration value <i>timer_value</i>
---------------------------	---

value *timer_value*

Specify the timer value in seconds.

Must be an integer in the range of 10-120.

Usage Guidelines	Use this command to configure timeout value for registration.
-------------------------	---

amf-global uid-optimize

Configures optimized unique ID allocation for the AMF. This feature is enabled by default.

Command Modes

Exec > Global Configuration

Syntax Description

uid-optimize [**disabled**]

uid-optimize

Enables optimized unique ID allocation (default behavior).

uid-optimize [disabled]

Disables optimized unique ID allocation.

Usage Guidelines

Use this command to enable or disable the optimized unique ID allocation feature for the AMF. By default, optimized unique ID allocation is enabled. Use the `disabled` keyword to turn off this feature if required.



Note

Any change in this configuration requires opscenter shut and start.

amf-services api-root

Configures the API root for the AMF services.

Command Modes	Exec > Global Configuration (config) > AMF Service Configuration (config-amf-service- <i>service_name</i>)
----------------------	---

Syntax Description	api-root <i>deployment_prefix</i>
---------------------------	--

api-root *deployment_prefix*

Specify the API root with the given deployment prefix.

Usage Guidelines	Use this command to configure API root with deployment prefix.
-------------------------	--

amf-services capacity

Configures the capacity parameter for the AMF service.

Command Modes	Exec > Global Configuration (config) > AMF Service Configuration (config-amf-service-service_name)
----------------------	--

Syntax Description	capacity <i>capacity_value</i>
---------------------------	---------------------------------------

capacity *capacity_value*

Specify the capacity value for the AMF service or profile and must be an integer between 0 and 65535. The default value is 10.

Usage Guidelines	Use this command to configure capacity parameter for the AMF service.
-------------------------	---

amf-services priority

Configures the priority parameter for the AMF service.

Command Modes	Exec > Global Configuration (config) > AMF Service Configuration (config-amf-service- <i>service_name</i>)
----------------------	---

Syntax Description	priority <i>priority_value</i>
---------------------------	---------------------------------------

priority *priority_value*

Specify the priority value for the AMF service or profile and must be an integer between 0 and 65535. The default value is 1.

Usage Guidelines	Use this command to configure priority parameter for the AMF service.
-------------------------	---

amf-services peer-mme dns-discovery

Configures the DNS-based dynamic discovery of peer MMEs for the specified AMF service.

Command Modes	Exec > Global Configuration (config) > AMF Service Configuration (config-amf-service-service_name)
Syntax Description	peer-mme dns-discovery enabled peer-mme dns-discovery enabled Enables DNS-based dynamic discovery of peer MMEs.
Usage Guidelines	Use this command to configure and allow the AMF to automatically resolve and select peer MMEs using DNS queries.

amf-services relative-amf-capacity

Configures the AMF Services ID (**relative-amf-capacity**) to enable the Relative Capacity Configuration Update feature in AMF.

Command Modes	Exec > Global Configuration (<i>config</i>) > AMF Services Configuration (<i>amf-services amf_services_name</i>)
----------------------	--

Syntax Description	<pre>config amf-services service_name relative-amf-capacity capacity_number</pre>
---------------------------	---

relative-amf-capacity *capacity_number*

relative-amf-capacity *capacity_number*—Specifies the AMF capacity, within the range of 0–255. The default value is 127.

Usage Guidelines	Use this relative-amf-capacity command, when you want the relative capacity configuration update feature in AMF feature to be configured.
-------------------------	--

amf-services stateless-proto-ep

Enables the stateless protocol EP deployment for the specified AMF service.

Command Modes

Exec > Global Configuration (config) > AMF Service Configuration (config-amf-service-*service_name*)

stateless-proto-ep enabled

Syntax Description

stateless-proto-ep enabled Enables the stateless protocol EP deployment.

Command Default

Disabled

Usage Guidelines

Use this command to enables the stateless protocol EP deployment. Enabling/disabling this feature requires ops-center shut/start.

apn-groups

Configures APN groups.

Command Modes

Exec > Global Configuration (config)

Syntax Description

apn-groups **name** *apn_group_name*

name *apn_group_name*

Specify name of the APN group.

Must be a string.

Usage Guidelines

Use this command to configure APN groups. The CLI prompt changes to the APN Groups Configuration mode (config-apn-groups-<group_name>).

apn-groups apns

Configures APN group parameters.

Command Modes	Exec > Global Configuration (config) > APN Groups Configuration (config-apn-groups- <i>group_name</i>)
----------------------	---

Syntax Description	apns <i>apn_name</i>
---------------------------	-----------------------------

apns *apn_name*

Specify name of the APN.

Must be a string.

Usage Guidelines	Use this command to configure APN group parameters.
-------------------------	---

apn-profiles

Configures APN profile parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

apn-profiles *apn_profile_name*

apn_profile_name

Specify name of the APN profile.

Must be a string.

Usage Guidelines

Use this command to configure APN profile parameters.

cdl clear sessions

Clears the data from the Cisco Data Layer (CDL) datastore.

Command Modes

Exec

Syntax Description

cdl clear sessions [**db-name** *database* | **filter** *filter* | **map-id** *map_id* | **slice-name** *slice_name*]

db-name *database*

Specify the database name to be queried for displaying the session details.

Must be a string of 1 to 16 characters.

filter *filter*

Specify the filter.

map-id *map_id*

Specify the map ID to display the data for a map.

Must be an integer in the range of 0-1024.

slice-name *slice_name*

Specify the slice name to be queried.

Must be a string of 1 to 16 characters.

Usage Guidelines

Use this command to clear the data from the Cisco Data Layer (CDL) datastore.

cdl kafka

Displays the Kafka parameters for Geo Replication.

Command Modes

Exec

Syntax Description

```
cdl kafka [ describe [ consumer-groups name | topics [ name kafka_topic_name
| include-internal-topics ] | list [ consumer-groups | topics
include-internal-topics ]
```

describe

Describe the kafka topics or consumer groups.

consumer-groups *name*

Displays the kafka consumer groups. By default, all the consumer groups are described

topics name *kafka_topic_name*

Displays the specified kafka topics. By default, all the internal topics are described

include-internal-topics

Indicates to include the internal topics.

list

Lists the kafka topics or the consumer groups.

consumer-groups

Lists the kafka topics or the consumer groups.

topics include-internal-topics

List all the kafka topics that include the internal topics.

Usage Guidelines

Use this command to display Kafka parameters for Geo Replication.

cdl show sessions

Displays the session data from the datastore.

Command Modes

Exec

Syntax Description

```
cdl show sessions count [ detailed [ db-name db_name | filter { condition
[ ends-with | match | starts-with ] | key key_value } | map-id map_id |
slice-name slice_name ] | summary ] | summary [ db-name db_name | filter {
condition [ ends-with | match | starts-with ] | key key_value } | limit
limit | map-id map_id | max-data-size-kb maximum_data_size | next-eval-end-time
| next-eval-start-time | purge-on-eval | slice-name slice_name ] | detailed
[ db-name db_name | filter { condition [ ends-with | match | starts-with
] | key key_value } | limit limit | map-id map_id | max-data-size-kb
maximum_data_size | next-eval-end-time | next-eval-start-time | purge-on-eval
| slice-name slice_name ]
```

count

Display the session count information.

detailed

Display the session details with data.

db-name *db_name*

Specify the database name to be queried for displaying the session details.

Must be a string of 1 to 16 characters.

key *key_value*

Specify the query value.

Must be a string of 0 to 512 characters.

map-id *map_id*

Specify the map ID to display the data for a map.

Must be an integer in the range of 0-1024.

limit *limit*

Specify the maximum number of records to display.

Must be an integer in the range of 1-500.

filter condition { ends-with | match | starts-with }

Specify the query expression to filter the results of query.

purge-on-eval

Displays the list of sessions that have purge-on-eval flag set to true or false.

next-eval-end-time

Displays the sessions that have the next-eval-time less than this time.

next-eval-start-time

Displays the sessions that have the next-eval-time greater than this time.

Usage Guidelines

Use this command to display the session details.

cdl show status

Displays the status of the database from the datastore.

Command Modes

Exec

Syntax Description

cdl show status db-name *database_name*

db-name *database_name*

Specify the database name to display the status.

Must be a string of 1 to 16 characters.

Usage Guidelines

Use this command to display the status of the queried database from the datastore.

clear subscriber

Clears subscriber data.

Command Modes

Exec

Syntax Description

```
clear subscriber { all | gr-instance gr_instance | imei imei_id | namespace
namespace | nf-service nf_service | supi supi_id { tpurge 0 | local-purge true
} | config_specific_options }
```

all

Specify to remove all subscriber data.

gr-instance *gr_instance*

Specify the subscribers from the GR instance.

imei *imei_id*

Specify the International Mobile Equipment Identity.

Must be a string of 15-16 characters.

namespace *namespace*

NOTE: This keyword is deprecated, use nf-service instead. Specifies the product namespace under which to search.

Default Value: cisco-mobile-infra:none.

nf-service *nf_service*

Specify the network function service under which to search.

Default Value: cisco-mobile-infra:none.

supi *supi_id* { **tpurge** 0 | **local-purge** true }

Specify to remove subscriber data associated with the SUPI ID.

Must be a string of 1-63 characters.

- **tpurge 0** : Purges the subscriber immediately.
- **local-purge true** : Purges the subscriber locally without informing peer nodes.

Usage Guidelines

Use this command to clear subscriber data.

clear subscriber clear-opt ran-opt

Displays and clears subscriber data based on specified criteria.

Command Modes

Exec

Syntax Description

```
{ clear | show } subscriber gnodeb-id gnodeb_id mnc mobile_network_code mcc
mobile_country_code
```

gnodeb-id gnodeb_id

Specify the gnodeb-id.

Must be an integer in the range of 0-4294967295.

mcc mobile_country_code

Specify the mobile country code.

Must be a string in a two digit pattern.

mnc mobile_network_code

Specify the mobile network code.

Must be a string in the two-or-three-digit pattern. For information on the two-or-three-digit pattern, see the Input Pattern Types section.

Usage Guidelines

Use this command to view and to clear subscriber data based on specified criteria.

client http header

Configures HTTP header parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

client http header user-agent *user_agent_header*

user-agent *user_agent_header*

Specify the user agent header.

Must be one of the following:

- **app-name**
- **cluster-name**
- **disable**

Default Value: app-name.

Usage Guidelines

Use this command to configure HTTP header parameters.

client http ping

Configures HTTP ping parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
client http ping { [ interval ping_interval ] [ timeout ping_timeout ] }
```

interval ping_interval

Specify, in milliseconds, the time interval between two HTTP pings.

Must be an integer in the range of 0-30000.

Default Value: 10000.

timeout ping_timeout

Specify, in milliseconds, the ping timeout duration to detect if remote host is down.

Must be an integer in the range of 0-15000.

Default Value: 5000.

Usage Guidelines

Use this command to configure HTTP ping parameters.

client inbound interface

Configures inbound client interface parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

client inbound interface *interface_name*

interface *interface_name*

Specify name of the interface.

Usage Guidelines

Use this command to configure inbound client interface parameters. The CLI prompt changes to the Interface Configuration mode (config-interface-<interface_name>).

client inbound interface limit overload

Configures Overload configuration parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

client inbound limit overload reject-code *response_code*

reject-code *response_code*

Specify the response code to be used when pending limit exceeds.

Must be an integer.

Usage Guidelines

Use this command to configure Overload configuration parameters.

client inbound interface limit pending

Configures pending limit parameter.

Command Modes

Exec > Global Configuration (config)

Syntax Description

client inbound limit pending request *max_pending_request_limit*

request *max_pending_request_limit*

Specify the maximum pending request limit to allow.

Must be an integer.

Default Value: 10240.

Usage Guidelines

Use this command to configure the pending request limit parameter.

client inbound limit overload

Configures Overload configuration parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

client inbound limit overload reject-code *response_code*

reject-code *response_code*

Specify the response code to be used when pending limit exceeds.

Must be an integer.

Usage Guidelines

Use this command to configure Overload configuration parameters.

client inbound limit pending

Configures pending limit parameter.

Command Modes

Exec > Global Configuration (config)

Syntax Description

client inbound limit pending request *max_pending_request_limit*

request *max_pending_request_limit*

Specify the maximum pending request limit to allow.

Must be an integer.

Default Value: 10240.

Usage Guidelines

Use this command to configure the pending request limit parameter.

client outbound host ping

Configures outbound host ping parameter.

Command Modes

Exec > Global Configuration (config) > Interface Configuration (config-interface-*interface_name*)

Syntax Description

host ping backoff *backoff_interval* **timeout** *ping_timeout* **interval** *ping_interval*

backoff *backoff_interval*

Specify, in milliseconds, the backoff time interval to wait when remote host is detected down before pinging again.

Must be an integer in the range of 0-3600000.

Default Value: 0.

interval *ping_interval*

Specify, in milliseconds, the time interval between two pings.

Must be an integer in the range of 0-30000.

Default Value: 0.

timeout *ping_timeout*

Specify the ping timeout duration, in milliseconds, to detect remote host down.

Must be an integer in the range of 0-15000.

Default Value: 0.

Usage Guidelines

Use this command to configure outbound host ping parameter.

client outbound interface

Configures outbound client interface parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

client outbound interface *interface_name*

interface *interface_name*

Specify the interface.

Usage Guidelines

Use this command to configure outbound client interface parameters. The CLI prompt changes to the Interface Configuration mode (config-interface-<interface_name>).

client outbound interface host ping

Configures outbound host ping parameter.

Command Modes

Exec > Global Configuration (config) > Interface Configuration (config-interface-*interface_name*)

Syntax Description

host ping backoff *backoff_interval* **timeout** *ping_timeout* **interval** *ping_interval*

backoff *backoff_interval*

Specify, in milliseconds, the backoff time interval to wait when remote host is detected down before pinging again.

Must be an integer in the range of 0-3600000.

Default Value: 0.

interval *ping_interval*

Specify, in milliseconds, the time interval between two pings.

Must be an integer in the range of 0-30000.

Default Value: 0.

timeout *ping_timeout*

Specify the ping timeout duration, in milliseconds, to detect remote host down.

Must be an integer in the range of 0-15000.

Default Value: 0.

Usage Guidelines

Use this command to configure outbound host ping parameter.

client outbound interface limit consecutive failure

Configures consecutive failure configuration parameters.

Command Modes

Exec > Global Configuration (config) > Interface Configuration (config-interface-*interface_name*)

Syntax Description

limit consecutive failure count *consecutive_failure_count* **codes** *failure_codes*

codes *failure_codes*

Specify the list of failure codes to be considered, such as timeout, 503, etc.

Must be a string.

You can configure a maximum of 10 elements with this keyword.

count *consecutive_failure_count*

Specify the consecutive failure limit count to detect remote host as down.

Must be an integer.

Default Value: 0.

Usage Guidelines

Use this command to configure consecutive failure configuration parameters.

client outbound interface limit pending

Configures pending limit configuration.

Command Modes

Exec > Global Configuration (config) > Interface Configuration (config-interface-*interface_name*)

Syntax Description

limit pending response *response_message_limit*

response *response_message_limit*

Specify the pending response message limit to detect remote host as down.

Must be an integer.

Default Value: 1024.

Usage Guidelines

Use this command to configure pending limit configuration.

client outbound limit consecutive failure

Configures consecutive failure configuration parameters.

Command Modes

Exec > Global Configuration (config) > Interface Configuration (config-interface-*interface_name*)

Syntax Description

limit consecutive failure count *consecutive_failure_count* **codes** *failure_codes*

codes *failure_codes*

Specify the list of failure codes to be considered, such as timeout, 503, etc.

Must be a string.

You can configure a maximum of 10 elements with this keyword.

count *consecutive_failure_count*

Specify the consecutive failure limit count to detect remote host as down.

Must be an integer.

Default Value: 0.

Usage Guidelines

Use this command to configure consecutive failure configuration parameters.

client outbound limit pending

Configures pending limit configuration.

Command Modes

Exec > Global Configuration (config) > Interface Configuration (config-interface-*interface_name*)

Syntax Description

limit pending response *response_message_limit*

response *response_message_limit*

Specify the pending response message limit to detect remote host as down.

Must be an integer.

Default Value: 1024.

Usage Guidelines

Use this command to configure pending limit configuration.

commit

Configures the commit parameters.

Command Modes

Exec

Syntax Description

```
commit [ abort { persist-id persist_id } | confirm { persist-id persist_id } | persist-id persist_id ]
```

abort persist-id *persist_id*

Specify to abort commit. Specify the persistence ID for the commit operation.

Must be an integer.

confirm persist-id *persist_id*

Specify to confirm commit. Specify the persistence ID for the commit operation.

Must be an integer.

persist-id *persist_id*

Specify the persistence ID for the commit operation.

Must be an integer.

Usage Guidelines

Use this command to configure the commit parameters.

compare

Compares the running configuration to another configuration or a file.

Command Modes

Exec

Syntax Description

compare file { *filename another_configuration* }

filename [.kube | .ssh] |

Specify the file name ending with .kube/.ssh or the directory path of the file to be compared.

Must be a string.

another_configuration

Specify the configuration to be compared against.

Must be a string.

Usage Guidelines

Use this command to configure the file that must be compared.

config

Manipulates the software configuration information.

Command Modes

Exec

Syntax Description

config [**exclusive** | **no-confirm** | **shared** | **terminal**]

exclusive

Specify to enter the exclusive configuration mode.

no-confirm

Specify to apply the command without asking for confirmation.

shared

Specify to enter the shared configuration mode.

terminal

Specify to enter the terminal configuration mode.

Usage Guidelines

Use this command to manipulate the software configuration information.

config-error info

Displays configuration error information.

Command Modes	Exec
----------------------	------

Syntax Description	show config-error [info]
---------------------------	-----------------------------------

Usage Guidelines	Use this command to view configuration error information.
-------------------------	---

coverage

Configures code coverage utilities.

Command Modes

Exec > Global Configuration (config)

Syntax Description

coverage container-stop *container_stop*

container-stop *container_stop*

Specify the container stop.

Must be a string.

Default Value: false.

Usage Guidelines

Use this command to configure code coverage utilities.

datastore dbs

Configures DBS parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

datastore dbs *dbs_name*

dbs *dbs_name*

Specify name of the DBS.

Must be a string.

Usage Guidelines

Use this command to configure the DBS parameters. The CLI prompt changes to the DBS Configuration mode (config-dbs-<dbs_name>).

datastore dbs endpoints

Configures endpoint parameters.

Command Modes	Exec > Global Configuration (config) > DBS Configuration (config-dbs- <i>dbs_name</i>)
----------------------	---

Syntax Description	endpoints <i>endpoint_name</i> [port <i>port_number</i>]
---------------------------	--

endpoints *endpoint_name*

Specify the endpoint host name.

Must be a string.

port *port_number*

Specify the port number.

Must be an integer.

Usage Guidelines	Use this command to configure endpoint parameters.
-------------------------	--

datastore notification-ep

Configures notification endpoint parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

datastore notification-ep { [**host** *host_name*] [**port** *port_number*] }

host *host_name*

Specify the host name.

Must be a string.

port *port_number*

Specify the port number.

Must be an integer.

Usage Guidelines

Use this command to configure notification endpoint parameters.

datastore session-db

Configures Session DB parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

datastore session-db endpoints *endpoint_name* [[**port** *port_number*] [**slice-name** *slice_name*]]

slice-name *slice_name*

Specify name of the slice.

Must be a string.

Usage Guidelines

Use this command to configure Session DB parameters.

datastore session-db endpoints

Configures endpoint parameters.

Command Modes

Exec > Global Configuration (config) > DBS Configuration (config-dbs-*db_name*)

Syntax Description

endpoints *endpoint_name* [**port** *port_number*]

endpoints *endpoint_name*

Specify the endpoint host name.

Must be a string.

port *port_number*

Specify the port number.

Must be an integer.

Usage Guidelines

Use this command to configure endpoint parameters.

debug-settings amf-ngap-ep

Configures debug settings for AMF NGAP endpoint.

Command Modes

Exec > Global Configuration (config)

Syntax Description

debug-settings amf-ngap-ep go-debug

go-debug

Specify to debug.

Must be a string.

Usage Guidelines

Use this command to configure debug settings for the AMF NGAP endpoint.

debug-settings amf-rest-ep

Configures debug settings for AMF REST endpoint.

Command Modes

Exec > Global Configuration (config)

Syntax Description

debug-settings amf-rest-ep go-debug

go-debug

Specify to debug.

Must be a string.

Usage Guidelines

Use this command to configure debug settings for the AMF REST endpoint.

debug-settings amf-sctp-lb

Configures debug settings for amf-sctp-lb.

Command Modes

Exec > Global Configuration (config)

Syntax Description

debug-settings amf-sctp-lb go-debug

go-debug

Specify to debug.

Must be a string.

Usage Guidelines

Use this command to configure debug settings for amf-sctp-lb.

debug-settings amf-service

Configures debug settings for AMF service.

Command Modes

Exec > Global Configuration (config)

Syntax Description

debug-settings amf-service go-debug

go-debug

Specify to debug.

Must be a string.

Usage Guidelines

Use this command to configure debug settings for the AMF service.

deployment

Configures the product deployment parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
deployment { app-name application_name | cluster-name cluster_name | dc-name datacenter_name | logical-nf-instance-id logical_nf_instance_id | model deployment_model }
```

app-name *application_name*

Specify name of the application.

Must be a string.

cluster-name *cluster_name*

Specify name of the cluster.

Must be a string.

dc-name *datacenter_name*

Specify name of the datacenter.

Must be a string.

logical-nf-instance-id *logical_nf_instance_id*

Specify the logical NF instance ID.

Must be an integer.

Default Value: 0.

model *deployment_model*

Specify the deployment model. Default: Large.

Must be one of the following:

- **small**

Usage Guidelines

Use this command to configure product deployment parameters.

deployment resource

Configures the deployment CPU resource parameter.

Command Modes

Exec > Global Configuration (config) > Deployment Configuration (config-deployment)

Syntax Description

resource **cpu** *cpu_size*

cpu *cpu_size*

Specify the CPU size in millicores.

Must be an integer in the range of 2000-1000000.

Default Value: 18000.

Usage Guidelines

Use this command to configure the deployment CPU resource parameter.

describe

Displays the command information.

Command Modes

Exec

Syntax Description

describe *command*

command

Specify the command name to display the detailed information about the command.

Must be a string.

The command must be one of the following:

- **aaa**
- **cd**
- **cdl**
- **clear**
- **commit**
- **compare**
- **config**
- **describe**
- **dump**
- **exit**
- **geo**
- **help**
- **history**
- **id**
- **idle-timeout**
- **ignore-leading-space**
- **job**
- **leaf-prompting**
- **license**
- **logout**
- **monitor**
- **no**

- **paginate**
- **quit**
- **reconcile**
- **screen-length**
- **screen-width**
- **search**
- **send**
- **show**
- **show-defaults**
- **smiuser**
- **system**
- **terminal**
- **timestamp**
- **transaction**
- **who**

Usage Guidelines

Use this command to display the command-specific information.

diagnostics

Displays diagnostics information.

Command Modes

Exec

Syntax Description

show diagnostics

Usage Guidelines

Use this command to view diagnostics information.

diagnostics info

Displays diagnostics information.

Command Modes

Exec

Syntax Description

show diagnostics [info]

Usage Guidelines

Use this command to view diagnostics information.

dump

Removes the transaction history.

Command Modes

Exec

Syntax Description

dump transactionhistory

transactionhistory

Dump the transaction history.

Usage Guidelines

Use this command to remove the transaction history.

edr reporting

Disables/Enables the EDR reporting.

Command Modes

Exec > Global Configuration (config)

Syntax Description

edr reporting { disable | enable }

edr reporting { disable | enable }

- **disable**

: Disables the EDR reporting.

- **enable**

: Enables the EDR reporting.

Usage Guidelines

Use this command to configure EDR enable parameters.

edr all subscribers

Configures EDR reporting for all subscribers.

Command Modes	Exec > Global Configuration (config)
Syntax Description	edr reporting all subscribers edr reporting all subscribers all subscribers : Enables edr reporting for all.

Usage Guidelines	Use this command to configure EDR reporting for all subscribers.
-------------------------	--

edr file transaction reporting

Configures EDR file transaction reporting.

Command Modes

Exec > Global Configuration (config)

Syntax Description

edr file transaction reporting { disable | enable }

edr file transaction reporting { disable | enable }

Use this command to disable/enable transaction level EDR.

Usage Guidelines

Use this command to disable or enable the EDR file transaction reporting.

edr file transaction flush interval

Configures EDR file transaction flush interval.

Command Modes

Exec > Global Configuration (config)

Syntax Description

edr file transaction flush *flush_interval*

edr file transaction flush *flush_interval*

Specify the interval time interval in milliseconds to flush file.

The flush interval value is in integer ranging from 500 to 10000 ms. The default value is 1000 ms.

Usage Guidelines

Use this command to configure EDR file flush parameters.

edr file transaction limit

Configures EDR file transaction limit parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

edr file transaction limit { count *file_count* | size *file_max_limit* | storage *storage_size* }

edr file transaction limit { count *file_count* | size *file_max_limit* | storage *storage_size* }

- **count** *file_count*: Specify the maximum number of files to be preserved in service-pod (s), (default: 10).
- **size** *file_max_limit*: Specify the maximum single file size (in MiB) limit in service-pod (s), (default: 100MiB).
- **storage** *storage_size*: Specify the EDR Storage size (in GiB) of persistent volume in edr-monitor pod (s), (disable PV: 0, default: 24GiB).

Usage Guidelines

Use this command to configure EDR file transaction limit parameters.

edr file transaction procedure

Configures the procedure-id, event-id, and field-id parameters.



Note Once you configure this CLI, the system generates EDR only for the configured parameters, and it disables all other procedures, fields, and events.

Command Modes Exec > Global Configuration (config) > EDR File Transaction (config-edr-file-transaction)

Syntax Description **procedure** *procedure_id* [**event** *event_id* | **field** *field_id*]

procedure *procedure_id*{ **event** *event_id* | **field** *field_id* }

Specify the name of procedure-id, event-id, and field-id to enable the EDR reporting.

Must be a string.

Usage Guidelines Use this command to enable transaction-level procedure-id, event-id, and field-id parameters.

edr file transaction rate

Configures EDR file transaction rate.

Command Modes

Exec > Global Configuration (config)

Syntax Description

edr file transaction rate *edr_generation_rate*

edr file transaction rate *edr_generation_rate*

Specify the allowed rate per second to generate EDR records. The default value is 4096.

Usage Guidelines

Use this command to configure EDR file transaction rate.

edr file transaction threshold

Configures EDR file transaction threshold parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
edr file transaction threshold { cpu cpu_threshold | session session_threshold }
```

```
edr file transaction threshold { cpu cpu_threshold | session session_threshold }
```

Specify the CPU and Session threshold value (s) to limit EDR generation. After reaching any of the CPU or session threshold values, the system stops generating the EDR files.

The default value for CPU threshold is 80%.

The default value for session threshold is 100,000 per gr-instance.

Usage Guidelines

Use this command to configure EDR file transaction threshold parameters.

edr file transaction collision reporting

Configures EDR file transaction-collision reporting.



Note For more details on transaction-collision scenarios, see [UCC AMF Configuration and Administration Guide > Chapter: Event Data Records > EDR Transaction Collision](#)

Command Modes Exec > Global Configuration (config)

Syntax Description `edr file transaction-collision reporting { disable | enable }`

edr file transaction-collision reporting { disable | enable }

Disables or enables the EDR reporting.

Usage Guidelines Use this command to disable or enable the EDR file transaction-collision reporting.

edr file transaction-collision flush interval

Configures EDR file transaction-collision flush interval.



Note For more details on transaction-collision scenarios, see [UCC AMF Configuration and Administration Guide > Chapter: Event Data Records > EDR Transaction Collision](#)

Command Modes Exec > Global Configuration (config)

Syntax Description **edr file transaction-collision flush** *flush_interval*

edr file transaction-collision flush *flush_interval*

Specify the interval time interval in milliseconds to flush file.

The flush interval value is in integer ranging from 500 to 10000 ms. The default value is 1000 ms.

Usage Guidelines Use this command to configure EDR file flush parameters.

edr file transaction-collision limit

Configures EDR file transaction-collision limit parameters.



Note For more details on transaction-collision scenarios, see [UCC AMF Configuration and Administration Guide > Chapter: Event Data Records > EDR Transaction Collision](#)

Command Modes Exec > Global Configuration (config)

Syntax Description **edr file transaction-collision limit** { **count** *file_count* | **size** *file_max_limit* | **storage** *storage_size* }

edr file transaction-collision limit{ **count** *file_count* | **size** *file_max_limit* | **storage** *storage_size* }

- **count** *file_count*: Specify the maximum number of files to be preserved in service-pod (s), (default: 10).
- **size** *file_max_limit*: Specify the maximum single file size (in MiB) limit in service-pod (s), (default: 100MiB).
- **storage** *storage_size*: Specify the EDR Storage size (in GiB) of persistent volume in edr-monitor pod (s), (disable PV: 0, default: 24GiB).

Usage Guidelines Use this command to configure EDR file transaction-collision limit parameters.

show endpoint

Displays endpoint status.

Command Modes

Exec

Syntax Description

show endpoint { all | info | ipv4 | ipv6 }

all

Displays the status of all endpoints across all pods in the cluster.

info

Displays the detailed information about endpoints.

ipv4

Displays the status of endpoints with IPv4 addresses.

ipv6

Displays the status of endpoints with IPv6 addresses.

Usage Guidelines

Use this command to view the status of endpoints.

exit

Exits the current configuration mode and returns to the parent configuration mode.

Command Modes

Exec

Syntax Description

exit

Usage Guidelines

Use this command to exit the current configuration mode and return to the parent configuration mode. When used in the Exec mode, exits the management session.

group nf-mgmt

Configures NF management group name.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
group nf-mgmt mgmt_group_name { nrf-mgmt-group nrf_mgmt_group_name |
failure-handling-profile fh_profile_name | locality locality_name |
heartbeat-interval heartbeat_interval | message-handling-profile
message_handling_profile_name
```

group nf-mgmt *mgmt_group_name*

Specify name of the NRF management group.

Must be a string.

nrf-mgmt-group *nrf_mgmt_group_name*

Specify name of the NRF management group.

Must be a string.

failure-handling-profile *fh_profile_name*

Specify name of the Failure Handling profile for the NRF Management functionality.

Must be a string.

locality *locality_name*

Specify the locality information.

Must be a string.

heartbeat-interval *heartbeat_interval*

Specify the heartbeat interval in seconds.

Must be an integer.

message-handling-profile *message_handling_profile_name*

Specify the message handling profile name.

Must be an integer.

Usage Guidelines

Use this command to configure NF management group name.

group nrf discovery

Configures NRF discovery group parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

group nrf discovery *group_name* [**nrf-type** *nrf_type*]

discovery *group_name*

Specify name of the NRF discovery group.

Must be a string.

nrf-type *nrf_type*

Specify the NRF type.

Must be one of the following:

- **PLMN**: PLMN.
- **SHARED**: SHARED.
- **SLICE-LOCAL**: SLICE-LOCAL.

Usage Guidelines

Use this command to configure the NRF discovery group configuration.

group nrf discovery service type nrf

Configures the NRF discovery service name.

Command Modes

Exec > Global Configuration (config)

Syntax Description

nrf *nrf_service_name* [**responsetimeout** *response_timeout*]

nrf nrf_service_name

Specify name of the NRF discovery service.

Must be one of the following:

- **nnrf-disc**

responsetimeout response_timeout

Specify the response timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

Usage Guidelines

Use this command to configure the NRF discovery service name.

group nrf discovery service type nrf endpoint-profile

Configures endpoint profile parameters.

Command Modes

Exec > Global Configuration

Syntax Description

```
endpoint-profile endpoint_profile_name { api-uri-prefix api_uri_prefix | api-root
api_root | uri-scheme uri_scheme | uri-version uri_version }
```

api-root *api_root*

Specify the API root.

Must be a string.

api-uri-prefix *api_uri_prefix*

Specify the API URI prefix.

Must be a string.

endpoint-profile *endpoint_profile_name*

Specify name of the endpoint profile.

Must be a string.

uri-scheme *uri_scheme*

Specify the URI scheme.

Must be one of the following:

- **http**
- **https**

uri-version *uri_version*

Specify the URI version.

Must be a string.

Usage Guidelines

Use this command to configure endpoint profile parameters.

group nrf discovery service type nrf endpoint-profile endpoint-name

Configures endpoint parameters.

Command Modes

Exec > Global Configuration

Syntax Description

endpoint-name *endpoint_name* [**priority** *priority* | **capacity** *endpoint_capacity*]

capacity *endpoint_capacity*

Specify the endpoint capacity.

Must be an integer in the range of 0-65535.

Default Value: 10.

priority *priority*

Specify the node priority for endpoint.

Must be an integer in the range of 0-65535.

endpoint_name

Specify name of the endpoint.

Must be a string.

Usage Guidelines

Use this command to configure endpoint parameters.

group nrf discovery service type nrf endpoint-profile endpoint-name primary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > NRF NF-Client Configuration (config-nrf) > NRF Profile Configuration (config-nrf-profile- <i>profile_name</i>) > Locality Configuration (config-locality- <i>locality_name</i>) > Service Name Type Configuration (config-type- <i>service_name_type</i>) > Endpoint Profile Configuration (config-endpoint-profile- <i>profile_name</i>) > Endpoint Name Configuration (config-endpoint-name- <i>endpoint_name</i>)
Syntax Description	{ primary secondary tertiary } ip-address { [ipv4 <i>ipv4_address</i> ipv6 <i>ipv6_address</i>] [port <i>port_number</i>] } ipv4 <i>ipv4_address</i> Specify the IPv4 address. Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section. ipv6 <i>ipv6_address</i> Specify the IPv6 address. Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section. port <i>port_number</i> Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

group nrf discovery service type nrf endpoint-profile endpoint-name secondary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > NRF NF-Client Configuration (config-nrf) > NRF Profile Configuration (config-nrf-profile-profile_name) > Locality Configuration (config-locality-locality_name) > Service Name Type Configuration (config-type-service_name_type) > Endpoint Profile Configuration (config-endpoint-profile-profile_name) > Endpoint Name Configuration (config-endpoint-name-endpoint_name)
Syntax Description	{ primary secondary tertiary } ip-address { [ipv4 ipv4_address ipv6 ipv6_address] [port port_number] } ipv4 ipv4_address Specify the IPv4 address. Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section. ipv6 ipv6_address Specify the IPv6 address. Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section. port port_number Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

group nrf discovery service type nrf endpoint-profile endpoint-name tertiary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > NRF NF-Client Configuration (config-nrf) > NRF Profile Configuration (config-nrf-profile- <i>profile_name</i>) > Locality Configuration (config-locality- <i>locality_name</i>) > Service Name Type Configuration (config-type- <i>service_name_type</i>) > Endpoint Profile Configuration (config-endpoint-profile- <i>profile_name</i>) > Endpoint Name Configuration (config-endpoint-name- <i>endpoint_name</i>)
Syntax Description	{ primary secondary tertiary } ip-address { [ipv4 <i>ipv4_address</i> ipv6 <i>ipv6_address</i>] [port <i>port_number</i>] } ipv4 <i>ipv4_address</i> Specify the IPv4 address. Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section. ipv6 <i>ipv6_address</i> Specify the IPv6 address. Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section. port <i>port_number</i> Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

group nrf discovery service type nrf endpoint-profile version uri-version

Configures URI version information.

Command Modes Exec > Global Configuration

Syntax Description **uri-version** *uri_version* [**full-version** *full_version*]

full-version *full_version*

Specify the full version in the format *major-version.minor-version.patch-version.[alpha-draft-number]*

Must be a string.

uri-version *uri_version*

Specify the URI version.

Must be a string in the pattern *v\d*.

Usage Guidelines Use this command to configure URI version information.

group nrf mgmt

Configures the NRF self-management group parameters.

Command Modes

Exec > Global Configuration

Syntax Description

mgmt *group_name* [**nrf-type** *nrf_type*]

mgmt *group_name*

Specify name of the NRF self-management group.

Must be a string.

nrf-type *nrf_type*

Specify the NRF type.

Must be one of the following:

- **PLMN**: PLMN.
- **SHARED**: SHARED.
- **SLICE-LOCAL**: SLICE-LOCAL.

Usage Guidelines

Use this command to configure the NRF self-management group parameters.

group nrf mgmt service type nrf

Configures the NRF self-management service information.

Command Modes

Exec > Global Configuration

Syntax Description

nrf nrf-service-name *nrf_service_name* [**responsetimeout** *response_timeout*]

nrf-service-name *nrf_service_name*

Specify name of the NRF service.

Must be one of the following:

- **nnrf-nfm**

responsetimeout *response_timeout*

Specify the response timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

Usage Guidelines

Use this command to configure the NRF self-management service information.

group nrf mgmt service type nrf endpoint-profile

Configures endpoint profile parameters¹.

Command Modes

Exec > Global Configuration

Syntax Description

endpoint-profile *endpoint_profile_name* { **api-uri-prefix** *api_uri_prefix* | **api-root** *api_root* | **uri-scheme** *uri_scheme* }

api-root *api_root*

Specify the API root.

Must be a string.

api-uri-prefix *api_uri_prefix*

Specify the API URI prefix.

Must be a string.

endpoint-profile *endpoint_profile_name*

Specify name of the endpoint profile.

Must be a string.

uri-scheme *uri_scheme*

Specify the URI scheme.

Must be one of the following:

- **http**
- **https**

Usage Guidelines

Use this command to configure endpoint profile parameters.

group nrf mgmt service type nrf endpoint-profile endpoint-name

Configures endpoint parameters.

Command Modes Exec > Global Configuration

Syntax Description **endpoint-name** *endpoint_name* [**max-retry-count** *max_retry_count*] [**priority** *endpoint_priority*]

max-retry-count *max_retry_count*

Specify the maximum retry count.

Must be an integer in the range of 0-10.

Default Value: 3.

priority *endpoint_priority*

Specify the node priority for endpoint.

Must be an integer in the range of 0-65535.

endpoint_name

Specify name of the endpoint.

Must be a string.

Usage Guidelines Use this command to configure endpoint parameters.

group nrf mgmt service type nrf endpoint-profile endpoint-name primary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > NRF NF-Client Configuration (config-nrf) > NRF Profile Configuration (config-nrf-profile- <i>profile_name</i>) > Locality Configuration (config-locality- <i>locality_name</i>) > Service Name Type Configuration (config-type- <i>service_name_type</i>) > Endpoint Profile Configuration (config-endpoint-profile- <i>profile_name</i>) > Endpoint Name Configuration (config-endpoint-name- <i>endpoint_name</i>)
Syntax Description	{ primary secondary tertiary } ip-address { [ipv4 <i>ipv4_address</i> ipv6 <i>ipv6_address</i>] [port <i>port_number</i>] } ipv4 <i>ipv4_address</i> Specify the IPv4 address. Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section. ipv6 <i>ipv6_address</i> Specify the IPv6 address. Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section. port <i>port_number</i> Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

group nrf mgmt service type nrf endpoint-profile endpoint-name secondary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > NRF NF-Client Configuration (config-nrf) > NRF Profile Configuration (config-nrf-profile-profile_name) > Locality Configuration (config-locality-locality_name) > Service Name Type Configuration (config-type-service_name_type) > Endpoint Profile Configuration (config-endpoint-profile-profile_name) > Endpoint Name Configuration (config-endpoint-name-endpoint_name)
Syntax Description	<pre>{ primary secondary tertiary } ip-address { [ipv4 ipv4_address ipv6 ipv6_address] [port port_number] }</pre> ipv4 ipv4_address Specify the IPv4 address. Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section. ipv6 ipv6_address Specify the IPv6 address. Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section. port port_number Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

group nrf mgmt service type nrf endpoint-profile endpoint-name tertiary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > NRF NF-Client Configuration (config-nrf) > NRF Profile Configuration (config-nrf-profile- <i>profile_name</i>) > Locality Configuration (config-locality- <i>locality_name</i>) > Service Name Type Configuration (config-type- <i>service_name_type</i>) > Endpoint Profile Configuration (config-endpoint-profile- <i>profile_name</i>) > Endpoint Name Configuration (config-endpoint-name- <i>endpoint_name</i>)
Syntax Description	{ primary secondary tertiary } ip-address { [ipv4 <i>ipv4_address</i> ipv6 <i>ipv6_address</i>] [port <i>port_number</i>] } ipv4 <i>ipv4_address</i> Specify the IPv4 address. Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section. ipv6 <i>ipv6_address</i> Specify the IPv6 address. Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section. port <i>port_number</i> Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

group nrf mgmt service type nrf endpoint-profile version uri-version

Configures version information.

Command Modes Exec > Global Configuration

Syntax Description **uri-version** *uri_version* [**full-version** *full_version*]

full-version *full_version*

Specify the full version in the format *major-version.minor-version.patch-version.[alpha-draft-number]*

Must be a string.

uri-version *uri_version*

Specify the URI version.

Must be a string in the pattern *v\d*.

Usage Guidelines Use this command to configure the version information.

help

Displays help information for specified command.

Command Modes

Exec

Syntax Description

help *command*

command

Specify the command name to display the corresponding help information.

Must be a string.

The command must be one of the following:

- **aaa**
- **cd**
- **cdl**
- **clear**
- **commit**
- **compare**
- **config**
- **describe**
- **dump**
- **exec-imap**
- **exit**
- **geo**
- **help**
- **history**
- **id**
- **idle-timeout**
- **ignore-leading-space**
- **job**
- **leaf-prompting**
- **license**
- **logout**
- **mode**

- **monitor**
- **no**
- **paginate**
- **quit**
- **reconcile**
- **screen-length**
- **screen-width**
- **search**
- **send**
- **show**
- **show-defaults**
- **smiuser**
- **smi-ldap**
- **system**
- **terminal**
- **timestamp**
- **transaction**
- **who**

Usage Guidelines

Use this command to view help information for a specified command.

history

Configures the command history cache size.

Command Modes

Exec

Syntax Description

history *history_size*

history_size

Specify the command history cache size.

Must be an integer in the range of 0-1000.

Usage Guidelines

Use this command to configure the command history cache size.

id

Displays the user ID information.

Command Modes	Exec
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Syntax Description	<code>id</code>
---------------------------	-----------------

Usage Guidelines	Use this command to view the user ID information.
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idle-timeout

Configures the maximum duration for which a command can remain idle in seconds after which the system automatically terminates the connection.

Command Modes

Exec

Syntax Description

idle-timeout *timeout_in_seconds*

timeout_in_seconds

Specify the idle timeout duration in seconds.

Usage Guidelines

Use this command to configure the maximum duration for which a command can remain idle.

ignore-leading-space

Configures whether to ignore or consider the leading whitespace at the beginning of a command.

Command Modes

Exec

Syntax Description

ignore-leading-space { false | true }

{ false | true }

Specify false to ignore leading whitespace, and true to consider it.

Must be either "false" or "true".

Usage Guidelines

Use this command to configure whether to ignore or consider leading whitespace at the beginning of a command.

infra metrics experimental

Configures the experimental metrics version to be enabled.

Command Modes

Exec > Global Configuration (config)

Syntax Description

infra metrics experimental version *experimental_metrics_version*

version *experimental_metrics_version*

Specify the experimental metrics version to be enabled.

Must be an integer in the range of 0-4.

Default Value: 0.

Usage Guidelines

Use this command to configure the experimental metrics version to be enabled.

infra metrics verbose verboseLevels

Configures verbose configuration parameters.

Command Modes Exec > Global Configuration (config)

Syntax Description `infra metrics verbose pod_type level verbose_level`

level *verbose_level*

Specify the verbosity level.

Must be one of the following:

- **debug**
- **off**
- **production**
- **trace**

Default Value: trace.

pod_type

Specify the pod type.

Must be one of the following:

- **application**
- **load-balancer**
- **protocol**
- **service**



Note You can enable the ASN encoding/decoding and NAS algorithm metrics by setting:
pod-type: to application, **verbose-level:** as trace.

Usage Guidelines Use this command to configure verbose configuration parameters.

infra transaction limit

Configures the maximum stage limit per transaction.

Command Modes

Exec > Global Configuration (config)

Syntax Description

infra transaction limit stage *max_stage_limit*

stage *max_stage_limit*

Specify the maximum stage limit per transaction.

Must be an integer.

Default Value: 100.

Usage Guidelines

Use this command to configure the maximum stage limit per transaction.

infra transaction limit consecutive same

Configures the maximum consecutive stage limit per transaction.

Command Modes

Exec > Global Configuration (config)

Syntax Description

infra transaction limit consecutive same stage *max_consecutive_stage_limit*

stage *max_consecutive_stage_limit*

Specify the maximum consecutive stage limit per transaction.

Must be an integer.

Default Value: 10.

Usage Guidelines

Use this command to configure the maximum consecutive stage limit per transaction.

infra transaction loop

Configures the transaction loop detection parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

infra transaction loop detection *detection_status*

detection *detection_status*

Specify to enable or disable loop detection.

Must be one of the following:

- **disable**
- **enable**

Default Value: disable.

Usage Guidelines

Use this command to configure the transaction loop detection parameter.

infra transaction loop category

Configures the loop category.

Command Modes

Exec > Global Configuration (config)

Syntax Description

infra transaction loop category *loop_category*

category *loop_category*

Specify the category.

Usage Guidelines

Use this command to configure the loop category. The CLI prompt changes to the Loop Category Configuration mode(config-category-<category>).

infra transaction loop category threshold

Configures the loop detection interval parameter.

Command Modes	Exec > Global Configuration (config) > Loop Category Configuration (config-category- <i>category</i>)
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Syntax Description	threshold interval <i>loop_detect_interval</i>
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interval *loop_detect_interval*

Specify, in seconds, the loop detection interval.

Must be an integer.

Default Value: 5.

Usage Guidelines	Use this command to configure the loop detection interval parameter.
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infra transaction loop category threshold thresholds

Configures thresholds.

Command Modes	Exec > Global Configuration (config) > Loop Category Configuration (config-category-category)
Syntax Description	threshold <i>threshold_level</i> [[action <i>threshold_action</i>] [count <i>max_transactions</i>]] action <i>threshold_action</i> Specify the action to take on threshold breach. Must be one of the following: • kill-session • log-event • noop Default Value: noop. count <i>max_transactions</i> Specify the maximum number of transactions for the threshold interval. Must be an integer. Default Value: 100. thresholds <i>threshold_level</i> Specify the threshold level. Must be one of the following: • high • low
Usage Guidelines	Use this command to configure thresholds.

instance instance-id

Configures instance ID of GR instance.

Command Modes

Exec > Global Configuration (config)

Syntax Description

instance instance-id *instance_id*

id *instance_id*

Specify the instance ID.

Usage Guidelines

GR instance-specific parameters. Use this command to configure the instance ID of GR instance. The CLI prompt changes to the Instance ID Configuration mode (config-instance-id-<instance_id>).

instance instance-id endpoint ep

Configures endpoint parameters.

Command Modes	Exec > Global Configuration (config) > Instance ID Configuration (config-instance-id- <i>instance_id</i>)
Syntax Description	endpoint <i>endpoint_type</i> [[instancetype <i>ep_local_interface_type</i>] [loopbackEth <i>loopbackEth</i>] [loopbackPort <i>loopbackPort</i>] [nodes <i>node_replicas_for_resiliency</i>] [replicas <i>replicas_per_node</i>] [uri-scheme <i>uri_scheme</i>]] certificate-name <i>certificate_alias_name</i> Specify the alias name for the certificate. endpoint <i>endpoint_type</i> Specify the endpoint type. instancetype <i>ep_local_interface_type</i> Specify the endpoint local interface type. Must be one of the following: • Dual • IPv4 • IPv6 Default Value: IPv4. internal-vip <i>internal_vip</i> Specify the internal VIP. Must be a string. loopbackEth <i>loopbackEth</i> Specify the endpoint local interface name or host IP. Must be a string. loopbackPort <i>loopbackPort</i> Specify the endpoint local port. Must be an integer. max-fragment-size <i>max_fragment_size</i> Specify the Maximum SCTP fragment size for data packet. Must be an integer.

 instance instance-id endpoint ep

Default Value: 0.

nodes *node_replicas_for_resiliency*

Specify the number of node replicas for resiliency.

Must be an integer.

Default Value: 1.

replicas *replicas_per_node*

Specify the number of replicas per node.

Must be an integer.

Default Value: 1.

uri-scheme *uri_scheme*

Specify the URI scheme.

Must be one of the following:

- **http**
- **https**

Default Value: http.

Usage Guidelines

Use this command to configure endpoint parameters.

instance instance-id endpoint gtp dscp

Configures the Differentiated Service Code Point (DSCP) while sending packets over the N26/GTPC interface.

Command Modes Exec > Global Configuration (config) > Instance ID Configuration (config-instance instance-id-*instance_id*) > Endpoint Configuration (config-endpoint-*gtp*)

dscp *dscp_value*

Syntax Description **dscp** *dscp_value* Specify the DSCP value. DSCP value is either in hexadecimal string starting with '0x' eg:0x3F or decimal value (range 0-63) eg:12.

Note
If DSCP value is not specified in the configuration then the default DSCP value is set to 0.

Usage Guidelines Use this command to configure the DSCP value for the N26/GTPC interface.

instance instance-id endpoint sctp dscp

Configures the Differentiated Service Code Point (DSCP) while sending packets over the N2/SCTP interface.

Command Modes Exec > Global Configuration (config) > Instance ID Configuration (config-instance instance-id-*instance_id*) > Endpoint Configuration (config-endpoint-sctp)

dscp *dscp_value*

Syntax Description **dscp** *dscp_value* Specify the DSCP value. DSCP value is either in hexadecimal string starting with '0x' eg:0x3F or decimal value (range 0-63) eg:12.

Note
If DSCP value is not specified in the configuration then the default DSCP value is set to 0.

Usage Guidelines Use this command to configure the DSCP value for the N2/SCTP interface.

instance instance-id endpoint sctp replicas parameters

Configures operational parameters for an SCTP endpoint within a defined service instance.

Command Modes

Exec > Global Configuration (config) > Instance ID Configuration (config-instance-id-*instance_id*)

Syntax Description

```
instance instance-id instance_id { endpoint sctp { replicas no_of_replicas {
parameters { association { heartbeat-interval heartbeat_interval_value |
max-assoc-retry-count max_assoc_retry_count | path-max-rtery-count
path_max_rtery_count | valid-cookie-life valid_cookie_life } | client-idle-timeout
client_idle_timeout_value | mtu-size mtu_size | rto { initial | max | min } |
sack { sack-frequency | sack-period } } } }
```

- **instance-id**: Assigns a unique identifier to the specific instance being configured.
- **endpoint sctp**: Configures the network communication endpoint settings.
- **replicas**: Specifies the number of instances or service copies to be deployed.
- **parameters**: Groups specific configuration settings for the SCTP protocol.
- **association**: Manages settings related to the SCTP association establishment and maintenance.
- **heartbeat-interval**: Sets the time interval between sending heartbeat chunks to monitor path availability.
- **max-assoc-retry-count**: Defines the maximum number of attempts to establish an SCTP association.
- **path-max-rtery-count**: Sets the maximum number of retransmission attempts for a specific network path.
- **valid-cookie-life**: Configures the duration for which an initialization cookie remains valid during the handshake.
- **client-idle-timeout**: Specifies the duration of inactivity before a client connection is terminated.
- **mtu-size**: Sets the Maximum Transmission Unit size for SCTP packets.
- **rto**: Configures Retransmission Timeout (RTO) parameters for the association.
- **initial**: Sets the starting RTO value used for retransmission calculations.
- **max**: Defines the maximum allowable RTO value.
- **min**: Defines the minimum allowable RTO value.
- **sack**: Configures Selective Acknowledgment (SACK) settings for the connection.
- **sack-frequency**: Determines how often SACK chunks are generated and sent.
- **sack-period**: Sets the time interval for reporting SACK information.

Usage Guidelines

Use this command to configure operational parameters for an SCTP endpoint within a defined service instance.

instance instance-id endpoint sbi dscp

Configures the Differentiated Service Code Point (DSCP) while sending packets over the SBI interface.

Command Modes

Exec > Global Configuration (config) > Instance ID Configuration (config-instance instance-id-*instance_id*) > Endpoint Configuration (config-endpoint-*sbi*)

dscp *dscp_value*

Syntax Description

dscp *dscp_value* Specify the DSCP value. DSCP value is either in hexadecimal string starting with '0x' eg:0x3F or decimal value (range 0-63) eg:12.

Note

If DSCP value is not specified in the configuration then the default DSCP value is set to 0.

Usage Guidelines

Use this command to configure the DSCP value for the SBI interface.

instance instance-id endpoint ep interface

Configures the interface type.

Command Modes Exec > Global Configuration (config) > Instance Configuration (config-instance-id-*instance_id*) > Endpoint Configuration (config-endpoint-*endpoint_name*)

Syntax Description **interface** *interface_type*

certificate-name *certificate_alias_name*

Specify the alias name for certificate.

instancetype *ep_local_interface_type*

Specify the endpoint local interface type.

Must be one of the following:

- **Dual**
- **IPv4**
- **IPv6**

Default Value: IPv4.

loopbackEth *loopback_eth*

Specify the Loopback Eth pod interface.

Must be a string.

loopbackPort *loopback_port_number*

Specify the loopback port number.

Must be an integer.

uri-scheme *uri_scheme*

Specify the URI scheme.

Must be one of the following:

- **http**
- **https**

Default Value: http.

interface_type

Specify the interface type.

instance instance-id endpoint ep interface

Usage Guidelines Use this command to configure the interface type.

instance instance-id endpoint ep interface dispatcher

Displays the dispatcher queue support details for the interface.

Command Modes

Exec> Global Configuration (config)> Instance ID Configuration (config-instance-id-*instance_id*)> Endpoint Configuration (config-endpoint-*endpoint_type*)> Interface Configuration (config-interface-*interface_name*)

Syntax Description

dispatcher { **cache** { **false** | **true** } | **capacity** *queue_capacity* | **count** *dispatcher_queues_count* | **expiry** *cache_entry_expiry_duration* | **nonresponsive** *cache_entry_expiry_duration* | **outbound** { **false** | **true** } | **rate-limit** *queue_rate_limit* | **threshold** *outstanding_requests_per_queue_cache* }

cache { **false** | **true** }

Specify to enable or disable retransmission cache support. To disable, set to true.

Must be one of the following:

- **false**
- **true**

Default Value: false.

capacity *queue_capacity*

Specify the capacity of each queue.

Must be an integer.

Default Value: 5000.

count *dispatcher_queues_count*

Specify the count of dispatcher queues.

Must be an integer.

Default Value: 0.

expiry *cache_entry_expiry_duration*

Specify, in milliseconds, the responded cache entry expiry duration.

Must be an integer.

Default Value: 60000.

nonresponsive *cache_entry_expiry_duration*

Specify, in milliseconds, the non-responsive cache entry expiry duration.

Must be an integer.

Default Value: 30000.

 instance instance-id endpoint ep interface dispatcher**outbound { false | true }**

Specify to enable or disable queue support for outbound messages. To disable, set to true.

Must be one of the following:

- **false**
- **true**

Default Value: true.

rate-limit *queue_rate_limit*

Specify the rate limit for each queue.

Must be an integer.

Default Value: 0.

threshold *outstanding_requests_per_queue_cache*

Specify the outstanding requests per queue cache.

Must be an integer.

Default Value: 30000.

Usage Guidelines

Use this command to view dispatcher queue support details for the interface.

instance instance-id endpoint ep interface internal base-port

Configures the internal base-port to start endpoint parameter.

Command Modes	Exec> Global Configuration (config)> Instance ID Configuration (config-instance-id- <i>instance_id</i>)> Endpoint Configuration (config-endpoint- <i>endpoint_type</i>)> Interface Configuration (config-interface- <i>interface_name</i>)
----------------------	---

Syntax Description	internal base-port start <i>base_port_to_start_ep</i>
---------------------------	--

start *base_port_to_start_ep*

Specify the base port to start endpoint.

Must be an integer in the range of 1024-65535.

Usage Guidelines	Use this command to configure the internal base-port to start endpoint parameter.
-------------------------	---

instance instance-id endpoint ep interface sla

Configures SLA parameters.

Command Modes Exec > Global Configuration (config) > Instance Configuration (config-instance-id-*instance_id*) > Endpoint Configuration (config-endpoint-*endpoint_name*) > Interface Configuration (config-interface-*interface_name*)

Syntax Description **sla** { [**response** *response_time*] [**procedure** *procedure_time*] }

procedure *procedure_time*

Specify, in milliseconds, the procedure time.

Must be an integer in the range of 1000-120000.

response *response_time*

Specify, in milliseconds, the response time.

Must be an integer in the range of 1000-180000.

Usage Guidelines Use this command to configure SLA parameters.

instance instance-id endpoint ep interface vip

Configures Virtual IP parameters.

Command Modes	Exec > Global Configuration (config) > Instance Configuration (config-instance-id- <i>instance_id</i>) > Endpoint Configuration (config-endpoint- <i>endpoint_name</i>) > Interface Configuration (config-interface- <i>interface_name</i>)
----------------------	--

Syntax Description	vip-ip <i>vip_ip_address</i> [[offline] [vip-interface <i>interface_name</i>] [vip-port <i>vip_port_number</i>]]
---------------------------	--

offline

Specify to mark the vip-ip as offline.

vip-interface *interface_name*

Specify the interface name to advertise BGP router.

Must be a string.

vip-ip *vip_ip_address*

Specify the host IP address.

Must be a string.

vip-port *vip_port_number*

Specify the port number.

Must be an integer.

Usage Guidelines	Use this command to configure Virtual IP parameters.
-------------------------	--

instance instance-id endpoint ep interface vip6

Configures VIP IPv6 parameters.

Command Modes Exec > Global Configuration (config) > Instance Configuration (config-instance-id-*instance_id*) > Endpoint Configuration (config-endpoint-*endpoint_name*) > Interface Configuration (config-interface-*interface_name*)

Syntax Description **vip-ip6** *vip_ip6* [[**offline**] [**vip-ipv6-port** *port_number*]]

offline

Specify the VIP IP as offline.

vip-ip6 *vip_ip6*

Specify the host detail.

Must be a string.

vip-ipv6-port *port_number*

Specify the port number.

Must be an integer.

Usage Guidelines Use this command to configure VIP IPv6 parameters.

instance instance-id endpoint ep nodes nodes-count internal vip ip interface interface-name vip ip

Configures GTPC-EP merge mode.

Command Modes Exec > Global Configuration (config) > Instance Configuration (config-instance-id-*instance_id*) > Endpoint Configuration (config-endpoint-*endpoint_name*) > Interface Configuration (config-interface-*interface_name*)

Syntax Description **vip-ip** *vip_ip_address*

vip-ip *vip_ip_address*

Specifies the virtual IP address associated with the specified interface.
Must be a string.



Note vip-ipv6 is not supported for GTP endpoint.

Usage Guidelines Use this command to configure Virtual IP parameters.

instance instance-id endpoint ep internal base-port

Configures the internal base-port to start endpoint parameter.

Command Modes Exec > Global Configuration (config) > Instance Configuration (config-instance-id-*instance_id*) > Endpoint Configuration (config-endpoint-*endpoint_type*)

Syntax Description **internal base-port start** *base_port_to_start_ep*

start *base_port_to_start_ep*

Specify the base port to start endpoint.

Must be an integer in the range of 1024-65535.

Usage Guidelines Use this command to configure the internal base-port to start endpoint parameter.

instance instance-id endpoint ep internal-port

Configures internal port parameters.

Command Modes

Exec > Global Configuration (config) > Instance Configuration (config-instance-id-*instance_id*) > Endpoint Configuration (config-endpoint-*endpoint_type*)

Syntax Description

internal-port **metrics** *metrics_port* **admin** *admin_port* **ipc** *ipc_port* **pprof** *pprof_port*
keepalived *keepalived_port*

admin *admin_port*

Specify the admin port number for SCTP.

Must be an integer.

Default Value: 7879.

ipc *ipc_port*

Specify the IPC port number for SCTP.

Must be an integer.

Default Value: 9005.

keepalived *keepalived_port*

Specify the keepalived port number for SCTP.

Must be an integer.

Default Value: 29000.

metrics *metrics_port*

Specify the metrics port number for SCTP.

Must be an integer.

Default Value: 7083.

pprof *pprof_port*

Specify the PPROF port number for SCTP.

Must be an integer.

Default Value: 7850.

Usage Guidelines

Use this command to configure internal port parameters.

instance instance-id endpoint ep system-health-level crash

Configures system health crash parameters.

Command Modes

Exec > Global Configuration (config) > Instance Configuration (config-instance-id-*instance_id*) > Endpoint Configuration (config-endpoint-*endpoint_type*)

Syntax Description

```
system-health-level crash { [ cpu-percent cpu_percentage ] [ memory-in-mbs memory ] [ num-of-goroutine goroutine_per_core ] }
```

cpu-percent *cpu_percentage*

Specify the CPU percentage.

Must be an integer.

Default Value: 80.

memory-in-mbs *memory*

Specify the memory in MB.

Must be an integer.

Default Value: 2048.

num-of-goroutine *goroutine_per_core*

Specify the number of goroutine per core.

Must be an integer.

Default Value: 45000.

Usage Guidelines

Use this command to configure system health crash parameters.

instance instance-id endpoint ep system-health-level critical

Configures system health critical parameters.

Command Modes Exec > Global Configuration (config) > Instance Configuration (config-instance-id-*instance_id*) > Endpoint Configuration (config-endpoint-*endpoint_type*)

Syntax Description **system-health-level critical** { [**cpu-percent** *cpu_percent*] [**memory-in-mbs** *memory*] [**num-of-goroutine** *number_of_goroutine*] }

cpu-percent *cpu_percentage*

Specify the CPU percentage.

Must be an integer.

Default Value: 60.

memory-in-mbs *memory*

Specify the memory in MB.

Must be an integer.

Default Value: 1024.

num-of-goroutine *number_of_goroutine*

Specify the number of goroutine per core.

Must be an integer.

Default Value: 35000.

Usage Guidelines Use this command to configure system health critical parameters.

instance instance-id endpoint ep system-health-level warn

Configures system health warn parameters.

Command Modes Exec > Global Configuration (config) > Instance Configuration (config-instance-id-*instance_id*) > Endpoint Configuration (config-endpoint-*endpoint_type*)

Syntax Description **system-health-level warn** { [**cpu-percent** *cpu_percentage*] [**memory-in-mbs** *memory*] [**num-of-goroutine** *number_of_goroutine*] }

cpu-percent *cpu_percentage*

Specify the CPU percentage.

Must be an integer.

Default Value: 50.

memory-in-mbs *memory*

Specify the memory in MBs.

Must be an integer.

Default Value: 512.

num-of-goroutine *goroutine_per_core*

Specify the number of goroutine per core.

Must be an integer.

Default Value: 25000.

Usage Guidelines Use this command to configure system health warn parameters.

instance instance-id endpoint ep vip

Configures VIP parameters.

Command Modes	Exec > Global Configuration (config) > Instance Configuration (config-instance-id- <i>instance_id</i>) > Endpoint Configuration (config-endpoint- <i>endpoint_type</i>)
----------------------	---

Syntax Description	vip-ip <i>vip_ipv4_address</i> [[offline] [vip-interface <i>vip_interface_name</i>] [vip-port <i>port_number</i>]]
---------------------------	--

offline

Specify the VIP-IP as offline.

vip-interface *vip_interface_name*

Specify the interface name to advertise BGP router.

Must be a string.

vip-ip *vip_ipv4_address*

Specify the VIP IPv4 address.

Must be a string.

vip-port *port_number*

Specify the port number.

Must be an integer.

Usage Guidelines	Use this command to configure VIP parameters.
-------------------------	---

instance instance-id endpoint ep vip6

Configures VIP IPv6 parameters.

Command Modes

Exec > Global Configuration (config) > Instance ID Configuration (config-instance-id-*instance_id*) > Endpoint *endpoint_type* Configuration (config-endpoint-*endpoint_type*)

Syntax Description

vip-ipv6 *vip_ipv6_detail* [[**offline**] [**vip-ipv6-port** *vip_ipv6_port_number*]]

offline

Specify the VIP-IP as offline.

vip-ipv6-port *vip_ipv6_port_number*

Specify the port number.

Must be an integer.

vip-ipv6 *vip_ipv6_detail*

Specify the IPv6 detail.

Must be a string.

Usage Guidelines

Use this command to configure VIP IPv6 parameters.

instance instance-id vip-ip vip-port fqdn

Configures the fqdn for AMF instance.

Command Modes	Exec > Global Configuration (config) > Instance Configuration (config-instance-instance-id- <i>instance_id</i>)
Syntax Description	endpoint <i>endpoint_name</i> { uri-scheme <i>uri_scheme_name</i> vip-ip <i>ip_address</i> vip-port <i>port_number</i> fqdn <i>fqdn_address</i> } endpoint <i>endpoint_name</i> { uri-scheme <i>uri_scheme_name</i> vip-ip <i>ip_address</i> vip-port <i>port_number</i> fqdn <i>fqdn_address</i> } • endpoint <i>endpoint_name</i> —Specify the endpoint for the instance. • uri-scheme <i>uri_scheme_name</i> —Specify the URI scheme name. • vip-ip <i>ip_address</i> —Specify the VIP IP address for the endpoint. • vip-port <i>port_number</i> —Specify the VIP IP port for the endpoint. • fqdn <i>fqdn_address</i> —Specify the fqdn name for the endpoint.
Usage Guidelines	Use this command to configure the fqdn for the AMF instance.

instances instance

Configures instance configuration parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

instances instance *instance_id* [[**cluster-id** *cluster_id*] [**system-id** *system_id*] [**slice-name** *slice_name*]]

cluster-id *cluster_id*

Specify the instance cluster ID.

Must be a string.

instance *instance_id*

Specify the instance ID.

Must be an integer in the range of 1-8.

slice-name *slice_name*

Specify the CDL slice name associated with instance ID.

Must be a string.

system-id *system_id*

Specify the instance system ID.

Must be a string.

Usage Guidelines

Use this command to configure instance configuration parameters.

instance instance-id endpoint service

Configures K8 pod resource parameters (CPU, memory, etc.) for the specified service endpoint.

Command Modes Exec > Global Configuration

Syntax Description `endpoint service { cpu | memory }`

cpu

Configures K8 pod CPU resources for this service endpoint.

memory

Configures K8 pod memory resources for this service endpoint.

Usage Guidelines Use this command to configure CPU and memory resources for a specific service endpoint instance in the K8 pod.



Note This option is applicable for endpoints: `ngap`, `gtp`, `sbi`, `li`, `nodemgr`, `protocol`, `protocol`, `service`, and `sctp`. Any change in this configuration requires `opscenter` shut and start.

instance instance-id endpoint service cpu

Configures CPU resource parameters for the specified service endpoint instance.

Command Modes

Exec > Global Configuration

Syntax Description

```
endpoint service cpu { max-process max_processes | request cpu_resource_request }
```

max-process *max_processes*

Specify the maximum number of parallel OS threads to use.

Must be an integer in the range of 1-32.

request *cpu_resource_request*

Specify the CPU resource request in millicores.

Must be an integer in the range of 100-1000000.

Usage Guidelines

Use this command to configure the CPU resource parameters for a specific service endpoint instance in the K8 pod.

instance instance-id endpoint service service-name

Configures the SCTP endpoint parameters with ULB integration.

Command Modes

Exec > Global Configuration

Syntax Description

```
instance instance-id instance_id { endpoint endpoint_name { service
service_name { cpu request cpu_resource_request | cpu max-process cpu_max_process
| memory request memory_request | memory limit memory_limit | replicas
replicas_value | nodes nodes_value | nad-policy nad_policy_name } } }
```

```
instance instance-id instance_id { endpoint endpoint_name { service service_name { cpu request
cpu_resource_request | cpu max-process cpu_max_process | memory request memory_request | memory
limit memory_limit | replicas replicas_value | nodes nodes_value | nad-policy nad_policy_name } }
```

- **instance instance-id** : Enters configuration mode for instance with ID 1.
- **endpoint** : Configures the endpoint type for the instance, for example `SCTP`.
- **service**: Defines a service under the endpoint.
- **cpu request**: Specify the millicores of CPU resources for the service, default value is 1000.
- **cpu max-process**: Specify the maximum number of CPU processes (threads) for the service, default value is 12.
- **memory request**: Specify the memory resources for the service, default value is 4096 MB.
- **memory limit**: Sets the maximum memory limit, default value is 8192 MB for the service.
- **replicas** : Specifies replicas of the service per node.
- **nodes**: Specifies node replica for resiliency.
- **nad-policy sctp-policy**: Applies the SCTP Network Attachment Definition (NAD) policy, example "sctp-policy" to the endpoint.



Note

Enabling / disabling non-host mode deployment configuration requires ops center shut and start.

instance instance-id endpoint service memory

Configures memory resource parameters for the specified service endpoint instance.

Command Modes

Exec > Global Configuration

Syntax Description

```
endpoint service memory { limit memory_limit | request memory_resource_request }
```

limit *memory_limit*

Specify the maximum memory resource limit in megabytes (MiB).

Must be an integer in the range appropriate for your deployment.

request *memory_resource_request*

Specify the memory resource request in megabytes (MiB).

Must be an integer in the range appropriate for your deployment.

Usage Guidelines

Use this command to configure the memory resource parameters for a specific service endpoint instance in the K8 pod.



Note

This option is applicable for endpoints: `ngap`, `gtp`, `sbi`, `li`, `nodemgr`, `protocol`, `protocol`, `service`, and `scdp`. Any change in this configuration requires opscenter shut and start.

job

Suspends the jobs that are running in the background.

Command Modes

Exec

Syntax Description

job stop *job_id*

job_id

Specify the job ID.

Must be an integer.

Usage Guidelines

Use this command to suspend the jobs that are running in the background.

k8 amf local etcd endpoint

Configures AMF local Etcd endpoint parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

amf local etcd endpoint host *host_name* **port** *port_number*

host *host_name*

Specify the host name.

Must be a string.

Default Value: etcd.

port *port_number*

Specify the port number.

Must be an integer.

Default Value: 2379.

Usage Guidelines

Use this command to configure AMF local Etcd endpoint parameters.

k8 label pod-group-config

Configures K8 node affinity label pod group configuration.

Command Modes

Exec > Global Configuration (config)

Syntax Description

k8 label *pod_group* **key** *label_key* **value** *label_value*

key *label_key*

Specify the key for the label.

Must be a string.

value *label_value*

Specify the value for the label.

Must be a string.

pod_group

Specify the pod group for the VMs.

Must be one of the following:

- **cdl-layer**
- **oam-layer**
- **protocol-layer**
- **service-layer**

Usage Guidelines

Use this command to configure K8 node affinity label pod group configuration.

k8 label sctp-layer

Configures AMF sctp-layer parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

sctp-layer **key** *label_key* **value** *label_value*

key *label_key*

Specify the key for the label.

Must be a string.

value *label_value*

Specify the value for the label.

Must be a string.

Usage Guidelines

Use this command to configure sctp-layer parameters.

k8s single-node

Enables AMF to be deployed in single node.

Command Modes

Exec > Global Configuration (config)

Syntax Description

k8s single-node { false | true }

single-node { false | true }

Specify whether to enable or disable single-node deployment of AMF.

Must be one of the following:

- **false**
- **true**

Default Value: false.

If **k8s single-node true** is configured, AMF pods can be deployed in a single node.

Single node deployment involves some additional configurations. For more information, contact your Cisco account representative.



Note AMF does not support dynamic changes to this command.

Usage Guidelines

Use this command to enable AMF to be deployed in single node.

leaf-prompting

Enables or disables automatically querying for leaf values.

Command Modes

Exec

Syntax Description

leaf-prompting { false | true }

{ false | true }

Specify false to disable leaf prompting, true to enable.

Must be either "false" or "true".

Usage Guidelines

Use this command to automatically query for leaf values.

license smart register

Registers the VNF for Smart Licensing.

Command Modes

Exec

Syntax Description

`license smart register [ force | idtoken idtoken ]`

register

Register the VNF for Smart Licensing.

force

Force registration of the agent.

idtoken

Specify the ID token to register the agent with.

Must be an integer.

Usage Guidelines

Use this command to register the VNF for Smart Licensing.

license smart deregister

Deregisters the VNF for Smart Licensing.

Command Modes

Exec

Syntax Description

license smart deregister

deregister

Deregisters the VNF for Smart Licensing.

Usage Guidelines

Use this command to deregister the VNF for Smart Licensing.

license smart renew

Renews smart agent IDs and authentication.

Command Modes

Exec

Syntax Description

`license smart renew { ID | auth }`

renew

Renews the smart agent IDs and authentication.

ID

Specify the ID to renew smart agent license registration information.

auth

Specify to initiate a manual update of the license usage information with Cisco.

Usage Guidelines

Use this command to renew the smart agent IDs and authentication.

license smart status

Displays the smart licensing status information.

Command Modes

Exec

Syntax Description

`license smart status status-only { true | false }`

status

Displays the smart licensing information.

status-only

Displays only the status information.

Must be one of the following:

- false
- true

Usage Guidelines

Use this command to view the smart licensing status information.

local-instance

Configures GR instance for current instance.

Command Modes	Exec > Global Configuration
----------------------	-----------------------------

Syntax Description	local-instance instance <i>gr_instance_id</i>
---------------------------	--

instance *gr_instance_id*

Specify the GR instance ID of current instance.

Usage Guidelines	Use this command to configure GR instance for current instance.
-------------------------	---

local-cause-code-map auth-failure

Configures the UE authentication failure condition type parameter.

Command Modes

Exec > Global Configuration (config)

Syntax Description

local-cause-code-map auth-failure cause-code-5gmm *cause_code_5gmm*

cause-code-5gmm *cause_code_5gmm*

Specify the condition type.

Must be one of the following:

- **illegal-ms**
- **no-suitable-cells-in-tracking-area**
- **plmn-not-allowed**
- **restricted-service-area**
- **roaming-not-allowed-in-this-tracking-area**
- **tracking-area-not-allowed**

Default Value: illegal-ms.

Usage Guidelines

Use this command to configure the UE authentication failure condition type parameter.

local-cause-code-map clear-subscriber

Configures the UE subscriber clear condition type.

Command Modes

Exec > Global Configuration (config)

Syntax Description

local-cause-code-map clear-subscriber cause-code-5gmm *cause_code_5gmm*

cause-code-5gmm *cause_code_5gmm*

Specify the condition type.

Must be one of the following:

- **5GS-services-not-allowed**
- **implicitly-de-registered**
- **no-suitable-cells-in-tracking-area**
- **plmn-not-allowed**
- **restricted-service-area**
- **roaming-not-allowed-in-this-tracking-area**
- **tracking-area-not-allowed**

Default Value: plmn-not-allowed.

Usage Guidelines

Use this command to configure the UE subscriber clear condition type.

local-cause-code-map core-network-type-restriction

Configures a mapping of local cause codes to specific actions or responses. It allows the system to handle different scenarios or errors based on predefined cause codes, ensuring appropriate processing or signaling.

Command Modes

Exec > Global Configuration (config)

Syntax Description

local-cause-code-map core-network-type-restriction cause-code-5gmm
cause_code_5gmm

core-network-type-restriction cause-code-5gmm *cause_code_5gmm*

Restricts the core network type to 5GC. It ensures that the policies and configurations apply specifically to the 5G Core network, potentially affecting how certain services are managed or restricted within this network type.

Usage Guidelines

Use this command to configure a mapping of local cause codes to specific actions or responses.

local-cause-code-map ctxt-xfer-fail

Configures the AMF context transfer failure condition type parameter.

Command Modes	Exec > Global Configuration (config) > AMF Services Configuration (config-amf-services-service_name)
----------------------	--

Syntax Description	local-cause-code-map ctxt-xfer-fail cause-code-5gmm <i>cause_code_5gmm</i>
---------------------------	---

cause-code-5gmm *cause_code_5gmm*

Specify the condition type.

Must be one of the following:

- **no-suitable-cells-in-tracking-area**
- **plmn-not-allowed**
- **restricted-service-area**
- **roaming-not-allowed-in-this-tracking-area**
- **tracking-area-not-allowed**
- **ue-identity-not-derived**

Default Value: ue-identity-not-derived.

Usage Guidelines	Use this command to configure the AMF context transfer failure condition type parameter.
-------------------------	--

local-cause-code-map ctxt-xfer-fail-mme

Configures the MME context transfer failure condition type parameter.

Command Modes

Exec > Global Configuration (config)

Syntax Description

local-cause-code-map ctxt-xfer-fail-mme cause-code-5gmm *cause_code_5gmm*

cause-code-5gmm *cause_code_5gmm*

Specify the condition type.

Must be one of the following:

- **no-suitable-cells-in-tracking-area**
- **plmn-not-allowed**
- **restricted-service-area**
- **roaming-not-allowed-in-this-tracking-area**
- **tracking-area-not-allowed**
- **ue-identity-not-derived**

Default Value: ue-identity-not-derived.

Usage Guidelines

Use this command to configure the MME context transfer failure condition type parameter.

local-cause-code-map dnn-mismatch

Configures the DNN mismatch condition type parameter.

Command Modes

Exec > Global Configuration (config)

Syntax Description

local-cause-code-map dnn-mismatch cause-code-5gmm *cause_code_5gmm*

cause-code-5gmm *cause_code_5gmm*

Specify the condition type.

Must be one of the following:

- **no-suitable-cells-in-tracking-area**
- **plmn-not-allowed**
- **restricted-service-area**
- **roaming-not-allowed-in-this-tracking-area**
- **tracking-area-not-allowed**

Default Value: plmn-not-allowed.

Usage Guidelines

Use this command to configure the DNN mismatch condition type parameter.

local-cause-code-map dnn-not-subscribed

Configures the DNN not subscribed condition type parameter.

Command Modes

Exec > Global Configuration (config)

Syntax Description

local-cause-code-map dnn-not-subscribed cause-code-5gmm *cause_code_5gmm*

cause-code-5gmm *cause_code_5gmm*

Specify the condition type.

Must be one of the following:

- **dnn-not-subscribed**

Default Value: dnn-not-subscribed.

Usage Guidelines

Use this command to configure the DNN not subscribed condition type parameter.

local-cause-code-map gw-unreachable

Configures the gw unreachable condition type parameter.

Command Modes

Exec > Global Configuration (config)

Syntax Description

local-cause-code-map gw-unreachable cause-code-5gmm *cause_code_5gmm*

cause-code-5gmm *cause_code_5gmm*

Specify the condition type.

Must be one of the following:

- **no-suitable-cells-in-tracking-area**
- **plmn-not-allowed**
- **restricted-service-area**
- **roaming-not-allowed-in-this-tracking-area**
- **tracking-area-not-allowed**

Default Value: no-suitable-cells-in-tracking-area.

Usage Guidelines

Use this command to configure the gw unreachable condition type parameter.

local-cause-code-map ims-vops-failure

Configures a mapping between the local cause code and ims-vops-failure.

Command Modes

Exec > Global Configuration (config)

Syntax Description

local-cause-code-map ims-vops-failure cause-code-5gmm *cause_code_5gmm*

ims-vops-failure cause-code-5gmm *cause_code_5gmm*

Configures a mapping between a local cause code for IMS Voice over PS service failures and a specific 5GMM cause code. This mapping allows the system to translate or associate IMS VoPS failures with a relevant cause code recognized within the 5G Mobility Management framework. By doing so, it facilitates coherent handling and signaling of these failures across the network, enabling more effective management and troubleshooting of IMS-related issues.

Usage Guidelines

Use this command to configure a mapping of local cause codes to ims-vops-failure.

local-cause-code-map inter-plmn-roaming

Configures the inter-PLMN roaming condition type parameter.

Command Modes

Exec > Global Configuration (config)

Syntax Description

local-cause-code-map inter-plmn-roaming cause-code-5gmm *cause_code_5gmm*

cause-code-5gmm *cause_code_5gmm*

Specify the condition type.

Must be one of the following:

- **5GS-services-not-allowed**
- **no-suitable-cells-in-tracking-area**
- **plmn-not-allowed**
- **restricted-service-area**
- **roaming-not-allowed-in-this-tracking-area**
- **tracking-area-not-allowed**

Default Value: plmn-not-allowed.

Usage Guidelines

Use this command to configure the inter-PLMN roaming condition type parameter.

local-cause-code-map odb-packet-services

Configures the barring condition type parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

local-cause-code-map odb-packet-services cause-code-5gmm *cause_code_5gmm*

cause-code-5gmm *cause_code_5gmm*

Specify the condition type.

Must be one of the following:

- **5GS-services-not-allowed**
- **n1-mode-not-allowed**
- **no-suitable-cells-in-tracking-area**
- **plmn-not-allowed**
- **restricted-service-area**
- **tracking-area-not-allowed**

Usage Guidelines

Use this command to configure the barring condition type parameter.

local-cause-code-map peer-node-unknown

Configures the peer node no response condition type parameter.

Command Modes

Exec > Global Configuration (config)

Syntax Description

local-cause-code-map peer-node-unknown cause-code-5gmm *cause_code_5gmm*

cause-code-5gmm *cause_code_5gmm*

Specify the condition type.

Must be one of the following:

- **no-suitable-cells-in-tracking-area**
- **plmn-not-allowed**
- **restricted-service-area**
- **roaming-not-allowed-in-this-tracking-area**
- **tracking-area-not-allowed**
- **ue-identity-not-derived**

Default Value: ue-identity-not-derived.

Usage Guidelines

Use this command to configure the peer node no response condition type parameter.

local-cause-code-map rat-type-restriction

Configures a mapping between the local cause code and rat-type-restriction.

Command Modes

Exec > Global Configuration (config)

Syntax Description

local-cause-code-map rat-type-restriction cause-code-5gmm *cause_code_5gmm*

rat-type-restriction cause-code-5gmm *cause_code_5gmm*

Configures a mapping between local cause codes for RAT type restrictions and specific 5GMM cause codes. This configuration allows the system to handle scenarios where certain RAT types are restricted by associating them with a standardized 5GMM cause code. This ensures consistent communication and management of RAT type restrictions within the 5G network, helping to streamline operations and facilitate troubleshooting.

Must be one of the following:

- **plmn-not-allowed**
- **no-suitable-cells-in-tracking-area**
- **restricted-service-area**
- **roaming-not-allowed-in-this-tracking-area**
- **tracking-area-not-allowed**
- **5GS-services-not-allowed**
- **n1-mode-not-allowed**
- **redirection-to-epc-required**

Usage Guidelines

Use this command to configure a mapping of local cause codes to rat-type-restriction.

local-cause-code-map registration-restriction

Configures a mapping of local cause codes to registration-restriction.

Command Modes

Exec > Global Configuration (config)

Syntax Description

local-cause-code-map registration-restriction cause-code-5gmm *cause_code_5gmm*

registration-restriction cause-code-5gmm *cause_code_5gmm*

Configures the mapping of local cause codes related to registration restrictions to specific 5GMM (5G Mobility Management) cause codes. This configuration helps the system to handle cases where registration attempts are restricted by associating them with a corresponding 5GMM cause code. This mapping ensures that the restrictions are communicated consistently and efficiently within the 5G network, aiding in proper signaling and management of registration-related issues.

Must be one of the following:

- **plmn-not-allowed**
- **5GS-service-not-allowed**
- **no-suitable-cells-in-tracking-area**
- **restricted-service-area**
- **roaming-not-allowed-in-this-tracking-area**
- **tracking-area-not-allowed**
- **n1-mode-not-allowed**
- **redirection-to-epc-required**

Default value: plmn-not-allowed

Usage Guidelines

Use this command to configure a mapping of local cause codes to specific registration-restrictions.

local-cause-code-map restricted-zone-code

Configures the restricted zone code condition type parameter.

Command Modes

Exec > Global Configuration (config)

Syntax Description

local-cause-code-map restricted-zone-code cause-code-5gmm *cause_code_5gmm*

cause-code-5gmm *cause_code_5gmm*

Specify the condition type.

Must be one of the following:

- **5GS-services-not-allowed**
- **no-suitable-cells-in-tracking-area**
- **plmn-not-allowed**
- **restricted-service-area**
- **roaming-not-allowed-in-this-tracking-area**
- **tracking-area-not-allowed**

Default Value: no-suitable-cells-in-tracking-area.

Usage Guidelines

Use this command to configure the restricted zone code condition type parameter.

local-cause-code-map smf-selection-failure

Configures the SMF selection failure condition type parameter.

Command Modes

Exec > Global Configuration (config)

Syntax Description

local-cause-code-map smf-selection-failure cause-code-5gmm *cause_code_5gmm*

cause-code-5gmm *cause_code_5gmm*

Specify the condition type.

Must be one of the following:

- **no-suitable-cells-in-tracking-area**
- **plmn-not-allowed**
- **restricted-service-area**
- **roaming-not-allowed-in-this-tracking-area**
- **tracking-area-not-allowed**

Default Value: no-suitable-cells-in-tracking-area.

Usage Guidelines

Use this command to configure the SMF selection failure condition type parameter.

local-cause-code-map udm-unavailable

Configures the UDM not available condition type parameter.

Command Modes

Exec > Global Configuration (config)

Syntax Description

local-cause-code-map udm-unavailable cause-code-5gmm *cause_code_5gmm*

cause-code-5gmm *cause_code_5gmm*

Specify the condition type.

Must be one of the following:

- **no-suitable-cells-in-tracking-area**
- **plmn-not-allowed**
- **restricted-service-area**
- **roaming-not-allowed-in-this-tracking-area**
- **tracking-area-not-allowed**
- **5GS-services-not-allowed**
- **n1-mode-not-allowed**
- **redirection-to-epc-required**

Default Value: no-suitable-cells-in-tracking-area.

Usage Guidelines

Use this command to configure the UDM not available condition type parameter.

logging async application enable

Enables and configures async application logging.

Command Modes

Exec > Global Configuration (config)

Syntax Description

logging async application { disable | enable buffer-size *buffer_size* }

buffer-size *buffer_size*

Specify the buffer size for async logging.

Must be an integer.

Usage Guidelines

Use this command to enable and configure async application logging.

logging async monitor-subscriber enable

Enables and configures async mon-sub logging.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
logging async monitor-subscriber { disable | enable buffer-size buffer_size
}
```

buffer-size *buffer_size*

Specify the buffer size for async logging.

Must be an integer.

Usage Guidelines

Use this command to enable and configure async mon-sub logging.

logging async tracing enable

Enables and configures async tracing logging.

Command Modes

Exec > Global Configuration (config)

Syntax Description

logging async tracing { disable | enable buffer-size *buffer_size* }

buffer-size *buffer_size*

Specify the buffer size for async logging.

Must be an integer.

Usage Guidelines

Use this command to enable and configure async tracing logging.

logging async transaction enable

Enables and configures async transaction logging.

Command Modes

Exec > Global Configuration (config)

Syntax Description

logging async transaction { disable | enable buffer-size *buffer_size* }

buffer-size *buffer_size*

Specify the buffer size for async logging.

Must be an integer.

Usage Guidelines

Use this command to enable and configure async transaction logging.

logging error

Configures error logging parameters.

Command Modes	Exec > Global Configuration (config)
----------------------	--------------------------------------

Syntax Description	logging error stack <i>status</i>
---------------------------	--

stack status

Specify to enable or disable error stack.

Must be one of the following:

- **disable**
- **enable**

Default Value: enable.

Usage Guidelines	Use this command to configure error logging parameters.
-------------------------	---

logging json logging

Configures the JSON logging for different types of logs in the AMF.

Command Modes

Exec

Syntax Description

logging json-logging [application | monitor-subscriber | transaction]

application

Enables or disables JSON logging for application logs.

monitor-subscriber

Enables or disables JSON logging for subscriber monitoring logs.

transaction

Enables or disables JSON logging for transaction logs.

Usage Guidelines

Use this command to configure JSON logging for different types of logs in the AMF.

logging level

Configures the logging level.

Command Modes	Exec > Global Configuration (config)
----------------------	--------------------------------------

Syntax Description	logging level <i>log_level</i>
---------------------------	---------------------------------------

application *application_log_level*

Specify the application logging level.

Must be one of the following:

- **debug**
- **error**
- **info**
- **off**
- **trace**
- **warn**

monitor-subscriber *monitor_subscriber_log_level*

Specify the monitor subscriber logging level.

Must be one of the following:

- **debug**
- **error**
- **info**
- **off**
- **trace**
- **warn**

tracing *tracing_log_level*

Specify the tracing logging level.

Must be one of the following:

- **debug**
- **error**
- **info**
- **off**

- trace
- warn

transaction *transaction_log_level*

Specify the transaction logging level.

Must be one of the following:

- debug
- error
- info
- off
- trace
- warn

Usage Guidelines

Use this command to configure the logging level.

logging name

Configures the log name.

Command Modes

Exec > Global Configuration (config)

Syntax Description

logging name { infra.config.core | infra.message_log.core }

logging name logging name { infra.config.core | infra.message_log.core }

Specify the module name for logs generation.

Must be a string.

infra.config.core

Specify the log identifier used to capture events related to the core configuration of the infrastructure.

infra.message_log.core

Specify the log identifier used to capture core infrastructure messaging.

Usage Guidelines

Use this command to configure the log names.

logging transaction

Configures the logging transaction parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
logging transaction { [ duplicate { disable | enable } ] [ message {
disable | enable } ] [ persist { disable | enable [ max-file-size
max_file_size ] [ max-rotation max_rotations ] } ] }
```

duplicate { enable | disable }

Specify whether to enable or disable duplicate logs in transaction logging.

Must be one of the following:

- **disable**
- **enable**

Default Value: disable.

max-file-size max_file_size

Specify the maximum transaction file size in MB.

Must be an integer in the range of 1-10000.

Default Value: 50.

max-rotation max_rotations

Specify the maximum number of file rotations.

Must be an integer in the range of 2-1000.

Default Value: 10.

message { enable | disable }

Specify whether to enable or disable messages in transaction logging.

Must be one of the following:

- **disable**
- **enable**

Default Value: disable.

persist { enable | disable }

Specify whether to enable or disable file-based transaction logging.

Must be one of the following:

- **disable**

- **enable**

Default Value: disable.

Usage Guidelines Use this command to configure the logging transaction parameters.

logging range name

Configures specific logging targets (such as `infra.config.core` or `infra.message_log.core`) rather than applying settings globally.

Command Modes

Exec > Global Configuration (config)

Syntax Description

logging range name { infra.config.core | infra.message_log.core }

logging range name { infra.config.core | infra.message_log.core }

Specify the module range name for logs generation.

Must be a string.

infra.config.core

Specify the log identifier used to capture events related to the core configuration of the infrastructure.

infra.message_log.core

Specify the log identifier used to capture core infrastructure messaging.

Usage Guidelines

Use this command to configure specific logging targets with the logging range name [prefix].

logout

Logout a specific session or a specific user from all sessions.

Command Modes

Exec

Syntax Description

logout [**session** *session_id* | **user** *user_name*]

session *session_id*

Specify the session ID from the possible completion options.

Must be a string.

user *user_name*

Specify the user name or the user process from the possible completion options.

Must be a string.

Usage Guidelines

Use this command to log out a specific session or a specific user from all sessions.

monitor protocol

Configures the AMF to monitor the protocol.

Command Modes

Exec

Syntax Description

monitor protocol [**interface** *interface_name* [**capture-duration** *duration* | **gr-instance** *gr_instance* | **pcap**]]

interface *interface_name*

Specify the name of interface on which PCAP is captured.

Must be a string.

Must be one of the following:

- sbi
- pfcp
- gtpu
- gtpc
- gtp
- radius
- diameter

capture-duration *duration*

Specify the duration, in seconds, during which monitor subscriber is enabled.

Must be an integer.

Default Value: 300 seconds

gr-instance *gr_instance*

Specify the GR instance ID.

pcap

Enable PCAP file generation.

Must be "yes" or "no".

Default Value: no

Usage Guidelines

Use this command to monitor the protocol.

monitor subscriber

Configures the AMF to monitor the subscribers.

Command Modes

Exec

Syntax Description

```
monitor subscriber [ capture-duration duration | dump filename file_name |
supi supi | gr-instance gr_instance | imei subscriber_imei | imsi subscriber_imsi |
internal-messages [ yes ] | list | namespace [ sgw | smf ] | nf-service
[ sgw | smf ] | transaction-logs [ yes ] ]
```

capture-duration *duration*

Specify the duration, in seconds, during which monitor subscriber is enabled.

Must be an integer.

Default Value: 300 seconds

dump filename *file_name*

Specify the path of the file name to be dumped.

Must be a string.

supi *supi*

Specify the subscriber identifier.

Must be a string.

gr-instance *gr_instance*

Specifies the network function service instance (GR instance) under which to search or monitor subscribers.

Must be a string.

imei *subscriber_imei*

Specifies the International Mobile Equipment Identity (IMEI) of the subscriber; must be a string of 15-16 characters.

imsi *subscriber_imsi*

Specifies the International Mobile Subscriber Identity (IMSI) of the subscriber; must be a string.

internal-messages

Set to yes to enable internal messages.

Default Value: disabled

list

List the monitored subscriber files.

namespace [sgw | smf]

Specifies the product namespace under which to search; this keyword is deprecated and replaced by nf-service.

nf-service [sgw | smf]

Specifies the network function service under which to search or monitor subscribers, such as SGW or SMF.

transaction-logs

Set to yes to enable transaction logging.

Default Value: disabled

Usage Guidelines

Use this command to monitor the subscribers.

no

Restores the command history cache size to its default setting. See the *history* command.

Command Modes

Exec

Syntax Description

no history

Usage Guidelines

Use this command to configure the command history cache size to its default setting. For more details, see the *history* command.

nf-tls ca certificates

Configures client certificates.

Command Modes

Exec > Global Configuration (config)

Syntax Description

nf-tls ca-certificates *certificate_name* **cert-data** *certificate_data*

nf-tls ca-certificates *certificate_name*

Specify the certificate name and data.

Must be a string.

cert-data *certificate_data*

Specify the certificate data in PEM format.

Must be a string.

Usage Guidelines

Use this command to configure client certificates.

nf-tls certificates

Configures server certificates.

Command Modes	Exec > Global Configuration (config)
Syntax Description	nf-tls certificates <i>certificate_name</i> cert-data <i>certificate_data</i> private-enc-key <i>private_enc_key_data</i>

nf-tls certificates *certificate_name*

Specify the certificate name and data.
Must be a string.

cert-data *certificate_data*

Specify the certificate data in PEM format.
Must be a string.

private-enc-key *private_enc_key_data*

Specify the certificate private enc key in PEM format.
Must be a string.



Note **private-key** option is deprecated and it is recommended to use **private-enc-key** instead.

Usage Guidelines	Use this command to configure server certificates.
-------------------------	--

show nrf

Displays various operational and configuration details related to the Network Repository Function (NRF), such as access token information, discovery filters, and registration or subscription status.

Command Modes

Exec

Syntax Description

show nrf { access-token-info | discovery-info | displaylevel }

access-token-info

Displays detailed information regarding the Network Function (NF) access tokens.

discovery-info

Displays information related to the discovery filter configurations used by the NRF.

displaylevel

Specifies the depth or level of detail to be shown in the output for NRF-related information.

Usage Guidelines

Use this command to view operational and configuration details related to the Network Repository Function (NRF), such as access token information, discovery filters, and registration or subscription status.

nrf registration-info

Displays NRF registration information.

Command Modes

Exec

Syntax Description

```
show nrf { registration-info { displaylevel | gr-instance } }
```

displaylevel

Displays the depth to show.

Must be a string.

gr-instance

Specify the `gr-instance` parameter for the unique identifier of the group instance for which you want to display NF subscription information.

Usage Guidelines

Use this command to view registration information.

nrf subscription-info

Displays NF subscription information.

Command Modes

Exec > Global Configuration

Syntax Description

show nrf subscription-info { displaylevel | gr-instance }

displaylevel

Displays the depth to show.

Must be a string.

gr-instance

Specify the `gr-instance` parameter for the unique identifier of the group instance for which you want to display NF subscription information.

Usage Guidelines

Use this command to view NF subscription information.

operator-policy network-element-profile-list scp

Configures the network element profiles with specific policies in a given environment.

Command Modes

Exec > Global Configuration (config) > Operator Policy Configuration
(config-operator-policy-operator_policy_name)

Syntax Description

network-element-profile-list scp *profile_name*

network-element-profile-list scp *profile_name*

Specify the profile name for the network element list.

Usage Guidelines

Use this command to configure a policy with a network element profile.

paginate

Configures whether or not to paginate CLI command output.

Command Modes

Exec

Syntax Description

paginate { true | false }

{ true | false }

Specify false to disable paginating CLI command output, and true to enable.

Must be either "false" or "true".

Usage Guidelines

Use this command to paginate the command output.

patch amf-ngap-ep

Configures patch amf-ngap-ep parameter.

Command Modes

Exec > Global Configuration (config)

Syntax Description

patch amf-ngap-ep patch-url *patch_url*

patch-url *patch_url*

Specify the patch URL.

Must be a string.

Usage Guidelines

Use this command to configure patch amf-ngap-ep parameter.

patch amf-rest-ep

Configures patch AMF REST endpoint.

Command Modes

Exec > Global Configuration (config)

Syntax Description

patch amf-rest-ep patch-url *patch_url*

patch-url *patch_url*

Specify the patch URL.

Must be a string.

Usage Guidelines

Use this command to configure patch AMF REST endpoint.

patch amf-sctp-lb

Configures patch amf-sctp-lb parameter.

Command Modes

Exec > Global Configuration (config)

Syntax Description

patch amf-sctp-lb patch-url *patch_url*

patch-url *patch_url*

Specify the patch URL.

Must be a string.

Usage Guidelines

Use this command to configure patch amf-sctp-lb parameter.

patch amf-service

Configures patch AMF service.

Command Modes

Exec > Global Configuration (config)

Syntax Description

patch amf-service patch-url *patch_url*

patch-url *patch_url*

Specify the patch URL.

Must be a string.

Usage Guidelines

Use this command to configure patch AMF service.

peers

Displays peer information.

Command Modes

Exec

Syntax Description

```
show peers { all { additionalDetails | connectedTime | direction |
interfaceName | podInstance | rpc | type | vrf } | ipv4 { additionalDetails
| connectedTime | direction | interfaceName | podInstance | rpc | type
| vrf } | ipv6 { additionalDetails | connectedTime | direction |
interfaceName | podInstance | rpc | type | vrf } }
```

Syntax Description

Displays the additional information about each peer. This information includes metrics, such as error rates and configuration specific details.

Syntax Description

Displays the duration for which the peer has been connected.

Syntax Description

Displays the direction of the peer connection. For example, inbound or outbound.

Syntax Description

Displays the name of the network interface through which the peer is connected.

Syntax Description

Displays the specific pod instance that the peer is connected to.

Syntax Description

Displays information related to Remote Procedure Calls (RPC) between peers.

Syntax Description

Displays the type of peer. For example, client, server, or router

Syntax Description

Displays the vrf details.

Usage Guidelines

Use this command to view peer information for all peers, ipv4, and ipv6.

profile compliance

Configures 3GPP compliance profile configuration.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile compliance *profile_name*

profile compliance *profile_name*

Specify name of the compliance profile.

Must be a string.

Usage Guidelines

Use this command to configure the 3GPP compliance profile configuration.

profile compliance service

Configures the AMF service names.

Command Modes	Exec > Global Configuration (config) > Compliance Profile Configuration (config-compliance- <i>profile_name</i>)
----------------------	---

Syntax Description	service <i>service_name</i>
---------------------------	------------------------------------

service_name

Specify the service names.

Usage Guidelines	Use this command to configure the AMF service names.
-------------------------	--

profile compliance service version spec

Configures the 3GPP specification version number.

Command Modes

Exec > Global Configuration (config) > Compliance Profile Configuration (config-compliance-*profile_name*) > Service (*service_name*)

Syntax Description

version spec *3gpp_spec_version*

version spec *3gpp_spec_version*

Specify the 3GPP specification version number.

Usage Guidelines

Use this command to configure the 3GPP specification version number.

profile emergency-profile emergency

Configures emergency profile parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile emergency-profile *profile_name* [[**dnn** *dnn_name*] [**ue-validation-level** *ue_validation_level*]]

dnn *dnn_name*

Specify name of the DNN.

Must be a string.

emergency-profile *profile_name*

Specify name of the profile.

Must be a string.

ue-validation-level *ue_validation_level*

Specify the UE validation level.

Must be one of the following:

- **auth-only**: Specify to allow only authenticated UEs. Subscription is bypassed.
- **full**: Specify to allow only authenticated UEs with subscription and location validated. Allow only UEs with Normal Registration.
- **none**: Specify to allow any UE. UE without SUPI will attach using IMEI/PEI. Authentication is optional..
- **supi-only**: Specify to allow only UEs with SUPI. UE without SUPI will be rejected. Authentication is optional.

Usage Guidelines

Use this command to configure emergency profile parameters. The CLI prompt changes to the Emergency Profile Configuration mode (config-emergency-profile-<profile_name>).

profile emergency-profile emergency extended-emergency-num

Configures the extended emergency number parameters.

Command Modes

Exec > Global Configuration (config) > Emergency Profile Configuration
(config-emergency-profile-*profile_name*)

Syntax Description

extended-emergency-num *extended_emergency_number* **sub-service**
emergency_number_sub_service_type

extended-emergency-num *extended_emergency_number*

Specify the extended emergency number.

Must be a string of 1-10 characters.

sub-service *emergency_number_sub_service_type*

Specify the emergency number sub-service type.

Must be a string.

Usage Guidelines

Use this command to configure extended emergency number parameters.

You can configure a maximum of 10 elements with this command.

profile emergency-profile emergency local-emergency-num

Configures local emergency number parameters.

Command Modes	Exec > Global Configuration (config) > Emergency Profile Configuration (config-emergency-profile- <i>profile_name</i>)
Syntax Description	local-emergency-num <i>emergency_number emergency_number_service_type</i> <i>emergency_number</i> Specify the emergency number. Must be a string of 1-10 characters. <i>emergency_number_service_type</i> Specify the emergency number service type. Must be one of the following: • ambulance • fire • marine-guard • mountain-rescue • police

Usage Guidelines	Use this command to configure local emergency number parameters. You can configure a maximum of 10 elements with this command.
-------------------------	--

profile emergency-profile emergency nssai

Configures slice for subscriber parameters.

Command Modes

Exec > Global Configuration (config) > Emergency Profile Configuration
(config-emergency-profile-*profile_name*)

Syntax Description

nssai *slice_name* [**sst** *slice_service_type*]

nssai *slice_name*

Specify name of the slice.

Must be a string.

sst *slice_service_type*

Specify the Slice Service Type (SST).

Must be an integer in the range of 0-255.

Usage Guidelines

Use this command to configure slice for subscriber parameters.

profile load

Configures the load profile parameter for the AMF service.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile load *load_profile_name* { **load-calc-frequency** *load_calc_frequency_value* | **change-factor** *change_factor_value* }

profile load *load_profile_name*

Specify the load profile name.

load-calc-frequency *load_calc_frequency_value*

Specify the frequency value in seconds ranging from 5 to 3600 seconds. The default value is 120 seconds.

change-factor *change_factor_value*

Specify the change factor value. Range is between 1 to 20. The default value is 5.

Usage Guidelines

Use this command to configure the load profile parameters.

profile network-element amf

Configures the peer AMF network element configuration parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile network-element amf *peer_amf_config_name* [[**nf-client-profile** *nf_client_profile_name*] [**failure-handling-profile** *failure_handling_profile_name*]]

failure-handling-profile *failure_handling_profile_name*

Specify name of the failure handling profile.

Must be a string.

nf-client-profile *nf_client_profile_name*

Specify name of the NF client profile.

Must be a string.

peer_amf_config_name

Specify name of the AMF peer configuration.

Must be a string.

Usage Guidelines

Use this command to configure the peer AMF network element configuration parameters. The CLI prompt changes to the AMF NE Configuration mode (config-amf-<amf_name>).

profile network-element amf query-params

Configures query parameters for AMF discovery.

Command Modes Exec > Global Configuration (config) > AMF NE Configuration mode (config-amf-*amf_name*)

Syntax Description **query-params** *amf_query_params*

query-params *amf_query_params*

Specify the AMF query parameters.

Must be one of the following:

- **amf-set-id**
- **amf-region-id**
- **guami**
- **requester-plmn**
- **snssais**
- **target-nf-instance-id**
- **tai**
- **target-plmn**

Usage Guidelines Use this command to configure query parameters for AMF discovery.

profile network-element ausf

Configures peer AUSF parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile network-element ausf *peer_ausf_config_name* **nf-client-profile**
nf_client_profile_name **failure-handling-profile** *fh_profile_name*

failure-handling-profile *fh_profile_name*

Specify name of the failure handling profile.

Must be a string.

nf-client-profile *nf_client_profile_name*

Specify name of the NF client profile.

Must be a string.

peer_ausf_config_name

Specify name of the peer AUSF configuration.

Must be a string.

Usage Guidelines

Use this command to configure peer AUSF parameters.

profile network-element ausf query-params

Configures query parameter for AUSF discovery.

Command Modes	Exec > Global Configuration (config) > AUSF Peer Configuration (config-amf- <i>peer_ausf_config_name</i>)
----------------------	--

Syntax Description	query-params <i>amf_ausf_query_params</i>
---------------------------	--

query-params *amf_ausf_query_params*

Specify the AMF AUSF query parameters.

Must be one of the following:

- requester-plmn
- routing-indicator
- supi
- target-plmn

Usage Guidelines	Use this command to configure query parameter for AUSF discovery.
-------------------------	---

profile network-element eir

Configures the EIR network element profile list.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile network-element eir *eir_name* **nf-client-profile** *nf_client_profile_name*
failure-handling-profile *fh_profile_name*

profile network-element eir *eir_name*

Specify the name of EIR with the network element profile.

nf-client-profile *nf_client_profile_name*

Specify name of the NF client profile.

Must be a string.

failure-handling-profile *fh_profile_name*

Specify name of the failure handling profile.

Must be a string.

Usage Guidelines

Use this command to configure the EIR with the network element profile.

profile network element eir query params

Configures query parameter for EIR discovery.

Command Modes	Exec > Global Configuration (config) > Profile Network Element EIR (config- profile network-element eir <i>eir_profile_network_element_name</i>)
----------------------	---

Syntax Description	query-params [target-plmn]
---------------------------	------------------------------------

query-params [target-plmn]

Specifies the target Public Land Mobile Network (PLMN). This defines the particular mobile network to which the EIR queries are directed, allowing the EIR to check equipment statuses relevant to that specific network.

Usage Guidelines	Use this command to configure query parameter for EIR discovery.
-------------------------	--

profile network-element gmlc

Configures the GMLC network element profile list.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile network-element gmlc *gmlc_name* **nf-client-profile** *nf_client_profile_name*
failure-handling-profile *fh_profile_name*

profile network-element gmlc *gmlc_name*

Specify the name of GMLC with the network element profile.

nf-client-profile *nf_client_profile_name*

Specify name of the NF client profile.

Must be a string.

failure-handling-profile *fh_profile_name*

Specify name of the failure handling profile.

Must be a string.

Usage Guidelines

Use this command to configure the GMLC with the network element profile.

profile network-element gmlc query-params

Configures query parameters for GMLC discovery.

Command Modes	Exec > Global Configuration (config) > GMLC NE Configuration mode (config-amf- <i>gmlc_name</i>)
----------------------	---

Syntax Description	query-params <i>gmlc_query_params</i>
---------------------------	--

query-params *gmlc_query_params*

Specify the GMLC query parameters.

Must be one of the following:

- **client-type**
- **target-plmn**

Usage Guidelines	Use this command to configure query parameters for GMLC discovery.
-------------------------	--

profile network-element lmf

Configures the LMF network element profile list.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile network-element lmf *lmf_name* **nf-client-profile** *nf_client_profile_name*
failure-handling-profile *fh_profile_name*

profile network-element lmf *lmf_name*

Specify the name of LMF with the network element profile.

nf-client-profile *nf_client_profile_name*

Specify name of the NF client profile.

Must be a string.

failure-handling-profile *fh_profile_name*

Specify name of the failure handling profile.

Must be a string.

Usage Guidelines

Use this command to configure the LMF with the network element profile.

profile network-element lmf query-params

Configures query parameters for LMF discovery.

Command Modes	Exec > Global Configuration (config) > LMF NE Configuration mode (config-amf-lmf_name)
----------------------	--

Syntax Description	query-params <i>lmf_query_params</i>
---------------------------	---

query-params *lmf_query_params*

Specify the LMF query parameters.

Must be one of the following:

- **target-plmn**
- **snssais**
- **an-node-type**
- **rat-type**
- **client-type**
- **lmf-id**
- **target-nf-instance-id**

Usage Guidelines	Use this command to configure query parameters for LMF discovery.
-------------------------	---

profile-network-element nf-selection-model-priority

Configures a network element profile with NF selection model and its priority parameters.

Command Modes

Exec > Global Configuration (config) > Network Element Configuration
(config-network-element-network_element_profile_name)

Syntax Description

```
{ nf-client-profile nf_client_profile_name | failure-handling-profile
failure_handling_profile_name | nf-selection-model priority nf_model_priority [
local | nrf-query | scp ] | query-params [queryparam1 queryparam2] }
```

```
{ nf-client-profile nf_client_profile_name | failure-handling-profile failure_handling_profile_name |
nf-selection-model priority nf_model_priority [ local | nrf-query | scp ] | query-params [queryparam1
queryparam2] }
```

- **nf-client-profile** *nf_client_profile_name* —Specify the NF client profile associated with the network element.
- **failure-handling-profile** *failure_handling_profile_name* —Specify the failure handling profile for the network element.
- **nf-selection-model priority** *nf_model_priority* [**local** | **nrf-query** | **scp**] —Specify the NF selection model and its priority.

```
nf-selection-model 1 scp
```

- **query-params** [*queryparam1 queryparam2*] —Specify the query parameters to be used.

Usage Guidelines

Use this command to configure the NF selection model and its priority.

profile network-element nssf

Configures peer NSSF parameters.

Command Modes Exec > Global Configuration (config)

Syntax Description **profile network-element nssf** *peer_nssf_config_name* **nf-client-profile** *nf_client_profile_name* **failure-handling-profile** *fh_profile_name*

failure-handling-profile *fh_profile_name*

Specify name of the failure handling profile.

Must be a string.

nf-client-profile *nf_client_profile_name*

Specify name of the NF client profile.

Must be a string.

peer_nssf_config_name

Specify name of the NSSF peer configuration.

Must be a string.

Usage Guidelines Use this command to configure peer NSSF parameters.

profile network-element nssf query-params

Configures query parameters for NSSF discovery.

Command Modes	Exec > Global Configuration (config) > NSSF Peer Configuration (config-nssf-peer_nssf_config_name)
----------------------	--

Syntax Description	query-params <i>query_parameters</i>
---------------------------	---

query-params *query_parameters*

Specify NRF query parameters.

Must be one of the following:

- requester-plmn
- tai
- target-plmn

Usage Guidelines	Use this command to configure query parameters for NSSF discovery.
-------------------------	--

profile network-element pcf

Configures peer PCF parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile network-element pcf *peer_pcf_config_name* **nf-client-profile**
nf_client_profile_name **failure-handling-profile** *failure_handling_profile_name*

failure-handling-profile *failure_handling_profile_name*

Specify name of the failure handling profile.

Must be a string.

nf-client-profile *nf_client_profile_name*

Specify name of the NF client profile.

Must be a string.

peer_pcf_config_name

Specify name of the PCF peer configuration.

Must be a string.

Usage Guidelines

Use this command to configure the peer PCF parameters.

profile network-element pcf query-params

Configures query parameters for PCF discovery.

Command Modes	Exec > Global Configuration (config) > PCF Peer Configuration (config-pcf-peer_pcf_config_name)
----------------------	---

Syntax Description	query-params <i>query_parameters</i>
---------------------------	---

query-params *query_parameters*

Specify NRF query parameters.

Must be one of the following:

- requester-plmn
- snssais
- supi
- tai
- target-plmn

Usage Guidelines	Use this command to configure query parameters for PCF discovery.
-------------------------	---

Configures the NF client profiles with SCP service and endpoint configurations.

profile-network-element scp endpoint-profile endpoint-name primary-ip-address port

- **fqdn-port** *fqdn_port* —Specify the fqdn port. fqdn port is an optional configuration.



Note If SCP peer FQDN is known, you can configure FQDN instead of primary/secondary IP address.

Usage Guidelines

Use this command to configure an NF client profile name with specific locality, scp and fqdn service, and endpoint configurations.

profile network-element scp

Configures the network element profiles with specific NF client and failure handling profiles and SCP discovery params.

Command Modes

Exec> Global Configuration (config)> Network Element Profile Configuration (config-profile network-element scp-scp_profile_name)

Syntax Description

nf-client-profile *client_profile_name* **failure-handling-profile** *failure_handling_profile_name* **discovery-params** [*service-names*]

nf-client-profile *client_profile_name*

Specify the SCP client profile. *client_profile_name* must be an alphanumeric string representing the corresponding NF client profile name.

failure-handling-profile *failure_handling_profile_name*

Specify the SCP failure handling network profile for the configured SCP. *failure_handling_profile_name* must be an alphanumeric string representing the corresponding SCP failure handling network profile name.

discovery-params [*service-names*]

Specify the service name for discovery. The "3gpp-Sbi-Discovery-service-names" HTTPheader is sent as a plain string to the SCP, but only when you configure the **discovery-params** [*service-names*] within the SCP network element profile.

3gpp-sbi-discovery-service-names : nsmf-pdusession

Usage Guidelines

Use this command to configure a network element profile name with an NF client profile and a failure handling profile.

profile network-element smf

Configures SMF peer parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile network-element smf *peer_smf_config_name* **nf-client-profile**
nf_client_profile_name **failure-handling-profile** *fh_profile_name*

failure-handling-profile *fh_profile_name*

Specify name of the failure handling profile.

Must be a string.

nf-client-profile *nf_client_profile_name*

Specify name of the NF client profile.

Must be a string.

peer_smf_config_name

Specify name of the SMF peer configuration.

Must be a string.

Usage Guidelines

Use this command to configure SMF peer parameters.

profile network-element smf query-params

Configures query parameter for SMF discovery.

Command Modes	Exec > Global Configuration (config) > SMF Peer Configuration (config-smf-peer_smf_config_name)
----------------------	---

Syntax Description	query-params <i>query_parameters</i>
---------------------------	---

query-params *smf_query_params*

Specify the SMF query parameters.

Must be one of the following:

- **dnn**
- **pgwfqdn**
- **pgwind**
- **requester-plmn**
- **snssais**
- **tai**
- **target-plmn**

Usage Guidelines	Use this command to configure query parameter for SMF discovery.
-------------------------	--

profile network-element udm

Configures peer UDM parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile network-element udm *peer_udm_config_name* **nf-client-profile**
nf_client_profile_name **failure-handling-profile** *fh_profile_name*

failure-handling-profile *fh_profile_name*

Specify name of the failure handling profile.

Must be a string.

nf-client-profile *nf_client_profile_name*

Specify name of the NF client profile.

Must be a string.

peer_udm_config_name

Specify name of the UDM peer configuration.

Must be a string.

Usage Guidelines

Use this command to configure peer UDM parameters.

profile network-element udm query-params

Configures query parameters for UDM discovery.

Command Modes	Exec > Global Configuration (config) > UDM Peer Configuration (config-udm-peer_udm_config_name)
----------------------	---

Syntax Description	query-params <i>query_parameters</i>
---------------------------	---

query-params *amf_udm_query_params*

Specify the AMF UDM query parameters.

Must be one of the following:

- requester-plmn
- routing-indicator
- supi
- target-plmn

Usage Guidelines	Use this command to configure query parameters for UDM discovery.
-------------------------	---

profile nf-client nf-type amf amf-profile

Configures AMF profile parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
profile nf-client nf-type amf { amf-profile profile_name { locality
locality_name | server-name server_name } | oauthenabled { true | false } }
```

amf-profile *profile_name*

Specify the AMF profile name

Must be a string.

locality *locality_name*

Specify the locality.

Must be a string.

server-name *server_name*

Specify the server name.

Must be a string.

oauthenabled { **true** | **false** }

Enable the oauthenabled profile configuration.

The default value is false.

Usage Guidelines

Use this command to configure AMF profile parameters. The CLI prompt changes to the AMF Profile Configuration mode (config-amf-profile-<profile_name>).

profile nf-client nf-type amf amf-profile locality

Configures the AMF profile locality parameter.

Command Modes	Exec > Global Configuration (config) > AMF Profile Configuration (config-amf-profile- <i>profile_name</i>)
----------------------	---

Syntax Description	locality <i>locality_name</i> [priority <i>locality_priority</i>]
---------------------------	---

locality *locality_name*

Specify name of the locality.

Must be a string.

priority *locality_priority*

Specify priority of the locality configuration.

Must be an integer in the range of 0-65535.

Usage Guidelines	Use this command to configure the AMF profile locality parameter.
-------------------------	---

profile nf-client nf-type amf amf-profile locality service name type

Configures the AMF service name type parameter.

Command Modes Exec > Global Configuration (config) > AMF NF-Client Configuration (config-amf) > AMF Profile Configuration (config-amf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*)

Syntax Description **service name type** *amf_service_name_type* **responsetimeout** *response_timeout*

responsetimeout *response_timeout*

Specify the response timeout interval in milliseconds.
Must be an integer.
Default Value: 2000.

type *amf_service_name_type*

Specify the service name type.
Must be one of the following:

- **namf-comm**
- **namf-evts**
- **namf-loc**
- **namf-mt**

Usage Guidelines Use this command to configure the AMF service name type parameter. The CLI prompt changes to the Service Name Type Configuration mode (config-type-<service_name_type>).

profile nf-client nf-type amf amf-profile locality service name type endpoint-profile

Configures endpoint profile parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes Exec > Global Configuration (config) > AMF NF-Client Configuration (config-amf) > AMF Profile Configuration (config-amf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*)

Syntax Description **endpoint-profile** *endpoint_profile_name* { **capacity** *capacity_value* | **priority** *profile_priority* | **api-uri-prefix** *api_uri_prefix* | **api-root** *api_root* | **uri-scheme** *uri_scheme* }

api-root *api_root*

Specify the API root.

Must be a string.

api-uri-prefix *api_uri_prefix*

Specify the API URI prefix.

Must be a string.

capacity *capacity_value*

Specify the profile capacity.

Must be an integer in the range of 0-65535.

Default Value: 10.

endpoint-profile *endpoint_profile_name*

Specify name of the endpoint profile.

Must be a string.

priority *profile_priority*

Specify the priority of the profile.

Must be an integer in the range of 0-65535.

Default Value: 1.

uri-scheme *uri_scheme*

Specify the URI scheme.

Must be one of the following:

- **http**: HTTP.

profile nf-client nf-type amf amf-profile locality service name type endpoint-profile

- **https**: HTTPS.

Usage Guidelines

Use this command to configure endpoint profile parameters. The CLI prompt changes to the Endpoint Profile Configuration mode (config-endpoint-profile-<profile_name>).

profile nf-client nf-type amf amf-profile locality service name type endpoint-profile endpoint-name

Configures the endpoint name parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > AMF NF-Client Configuration (config-amf) > AMF Profile Configuration (config-amf-profile- <i>profile_name</i>) > Locality Configuration (config-locality- <i>locality_name</i>) > Service Name Type Configuration (config-type- <i>service_name_type</i>) > Endpoint Profile Configuration (config-endpoint-profile- <i>profile_name</i>)
Syntax Description	endpoint-name <i>endpoint_name</i> [priority <i>node_priority</i> capacity <i>node_capacity</i>] capacity <i>node_capacity</i> Specify the node capacity for the endpoint. Must be an integer in the range of 0-65535. endpoint-name <i>endpoint_name</i> Specify name of the endpoint. You can configure the primary, secondary, and tertiary host (IP: Port) within each endpoint for NF server failover handling. The server failover configuration accepts both IPv4 and IPv6 addresses. However, the SMF gives preference to the IPv4 address. Must be a string. priority <i>node_priority</i> Specify the node priority for the endpoint. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this configuration to configure the endpoint name parameters. The CLI prompt changes to the Endpoint Name Configuration mode (config-endpoint-name-<endpoint_name>).

profile nf-client nf-type amf amf-profile locality service name type endpoint-profile endpoint-name primary ip-address

profile nf-client nf-type amf amf-profile locality service name type endpoint-profile endpoint-name primary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > AMF NF-Client Configuration (config-amf) > AMF Profile Configuration (config-amf-profile-profile_name) > Locality Configuration (config-locality-locality_name) > Service Name Type Configuration (config-type-service_name_type) > Endpoint Profile Configuration (config-endpoint-profile-profile_name) > Endpoint Name Configuration (config-endpoint-name-endpoint_name)
Syntax Description	{ primary secondary tertiary } ip-address { [ipv4 ipv4_address ipv6 ipv6_address] [port port_number] } ipv4 ipv4_address Specify the IPv4 address. Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section. ipv6 ipv6_address Specify the IPv6 address. Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section. port port_number Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type amf amf-profile locality service name type endpoint-profile endpoint-name secondary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > AMF NF-Client Configuration (config-amf) > AMF Profile Configuration (config-amf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*) > Endpoint Name Configuration (config-endpoint-name-*endpoint_name*)

Syntax Description

{ primary | secondary | tertiary } ip-address { [ipv4 *ipv4_address* | ipv6 *ipv6_address*] [port *port_number*] }

ipv4 *ipv4_address*

Specify the IPv4 address.

Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section.

ipv6 *ipv6_address*

Specify the IPv6 address.

Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section.

port *port_number*

Specify the port number.

Must be an integer in the range of 0-65535.

Usage Guidelines

Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type amf amf-profile locality service name type endpoint-profile endpoint-name tertiary ip-address

profile nf-client nf-type amf amf-profile locality service name type endpoint-profile endpoint-name tertiary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > AMF NF-Client Configuration (config-amf) > AMF Profile Configuration (config-amf-profile-profile_name) > Locality Configuration (config-locality-locality_name) > Service Name Type Configuration (config-type-service_name_type) > Endpoint Profile Configuration (config-endpoint-profile-profile_name) > Endpoint Name Configuration (config-endpoint-name-endpoint_name)
Syntax Description	{ primary secondary tertiary } ip-address { [ipv4 ipv4_address ipv6 ipv6_address] [port port_number] } ipv4 ipv4_address Specify the IPv4 address. Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section. ipv6 ipv6_address Specify the IPv6 address. Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section. port port_number Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type amf amf-profile locality service name type endpoint-profile version uri-version

Configures the URI version parameter. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes Exec > Global Configuration (config) > AMF NF-Client Configuration (config-amf) > AMF Profile Configuration (config-amf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*)

Syntax Description **version uri-version** { *uri_version* | **full-version** *full_version* }

full-version *full_version*

Specify the full version in the format *major-version.minor-version.patch-version.[alpha-draft-number]*

Must be a string.

uri-version *uri_version*

Specify the URI version.

Must be a string in the pattern *v\d*.

Usage Guidelines Use this command to configure the URI version parameter.

profile nf-client nf-type ausf ausf-profile

Configures AUSF profile parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
profile nf-client nf-type ausf { ausf-profile profile_name { locality  
locality_name | server-name server_name } | oauthenabled { true | false } }
```

ausf-profile *profile_name*

Specify name of the AUSF profile.

Must be a string.

locality *locality_name*

Specify the locality.

Must be a string.

server-name *server_name*

Specify the server name.

Must be a string.

oauthenabled { true | false }

Enable the oauthenabled profile configuration.

The default value is false.

Usage Guidelines

Use this command to configure AUSF profile parameters. The CLI prompt changes to the AUSF Profile Configuration mode (config-ausf-profile-<profile_name>).

profile nf-client nf-type ausf ausf-profile locality

Configures the AUSF profile locality parameter.

Command Modes	Exec > Global Configuration (config) > AUSF Profile Configuration (config-ausf-profile- <i>profile_name</i>)
----------------------	---

Syntax Description	locality <i>locality_name</i> [priority <i>locality_priority</i>]
---------------------------	---

locality *locality_name*

Specify name of the locality.

Must be a string.

priority *locality_priority*

Specify priority of the locality configuration.

Must be an integer in the range of 0-65535.

Usage Guidelines	Use this command to configure the AUSF profile locality parameter.
-------------------------	--

profile nf-client nf-type ausf ausf-profile locality service name type

Configures the AUSF service name type parameter.

Command Modes

Exec > Global Configuration (config) > AUSF NF-Client Configuration (config-ausf) > AUSF Profile Configuration (config-ausf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*)

Syntax Description

service name type *ausf_service_name_type* [**responsetimeout** *response_timeout*]

responsetimeout *response_timeout*

Specify the timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

type *ausf_service_name_type*

Specify the AUSF service name type.

Must be one of the following:

- **nausf-auth**

Usage Guidelines

Use this command to configure the AUSF service name type parameter. The CLI prompt changes to the Service Name Type Configuration mode (config-type-<service_name_type>).

profile nf-client nf-type ausf ausf-profile locality service name type endpoint-profile

Configures endpoint profile parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > AUSF NF-Client Configuration (config-ausf) > AUSF Profile Configuration (config-ausf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*)

Syntax Description

endpoint-profile *endpoint_profile_name* { **capacity** *capacity_value* | **priority** *profile_priority* | **api-uri-prefix** *api_uri_prefix* | **api-root** *api_root* | **uri-scheme** *uri_scheme* }

api-root *api_root*

Specify the API root.

Must be a string.

api-uri-prefix *api_uri_prefix*

Specify the API URI prefix.

Must be a string.

capacity *capacity_value*

Specify the profile capacity.

Must be an integer in the range of 0-65535.

Default Value: 10.

endpoint-profile *endpoint_profile_name*

Specify name of the endpoint profile.

Must be a string.

priority *profile_priority*

Specify the priority of the profile.

Must be an integer in the range of 0-65535.

Default Value: 1.

uri-scheme *uri_scheme*

Specify the URI scheme.

Must be one of the following:

- **http**: HTTP.

```
profile nf-client nf-type ausf ausf-profile locality service name type endpoint-profile
```

- **https**: HTTPS.

Usage Guidelines

Use this command to configure endpoint profile parameters. The CLI prompt changes to the Endpoint Profile Configuration mode (config-endpoint-profile-<profile_name>).

profile nf-client nf-type ausf ausf-profile locality service name type endpoint-profile endpoint-name

Configures the endpoint name parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > AUSF NF-Client Configuration (config-ausf) > AUSF Profile Configuration (config-ausf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-service_name_type) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*)

Syntax Description

endpoint-name *endpoint_name* [**priority** *node_priority* | **capacity** *node_capacity*]

capacity *node_capacity*

Specify the node capacity for the endpoint.

Must be an integer in the range of 0-65535.

endpoint-name *endpoint_name*

Specify name of the endpoint. You can configure the primary, secondary, and tertiary host (IP: Port) within each endpoint for NF server failover handling. The server failover configuration accepts both IPv4 and IPv6 addresses. However, the SMF gives preference to the IPv4 address.

Must be a string.

priority *node_priority*

Specify the node priority for the endpoint.

Must be an integer in the range of 0-65535.

Usage Guidelines

Use this configuration to configure the endpoint name parameters. The CLI prompt changes to the Endpoint Name Configuration mode (config-endpoint-name-<endpoint_name>).

```
profile nf-client nf-type ausf ausf-profile locality service name type endpoint-profile endpoint-name primary ip-address
```

profile nf-client nf-type ausf ausf-profile locality service name type endpoint-profile endpoint-name primary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > AUSF NF-Client Configuration (config-ausf) > AUSF Profile Configuration (config-ausf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-service-*name_type*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*) > Endpoint Name Configuration (config-endpoint-name-*endpoint_name*)

Syntax Description

```
{ primary | secondary | tertiary } ip-address { [ ipv4 ipv4_address | ipv6 ipv6_address ] [ port port_number ] }
```

ipv4 *ipv4_address*

Specify the IPv4 address.

Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section.

ipv6 *ipv6_address*

Specify the IPv6 address.

Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section.

port *port_number*

Specify the port number.

Must be an integer in the range of 0-65535.

Usage Guidelines

Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type ausf ausf-profile locality service name type endpoint-profile endpoint-name secondary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > AUSF NF-Client Configuration (config-ausf) > AUSF Profile Configuration (config-ausf-profile- <i>profile_name</i>) > Locality Configuration (config-locality- <i>locality_name</i>) > Service Name Type Configuration (config-type- <i>service_name_type</i>) > Endpoint Profile Configuration (config-endpoint-profile- <i>profile_name</i>) > Endpoint Name Configuration (config-endpoint-name- <i>endpoint_name</i>)
Syntax Description	<pre>{ primary secondary tertiary } ip-address { [ipv4 <i>ipv4_address</i> ipv6 <i>ipv6_address</i>] [port <i>port_number</i>] }</pre> ipv4 <i>ipv4_address</i> Specify the IPv4 address. Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section. ipv6 <i>ipv6_address</i> Specify the IPv6 address. Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section. port <i>port_number</i> Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

```
profile nf-client nf-type ausf ausf-profile locality service name type endpoint-profile endpoint-name tertiary ip-address
```

profile nf-client nf-type ausf ausf-profile locality service name type endpoint-profile endpoint-name tertiary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > AUSF NF-Client Configuration (config-ausf) > AUSF Profile Configuration (config-ausf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-service-*name_type*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*) > Endpoint Name Configuration (config-endpoint-name-*endpoint_name*)

Syntax Description

```
{ primary | secondary | tertiary } ip-address { [ ipv4 ipv4_address | ipv6 ipv6_address ] [ port port_number ] }
```

ipv4 *ipv4_address*

Specify the IPv4 address.

Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section.

ipv6 *ipv6_address*

Specify the IPv6 address.

Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section.

port *port_number*

Specify the port number.

Must be an integer in the range of 0-65535.

Usage Guidelines

Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type ausf ausf-profile locality service name type endpoint-profile version uri-version

Configures the URI version parameter. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes Exec > Global Configuration (config) > AUSF NF-Client Configuration (config-ausf) > AUSF Profile Configuration (config-ausf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*)

Syntax Description **version uri-version** { *uri_version* | **full-version** *full_version* }

full-version *full_version*

Specify the full version in the format *major-version.minor-version.patch-version.[alpha-draft-number]*

Must be a string.

uri-version *uri_version*

Specify the URI version.

Must be a string in the pattern v\d.

Usage Guidelines Use this command to configure the URI version parameter.

profile nf-client nf-type eir eir-profile

Configures EIR profile parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
profile nf-client nf-type eir { eir-profile profile_name { locality
locality_name | server-name server_name } | oauthenabled { true | false } }
```

eir-profile *eir_profile_name*

Specify name of the EIR profile.

Must be a string.

locality *locality_name*

Specify the locality.

Must be a string.

server-name *server_name*

Specify the server name.

Must be a string.

oauthenabled { **true** | **false** }

Enable the oauthenabled profile configuration.

The default value is false.

Usage Guidelines

Use this command to configure the EIR profile parameters. The CLI prompt changes to the EIR Profile Configuration mode (config-eir-profile-<profile_name>).

profile nf-client nf-type eir eir-profile locality

Configures the EIR profile locality parameter.

Command Modes	Exec > Global Configuration (config) > EIR NF-Client Configuration (config-eir) > EIR Profile Configuration (config-eir-profile- <i>profile_name</i>)
----------------------	--

Syntax Description	locality <i>locality_name</i> [priority <i>priority</i>]
---------------------------	--

locality *locality_name*

Specify name of the locality.

Must be a string.

priority *priority*

Specify the priority of the locality configuration.

Must be an integer in the range of 0-65535.

Usage Guidelines	Use this command to configure the EIR profile locality parameter.
-------------------------	---

profile nf-client nf-type eir eir-profile locality service name type

Configures the EIR service name type parameter.

Command Modes Exec > Global Configuration (config) > EIR NF-Client Configuration (config-eir) > EIR Profile Configuration (config-eir-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*)

Syntax Description **service name type** *service_name_type* [**responsetimeout** *response_timeout_interval*]

responsetimeout *response_timeout_interval*

Specify the response timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

type *service_name_type*

Specify the EIR service name type.

Must be one of the following:

- **n5g-eir-eic**

Usage Guidelines Use this command to configure the EIR service name type parameter. The CLI prompt changes to the Service Name Type Configuration mode (config-type-<service_name_type>).

profile nf-client nf-type eir eir-profile locality service name type endpoint-profile

Configures endpoint profile parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes Exec > Global Configuration (config) > EIR NF-Client Configuration (config-eir) > EIR Profile Configuration (config-eir-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*)

Syntax Description **endpoint-profile** *endpoint_profile_name* { **capacity** *capacity_value* | **priority** *profile_priority* | **api-uri-prefix** *api_uri_prefix* | **api-root** *api_root* | **uri-scheme** *uri_scheme* }

api-root *api_root*

Specify the API root.

Must be a string.

api-uri-prefix *api_uri_prefix*

Specify the API URI prefix.

Must be a string.

capacity *capacity_value*

Specify the profile capacity.

Must be an integer in the range of 0-65535.

Default Value: 10.

endpoint-profile *endpoint_profile_name*

Specify name of the endpoint profile.

Must be a string.

priority *profile_priority*

Specify the priority of the profile.

Must be an integer in the range of 0-65535.

Default Value: 1.

uri-scheme *uri_scheme*

Specify the URI scheme.

Must be one of the following:

- **http**: HTTP.

profile nf-client nf-type eir eir-profile locality service name type endpoint-profile

- **https**: HTTPS.

Usage Guidelines

Use this command to configure endpoint profile parameters. The CLI prompt changes to the Endpoint Profile Configuration mode (config-endpoint-profile-<profile_name>).

profile nf-client nf-type eir eir-profile locality service name type endpoint-profile endpoint-name

Configures the endpoint name parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > EIR NF-Client Configuration (config-eir) > EIR Profile Configuration (config-eir-profile-profile_name) > Locality Configuration (config-locality-locality_name) > Service Name Type Configuration (config-type-service_name_type) > Endpoint Profile Configuration (config-endpoint-profile-profile_name)
----------------------	--

Syntax Description	endpoint-name <i>endpoint_name</i> [priority <i>node_priority</i> capacity <i>node_capacity</i>]
---------------------------	---

capacity *node_capacity*

Specify the node capacity for the endpoint.

Must be an integer in the range of 0-65535.

endpoint-name *endpoint_name*

Specify name of the endpoint. You can configure the primary, secondary, and tertiary host (IP: Port) within each endpoint for NF server failover handling. The server failover configuration accepts both IPv4 and IPv6 addresses. However, the SMF gives preference to the IPv4 address.

Must be a string.

priority *node_priority*

Specify the node priority for the endpoint.

Must be an integer in the range of 0-65535.

Usage Guidelines	Use this configuration to configure the endpoint name parameters. The CLI prompt changes to the Endpoint Name Configuration mode (config-endpoint-name-<endpoint_name>).
-------------------------	--

profile nf-client nf-type eir eir-profile locality service name type endpoint-profile endpoint-name primary ip-address

profile nf-client nf-type eir eir-profile locality service name type endpoint-profile endpoint-name primary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > EIR NF-Client Configuration (config-eir) > EIR Profile Configuration (config-eir-profile- <i>profile_name</i>) > Locality Configuration (config-locality- <i>locality_name</i>) > Service Name Type Configuration (config-type- <i>service_name_type</i>) > Endpoint Profile Configuration (config-endpoint-profile- <i>profile_name</i>) > Endpoint Name Configuration (config-endpoint-name- <i>endpoint_name</i>)
Syntax Description	{ primary secondary tertiary } ip-address { [ipv4 <i>ipv4_address</i> ipv6 <i>ipv6_address</i>] [port <i>port_number</i>] } ipv4 <i>ipv4_address</i> Specify the IPv4 address. Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section. ipv6 <i>ipv6_address</i> Specify the IPv6 address. Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section. port <i>port_number</i> Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type eir eir-profile locality service name type endpoint-profile endpoint-name secondary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > EIR NF-Client Configuration (config-eir) > EIR Profile Configuration (config-eir-profile-profile_name) > Locality Configuration (config-locality-locality_name) > Service Name Type Configuration (config-type-service_name_type) > Endpoint Profile Configuration (config-endpoint-profile-profile_name) > Endpoint Name Configuration (config-endpoint-name-endpoint_name)
Syntax Description	{ primary secondary tertiary } ip-address { [ipv4 ipv4_address ipv6 ipv6_address] [port port_number] } ipv4 ipv4_address Specify the IPv4 address. Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section. ipv6 ipv6_address Specify the IPv6 address. Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section. port port_number Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type eir eir-profile locality service name type endpoint-profile endpoint-name tertiary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > EIR NF-Client Configuration (config-eir) > EIR Profile Configuration (config-eir-profile- <i>profile_name</i>) > Locality Configuration (config-locality- <i>locality_name</i>) > Service Name Type Configuration (config-type- <i>service_name_type</i>) > Endpoint Profile Configuration (config-endpoint-profile- <i>profile_name</i>) > Endpoint Name Configuration (config-endpoint-name- <i>endpoint_name</i>)
Syntax Description	<pre>{ primary secondary tertiary } ip-address { [ipv4 <i>ipv4_address</i> ipv6 <i>ipv6_address</i>] [port <i>port_number</i>] }</pre> ipv4 <i>ipv4_address</i> Specify the IPv4 address. Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section. ipv6 <i>ipv6_address</i> Specify the IPv6 address. Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section. port <i>port_number</i> Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type eir eir-profile locality service name type endpoint-profile version uri-version

Configures the URI version parameter. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes Exec > Global Configuration (config) > EIR NF-Client Configuration (config-eir) > EIR Profile Configuration (config-eir-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*)

Syntax Description **version uri-version** { *uri_version* | **full-version** *full_version* }

full-version *full_version*

Specify the full version in the format *major-version.minor-version.patch-version.[alpha-draft-number]*

Must be a string.

uri-version *uri_version*

Specify the URI version.

Must be a string in the pattern *v\d*.

Usage Guidelines Use this command to configure the URI version parameter.

profile nf-client nf-type group nrf auth service type nrf oauth2

Configures the AMF ID (**service type nrf oauth2** in the **group nrf auth**) to enable an NRF endpoint, to which the AMF will send the `AccessToken` request to the NRF server, when the `nf-client` is configured.

Command Modes

Exec > Global Configuration (`config`) > AMF Configuration (`config-amf amf_name`) > NF Profile Name Configuration (`config-nf-profile-nf nf_profile_name`) > NF Profile Type Configuration (`config-nf-type-profile profile_type_name`) > `group nrf auth` > `service type nrf oauth2`

Syntax Description

```
group nrf auth nrf_group_name
  service type nrf oauth2
    endpoint-profile endpoint_profile_details
    capacity capacity_number
    uri-scheme http
    endpoint-name endpoint_name
    priority priority_number
    primary ip-address ipv4 ipv4_address
    primary ip-address port port_address
```

group nrf auth *nrf_group_name*

Specify the NRF group name to authenticate. Must be a string.

service type nrf oauth2

Specify the service and the type of NRF, which must be authenticated to enable the OAuth2 profile configuration.

endpoint-profile *endpoint_profile_details*

Specify the endpoint profile details.

capacity *capacity_number*

Specify the capacity requirement in number.

uri-scheme **http**

Specify the URI scheme.

endpoint-name *endpoint_name*

Specify the endpoint name.

priority *priority_number*

Specify the priority request. Must be in numbers.

primary ip-address ipv4 *ipv4_address*

Specify the primary IPv4 address.

primary ip-address port *port_address*

Specify the primary port address.

Usage Guidelines

Use this command, when the **service type nrf oauth2** in the **group nrf auth** feature is configured, when the AMF sends the `AccessToken` request to the NRF server, when the `nf-client` is configured.

profile nf-client nf-type gmlc gmlc-profile

Configures GMLC profile parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
profile nf-client nf-type gmlc { gmlc-profile profile_name { locality
locality_name | server-name server_name } | oauthenabled { true | false } }
```

gmlc-profile *profile_name*

Specify the GMLC profile name

Must be a string.

locality *locality_name*

Specify the locality.

Must be a string.

server-name *server_name*

Specify the server name.

Must be a string.

oauthenabled { **true** | **false** }

Enable the oauthenabled profile configuration.

The default value is false.

Usage Guidelines

Use this command to configure GMLC profile parameters. The CLI prompt changes to the GMLC Profile Configuration mode (config-gmlc-profile-<profile_name>).

profile nf-client nf-type gmlc gmlc-profile locality

Configures the GMLC profile locality parameter.

Command Modes	Exec > Global Configuration (config) > GMLC Profile Configuration (config-amf-profile- <i>gmlc_profile_name</i>)
----------------------	---

Syntax Description	locality <i>locality_name</i> [priority <i>locality_priority</i>]
---------------------------	---

locality *locality_name*

Specify name of the locality.

Must be a string.

priority *locality_priority*

Specify priority of the locality configuration.

Must be an integer in the range of 0-65535.

Usage Guidelines	Use this command to configure the GMLC profile locality parameter.
-------------------------	--

profile nf-client nf-type gmlc gmlc-profile locality service name type

Configures the GMLC service name type parameter.

Command Modes Exec > Global Configuration (config) > GMLC NF-Client Configuration (config-gmlc) > GMLC Profile Configuration (config-GMLC-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*)

Syntax Description **service name type** *gmlc_service_name_type* { **responsetimeout** *response_timeout* }

service name type *gmlc_service_name_type*

Specify the service name type.

Must be one of the following:

- ngmlc-loc

responsetimeout *response_timeout*

Specify the response timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

Usage Guidelines Use this command to configure the GMLC service name type parameter. The CLI prompt changes to the Service Name Type Configuration mode (config-type-<service_name_type>).

profile nf-client nf-type gmlc gmlc-profile locality service name type ngmlc-loc endpoint-profile

Configures endpoint profile parameters.

Command Modes Exec > Global Configuration (config) > GMLC NF-Client Configuration (config-gmlc) > GMLC Profile Configuration (config-gmlc-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*)

Syntax Description **endpoint-profile** *endpoint_profile_name* { **capacity** *endpoint_capacity* | **priority** *profile_priority* | **uri-scheme** *uri_scheme* | **server-name** *server_name*}

endpoint-profile *endpoint_profile_name*

Specify name of the endpoint profile.

Must be a string.

{ **capacity** *endpoint_capacity*

Specify the endpoint capacity.

Must be an integer in the range of 0-65535.

priority *profile_priority*

Specify the priority of the profile.

Must be an integer in the range of 0-65535.

Default Value: 1.

uri-scheme *uri_scheme*

Specify the URI scheme.

Must be one of the following:

- **http**: HTTP.
- **https**: HTTPS.

server-name *server_name*

Specify the server name.

Usage Guidelines Use this command to configure endpoint profile parameters. The CLI prompt changes to the Endpoint Profile Configuration mode (config-endpoint-profile-<profile_name>).

profile nf-client nf-type gmlc gmlc-profile locality service name type endpoint-profile endpoint-name

Configures the endpoint name parameters.

Command Modes

Exec > Global Configuration (config) > GMLC NF-Client Configuration (config-gmlc) > GMLC Profile Configuration (config-gmlc-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-service_name_type) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*)

Syntax Description

endpoint-name *endpoint_name* [**priority** *node_priority* | **capacity** *node_capacity*]

capacity *node_capacity*

Specify the node capacity for the endpoint.

Must be an integer in the range of 0-65535.

endpoint-name *endpoint_name*

Specify name of the endpoint. You can configure the primary, secondary, and tertiary host (IP: Port) within each endpoint for NF server failover handling. The server failover configuration accepts both IPv4 and IPv6 addresses.

Must be a string.

priority *node_priority*

Specify the node priority for the endpoint.

Must be an integer in the range of 0-65535.

Usage Guidelines

Use this configuration to configure the endpoint name parameters. The CLI prompt changes to the Endpoint Name Configuration mode (config-endpoint-name-<endpoint_name>).

profile nf-client nf-type gmlc gmlc-profile locality service name type endpoint-profile endpoint-name default-notification-subscriptions

Configures the Default Notification Subscription parameters.

Command Modes

Exec > Global Configuration (config) > GMLC NF-Client Configuration (config-gmlc) > GMLC Profile Configuration (config-gmlc-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*) > Endpoint Name Configuration (config-endpoint-name-*endpoint_name*)

Syntax Description

default-notification-subscriptions *name* [**callback-uri** *callback_uri* | **notification-type** *notification_type*]

callback-uri *callback_uri*

Specify the callback URI.

Must be a string.

notification-type *notification_type*

Specify the notification type.

- LOCATION_NOTIFICATION

name

Specify the name of the default notification subscriptions.

Must be a string.

Usage Guidelines

Use this command to configure the Default Notification Subscription parameters. The CLI prompt changes to the Default Notification Subscriptions Configuration mode (config-default-notification-subscriptions-*<name>*)

profile nf-client nf-type gmlc gmlc-profile locality service name type endpoint-profile endpoint-name primary ip-address

profile nf-client nf-type gmlc gmlc-profile locality service name type endpoint-profile endpoint-name primary ip-address

Configures the endpoint IP address and port number parameters.

Command Modes	Exec > Global Configuration (config) > GMLC NF-Client Configuration (config-gmlc) > GMLC Profile Configuration (config-gmlc-profile-profile_name) > Locality Configuration (config-locality-locality_name) > Service Name Type Configuration (config-type-service_name_type) > Endpoint Profile Configuration (config-endpoint-profile-profile_name) > Endpoint Name Configuration (config-endpoint-name-endpoint_name)
Syntax Description	<pre>{ primary ip-address { [{ ipv4 ipv4_address ipv6 ipv6_address }] [port port_number] }</pre> ipv4 ipv4_address ipv6 ipv6_address Specify the IPv4/IPv6 address. Must be a string in the IPv4/IPv6-address pattern. For information on the IPv4/IPv6-address pattern, see the Input Pattern Types section. port port_number Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type lmf lmf-profile

Configures LMF profile parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
profile nf-client nf-type lmf { lmf-profile profile_name { locality  
locality_name | server-name server_name } | oauthenabled { true | false } }
```

lmf-profile *profile_name*

Specify the LMF profile name

Must be a string.

locality *locality_name*

Specify the locality.

Must be a string.

server-name *server_name*

Specify the server name.

Must be a string.

oauthenabled { **true** | **false** }

Enable the oauthenabled profile configuration.

The default value is false.

Usage Guidelines

Use this command to configure LMF profile parameters. The CLI prompt changes to the LMF Profile Configuration mode (config-lmf-profile-<profile_name>).

profile nf-client nf-type lmf lmf-profile locality

Configures the LMF profile locality parameter.

Command Modes	Exec > Global Configuration (config) > LMF Profile Configuration (config-amf-profile- <i>profile_name</i>)
----------------------	---

Syntax Description	locality <i>locality_name</i> [priority <i>locality_priority</i>]
---------------------------	---

locality *locality_name*

Specify name of the locality.

Must be a string.

priority *locality_priority*

Specify priority of the locality configuration.

Must be an integer in the range of 0-65535.

Usage Guidelines	Use this command to configure the LMF profile locality parameter.
-------------------------	---

profile nf-client nf-type lmf lmf-profile locality service name type

Configures the LMF service name type parameter.

Command Modes Exec > Global Configuration (config) > LMF NF-Client Configuration (config-lmf) > LMF Profile Configuration (config-lmf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*)

Syntax Description **service name type** *lmf_service_name_type* **responsetimeout** *response_timeout*

responsetimeout *response_timeout*

Specify the response timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

type *lmf_service_name_type*

Specify the service name type.

Must be one of the following:

- **nlmf-loc**

Usage Guidelines Use this command to configure the LMF service name type parameter. The CLI prompt changes to the Service Name Type Configuration mode (config-type-<service_name_type>).

profile nf-client nf-type lmf lmf-profile locality service name type endpoint-profile

Configures endpoint profile parameters.

Command Modes

Exec > Global Configuration (config) > LMF NF-Client Configuration (config-lmf) > LMF Profile Configuration (config-lmf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*)

Syntax Description

endpoint-profile *endpoint_profile_name* { **capacity** *capacity_value* | **priority** *profile_priority* | **api-uri-prefix** *api_uri_prefix* | **api-root** *api_root* | **uri-scheme** *uri_scheme* }

endpoint-profile *endpoint_profile_name*

Specify name of the endpoint profile.

Must be a string.

priority *profile_priority*

Specify the priority of the profile.

Must be an integer in the range of 0-65535.

Default Value: 1.

uri-scheme *uri_scheme*

Specify the URI scheme.

Must be one of the following:

- **http**: HTTP.
- **https**: HTTPS.

Usage Guidelines

Use this command to configure endpoint profile parameters. The CLI prompt changes to the Endpoint Profile Configuration mode (config-endpoint-profile-*<profile_name>*).

profile nf-client nf-type lmf lmf-profile locality service name type endpoint-profile endpoint-name

Configures the endpoint name parameters.

Command Modes Exec > Global Configuration (config) > LMF NF-Client Configuration (config-lmf) > LMF Profile Configuration (config-lmf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*)

Syntax Description **endpoint-name** *endpoint_name* [**priority** *node_priority* | **capacity** *node_capacity*]

capacity *node_capacity*

Specify the node capacity for the endpoint.

Must be an integer in the range of 0-65535.

endpoint-name *endpoint_name*

Specify name of the endpoint. You can configure the primary, secondary, and tertiary host (IP: Port) within each endpoint for NF server failover handling. The server failover configuration accepts both IPv4 and IPv6 addresses.

Must be a string.

priority *node_priority*

Specify the node priority for the endpoint.

Must be an integer in the range of 0-65535.

Usage Guidelines Use this configuration to configure the endpoint name parameters. The CLI prompt changes to the Endpoint Name Configuration mode (config-endpoint-name-<endpoint_name>).

profile nf-client nf-type lmf lmf-profile locality service name type endpoint-profile endpoint-name default-notification-subscriptions

Configures the Default Notification Subscription parameters.

Command Modes	Exec > Global Configuration (config) > LMF NF-Client Configuration (config-lmf) > LMF Profile Configuration (config-lmf-profile- <i>profile_name</i>) > Locality Configuration (config-locality- <i>locality_name</i>) > Service Name Type Configuration (config-type- <i>service_name_type</i>) > Endpoint Profile Configuration (config-endpoint-profile- <i>profile_name</i>) > Endpoint Name Configuration (config-endpoint-name- <i>endpoint_name</i>)
Syntax Description	default-notification-subscriptions <i>name</i> [callback-uri <i>callback_uri</i> n1-message-class <i>n1_message_class</i> n2-information-class <i>n2_information_class</i> notification-type <i>notification_type</i>] callback-uri <i>callback_uri</i> Specify the callback URI. Must be a string. n1-message-class <i>n1_message_class</i> Specify the N1 Message Class. Must be one of the following: • LPP n2-information-class <i>n2_information_class</i> Specify the N2 Information Class. Must be one of the following: • NRPPA notification-type <i>notification_type</i> Specify the notification type. Must be one of the following: • N1_MESSAGES • N2_INFORMATION name Specify the name of the default notification subscriptions. Must be a string.

Usage Guidelines

Use this command to configure the Default Notification Subscription parameters. The CLI prompt changes to the Default Notification Subscriptions Configuration mode (config-default-notification-subscriptions-<name>)

profile nf-client nf-type lmf lmf-profile locality service name type endpoint-profile endpoint-name primary ip-address

profile nf-client nf-type lmf lmf-profile locality service name type endpoint-profile endpoint-name primary ip-address

Configures the endpoint IP address and port number parameters.

Command Modes

Exec > Global Configuration (config) > LMF NF-Client Configuration (config-lmf) > LMF Profile Configuration (config-lmf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*) > Endpoint Name Configuration (config-endpoint-name-*endpoint_name*)

Syntax Description

```
{ primary ip-address { [ ipv4 ipv4_address ] [ port port_number ] }
```

ipv4 *ipv4_address*

Specify the IPv4 address.

Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section.

port *port_number*

Specify the port number.

Must be an integer in the range of 0-65535.

Usage Guidelines

Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type lmf lmf-profile locality service name type endpoint-profile version uri-version

Configures the URI version parameter.

Command Modes Exec > Global Configuration (config) > LMF NF-Client Configuration (config-lmf) > LMF Profile Configuration (config-lmf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*)

Syntax Description **version uri-version** { *uri_version* | **full-version** *full_version* }

full-version *full_version*

Specify the full version in the format *major-version.minor-version.patch-version.[alpha-draft-number]*
Must be a string.

uri-version *uri_version*

Specify the URI version.
Must be a string in the pattern v\d.

Usage Guidelines Use this command to configure the URI version parameter.

profile nf-client nf-type nssf nssf-profile

Configures NSSF profile parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
profile nf-client nf-type nssf { nssf-profile profile_name { locality  
locality_name | server-name server_name } | oauthenabled { true | false } }
```

nssf-profile *nssf_profile_name*

Specify name of the NSSF profile.

Must be a string.

locality *locality_name*

Specify the locality.

Must be a string.

server-name *server_name*

Specify the server name.

Must be a string.

oauthenabled { true | false }

Enable the oauthenabled profile configuration.

The default value is false.

Usage Guidelines

Use this command to configure the NSSF profile parameters. The CLI prompt changes to the NSSF Profile Configuration mode (config-nssf-profile-<profile_name>).

profile nf-client nf-type nssf nssf-profile locality

Configures locality parameter.

Command Modes	Exec > Global Configuration (config) > NSSF Profile Configuration (config-nssf-profile- <i>profile_name</i>)
----------------------	---

Syntax Description	locality <i>locality_name</i> [priority <i>locality_config_priority</i>]
---------------------------	--

locality *locality_name*

Specify name of the locality.

Must be a string.

priority *locality_config_priority*

Specify the priority of the locality configuration.

Must be an integer in the range of 0-65535.

Usage Guidelines	Use this command to configure the NSSF Profile Locality parameter.
-------------------------	--

profile nf-client nf-type nssf nssf-profile locality service name type

Configures the NSSF service name type parameter.

Command Modes	Exec > Global Configuration (config) > NSSF NF-Client Configuration (config-nssf) > NSSF Profile Configuration (config-nssf-profile-profile_name) > Locality Configuration (config-locality-locality_name)
Syntax Description	service name type <i>service_name_type</i> [responsetimeout <i>response_timeout_interval</i>] responsetimeout <i>response_timeout_interval</i> Specify the response timeout interval in milliseconds. Must be an integer. Default Value: 2000. type <i>service_name_type</i> Specify the NSSF service name type. Must be one of the following: nnssf-nselection
Usage Guidelines	Use this command to configure the NSSF service name type parameter. The CLI prompt changes to the Service Name Type Configuration mode (config-type-<service_name_type>).

profile nf-client nf-type nssf nssf-profile locality service name type endpoint-profile

Configures endpoint profile parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > NSSF NF-Client Configuration (config-nssf) > NSSF Profile Configuration (config-nssf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*)

Syntax Description

endpoint-profile *endpoint_profile_name* { **capacity** *capacity_value* | **priority** *profile_priority* | **api-uri-prefix** *api_uri_prefix* | **api-root** *api_root* | **uri-scheme** *uri_scheme* }

api-root *api_root*

Specify the API root.

Must be a string.

api-uri-prefix *api_uri_prefix*

Specify the API URI prefix.

Must be a string.

capacity *capacity_value*

Specify the profile capacity.

Must be an integer in the range of 0-65535.

Default Value: 10.

endpoint-profile *endpoint_profile_name*

Specify name of the endpoint profile.

Must be a string.

priority *profile_priority*

Specify the priority of the profile.

Must be an integer in the range of 0-65535.

Default Value: 1.

uri-scheme *uri_scheme*

Specify the URI scheme.

Must be one of the following:

- **http**: HTTP.

profile nf-client nf-type nssf nssf-profile locality service name type endpoint-profile

- **https**: HTTPS.

Usage Guidelines

Use this command to configure endpoint profile parameters. The CLI prompt changes to the Endpoint Profile Configuration mode (config-endpoint-profile-<profile_name>).

profile nf-client nf-type nssf nssf-profile locality service name type endpoint-profile endpoint-name

Configures the endpoint name parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > NSSF NF-Client Configuration (config-nssf) > NSSF Profile Configuration (config-nssf-profile- <i>profile_name</i>) > Locality Configuration (config-locality- <i>locality_name</i>) > Service Name Type Configuration (config-type-service_name_type) > Endpoint Profile Configuration (config-endpoint-profile- <i>profile_name</i>)
Syntax Description	endpoint-name <i>endpoint_name</i> [priority <i>node_priority</i> capacity <i>node_capacity</i>] capacity <i>node_capacity</i> Specify the node capacity for the endpoint. Must be an integer in the range of 0-65535. endpoint-name <i>endpoint_name</i> Specify name of the endpoint. You can configure the primary, secondary, and tertiary host (IP: Port) within each endpoint for NF server failover handling. The server failover configuration accepts both IPv4 and IPv6 addresses. However, the SMF gives preference to the IPv4 address. Must be a string. priority <i>node_priority</i> Specify the node priority for the endpoint. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this configuration to configure the endpoint name parameters. The CLI prompt changes to the Endpoint Name Configuration mode (config-endpoint-name-<endpoint_name>).

```
profile nf-client nf-type nssf nssf-profile locality service name type endpoint-profile endpoint-name primary ip-address
```

profile nf-client nf-type nssf nssf-profile locality service name type endpoint-profile endpoint-name primary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > NSSF NF-Client Configuration (config-nssf) > NSSF Profile Configuration (config-nssf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-service-*name_type*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*) > Endpoint Name Configuration (config-endpoint-name-*endpoint_name*)

Syntax Description

```
{ primary | secondary | tertiary } ip-address { [ ipv4 ipv4_address | ipv6  
ipv6_address ] [ port port_number ] }
```

ipv4 *ipv4_address*

Specify the IPv4 address.

Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section.

ipv6 *ipv6_address*

Specify the IPv6 address.

Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section.

port *port_number*

Specify the port number.

Must be an integer in the range of 0-65535.

Usage Guidelines

Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type nssf nssf-profile locality service name type endpoint-profile endpoint-name secondary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes Exec > Global Configuration (config) > NSSF NF-Client Configuration (config-nssf) > NSSF Profile Configuration (config-nssf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*) > Endpoint Name Configuration (config-endpoint-name-*endpoint_name*)

Syntax Description { **primary** | **secondary** | **tertiary** } **ip-address** { [**ipv4** *ipv4_address* | **ipv6** *ipv6_address*] [**port** *port_number*] }

ipv4 *ipv4_address*

Specify the IPv4 address.

Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section.

ipv6 *ipv6_address*

Specify the IPv6 address.

Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section.

port *port_number*

Specify the port number.

Must be an integer in the range of 0-65535.

Usage Guidelines Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type nssf nssf-profile locality service name type endpoint-profile endpoint-name tertiary ip-address

profile nf-client nf-type nssf nssf-profile locality service name type endpoint-profile endpoint-name tertiary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > NSSF NF-Client Configuration (config-nssf) > NSSF Profile Configuration (config-nssf-profile-<i>profile_name</i>) > Locality Configuration (config-locality-<i>locality_name</i>) > Service Name Type Configuration (config-type-<i>service_name_type</i>) > Endpoint Profile Configuration (config-endpoint-profile-<i>profile_name</i>) > Endpoint Name Configuration (config-endpoint-name-<i>endpoint_name</i>)
Syntax Description	<pre>{ primary secondary tertiary } ip-address { [ipv4 ipv4_address ipv6 ipv6_address] [port port_number] }</pre> ipv4 <i>ipv4_address</i> Specify the IPv4 address. Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section. ipv6 <i>ipv6_address</i> Specify the IPv6 address. Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section. port <i>port_number</i> Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type nssf nssf-profile locality service name type endpoint-profile version uri-version

Configures the URI version parameter. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > NSSF NF-Client Configuration (config-nssf) > NSSF Profile Configuration (config-nssf-profile- <i>profile_name</i>) > Locality Configuration (config-locality- <i>locality_name</i>) > Endpoint Profile Configuration (config-endpoint-profile- <i>profile_name</i>)
Syntax Description	version uri-version { <i>uri_version</i> full-version <i>full_version</i> } full-version <i>full_version</i> Specify the full version in the format <i>major-version.minor-version.patch-version.[alpha-draft-number]</i> Must be a string. uri-version <i>uri_version</i> Specify the URI version. Must be a string in the pattern <i>v\d</i>.
Usage Guidelines	Use this command to configure the URI version parameter.

profile nf-client nf-type pcf pcf-profile

Configures PCF profile parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
profile nf-client nf-type pcf { pcf-profile profile_name { locality  
locality_name | server-name server_name } | oauthenabled { true | false } }
```

pcf-profile *profile_name*

Specify name of the PCF profile.

Must be a string.

locality *locality_name*

Specify the locality.

Must be a string.

server-name *server_name*

Specify the server name.

Must be a string.

oauthenabled { true | false }

Enable the oauthenabled profile configuration.

The default value is false.

Usage Guidelines

Use this command to configure the PCF profile parameters. The CLI prompt changes to the PCF Profile Configuration mode (config-pcf-profile-<profile_name>).

profile nf-client nf-type pcf pcf-profile locality

Configures the PCF profile locality parameter.

Command Modes	Exec > Global Configuration (config) > PCF Profile Configuration (config-psf-profile- <i>profile_name</i>)
----------------------	---

Syntax Description	locality <i>locality_name</i> [priority <i>locality_priority</i>]
---------------------------	---

locality *locality_name*

Specify name of the locality.

Must be a string.

priority *locality_priority*

Specify priority of the locality configuration.

Must be an integer in the range of 0-65535.

Usage Guidelines	Use this command to configure the PCF profile locality parameter.
-------------------------	---

profile nf-client nf-type pcf pcf-profile locality service name type

Configures the PCF service name type parameter.

Command Modes Exec > Global Configuration (config) > PCF NF-Client Configuration (config-pcf) > PCF Profile Configuration (config-pcf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*)

Syntax Description **service name type** *service_name_type* [**responsetimeout** *response_timeout*]

responsetimeout *response_timeout*

Specify the response timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

type *service_name_type*

Specify the PCF service name parameters.

Must be one of the following:

- **npcf-am-policy-control**

Usage Guidelines Use this command to configure the PCF service name type parameter. The CLI prompt changes to the Service Name Type Configuration mode (config-type-<service_name_type>).

profile nf-client nf-type pcf pcf-profile locality service name type endpoint-profile

Configures endpoint profile parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > PCF NF-Client Configuration (config-pcf) > PCF Profile Configuration (config-pcf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*)

Syntax Description

endpoint-profile *endpoint_profile_name* { **capacity** *capacity_value* | **priority** *profile_priority* | **api-uri-prefix** *api_uri_prefix* | **api-root** *api_root* | **uri-scheme** *uri_scheme* }

api-root *api_root*

Specify the API root.

Must be a string.

api-uri-prefix *api_uri_prefix*

Specify the API URI prefix.

Must be a string.

capacity *capacity_value*

Specify the profile capacity.

Must be an integer in the range of 0-65535.

Default Value: 10.

endpoint-profile *endpoint_profile_name*

Specify name of the endpoint profile.

Must be a string.

priority *profile_priority*

Specify the priority of the profile.

Must be an integer in the range of 0-65535.

Default Value: 1.

uri-scheme *uri_scheme*

Specify the URI scheme.

Must be one of the following:

- **http**: HTTP.

profile nf-client nf-type pcf pcf-profile locality service name type endpoint-profile

- **https**: HTTPS.

Usage Guidelines

Use this command to configure endpoint profile parameters. The CLI prompt changes to the Endpoint Profile Configuration mode (config-endpoint-profile-<profile_name>).

profile nf-client nf-type pcf pcf-profile locality service name type endpoint-profile endpoint-name

Configures the endpoint name parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes Exec > Global Configuration (config) > PCF NF-Client Configuration (config-pcf) > PCF Profile Configuration (config-pcf-profile-profile_name) > Locality Configuration (config-locality-locality_name) > Service Name Type Configuration (config-type-service_name_type) > Endpoint Profile Configuration (config-endpoint-profile-profile_name)

Syntax Description **endpoint-name** *endpoint_name* [**priority** *node_priority* | **capacity** *node_capacity*]

capacity *node_capacity*

Specify the node capacity for the endpoint.

Must be an integer in the range of 0-65535.

endpoint-name *endpoint_name*

Specify name of the endpoint. You can configure the primary, secondary, and tertiary host (IP: Port) within each endpoint for NF server failover handling. The server failover configuration accepts both IPv4 and IPv6 addresses. However, the SMF gives preference to the IPv4 address.

Must be a string.

priority *node_priority*

Specify the node priority for the endpoint.

Must be an integer in the range of 0-65535.

Usage Guidelines Use this configuration to configure the endpoint name parameters. The CLI prompt changes to the Endpoint Name Configuration mode (config-endpoint-name-<endpoint_name>).

profile nf-client nf-type pcf pcf-profile locality service name type endpoint-profile endpoint-name primary ip-address

profile nf-client nf-type pcf pcf-profile locality service name type endpoint-profile endpoint-name primary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > PCF NF-Client Configuration (config-pcf) > PCF Profile Configuration (config-pcf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*) > Endpoint Name Configuration (config-endpoint-name-*endpoint_name*)

Syntax Description

{ primary | secondary | tertiary } ip-address { [ipv4 *ipv4_address* | ipv6 *ipv6_address*] [port *port_number*] }

ipv4 *ipv4_address*

Specify the IPv4 address.

Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section.

ipv6 *ipv6_address*

Specify the IPv6 address.

Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section.

port *port_number*

Specify the port number.

Must be an integer in the range of 0-65535.

Usage Guidelines

Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type pcf pcf-profile locality service name type endpoint-profile endpoint-name secondary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > PCF NF-Client Configuration (config-pcf) > PCF Profile Configuration (config-pcf-profile- <i>profile_name</i>) > Locality Configuration (config-locality- <i>locality_name</i>) > Service Name Type Configuration (config-type- <i>service_name_type</i>) > Endpoint Profile Configuration (config-endpoint-profile- <i>profile_name</i>) > Endpoint Name Configuration (config-endpoint-name- <i>endpoint_name</i>)
Syntax Description	{ primary secondary tertiary } ip-address { [ipv4 <i>ipv4_address</i> ipv6 <i>ipv6_address</i>] [port <i>port_number</i>] } ipv4 <i>ipv4_address</i> Specify the IPv4 address. Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section. ipv6 <i>ipv6_address</i> Specify the IPv6 address. Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section. port <i>port_number</i> Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type pcf pcf-profile locality service name type endpoint-profile endpoint-name tertiary ip-address

profile nf-client nf-type pcf pcf-profile locality service name type endpoint-profile endpoint-name tertiary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes Exec > Global Configuration (config) > PCF NF-Client Configuration (config-pcf) > PCF Profile Configuration (config-pcf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*) > Endpoint Name Configuration (config-endpoint-name-*endpoint_name*)

Syntax Description { **primary** | **secondary** | **tertiary** } **ip-address** { [**ipv4** *ipv4_address* | **ipv6** *ipv6_address*] [**port** *port_number*] }

ipv4 *ipv4_address*

Specify the IPv4 address.

Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section.

ipv6 *ipv6_address*

Specify the IPv6 address.

Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section.

port *port_number*

Specify the port number.

Must be an integer in the range of 0-65535.

Usage Guidelines Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type pcf pcf-profile locality service name type endpoint-profile version uri-version

Configures the URI version parameter. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > PCF NF-Client Configuration (config-pcf) > PCF Profile Configuration (config-pcf-profile- <i>profile_name</i>) > Locality Configuration (config-locality- <i>locality_name</i>) > Endpoint Profile Configuration (config-endpoint-profile- <i>profile_name</i>)
----------------------	---

Syntax Description	version uri-version { <i>uri_version</i> full-version <i>full_version</i> }
---------------------------	---

full-version *full_version*

Specify the full version in the format *major-version.minor-version.patch-version.[alpha-draft-number]*

Must be a string.

uri-version *uri_version*

Specify the URI version.

Must be a string in the pattern *v\d*.

Usage Guidelines	Use this command to configure the URI version parameter.
-------------------------	--

profile nf-client nf-type smf smf-profile

Configures SMF profile parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
profile nf-client nf-type smf { smf-profile profile_name { locality  
locality_name| server-name server_name } | oauthenabled { true | false } }
```

smf-profile *smf_profile_name*

Specify name of the SMF profile.

Must be a string.

locality *locality_name*

Specify the locality.

Must be a string.

server-name *server_name*

Specify the server name.

Must be a string.

oauthenabled { true | false }

Enable the oauthenabled profile configuration.

The default value is false.

Usage Guidelines

Use this command to configure the SMF profile parameters. The CLI prompt changes to the SMF Profile Configuration mode (config-smf-profile-<profile_name>).

profile nf-client nf-type smf smf-profile locality

Configures the SMF profile locality parameter.

Command Modes	Exec > Global Configuration (config) > SMF Profile Configuration (config-smf-profile- <i>profile_name</i>)
----------------------	---

Syntax Description	locality <i>locality_name</i> [priority <i>priority</i>]
---------------------------	--

locality *locality_name*

Specify name of the locality.

Must be a string.

priority *priority*

Specify the priority of the locality configuration.

Must be an integer in the range of 0-65535.

Usage Guidelines	Use this command to configure the SMF profile locality parameter.
-------------------------	---

profile nf-client nf-type smf smf-profile locality service name type

Configures the SMF service name type parameter.

Command Modes

Exec > Global Configuration (config) > SMF NF-Client Configuration (config-smf) > SMF Profile Configuration (config-smf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*)

Syntax Description

service name type *smf_service_name_type* [**responsetimeout** *response_timeout*]

responsetimeout *response_timeout*

Specify the timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

type *smf_service_name_type*

Specify the service name type.

Must be one of the following:

- **nsmf-pdusession**

Usage Guidelines

Use this command to configure the SMF service name type parameter. The CLI prompt changes to the Service Name Type Configuration mode (config-type-<service_name_type>).

profile nf-client nf-type smf smf-profile locality service name type endpoint-profile

Configures endpoint profile parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes Exec > Global Configuration (config) > SMF NF-Client Configuration (config-smf) > SMF Profile Configuration (config-smf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*)

Syntax Description **endpoint-profile** *endpoint_profile_name* { **capacity** *capacity_value* | **priority** *profile_priority* | **api-uri-prefix** *api_uri_prefix* | **api-root** *api_root* | **uri-scheme** *uri_scheme* }

api-root *api_root*

Specify the API root.

Must be a string.

api-uri-prefix *api_uri_prefix*

Specify the API URI prefix.

Must be a string.

capacity *capacity_value*

Specify the profile capacity.

Must be an integer in the range of 0-65535.

Default Value: 10.

endpoint-profile *endpoint_profile_name*

Specify name of the endpoint profile.

Must be a string.

priority *profile_priority*

Specify the priority of the profile.

Must be an integer in the range of 0-65535.

Default Value: 1.

uri-scheme *uri_scheme*

Specify the URI scheme.

Must be one of the following:

- **http**: HTTP.

profile nf-client nf-type smf smf-profile locality service name type endpoint-profile

- **https**: HTTPS.

Usage Guidelines

Use this command to configure endpoint profile parameters. The CLI prompt changes to the Endpoint Profile Configuration mode (config-endpoint-profile-<profile_name>).

profile nf-client nf-type smf smf-profile locality service name type endpoint-profile endpoint-name

Configures the endpoint name parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > SMF NF-Client Configuration (config-smf) > SMF Profile Configuration (config-smf-profile- <i>profile_name</i>) > Locality Configuration (config-locality- <i>locality_name</i>) > Service Name Type Configuration (config-type- <i>service_name_type</i>) > Endpoint Profile Configuration (config-endpoint-profile- <i>profile_name</i>)
Syntax Description	endpoint-name <i>endpoint_name</i> [priority <i>node_priority</i> capacity <i>node_capacity</i>] capacity <i>node_capacity</i> Specify the node capacity for the endpoint. Must be an integer in the range of 0-65535. endpoint-name <i>endpoint_name</i> Specify name of the endpoint. You can configure the primary, secondary, and tertiary host (IP: Port) within each endpoint for NF server failover handling. The server failover configuration accepts both IPv4 and IPv6 addresses. However, the SMF gives preference to the IPv4 address. Must be a string. priority <i>node_priority</i> Specify the node priority for the endpoint. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this configuration to configure the endpoint name parameters. The CLI prompt changes to the Endpoint Name Configuration mode (config-endpoint-name- <i>endpoint_name</i> >).

profile nf-client nf-type smf smf-profile locality service name type endpoint-profile endpoint-name primary ip-address

profile nf-client nf-type smf smf-profile locality service name type endpoint-profile endpoint-name primary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > SMF NF-Client Configuration (config-smf) > SMF Profile Configuration (config-smf-profile-profile_name) > Locality Configuration (config-locality-locality_name) > Service Name Type Configuration (config-type-service_name_type) > Endpoint Profile Configuration (config-endpoint-profile-profile_name) > Endpoint Name Configuration (config-endpoint-name-endpoint_name)
Syntax Description	{ primary secondary tertiary } ip-address { [ipv4 ipv4_address ipv6 ipv6_address] [port port_number] } ipv4 ipv4_address Specify the IPv4 address. Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section. ipv6 ipv6_address Specify the IPv6 address. Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section. port port_number Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type smf smf-profile locality service name type endpoint-profile endpoint-name secondary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes Exec > Global Configuration (config) > SMF NF-Client Configuration (config-smf) > SMF Profile Configuration (config-smf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*) > Endpoint Name Configuration (config-endpoint-name-*endpoint_name*)

Syntax Description { **primary** | **secondary** | **tertiary** } **ip-address** { [**ipv4** *ipv4_address* | **ipv6** *ipv6_address*] [**port** *port_number*] }

ipv4 *ipv4_address*

Specify the IPv4 address.

Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section.

ipv6 *ipv6_address*

Specify the IPv6 address.

Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section.

port *port_number*

Specify the port number.

Must be an integer in the range of 0-65535.

Usage Guidelines Use this command to configure the endpoint IP address and port number parameters.

```
profile nf-client nf-type smf smf-profile locality service name type endpoint-profile endpoint-name tertiary ip-address
```

profile nf-client nf-type smf smf-profile locality service name type endpoint-profile endpoint-name tertiary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > SMF NF-Client Configuration (config-smf) > SMF Profile Configuration (config-smf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*) > Endpoint Name Configuration (config-endpoint-name-*endpoint_name*)

Syntax Description

```
{ primary | secondary | tertiary } ip-address { [ ipv4 ipv4_address | ipv6 ipv6_address ] [ port port_number ] }
```

ipv4 *ipv4_address*

Specify the IPv4 address.

Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section.

ipv6 *ipv6_address*

Specify the IPv6 address.

Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section.

port *port_number*

Specify the port number.

Must be an integer in the range of 0-65535.

Usage Guidelines

Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type smf smf-profile locality service name type endpoint-profile version uri-version

Configures the URI version parameter. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes Exec > Global Configuration (config) > SMF NF-Client Configuration (config-smf) > SMF Profile Configuration (config-smf-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*)

Syntax Description **version uri-version** { *uri_version* | **full-version** *full_version* }

full-version *full_version*

Specify the full version in the format *major-version.minor-version.patch-version.[alpha-draft-number]*

Must be a string.

uri-version *uri_version*

Specify the URI version.

Must be a string in the pattern *v\d*.

Usage Guidelines Use this command to configure the URI version parameter.

profile nf-client nf-type smsf

Configures SMSF parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
profile network-element smsf peer_smsf_config_name nf-client-profile
nf_client_profile_name { locality locality_name | priority priority_value |
service name type nsmsf-sms | endpoint-profile endpoint_profile | capacity
capacity_value | priority priority_value | uri-scheme http version |
uri-version v2 }
```

{ *locality* *locality_name* | *priority* *priority_value* | *service name type* *nsmsf-sms* | *endpoint-profile* *endpoint_profile* | *capacity* *capacity_value* | *priority* *priority_value* | *uri-scheme* *http* *version* | *uri-version* *v2* }

profile network-element smsf

Specify name of the network element as SMSF.

nf-client-profile *nf_client_profile_name*

Specify name of the NF client profile.

Must be a string.

locality *locality_name*

Specify name of the locality.

Must be a string.

priority *priority_value*

Specify the priority value.

Must be an integer.

service name type **nsmsf-sms**

Specify name of the service type as nsmsf-sms.

Must be a string.

endpoint-profile *endpoint_profile*

Specify name of the endpoint profile.

Must be a string.

capacity *capacity_value*

Specify the capacity value.

Must be a string.

uri-scheme http version

Specify the HTTP version of the URI scheme.

uri-version v2

Specify the version for URI.

Usage Guidelines

Use this command to configure SMSF parameters.

profile nf-client nf-type udm udm-profile

Configures UDM profile parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
profile nf-client nf-type udm { udm-profile profile_name { locality  
locality_name | server-name server_name } | oauthenabled { true | false } }
```

udm-profile *udm_profile_name*

Specify name of the UDM profile.

Must be a string.

locality *locality_name*

Specify the locality.

Must be a string.

server-name *server_name*

Specify the server name.

Must be a string.

oauthenabled { true | false }

Enable the oauthenabled profile configuration.

The default value is false.

Usage Guidelines

Use this command to configure the UDM profile parameters. The CLI prompt changes to the UDM Profile Configuration mode (config-udm-profile-<profile_name>).

profile nf-client nf-type udm udm-profile locality

Configures the UDM profile locality parameters.

Command Modes	Exec > Global Configuration (config) > UDM Profile Configuration (config-udm-profile- <i>profile_name</i>)
----------------------	---

Syntax Description	locality <i>locality_name</i> [priority <i>priority</i>]
---------------------------	--

locality *locality_name*

Specify name of the locality.

Must be a string.

priority *priority*

This keyword sets the priority for the locality configuration.

Must be an integer in the range of 0-65535.

Usage Guidelines	Use this command to configure the UDM profile locality parameter.
-------------------------	---

profile nf-client nf-type udm udm-profile locality service name type

Configures the UDM service name type parameter.

Command Modes

Exec > Global Configuration (config) > UDM NF-Client Configuration (config-udm) > UDM Profile Configuration (config-udm-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*)

Syntax Description

service name type *service_name_type* [**responsetimeout** *response_timeout*]

responsetimeout *response_timeout*

Specify the response timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

type *service_name_type*

Specify the UDM service name type.

Must be one of the following:

- **nudm-sdm**
- **nudm-uecm**

Usage Guidelines

Use this command to configure the UDM service name type parameter. The CLI prompt changes to the Service Name Type Configuration mode (config-type-<service_name_type>).

profile nf-client nf-type udm udm-profile locality service name type endpoint-profile

Configures endpoint profile parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes Exec > Global Configuration (config) > UDM NF-Client Configuration (config-udm) > UDM Profile Configuration (config-udm-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-*service_name_type*)

Syntax Description **endpoint-profile** *endpoint_profile_name* { **capacity** *capacity_value* | **priority** *profile_priority* | **api-uri-prefix** *api_uri_prefix* | **api-root** *api_root* | **uri-scheme** *uri_scheme* }

api-root *api_root*

Specify the API root.

Must be a string.

api-uri-prefix *api_uri_prefix*

Specify the API URI prefix.

Must be a string.

capacity *capacity_value*

Specify the profile capacity.

Must be an integer in the range of 0-65535.

Default Value: 10.

endpoint-profile *endpoint_profile_name*

Specify name of the endpoint profile.

Must be a string.

priority *profile_priority*

Specify the priority of the profile.

Must be an integer in the range of 0-65535.

Default Value: 1.

uri-scheme *uri_scheme*

Specify the URI scheme.

Must be one of the following:

- **http**: HTTP.

profile nf-client nf-type udm udm-profile locality service name type endpoint-profile

- **https**: HTTPS.

Usage Guidelines

Use this command to configure endpoint profile parameters. The CLI prompt changes to the Endpoint Profile Configuration mode (config-endpoint-profile-<profile_name>).

profile nf-client nf-type udm udm-profile locality service name type endpoint-profile endpoint-name

Configures the endpoint name parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > UDM NF-Client Configuration (config-smf) > UDM Profile Configuration (config-udm-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-service_name_type) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*)

Syntax Description

endpoint-name *endpoint_name* [**priority** *node_priority* | **capacity** *node_capacity*]

capacity *node_capacity*

Specify the node capacity for the endpoint.

Must be an integer in the range of 0-65535.

endpoint-name *endpoint_name*

Specify name of the endpoint. You can configure the primary, secondary, and tertiary host (IP: Port) within each endpoint for NF server failover handling. The server failover configuration accepts both IPv4 and IPv6 addresses. However, the SMF gives preference to the IPv4 address.

Must be a string.

priority *node_priority*

Specify the node priority for the endpoint.

Must be an integer in the range of 0-65535.

Usage Guidelines

Use this configuration to configure the endpoint name parameters. The CLI prompt changes to the Endpoint Name Configuration mode (config-endpoint-name-<endpoint_name>).

```
profile nf-client nf-type udm udm-profile locality service name type endpoint-profile endpoint-name primary ip-address
```

profile nf-client nf-type udm udm-profile locality service name type endpoint-profile endpoint-name primary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > UDM NF-Client Configuration (config-udm) > UDM Profile Configuration (config-udm-profile-*profile_name*) > Locality Configuration (config-locality-*locality_name*) > Service Name Type Configuration (config-type-service_name_type) > Endpoint Profile Configuration (config-endpoint-profile-*profile_name*) > Endpoint Name Configuration (config-endpoint-name-*endpoint_name*)

Syntax Description

```
{ primary | secondary | tertiary } ip-address { [ ipv4 ipv4_address | ipv6  
ipv6_address ] [ port port_number ] }
```

ipv4 *ipv4_address*

Specify the IPv4 address.

Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section.

ipv6 *ipv6_address*

Specify the IPv6 address.

Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section.

port *port_number*

Specify the port number.

Must be an integer in the range of 0-65535.

Usage Guidelines

Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type udm udm-profile locality service name type endpoint-profile endpoint-name secondary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes Exec > Global Configuration (config) > UDM NF-Client Configuration (config-udm) > UDM Profile Configuration (config-udm-profile-profile_name) > Locality Configuration (config-locality-locality_name) > Service Name Type Configuration (config-type-service_name_type) > Endpoint Profile Configuration (config-endpoint-profile-profile_name) > Endpoint Name Configuration (config-endpoint-name-endpoint_name)

Syntax Description { primary | secondary | tertiary } ip-address { [ipv4 ipv4_address | ipv6 ipv6_address] [port port_number] }

ipv4 ipv4_address

Specify the IPv4 address.

Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section.

ipv6 ipv6_address

Specify the IPv6 address.

Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section.

port port_number

Specify the port number.

Must be an integer in the range of 0-65535.

Usage Guidelines Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type udm udm-profile locality service name type endpoint-profile endpoint-name tertiary ip-address

profile nf-client nf-type udm udm-profile locality service name type endpoint-profile endpoint-name tertiary ip-address

Configures the endpoint IP address and port number parameters. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > UDM NF-Client Configuration (config-udm) > UDM Profile Configuration (config-udm-profile- <i>profile_name</i>) > Locality Configuration (config-locality- <i>locality_name</i>) > Service Name Type Configuration (config-type-service_name_type) > Endpoint Profile Configuration (config-endpoint-profile- <i>profile_name</i>) > Endpoint Name Configuration (config-endpoint-name- <i>endpoint_name</i>)
Syntax Description	{ primary secondary tertiary } ip-address { [ipv4 <i>ipv4_address</i> ipv6 <i>ipv6_address</i>] [port <i>port_number</i>] } ipv4 <i>ipv4_address</i> Specify the IPv4 address. Must be a string in the ipv4-address pattern. For information on the ipv4-address pattern, see the Input Pattern Types section. ipv6 <i>ipv6_address</i> Specify the IPv6 address. Must be a string in the ipv6-address pattern. For information on the ipv6-address pattern, see the Input Pattern Types section. port <i>port_number</i> Specify the port number. Must be an integer in the range of 0-65535.
Usage Guidelines	Use this command to configure the endpoint IP address and port number parameters.

profile nf-client nf-type udm udm-profile locality service name type endpoint-profile version uri-version

Configures the URI version parameter. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes	Exec > Global Configuration (config) > UDM NF-Client Configuration (config-udm) > UDM Profile Configuration (config-udm-profile-profile_name) > Locality Configuration (config-locality-locality_name) > Endpoint Profile Configuration (config-endpoint-profile-profile_name)
Syntax Description	version uri-version { <i>uri_version</i> full-version <i>full_version</i> } full-version full_version Specify the full version in the format <i>major-version.minor-version.patch-version.[alpha-draft-number]</i> Must be a string. uri-version uri_version Specify the URI version. Must be a string in the pattern <i>v\d</i>.
Usage Guidelines	Use this command to configure the URI version parameter.

profile nf-client-failure nf-type amf

Configures the AMF Profile Failure Handling parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile nf-client-failure nf-type amf

Usage Guidelines

Use this command to configure the AMF Profile Failure Handling parameters. The CLI prompt changes to the AMF Configuration mode (config-amf).

profile nf-client-failure nf-type amf profile failure-handling

Configures the AMF Failure Handling Template parameters.

Command Modes	Exec > Global Configuration (config) > AMF NF Client Failure Configuration (config-amf)
----------------------	---

Syntax Description	profile failure-handling <i>fh_template_name</i>
---------------------------	---

failure-handling *fh_template_name*

Specify name of the AMF failure handling template.

Must be a string.

Usage Guidelines	Use this command to configure the AMF Failure Handling Template parameters. The CLI prompt changes to the Failure Handling <profile_name> Configuration (config-failure-handling-<profile_name>).
-------------------------	---

profile nf-client-failure nf-type amf profile failure-handling service name type

Configures the AMF Failure Handling parameters.

Command Modes Exec > Global Configuration (config) > AMF NF-Client Configuration (config-amf) > Failure Handling Profile Configuration (config-failure-handling-profile_name)

Syntax Description **service name type** *amf_service_name_type* [**responsetimeout** *response_timeout*]

responsetimeout *response_timeout*

Specify the response timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

type *amf_service_name_type*

Specify the AMF service name type.

Must be one of the following:

- **namf-comm**
- **namf-evts**
- **namf-loc**
- **namf-mt**

Usage Guidelines Use this command to configure AMF Failure Handling parameters. The CLI prompt changes to the Failure Handling Service Name Type Configuration mode (config-type-<service_name_type>)

profile nf-client-failure nf-type amf profile failure-handling service name type message type

Configures the AMF message type parameters.

Command Modes Exec > Global Configuration (config) > AMF NF Client Configuration (config-amf) > Failure Handling Configuration (config-failure-handling-*profile_name*) > Failure Handling Service Name Type Configuration (config-type-service_name_type)

Syntax Description **message type** *amf_message_type*

type *amf_message_type*

Specify the AMF message type.

Must be one of the following:

- **AmfCommCreateUeContext**
- **AmfCommEBIAssignment**
- **AmfCommN1N2MessageTransfer**
- **AmfCommReleaseUeContext**
- **AmfCommSMStatusChangeNotify**
- **AmfCommUeContextTransfer**
- **AmfCommUeContextTransferUpdate**
- **AmfN1MessageNotifyClient**
- **AmfN2InfoNotifyClient**

Usage Guidelines Use this command to configure the AMF message type parameters.

profile nf-client-failure nf-type amf profile failure-handling service name type message type status-code

Configures DNS/HTTPv2 status codes. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > AMF NF Client Configuration (config-amf) > Failure Handling Configuration (config-failure-handling-profile_name) > Failure Handling Service Name Type Configuration (config-type-service_name_type) > Failure Handling Message Type Configuration (config-type-message_type_name)

Syntax Description

status-code [dns | httpv2] { **range** range } { **action** action | **retransmit** retransmit | **retransmit-interval** retransmit_interval | **retry** retry_value }

action action

Specify the action.

Must be one of the following:

- **continue**: Specify to continue the session without any retry. The retry count configuration is invalid with this action.
- **retry-and-continue**: Specify to retry as per the configured retry count and continue the session.
- **retry-and-ignore**: Specify to retry as per the configured retry count and ignore the session in case all retry fails.
- **retry-and-terminate**: Specify to retry as per the configured retry count and terminate the session in case all retry fails.
- **terminate**: Specify to terminate the session without any retry. Retry count configuration is invalid with this action.

status-code [dns | httpv2] range

Specify the code, or a range of status codes separated by either - (hyphen) or , (comma).

retransmit-interval retransmit_interval

Specify the retransmit interval in milliseconds.

Must be an integer.

retransmit retransmit

Specify the retransmit value.

Must be an integer in the range of 1-10.

retry retry_value

Specify the number of times the NF service must retry before proceeding with the action.

Must be an integer in the range of 1-10.

Usage Guidelines Use this command to configure DNS/HTTPv2 status codes.

profile nf-client-failure nf-type any

Configures the Profile Failure Handling parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile nf-client-failure nf-type any

Usage Guidelines

Use this command to configure the Profile Failure Handling parameters. The CLI prompt changes to the any configuration mode (config-any).

profile nf-client-failure nf-type any profile failure-handling

Configures the Failure Handling Template parameters.

Command Modes	Exec > Global Configuration (config) > any NF client failure configuration (config-any)
----------------------	---

Syntax Description	profile failure-handling <i>fh_template_name</i>
---------------------------	---

profile failure-handling *fh_template_name*

Specify name of the failure handling template.

Must be a string.

Usage Guidelines	Use this command to configure the Failure Handling Template parameters. The CLI prompt changes to the Failure Handling <profile_name> Configuration (config-failure-handling-<profile_name>).
-------------------------	---

profile nf-client-failure nf-type any profile failure-handling service name type

Configures the Failure Handling parameters.

Command Modes

Exec > Global Configuration (config) > any nf-client configuration (config-any) > Failure Handling Profile Configuration (config-failure-handling-profile_name)

Syntax Description

service name type *service_name_type* [**responsetimeout** *response_timeout*]

responsetimeout *response_timeout*

Specify the response timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

service name type *amf_service_name_type*

Specify the service name type as **namf-evts**.

Usage Guidelines

Use this command to configure Failure Handling parameters. The CLI prompt changes to the Failure Handling Service Name Type Configuration mode (config-type-<service_name_type>)

profile nf-client-failure nf-type any profile failure-handling service name type message type

Configures the message type parameters for failure handling profile.

Command Modes	Exec > Global Configuration (config) > any nf client configuration (config-any) > Failure Handling Configuration (config-failure-handling- <i>profile_name</i>) > Failure Handling Service Name Type Configuration (config-type-service_name_type)
Syntax Description	message type <i>amf_message_type</i> type <i>amf_message_type</i> Specify the AMF message type as AmfEventNotification.
Usage Guidelines	Use this command to configure the message type parameters.

profile nf-client-failure nf-type any profile failure-handling service name type message type status-code

Configures DNS/HTTPv2 status codes. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes Exec > Global Configuration (config) > NF Client Configuration (config-any) > Failure Handling Configuration (config-failure-handling-*profile_name*) > Failure Handling Service Name Type Configuration (config-type-*service_name_type*) > Failure Handling Message Type Configuration (config-type-*message_type_name*)

Syntax Description **status-code** [**dns** | **httpv2**] { **range** *range* } { **action** *action* | **retransmit** *retransmit* | **retransmit-interval** *retransmit_interval* | **retry** *retry_value* }

action *action*

Specify the action.

Must be one of the following:

- **continue**: Specify to continue the session without any retry. The retry count configuration is invalid with this action.
- **retry-and-continue**: Specify to retry as per the configured retry count and continue the session.
- **retry-and-ignore**: Specify to retry as per the configured retry count and ignore the session in case all retry fails.
- **retry-and-terminate**: Specify to retry as per the configured retry count and terminate the session in case all retry fails.
- **terminate**: Specify to terminate the session without any retry. Retry count configuration is invalid with this action.

status-code [**dns** | **httpv2**] **range**

Specify the code, or a range of status codes separated by either - (hyphen) or , (comma).

retransmit-interval *retransmit_interval*

Specify the retransmit interval in milliseconds.

Must be an integer.

retransmit *retransmit*

Specify the retransmit value.

Must be an integer in the range of 1-10.

retry *retry_value*

Specify the number of times the NF service must retry before proceeding with the action.

Must be an integer in the range of 1-10.

Usage Guidelines

Use this command to configure DNS/HTTPv2 status codes.

profile nf-client-failure nf-type ausf

Configures AUSF Profile Failure Handling parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile nf-client-failure nf-type ausf

Usage Guidelines

Use this command to configure AUSF Profile Failure Handling parameters. The CLI prompt changes to the AUSF Configuration mode (config-ausf).

profile nf-client-failure nf-type ausf profile failure-handling

Configures the AUSF Failure Handling Template parameters.

Command Modes	Exec > Global Configuration (config) > AUSF NF Client Failure Configuration (config-ausf)
----------------------	---

Syntax Description	profile failure-handling <i>fh_template_name</i>
---------------------------	---

failure-handling *fh_template_name*

Specify name of the AUSF failure handling template.

Must be a string.

Usage Guidelines	Use this command to configure the AUSF Failure Handling Template parameters. The CLI prompt changes to the Failure Handling Profile Configuration mode (config-failure-handling-<profile_name>).
-------------------------	--

profile nf-client-failure nf-type ausf profile failure-handling service name type

Configures the AUSF Failure Handling parameters.

Command Modes Exec > Global Configuration (config) > AUSF Configuration (config-ausf) > Failure Handling Profile Configuration (config-failure-handling-profile_name)

Syntax Description **service name type** *ausf_service_name_type* [**responsetimeout** *response_timeout*]

responsetimeout *response_timeout*

Specify the response timeout.

Must be an integer.

Default Value: 2000.

type *ausf_service_name_type*

Specify the AUSF service name type.

Must be one of the following:

- **nausf-auth**

Usage Guidelines Use this command to configure the AUSF Failure Handling parameters.

profile nf-client-failure nf-type ausf profile failure-handling service name type message type

Configures the AUSF message type parameters.

Command Modes Exec > Global Configuration (config) > AUSF NF Client Configuration (config-ausf) > Failure Handling Configuration (config-failure-handling-*profile_name*) > Failure Handling Service Name Type Configuration (config-type-service_name_type)

Syntax Description **message type** *ausf_message_type*

type *ausf_message_type*

Specify the AUSF message type.

Must be one of the following:

- **AusfAuthenticationCfm**
- **AusfAuthenticationReq**

Usage Guidelines Use this command to configure the AUSF message type parameters.

profile nf-client-failure nf-type ausf profile failure-handling service name type message type status-code httpv2

Configures HTTPv2 status codes. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > AUSF NF Client Configuration (config-ausf) > Failure Handling Configuration (config-failure-handling-profile_name) > Failure Handling Service Name Type Configuration (config-type-service_name_type) > Failure Handling Message Type Configuration (config-type-message_type_name)

Syntax Description

status-code httpv2 { range httpv2_range } { action action | retransmit retransmit | retransmit-interval retransmit_interval | retry retry_value }

action action

Specify the action.

Must be one of the following:

- **continue**: Specify to continue the session without any retry. The retry count configuration is invalid with this action.
- **retry-and-continue**: Specify to retry as per the configured retry count and continue the session.
- **retry-and-ignore**: Specify to retry as per the configured retry count and ignore the session in case all retry fails.
- **retry-and-terminate**: Specify to retry as per the configured retry count and terminate the session in case all retry fails.
- **terminate**: Specify to terminate the session without any retry. Retry count configuration is invalid with this action.

status-code httpv2 httpv2_range

Specify the code, or a range of status codes separated by either - (hyphen) or , (comma).

retransmit-interval retransmit_interval

Specify the retransmit interval in milliseconds.

Must be an integer.

retransmit retransmit

Specify the retransmit value.

Must be an integer in the range of 1-10.

retry retry_value

Specify the number of times the NF service must retry before proceeding with the action.

Must be an integer in the range of 1-10.

Usage Guidelines Use this command to configure HTTPv2 status codes.

profile nf-client-failure nf-type eir

Configures EIR Profile Failure Handling parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile nf-client-failure nf-type eir

Usage Guidelines

Use this command to configure EIR Profile Failure Handling parameters. The CLI prompt changes to the EIR Configuration mode (config-eir).

profile nf-client-failure nf-type eir profile failure-handling

Configures the EIR Failure Handling Template parameters.

Command Modes	Exec > Global Configuration (config) > EIR NF Client Failure Configuration (config-eir)
----------------------	---

Syntax Description	profile failure-handling <i>fh_template_name</i>
---------------------------	---

failure-handling *fh_template_name*

Specify name of the EIR failure handling template.

Must be a string.

Usage Guidelines	Use this command to configure the EIR Failure Handling Template parameters.
-------------------------	---

profile nf-client-failure nf-type eir profile failure-handling service name type

Configures the EIR Failure Handling parameters.

Command Modes Exec > Global Configuration (config) > EIR NF-Client Configuration (config-eir) > Failure Handling Profile Configuration (config-failure-handling-profile_name)

Syntax Description **service name type** *eir_service_name_type* [**responsetimeout** *response_timeout*]

responsetimeout *response_timeout*

Specify the response timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

type *eir_service_name_type*

Specify the EIR service name type.

Must be one of the following:

- **n5g-eir-eic**

Usage Guidelines Use this command to configure the EIR Failure Handling parameters.

profile nf-client-failure nf-type eir profile failure-handling service name type message type

Specify the EIR message type parameters.

Command Modes Exec > Global Configuration (config) > EIR Configuration (config-eir) > Failure Handling *profile_name* Configuration (config-failure-handling-*profile_name*) > Failure Handling Service Name Type Configuration (config-type-service_name_type)

Syntax Description **message type** *eir_message_type*

type *eir_message_type*

Specify the EIR message type.

Must be one of the following:

- **EirCheckEquipmentIdentity**

Usage Guidelines Use this command to configure the EIR message type parameters.

profile nf-client-failure nf-type eir profile failure-handling service name type message type status-code

Configures DNS/HTTPv2 status codes. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > EIR NF Client Configuration (config-eir) > Failure Handling Configuration (config-failure-handling-profile_name) > Failure Handling Service Name Type Configuration (config-type-service_name_type) > Failure Handling Message Type Configuration (config-type-message_type_name)

Syntax Description

status-code [dns | httpv2] { **range** range } { **action** action | **retransmit** retransmit | **retransmit-interval** retransmit_interval | **retry** retry_value }

action action

Specify the action.

Must be one of the following:

- **continue**: Specify to continue the session without any retry. The retry count configuration is invalid with this action.
- **retry-and-continue**: Specify to retry as per the configured retry count and reject the registration with appropriate cause.
- **retry-and-ignore**: Specify to retry as per the configured retry count and continue with the registration.
- **retry-and-terminate**: Specify to retry as per the configured retry count and terminate the session in case all retry fails.
- **terminate**: Specify to terminate the session without any retry. Retry count configuration is invalid with this action.

status-code [dns | httpv2] range

Specify the code, or a range of status codes separated by either - (hyphen) or , (comma).

retransmit-interval retransmit_interval

Specify the retransmit interval in milliseconds.

Must be an integer.

retransmit retransmit

Specify the retransmit value.

Must be an integer in the range of 1-10.

retry retry_value

Specify the number of times the NF service must retry before proceeding with the action.

Must be an integer in the range of 1-10.

Usage Guidelines Use this command to configure DNS/HTTPv2 status codes.

profile nf-client-failure nf-type gmlc

Configures GMLC profile failure handling parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile nf-client-failure nf-type gmlc

Usage Guidelines

Use this command to configure GMLC failure handling parameters. The CLI prompt changes to the GMLC Configuration mode (config-gmlc).

profile nf-client-failure nf-type gmlc profile failure-handling

Configures the GMLC Failure Handling Profile parameters.

Command Modes	Exec > Global Configuration (config) > GMLC NF Client Failure Configuration (config-gmlc)
----------------------	---

Syntax Description	profile failure-handling <i>fh_profile_name</i>
---------------------------	--

failure-handling *fh_profile_name*

Specify name of the GMLC failure handling profile.

Must be a string.

Usage Guidelines	Use this command to configure the GMLC Failure Handling Profile parameters. The CLI prompt changes to the Failure Handling <profile_name> Configuration (config-failure-handling-<profile_name>).
-------------------------	---

profile nf-client-failure nf-type gmlc profile failure-handling service name type

Configures the GMLC service name type.

Command Modes Exec > Global Configuration (config) > GMLC Configuration (config-gmlc) > Failure Handling *profile_name* Configuration mode (config-failure-handling-*profile_name*)

Syntax Description **service name type** *gmlc_service_name_type* [**responsetimeout** *response_timeout*]

service name type *gmlc_service_name_type*

Specify the GMLC service name type.

Must be one of the following:

- **ngmlc-loc**
- **namf-evts**

responsetimeout *response_timeout*

Specify the response timeout interval in milliseconds. Default value is 2000 milliseconds.

Must be an integer.

Usage Guidelines Use this command to configure the GMLC service name type.

profile nf-client-failure nf-type gmlc profile failure-handling service name type message type

Configures the GMLC message type parameters.

Command Modes Exec > Global Configuration (config) > GMLC Configuration (config-gmlc) > Failure Handling *profile_name* Configuration mode (config-failure-handling-*profile_name*) > Failure Handling Service Name Type Configuration (config-type-service_name_type)

Syntax Description **message type** *gmlc_message_type*

type *gmlc_message_type*

Specify the GMLC message type as one of the following:

- **AmfEventNotification**
- **NotifiedPosInfo**

Usage Guidelines Use this command to configure the GMLC message type parameters.

profile nf-client-failure nf-type gmlc profile failure-handling service name type message type status-code

Configures DNS/HTTPv2 status code.

Command Modes

Exec > Global Configuration (config) > GMLC NF Client Configuration (config-gmlc) > Failure Handling Configuration (config-failure-handling-profile_name) > Failure Handling Service Name Type Configuration (config-type-service_name_type) > Failure Handling Message Type Configuration (config-type-message_type_name)

Syntax Description

status-code [dns | httpv2] { range range } | **action** action | **retransmit** retransmit | **retransmit-interval** retransmit_interval | **rety-count** retry_count }

action action

Specify the action.

Must be one of the following:

- **continue**: Specify to continue the session without any retry. The retry count configuration is invalid with this action.
- **retry-and-continue**: Specify to retry as per the configured retry count and continue the session.
- **retry-and-ignore**: Specify to retry as per the configured retry count and ignore the session in case all retry fails.
- **retry-and-terminate**: Specify to retry as per the configured retry count and terminate the session in case all retry fails.
- **terminate**: Specify to terminate the session without any retry. Retry count configuration is invalid with this action.

status-code [dns | httpv2] range

Specify the code, or a range of status codes separated by either - (hyphen) or , (comma).

retransmit-interval retransmit_interval

Specify the retransmit interval in milliseconds.

Must be an integer.

retransmit retransmit

Specify the retransmit value.

Must be an integer in the range of 1-10.

rety-count retry_count

Specify the number for the retry count.

Must be an integer.

Usage Guidelines Use this command to configure DNS/HTTPv2 status codes.

profile nf-client-failure nf-type lmf

Configures LMF profile failure handling parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile nf-client-failure nf-type lmf

Usage Guidelines

Use this command to configure LMF failure handling parameters. The CLI prompt changes to the LMF Configuration mode (config-lmf).

profile nf-client-failure nf-type lmf profile failure-handling

Configures the LMF Failure Handling Template parameters.

Command Modes	Exec > Global Configuration (config) > LMF NF Client Failure Configuration (config-lmf)
----------------------	---

Syntax Description	profile failure-handling <i>fh_template_name</i>
---------------------------	---

failure-handling *fh_template_name*

Specify name of the LMF failure handling template.

Must be a string.

Usage Guidelines	Use this command to configure the LMF Failure Handling Template parameters. The CLI prompt changes to the Failure Handling <profile_name> Configuration (config-failure-handling-<profile_name>).
-------------------------	---

profile nf-client-failure nf-type lmf profile failure-handling service name type

Configures the LMF service name type.

Command Modes Exec > Global Configuration (config) > LMF Configuration (config-lmf) > Failure Handling *profile_name*
Configuration mode (config-failure-handling-*profile_name*)

Syntax Description **service name type** *lmf_service_name_type* **responsetimeout** *response_timeout* }

responsetimeout *response_timeout*

Specify the response timeout.
Must be an integer.

type *lmf_service_name_type*

Specify the LMF service name type.
Must be one of the following:

- nlmf-loc

Usage Guidelines Use this command to configure the LMF service name type.

profile nf-client-failure nf-type lmf profile failure-handling service name type message type

Configures the LMF message type parameters.

Command Modes Exec > Global Configuration (config) > LMF Configuration (config-lmf) > Failure Handling *profile_name* Configuration mode (config-failure-handling-*profile_name*) > Failure Handling Service Name Type Configuration (config-type-service_name_type)

Syntax Description **message type** *lmf_message_type*

type *lmf_message_type*

Specify the LMF message type.

Must be one of the following:

- **LmfDetermineLocation**
- **LmfN1MessageNotify**
- **LmfN1N2MsgTxfrFailureNotification**
- **LmfN2InfoNotify**

Usage Guidelines Use this command to configure the LMF message type parameters.

profile nf-client-failure nf-type lmf profile failure-handling service name type message type status-code

Configures DNS/HTTPv2 status codes.

Command Modes

Exec > Global Configuration (config) > LMF NF Client Configuration (config-lmf) > Failure Handling Configuration (config-failure-handling-profile_name) > Failure Handling Service Name Type Configuration (config-type-service_name_type) > Failure Handling Message Type Configuration (config-type-message_type_name)

Syntax Description

status-code [dns | httpv2] { **range** range } { **action** action | **retransmit** retransmit | **retransmit-interval** retransmit_interval | **retry** retry_value }

action action

Specify the action.

Must be one of the following:

- **continue**: Specify to continue the session without any retry. The retry count configuration is invalid with this action.
- **retry-and-continue**: Specify to retry as per the configured retry count and continue the session.
- **retry-and-ignore**: Specify to retry as per the configured retry count and ignore if retry count is exhausted.

status-code [dns | httpv2] range

Specify the code, or a range of status codes separated by either - (hyphen) or , (comma).

retransmit-interval retransmit_interval

Specify the retransmit interval in milliseconds.

Must be an integer.

retransmit retransmit

Specify the retransmit value.

Must be an integer in the range of 1-10.

retry retry_value

Specify the number of times the NF service must retry before proceeding with the action.

Must be an integer in the range of 1-10.

Usage Guidelines

Use this command to configure DNS/HTTPv2 status codes.

profile nf-client-failure nf-type nssf

Configures NSSF Profile Failure Handling parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile nf-client-failure nf-type nssf

Usage Guidelines

Use this command to configure NSSF Failure Handling parameters. The CLI prompt changes to the NSSF Configuration mode (config-nssf).

profile nf-client-failure nf-type nssf profile failure-handling

Configures the NSSF Failure Handling Template parameters.

Command Modes	Exec > Global Configuration (config) > NSSF NF Client Failure Configuration (config-nssf)
----------------------	---

Syntax Description	profile failure-handling <i>fh_template_name</i>
---------------------------	---

failure-handling *fh_template_name*

Specify name of the NSSF failure handling template.

Must be a string.

Usage Guidelines	Use this command to configure the NSSF Failure Handling Template parameters.
-------------------------	--

profile nf-client-failure nf-type nssf profile failure-handling service name type

Configures the NSSF Failure Handling parameters.

Command Modes

Exec > Global Configuration (config) > NSSF NF-Client Configuration (config-nssf) > Failure Handling Profile Configuration (config-failure-handling-*profile_name*)

Syntax Description

service name type *nssf_service_name_type* [**responsetimeout** *response_timeout*]

responsetimeout *response_timeout*

Specify the response timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

type *nssf_service_name_type*

Specify the NSSF service name type.

Must be one of the following:

- **nnssf-nsselection**

Usage Guidelines

Use this command to configure the NSSF Failure Handling parameters.

profile nf-client-failure nf-type nssf profile failure-handling service name type message type

Configures the NSSF message type parameters.

Command Modes	Exec > Global Configuration (config) > NSSF NF Client Configuration (config-nssf) > Failure Handling Configuration (config-failure-handling- <i>profile_name</i>) > Failure Handling Service Name Type Configuration (config-type-service_name_type)
Syntax Description	message type <i>nssf_message_type</i> type <i>nssf_message_type</i> Specify the NSSF message type. Must be one of the following: NssfNSSelectionReq
Usage Guidelines	Use this command to configure the NSSF message type parameters.

profile nf-client-failure nf-type nssf profile failure-handling service name type message type status-code

Configures DNS/HTTPv2 status codes. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes Exec > Global Configuration (config) > NSSF NF Client Configuration (config-nssf) > Failure Handling Configuration (config-failure-handling-*profile_name*) > Failure Handling Service Name Type Configuration (config-type-service_name_type) > Failure Handling Message Type Configuration (config-type-message_type_name)

Syntax Description **status-code** [**dns** | **httpv2**] { **range** *range* } { **action** *action* | **retransmit** *retransmit* | **retransmit-interval** *retransmit_interval* | **retry** *retry_value* }

action *action*

Specify the action.

Must be one of the following:

- **continue**: Specify to continue the session without any retry. The retry count configuration is invalid with this action.
- **retry-and-continue**: Specify to retry as per the configured retry count and continue the session.
- **retry-and-ignore**: Specify to retry as per the configured retry count and ignore the session in case all retry fails.
- **retry-and-terminate**: Specify to retry as per the configured retry count and terminate the session in case all retry fails.
- **terminate**: Specify to terminate the session without any retry. Retry count configuration is invalid with this action.

status-code [**dns** | **httpv2**] **range**

Specify the code, or a range of status codes separated by either - (hyphen) or , (comma).

retransmit-interval *retransmit_interval*

Specify the retransmit interval in milliseconds.

Must be an integer.

retransmit *retransmit*

Specify the retransmit value.

Must be an integer in the range of 1-10.

retry *retry_value*

Specify the number of times the NF service must retry before proceeding with the action.

profile nf-client-failure nf-type nssf profile failure-handling service name type message type status-code

Must be an integer in the range of 1-10.

Usage Guidelines Use this command to configure DNS/HTTPv2 status codes.

profile nf-client-failure nf-type pcf

Configures PCF Profile Failure Fandling parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile nf-client-failure nf-type pcf

Usage Guidelines

Use this command to configure PCF Profile Failure Handling parameters. The CLI prompt changes to the PCF Configuration mode (config-pcf).

profile nf-client-failure nf-type pcf profile failure-handling

Configures the PCF Failure Handling Template parameters.

Command Modes	Exec > Global Configuration (config) > PCF NF Client Failure Configuration (config-pcf)
----------------------	---

Syntax Description	profile failure-handling <i>fh_template_name</i>
---------------------------	---

failure-handling *fh_template_name*

Specify name of the PCF failure handling template.

Must be a string.

Usage Guidelines	Use this command to configure the PCF Failure Handling Template parameters.
-------------------------	---

profile nf-client-failure nf-type pcf profile failure-handling service name type

Configures the PCF Failure Handling parameters.

Command Modes	Exec > Global Configuration (config) > PCF NF-Client Configuration (config-pcf) > Failure Handling Profile Configuration (config-failure-handling-profile_name)
----------------------	---

Syntax Description	service name type <i>pcf_service_name_type</i> [responsetimeout <i>response_timeout</i>]
---------------------------	--

responsetimeout response_timeout

Specify the response timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

type pcf_service_name_type

Specify the PCF service name type.

Must be one of the following:

- **npcf-am-policy-control**

Usage Guidelines	Use this command to configure the PCF Failure handling parameters.
-------------------------	--

profile nf-client-failure nf-type pcf profile failure-handling service name type message type

Configures the PCF message type parameters.

Command Modes Exec > Global Configuration (config) > PCF NF Client Configuration (config-pcf) > Failure Handling Configuration (config-failure-handling-profile_name) > Failure Handling Service Name Type Configuration (config-type-service_name_type)

Syntax Description **message type** pcf_message_type

type pcf_message_type

Specify the PCF message type.

Must be one of the following:

- PcfAmfPolicyControlCreate
- PcfAmfPolicyControlDelete

Usage Guidelines Use this command to configure the PCF message type parameters.

profile nf-client-failure nf-type pcf profile failure-handling service name type message type status-code

Configures DNS/HTTPv2 status codes. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes Exec > Global Configuration (config) > PCF NF Client Configuration (config-pcf) > Failure Handling Configuration (config-failure-handling-*profile_name*) > Failure Handling Service Name Type Configuration (config-type-service_name_type) > Failure Handling Message Type Configuration (config-type-message_type_name)

Syntax Description **status-code** [**dns** | **httpv2**] { **range** *range* } { **action** *action* | **retransmit** *retransmit* | **retransmit-interval** *retransmit_interval* | **retry** *retry_value* }

action *action*

Specify the action.

Must be one of the following:

- **continue**: Specify to continue the session without any retry. The retry count configuration is invalid with this action.
- **retry-and-continue**: Specify to retry as per the configured retry count and continue the session.
- **retry-and-ignore**: Specify to retry as per the configured retry count and ignore the session in case all retry fails.
- **retry-and-terminate**: Specify to retry as per the configured retry count and terminate the session in case all retry fails.
- **terminate**: Specify to terminate the session without any retry. Retry count configuration is invalid with this action.

status-code [**dns** | **httpv2**] **range**

Specify the code, or a range of status codes separated by either - (hyphen) or , (comma).

retransmit-interval **retransmit_interval**

Specify the retransmit interval in milliseconds.

Must be an integer.

retransmit **retransmit**

Specify the retransmit value.

Must be an integer in the range of 1-10.

retry **retry_value**

Specify the number of times the NF service must retry before proceeding with the action.

profile nf-client-failure nf-type pcf profile failure-handling service name type message type status-code

Must be an integer in the range of 1-10.

Usage Guidelines Use this command to configure DNS/HTTPv2 status codes.

profile nf-client-failure nf-type scp

Configures the failure handling for NF clients using specific service and error handling parameters.

Command Modes	Exec > Global Configuration (config) > NF Client Failure Configuration (config-nf-client-failure- <i>nf_type</i>)
Syntax Description	<pre> profile nf-client-failure nf-type <i>nf_type</i> [profile failure-handling <i>failure_handlr_profile_name</i> [service-name-type <i>service_name_type</i> [responsetimeout <i>responsetimeout_value</i> message type <i>message_type</i> { status-code <i>status_code</i> retry <i>retry_count</i> action { continue retry-and-continue retry-and-fallback retry-and-ignore retry-and-terminate terminate } nf-action { continue retry-and-fallback retry-and-ignore terminate } }]]] profile nf-client-failure nf-type <i>nf_type</i> [profile failure-handling <i>failure_handling_profile_name</i> [service-name-type <i>service_name_type</i> [responsetimeout <i>responsetimeout_value</i> message type <i>message_type</i> { status-code <i>status_code</i> retry <i>retry_count</i> action { continue retry-and-continue retry-and-fallback retry-and-ignore retry-and-terminate terminate } nf-action { continue retry-and-fallback retry-and-ignore terminate } }]]] </pre> • profile nf-client-failure nf-type <i>nf_type</i> —Specify the NF client failure configuration. • profile failure-handling <i>failure_handling_profile_name</i> —Specify the failure handling profile name. • service-name-type <i>service_name_type</i> —Specify the the service name and type. • responsetimeout <i>responsetimeout_value</i> —Specify the responsetimeout value in milliseconds. • message type <i>message_type</i> —Specify the the message type. • status-code <i>status_code</i> —Specify the status code for http2 error or DNS failure. • retry <i>retry_count</i> —Specify the retry count. • action { continue retry-and-continue retry-and-fallback retry-and-ignore retry-and-terminate terminate } —Specify any action from the preceding options for retry. • nf-action { continue retry-and-fallback retry-and-ignore terminate } —Specify NF action from the preceding options for retry.

Usage Guidelines Use this command to configure failure handling and its related action.

profile nf-client-failure nf-type smf

Configures SMF Profile Failure Handling parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile nf-client-failure nf-type smf

Usage Guidelines

Use this command to configure SMF Profile Failure Handling parameters. The CLI prompt changes to the SMF Configuration mode (config-smf).

profile nf-client-failure nf-type smf profile failure-handling

Configures the SMF Failure Handling Template parameters.

Command Modes	Exec > Global Configuration (config) > SMF NF Client Failure Configuration (config-smf)
----------------------	---

Syntax Description	profile failure-handling <i>fh_template_name</i>
---------------------------	---

failure-handling *fh_template_name*

Specify name of the SMF failure handling template.

Must be a string.

Usage Guidelines	Use this command to configure the SMF Failure Handling Template parameters.
-------------------------	---

profile nf-client-failure nf-type smf profile failure-handling service name type

Configures the SMF Failure Handling parameters.

Command Modes Exec > Global Configuration (config) > SMF NF-Client Configuration (config-smf) > Failure Handling Profile Configuration (config-failure-handling-profile_name)

Syntax Description **service name type** *smf_service_name_type* [**responsetimeout** *response_timeout*]

responsetimeout *response_timeout*

Specify the response timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

type *smf_service_name_type*

Specify the SMF service name type.

Must be one of the following:

- **nsmf-pdusession**

Usage Guidelines Use this command to configure the SMF Failure Handling parameters.

profile nf-client-failure nf-type smf profile failure-handling service name type message type

Configures the SMF message type parameters.

Command Modes Exec > Global Configuration (config) > SMF NF Client Configuration (config-smf) > Failure Handling Configuration (config-failure-handling-*profile_name*) > Failure Handling Service Name Type Configuration (config-type-service_name_type)

Syntax Description **message type** *smf_message_type*

type *smf_message_type*

Specify the SMF message type.

Must be one of the following:

- SmfN1N2MsgTxfrFailureNotification
- SmfSmContextCreate
- SmfSmContextDelete
- SmfSmContextRetrieve
- SmfSmContextUpdate

Usage Guidelines Use this command to configure the SMF message type parameters.

profile nf-client-failure nf-type smf profile failure-handling service name type message type status-code

Configures DNS/HTTPv2 status codes. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > SMF NF Client Configuration (config-smf) > Failure Handling Configuration (config-failure-handling-profile_name) > Failure Handling Service Name Type Configuration (config-type-service_name_type) > Failure Handling Message Type Configuration (config-type-message_type_name)

Syntax Description

status-code [dns | httpv2] { **range** range } { **action** action | **retransmit** retransmit | **retransmit-interval** retransmit_interval | **retry** retry_value }

action action

Specify the action.

Must be one of the following:

- **continue**: Specify to continue the session without any retry. The retry count configuration is invalid with this action.
- **retry-and-continue**: Specify to retry as per the configured retry count and continue the session.
- **retry-and-ignore**: Specify to retry as per the configured retry count and ignore the session in case all retry fails.
- **retry-and-terminate**: Specify to retry as per the configured retry count and terminate the session in case all retry fails.

status-code [dns | httpv2] range

Specify the code, or a range of status codes separated by either - (hyphen) or , (comma).

retransmit-interval retransmit_interval

Specify the retransmit interval in milliseconds.

Must be an integer.

retransmit retransmit

Specify the retransmit value.

Must be an integer in the range of 1-10.

retry retry_value

Specify the number of times the NF service must retry before proceeding with the action.

Must be an integer in the range of 1-10.

Usage Guidelines Use this command to configure DNS/HTTPv2 status codes.

profile nf-client-failure nf-type udm

Configures UDM Profile Failure Handling parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile nf-client-failure nf-type udm

Usage Guidelines

Use this command to configure UDM Profile Failure Handling parameters. The CLI prompt changes to the UDM Configuration mode (config-udm).

profile nf-client-failure nf-type udm profile failure-handling

Configures the UDM Failure Handling Template parameters.

Command Modes	Exec > Global Configuration (config) > UDM NF Client Failure Configuration (config-udm)
----------------------	---

Syntax Description	profile failure-handling <i>fh_template_name</i>
---------------------------	---

failure-handling *fh_template_name*

Specify name of the UDM failure handling template.

Must be a string.

Usage Guidelines	Use this command to configure the UDM Failure Handling Template parameters.
-------------------------	---

profile nf-client-failure nf-type udm profile failure-handling service name type

Configures UDM Failure Handling parameters.

Command Modes

Exec > Global Configuration (config) > UDM NF-Client Configuration (config-udm) > Failure Handling Profile Configuration (config-failure-handling-profile_name)

Syntax Description

service name type *udm_service_name_type* [**responsetimeout** *response_timeout*]

responsetimeout *response_timeout*

Specify the response timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

type *udm_service_name_type*

Specify the UDM service name type.

Must be one of the following:

- **nudm-sdm**
- **nudm-uecm**

Usage Guidelines

Use this command to configure the UDM Failure Handling parameters.

profile nf-client-failure nf-type udm profile failure-handling service name type message type

Configures the UDM message type parameters.

Command Modes Exec > Global Configuration (config) > UDM NF Client Configuration (config-udm) > Failure Handling Configuration (config-failure-handling-*profile_name*) > Failure Handling Service Name Type Configuration (config-type-service_name_type)

Syntax Description **message type** *udm_message_type*

type *udm_message_type*

Specify the UDM message type.

Must be one of the following:

- UdmDeRegistrationReq
- UdmRegistrationReq
- UdmSubscriptionReq
- UdmUnSubscriptionReq
- UdmSorAckInfoReq
- UdmSubscribedSnssaisAckReq

Usage Guidelines Use this command to configure the UDM message type parameters.

profile nf-client-failure nf-type udm profile failure-handling service name type message type status-code

Configures DNS/HTTPv2 status codes. This command is common to multiple NF clients, and is available in the following configuration modes.

Command Modes

Exec > Global Configuration (config) > UDM NF Client Configuration (config-udm) > Failure Handling Configuration (config-failure-handling-profile_name) > Failure Handling Service Name Type Configuration (config-type-service_name_type) > Failure Handling Message Type Configuration (config-type-message_type_name)

Syntax Description

status-code [dns | httpv2] { **range** range } { **action** action | **retransmit** retransmit | **retransmit-interval** retransmit_interval | **retry** retry_value }

action action

Specify the action.

Must be one of the following:

- **continue**: Specify to continue the session without any retry. The retry count configuration is invalid with this action.
- **retry-and-continue**: Specify to retry as per the configured retry count and continue the session.
- **retry-and-ignore**: Specify to retry as per the configured retry count and ignore the session in case all retry fails.
- **retry-and-terminate**: Specify to retry as per the configured retry count and terminate the session in case all retry fails.
- **terminate**: Specify to terminate the session without any retry. Retry count configuration is invalid with this action.

status-code [dns | httpv2] range

Specify the code, or a range of status codes separated by either - (hyphen) or , (comma).

retransmit-interval retransmit_interval

Specify the retransmit interval in milliseconds.

Must be an integer.

retransmit retransmit

Specify the retransmit value.

Must be an integer in the range of 1-10.

retry retry_value

Specify the number of times the NF service must retry before proceeding with the action.

Must be an integer in the range of 1-10.

Usage Guidelines Use this command to configure DNS/HTTPv2 status codes.

profile nf-client-failure nf-type smsf

Configures the SMSF Failure Handling Template parameters.

Command Modes	Exec > Global Configuration (config) > SMSF NF Client Failure Configuration (config-udm)
----------------------	--

Syntax Description	profile failure-handling <i>fh_template_name</i>
---------------------------	---

failure-handling *fh_template_name*

Specify name of the SMSF failure handling template.

Must be a string.

Usage Guidelines	Use this command to configure the SMSF Failure Handling Template parameters.
-------------------------	--

profile nf-client-failure nf-type smsf profile failure-handling

Configures the SMSF Failure Handling Template parameters.

Command Modes	Exec > Global Configuration (config) > SMSF NF Client Failure Configuration (config-udm)
----------------------	--

Syntax Description	profile failure-handling <i>fh_template_name</i>
---------------------------	---

failure-handling *fh_template_name*

Specify name of the SMSF failure handling template.

Must be a string.

Usage Guidelines	Use this command to configure the SMSF Failure Handling Template parameters.
-------------------------	--

profile nf-client-failure nf-type smsf profile failure-handling service name type

Configures SMSF Failure Handling parameters.

Command Modes

Exec > Global Configuration (config) > SMSF NF-Client Configuration (config-udm) > Failure Handling Profile Configuration (config-failure-handling-profile_name)

Syntax Description

service name type *smsf_service_name_type* [**responsetimeout** *response_timeout*]

responsetimeout *response_timeout*

Specify the response timeout interval in milliseconds.

Must be an integer.

Default Value: 2000.

type *smsf_service_name_type*

Specify the SMSF service name type.

Must be the following:

- **nsmsf-sms**

Usage Guidelines

Use this command to configure the SMSF Failure Handling parameters.

profile nf-client-failure nf-type smsf profile failure-handling service name type message type status-code

Configures the SMSF message type parameters.

Command Modes	Exec > Global Configuration (config) > SMSF NF Client Configuration (config-udm) > Failure Handling Configuration (config-failure-handling- <i>profile_name</i>) > Failure Handling Service Name Type Configuration (config-type-service_name_type)
Syntax Description	<pre> message type SmsfActivationReq { status-code [DNS httpv2] action [retry-and-ignore] retry retry_count } SmsfDeactivationReq { status-code [httpv2] action [retry-and-ignore] retransmit retransmit_count retransmit-interval retransmit_interval } SmsfSendSms { status-code [httpv2] action [retry-and-ignore] retransmit retransmit_count retransmit-interval retransmit_interval } type smsf_message_type Specify the SMSF message type. Must be one of the following: • SmsfActivationReq • SmsfDeactivationReq • SmsfSendSms </pre>
Usage Guidelines	Use this command to configure the SMSF message type parameters.

profile nf-pair nf-type

Configures the NF client pair type parameter.

Command Modes

Exec > Global Configuration (config)

Syntax Description

profile nf-pair nf-type *nf_type* [[**limit** *max_discovery_profiles*] [**max-payload-size** *max_payload_size*] [**nrf-discovery-group** *group_name*]]

limit *max_discovery_profiles*

Specify the maximum number of discovery profiles that NRF can send.

Must be an integer in the range of 1-1000.

Default Value: 10.

max-payload-size *max_payload_size*

Specify the maximum payload size of the discovery response.

Must be an integer in the range of 124-2000.

Default Value: 124.

nf-type *nf_type*

Specify the NF client pair type.

Must be one of the following:

- **5G_EIR**
- **AMF**
- **AUSF**
- **GMLC**
- **LMF**
- **NRF**
- **NSSF**
- **PCF**
- **SCP**
- **SMF**
- **SMSF**
- **UDM**

nrf-discovery-group *group_name*

Specify name of the NRF discovery group.

Must be a string.

Usage Guidelines

Configures NF client pair parameters. Use this command to configure the NF client pair type parameter.

profile nf-pair nf-type cache invalidation true

Configures the invalidation cache for "true" case.

Command Modes

Exec > Global Configuration (config) > NF Type Configuration (config-nf-type-*nf_type*)

Syntax Description

cache invalidation { false | true [timeout *timeout_duration*] }

timeout *timeout_duration*

Specify the invalidation cache timeout duration in milliseconds.

Must be an integer.

Default Value: 0.

true

True condition.

Usage Guidelines

Use this command to configure the true case parameters for invalidation cache.

profile nf-pair nf-type locality

Configures client locality parameter.

Command Modes

Exec > Global Configuration (config) > NF Type Configuration (config-nf-type-*nf_type*)

Syntax Description

locality { **client** *locality_name* | **geo-server** *locality_name* | **preferred-server** *locality_name* }

client *locality_name*

Specify the Client Locality information.

Must be a string.

geo-server *locality_name*

Specify the Geo Service Locality information.

Must be a string.

preferred-server *locality_name*

Specify the preferred server locality information.

Must be a string.

Usage Guidelines

Use this command to configure the client locality parameter.

profile nf-pair nf-type nrf-auth-group nrf-discovery-group

Configures the AMF ID (**nrf-auth-group nrf-discovery-group** in the **nf-pair**) to specify **auth-groups** containing the NRF endpoint details for each NF type.

Command Modes

Exec > Global Configuration (**config**) > AMF Configuration (**config-amf amf_name**) > NF Profile Name Configuration (**config-nf-profile-nf nf_profile_name**) > NF Profile Type Configuration (**config-nf-type-profile profile_type_name**) > nrf-auth-group > nrf-discovery-group

Syntax Description

```
profile nf-pair nf-type nf_type_name { nrf-auth-group nrf_auth_group_name |
nrf-discovery-group nrf_discovery_group_name | cache invalidation { true |
false } timeout timeout_number }
```

profile nf-pair nf-type *nf_type_name*

Specify the **nf-type** under the **nf-pair** in the profile name to authenticate. Must be a string.

nrf-auth-group *nrf_auth_group_name*

Specify the **nrf-auth-group** name.

nrf-discovery-group *nrf_discovery_group_name*

Specify the **nrf-discovery-group** name.

cache invalidation { **true** | **false** } **timeout** *timeout_number*

Enable the cache invalidation configuration. The default value is false.

Usage Guidelines

Use this command to associate a specific Network Function (NF) type with its corresponding NRF authentication and discovery groups. This configuration is essential for the AMF to correctly identify and communicate with the NRF for the specified NF type.

quit

Exits the management session.

Command Modes

Exec

Syntax Description

`quit`

Usage Guidelines

Use this command to exit the management session.

resource pod

Configures Pod resource parameter.

Command Modes

Exec > Global Configuration (config)

Syntax Description

resource *pod_type*

resource *pod_type*

Specify the pod type.

Usage Guidelines

Use this command to configure Pod resource parameter. The CLI prompt changes to the Pod Resource Configuration mode (config-resource-<pod_type>).

resource pod cpu

Configures CPU resource request parameter.

Command Modes Exec > Global Configuration (config) > Pod Resource Configuration (config-resource-pod_type)

Syntax Description **cpu request** *cpu_resource_request*

request *cpu_resource_request*

Specify the CPU resource request in millicores.

Must be an integer in the range of 100-1000000.

Usage Guidelines Use this command to configure CPU resource request parameter.

resource pod labels

Configures K8 Node Affinity label configuration.

Command Modes

Exec > Global Configuration (config) > Pod Resource Configuration (config-resource-*pod_type*)

Syntax Description

labels **key** *label_key* **value** *label_value*

key *label_key*

Specify the key for the label.

Must be a string.

value *label_value*

Specify the value for the label.

Must be a string.

Usage Guidelines

Use this command to configure K8 Node affinity label configuration.

resource pod memory

Configures memory resource request parameter.

Command Modes	Exec > Global Configuration (config) > Pod Resource Configuration (config-resource-pod_type)
----------------------	--

Syntax Description	memory request <i>memory_resource_request</i>
---------------------------	--

request *memory_resource_request*

Specify the memory resource request in megabytes.

Must be an integer in the range of 100-200000.

Usage Guidelines	Use this command to configure memory resource request parameter.
-------------------------	--

resources

Displays resources information.

Command Modes

Exec

Syntax Description

show resources

Usage Guidelines

Use this command to view resources information.

resources info

Displays resource information.

Command Modes

Exec

Syntax Description

show resources [info]

Usage Guidelines

Use this command to view information about the configured resources.

router bgplist

Configures BGP speaker configuration.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
router bgp bgp [ learnDefaultRoute { false | true } | loopbackBFDPort bfd_local_port_number | loopbackPort bgp_local_port_number ]
```

bgp *bgp*

Specify the BGP.

Must be an integer.

learnDefaultRoute { false | true }

Specify whether to enable or disable learning default route and adding it in kernel space.

Must be one of the following:

- **false**
- **true**

Default Value: false.

loopbackBFDPort *bfd_local_port_number*

Specify the BFD local port number.

Must be an integer.

Default Value: 3784.

loopbackPort *bgp_local_port_number*

Specify the BGP local port number.

Must be an integer.

Default Value: 179.

Usage Guidelines

Use this command to configure the BGP speaker configuration.

router bgplist bfd

Configures BFD configuration.

Command Modes

Exec > Global Configuration (config) > Router Configuration (config-router-router)

Syntax Description

bfd { interval bfd_interval | min_rx bfd_min_rx | multiplier bfd_interval_multiplier }

interval bfd_interval

Specify, in microseconds, the BFD interval.

Must be an integer.

Default Value: 250000.

min_rx bfd_min_rx

Specify, in microseconds, the BFD minimum RX.

Must be an integer.

Default Value: 250000.

multiplier bfd_interval_multiplier

Specify the BFD interval multiplier.

Must be an integer.

Default Value: 3.

Usage Guidelines

Use this command to configure the BFD configuration.

router bgplist interfaceList

Configures bonding interface configuration.

Command Modes	Exec > Global Configuration (config) > Router Configuration (config-router-router)
----------------------	--

Syntax Description	interface <i>bgp_local_interface</i>
---------------------------	---

interface *bgp_local_interface*

Specify the BGP local interface.

Must be a string.

Usage Guidelines	Use this command to configure the bonding interface configuration.
-------------------------	--

router bgplist interfaceList bondingInterfaces

Configures bonding interface configuration.

Command Modes	Exec > Global Configuration (config) > Router Configuration (config-router-router) > Router Interface Configuration (config-router-interface)
----------------------	---

Syntax Description	bondingInterface <i>linked_bonding_interface</i>
---------------------------	---

bondingInterface *linked_bonding_interface*

Specify the linked bonding interface.

Must be a string.

Usage Guidelines	Use this command to configure the bonding interface configuration.
-------------------------	--

router bgplist interfaceList neighbors

Configures neighbor parameters.

Command Modes

Exec > Global Configuration (config) > Router Configuration (config-router-router) > Router Interface Configuration (config-router-interface)

Syntax Description

neighbor *neighbor_ip_address* [**fail-over** *failover_type* | **remote-as** *remote_as_number*]

fail-over *failover_type*

Specify the failover type.

Must be one of the following:

- **bfd**

neighbor *neighbor_ip_address*

Specify the IP address of the neighbor.

Must be a string.

remote-as *remote_as_number*

Specify the Autonomous System (AS) number of the BGP neighbor.

Must be an integer.

Default Value: 65000.

Usage Guidelines

Use this command to configure the neighbor parameters.

router bgplist policies

Configures policy parameters.

Command Modes

Exec > Global Configuration (config) > Router Configuration (config-router-router)

Syntax Description

```
policy-name policy_name [ as-path-set as_path_set | gateWay gateway_address |
interface interface | ip-prefix ip_prefix | isStaticRoute { false | true } |
mask-range mask_range | modifySourceIp { false | true } ]
```

as-path-set *as_path_set*

Specify the Autonomous System (AS) path set.

Must be a string.

gateWay *gateway_address*

Specify the gateway address.

Must be a string.

interface *interface*

Specify the interface to set as source ip.

Must be a string.

ip-prefix *ip_prefix*

Specify the IP prefix.

Must be a string.

isStaticRoute { **false** | **true** }

Specify whether to enable or disable adding static route into kernel space.

Must be one of the following:

- **false**
- **true**

Default Value: false.

mask-range *mask_range*

Specify the mask range.

Must be a string.

modifySourceIp { **false** | **true** }

Specify whether to enable or disable modifying source IP of incoming route.

Must be one of the following:

- **false**
- **true**

Default Value: false.

policy-name *policy_name*

Specify name of the policy.

Must be a string.

source-prefix *source_ip_prefix*

Specify the source IP prefix.

Must be a string.

Usage Guidelines

Use this command to configure the policy parameters.

running-status

Displays system running status information.

Command Modes

Exec

Syntax Description

show running-status

Usage Guidelines

Use this command to view system running status information.

running-status info

Displays the system's current status information.

Command Modes

Exec

Syntax Description

show running-status [info]

Usage Guidelines

Use this command to view the system's current status information.

screen-length

Configures the number of rows of text that the terminal screen displays.

Command Modes

Exec

Syntax Description

screen-length *number_of_rows*

number_of_rows

Specify the number of rows.

Must be an integer.

Usage Guidelines

Use this command to configure the number of rows that the terminal screen displays.

screen-width

Configures the number of columns that the terminal screen displays.

Command Modes

Exec

Syntax Description

screen-width *number_of_columns*

number_of_columns

Specify the number of columns.

Must be an integer.

Usage Guidelines

Use this command to configure the number of columns that the terminal screen displays.

sctp-parameter-profile parameters

Configures operational parameters for an SCTP profile.

Command Modes

Exec > Global Configuration (config)

Syntax Description

```
sctp-parameter-profile profile_name { parameters { association {  
heartbeat-interval heartbeat_interval_value | max-assoc-retry-count  
max_assoc_retry_count | path-max-rtery-count path_max_rtery_count |  
valid-cookie-life valid_cookie_life } | client-idle-timeout  
client_idle_timeout_value | mtu-size mtu_size | rto { initial | max | min } |  
sack { sack-frequency | sack-period } } } }
```

- **sctp-parameter-profile**: Specify the SCTP profile name.
- **parameters**: Groups specific configuration settings for the SCTP protocol.
- **association**: Manages settings related to the SCTP association establishment and maintenance.
- **heartbeat-interval**: Sets the time interval between sending heartbeat chunks to monitor path availability.
- **max-assoc-retry-count**: Defines the maximum number of attempts to establish an SCTP association.
- **path-max-rtery-count**: Sets the maximum number of retransmission attempts for a specific network path.
- **valid-cookie-life**: Configures the duration for which an initialization cookie remains valid during the handshake.
- **client-idle-timeout**: Specifies the duration of inactivity before a client connection is terminated.
- **mtu-size**: Sets the Maximum Transmission Unit size for SCTP packets.
- **rto**: Configures Retransmission Timeout (RTO) parameters for the association.
- **initial**: Sets the starting RTO value used for retransmission calculations.
- **max**: Defines the maximum allowable RTO value.
- **min**: Defines the minimum allowable RTO value.
- **sack**: Configures Selective Acknowledgment (SACK) settings for the connection.
- **sack-frequency**: Determines how often SACK chunks are generated and sent.
- **sack-period**: Sets the time interval for reporting SACK information.

Usage Guidelines

Use this command to configure operational parameters for an SCTP profile.

search

Search subscriber by SUPI.

Command Modes	Exec > Global Configuration (config)
Syntax Description	<code>search subscriber supi <i>supi_info</i> detailed { false true }</code>
Usage Guidelines	Use this command to search subscriber by SUPI.

send

Sends messages to the terminal of a specific user or all users.

Command Modes

Exec

Syntax Description

send *user message*

user

Specify the user from whom the message must be sent.

Must be a string.

Must be one of the following:

- admin
- confd-api-manager
- confd-message-manager

message

Specify the message that must be sent.

Must be a string.

Usage Guidelines

Use this command to send messages to the terminal of a specific user or to all users.

sessions

Displays pending session commits in the database.

Command Modes

Exec

Syntax Description

show sessions

Usage Guidelines

Use this command to view pending session commits in the database.

sessions affinity

Displays the affinity count per instance.

Command Modes

Exec

Syntax Description

show sessions affinity

Usage Guidelines

Use this command to view the affinity count per instance.

sessions commit-pending

Displays all pending session commits.

Command Modes

Exec

Syntax Description

show sessions commit-pending

Usage Guidelines

Use this command to view all pending session commits.

show

Displays the system information.

Command Modes

Exec

Syntax Description

show *system_component*

system_component

Specify the component to view the information.

Must be a string. Select from the possible completion options.

Usage Guidelines

Use this command to view the system information.

show edr

Displays EDR Transaction Procedure Event fields.

Command Modes

Exec

Syntax Description

```
show edr { [ event transaction_procedure_event ] [ transaction-procedure
transaction_procedure ] }
```

event *transaction_procedure_event*

Specify the transaction procedure event name/id/all.

Must be a string.

transaction-procedure *transaction_procedure*

Specify the transaction procedure's name, ID, or all.

Must be a string.

Usage Guidelines

Use this command to view EDR Transaction Procedure Event fields.

show geo-maintenance-mode

Indicates whether maintenance mode is enabled or disabled.

Command Modes

Exec

Syntax Description

show geo-maintenance-mode

Usage Guidelines

Use this command to view whether maintenance mode is enabled or disabled.

show georeplication

Displays ETCD/Cache checksum.

Command Modes

Exec

Syntax Description

show georeplication checksum instance-id *instance_id*

checksum

Specify checksum.

instance-id *instance_id*

Specify the instance ID for which checksum will be displayed.

Must be a string.

Usage Guidelines

Use this command to view ETCD/Cache checksum.

show local-interface-status

Displays status of local interface.

Command Modes

Exec

Syntax Description

show local-interface-status interface *local_interface_name*

interface *local_interface_name*

Specify name of the local interface.

Must be a string.

Usage Guidelines

Use this command to view status of local interface.

show role

Displays current role for the specified instance.

Command Modes

Exec

Syntax Description

show role instance-id *instance_id*

instance-id *instance_id*

Specify the instance ID for which role must be displayed.

Usage Guidelines

Use this command to view current role for the specified instance.

show rpc

Displays RPC information.

Command Modes

Exec

Syntax Description

show rpc [**all** | **ipv4** | **ipv6**] *optional_filter*

rpc [**all** | **ipv4** | **ipv6**] *optional_filter*

optional_filter must be one of the following:

- `connectedTime`
- `disconnectedTime`
- `monitorRPCHost`
- `processingInstanceInfo`
- `remoteHost`
- `setName`
- `status`
- `type`
- `version`
- `vrf`

Usage Guidelines

Use this command to view RPC information.

show subscriber

Displays subscriber information.

Command Modes

Exec

Syntax Description

```
show subscriber { all | supi supi_value count session_count | gr-instance
gr_instance | imei imei_id | namespace namespace_value | nf-service nf_service |
guti guti_value }
```

all

Specify all SUPIs or IMEIs.

count *session_count*

Specify the sessions count.

Must be one of the following:

- **count**

gr-instance *gr_instance*

Specify the network function service under which to search.

imei *imei_id*

Specify the International Mobile Equipment Identity.

Must be a string of 15-16 characters.

namespace *namespace_value*

NOTE: This keyword is deprecated, use nf-service instead. Specify the product namespace under which to search.

Default Value: cisco-mobile-infra:none.

nf-service *nf_service*

Specify the network function service under which to search.

Default Value: cisco-mobile-infra:none.

supi *supi_value*

Specify the subscriber's SUPI ID. Shows output only if the subscriber is registered.

Must be a string.

guti *guti_value*

Specify the subscriber's GUTI ID. Shows output for the subscriber irrespective of the UE state (example, registered, de-registered).

Must be a string.

Usage Guidelines

Use this command to view summary and detailed subscriber information for all subscribers or specific subscribers based on SUPI, IMEI, or all.

show subscriber ran-opt

Displays and clears subscriber data based on specified criteria.

Command Modes

Exec

Syntax Description

{ clear | show } subscriber gnodeb-id *gnodeb_id* **mnc** *mobile_network_code* **mcc** *mobile_country_code*

gnodeb-id *gnodeb_id*

Specify the gnodeb-id.

Must be an integer in the range of 0-4294967295.

mcc *mobile_country_code*

Specify the mobile country code.

Must be a string in a three digit pattern.

mnc *mobile_network_code*

Specify the mobile network code.

Must be a string in the two-digit (European standard) or three-digit (North American standard) pattern. For information on the two or three digits pattern, see the Input Pattern Types section.

Usage Guidelines

Use this command to view and to clear subscriber data based on specified criteria.

show-defaults

Configures whether to display default values when showing the configuration.

Command Modes

Exec

Syntax Description

show-defaults { false | true }

show-defaults { false | true }

Specify whether to display or hide the default values. To hide select false, to display select true.

Must be either "false" or "true".

Usage Guidelines

Use this command to view default values when viewing the configuration commands.

smiuser

Configures the Subscriber Microservices Infrastructure (SMI) user account parameters.

Command Modes

Exec

Syntax Description

```
smiuser add-group groupname group_name

smiuser add-user { username username | password password }

smiuser assign-user-group { groupname group_name | username username }

smiuser change-password-age { password-expire-days expire_days |
username username }

smiuser change-self-password { confirm-password confirm_password |
current-password current_password | new-password new_password |
password-expire-days password_expire_days }

smiuser delete-group groupname group_name

smiuser delete-user username username

smiuser show-user username username

smiuser unassign-user-group { username username | groupname group_name }

smiuser update-password-length length password_length
```

groupname *group_name*

Specify the group name in PAM.

Must be a string.

username *username*

Specify the username in PAM.

Must be a string.

Usage Guidelines

Use this command to configure the SMI user parameters.

system

Configures the NF's system operations.

Command Modes

Exec

Syntax Description

system { ops-center stop | ops-center-debug { start | stop } | synch { start | stop } | upgrade | uuid-override new-uuid *uuid_value* }

ops-center stop

Stops the operations center diagnostics.

ops-center debug { start | stop }

Starts or stops operations center debugging.

synch { start | stop }

Starts or stops the automatic synching of configuration,

upgrade

Initiates the upgrade of a product.

uuid-override new-uuid *uuid_value*

Change the Universally Unique Identifier (UUID) to a new value.

Must be a string.

Usage Guidelines

Use this command to display the NF's system operations.

tai-group

Configures Tracking Area Identity (TAI) group parameters.

Command Modes

Exec > Global Configuration (config)

Syntax Description

tai-group name *tai_group_name*

name *tai_group_name*

Specify name of the TAI group.

Must be a string.

Usage Guidelines

Use this command to configure TAI group parameters.

tai-group timezone

Configures timezone for Tracking Area Identity (TAI) group.

Command Modes	Exec > Global Configuration (config) > TAI Group Configuration (config-tai-group- <i>tai_group_name</i>)
Syntax Description	<pre>[timezone offset { + - } hours <i>value</i> [minutes { 0 15 30 45 } daylight { 0 1 2 }]</pre> [timezone offset { + - } hours <i>value</i> [minutes { 0 15 30 45 } daylight { 0 1 2 }] • { + - }—Specify the offset direction from the Universal Time (UTC). • hours <i>value</i>—Specify the offset from UTC in hours. Accepted value must be an integer 0—14. • minutes { 0 15 30 45 }—Specify the offset minutes that are added to the hours value. • daylight { 0 1 2 }—Specify the number of hours with which the time zone should be offset due to daylight savings time.
Usage Guidelines	Use this command to configure timezone and daylight saving values for TAI group.

tai-group network name

Configures short and full network name under Tracking Area Identity (TAI) group.

Command Modes	Exec > Global Configuration (config) > TAI Group Configuration (config-tai-group- <i>tai_group_name</i>)
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Syntax Description	network-name { short <i>short_network_name</i> full <i>full_network_name</i> }
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network-name { **short** *short_network_name* | **full** *full_network_name* }

- **short** *short_network_name*—Specify the short name for the network.
- **full** *full_network_name*—Specify the full name for the network.

Usage Guidelines	Use this command to configure short and full name of the network in a TAI group.
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tai-group tais

Configures Tracking Area Identity (TAI).

Command Modes

Exec > Global Configuration (config)

Syntax Description

tai-group name *tai_group_name* **tais name** *tai_name*

tais name *tai_name*

Specify name of the TAI.

Must be a string.

Usage Guidelines

Use this command to configure TAIs.

tai-group tais tailist

Configures TAI list.

Command Modes

Exec > Global Configuration (config) > TAI Group Configuration (config-tai-group-*tai_group_name*) > TAI S
List Configuration (config-tais-*tai_name*)

Syntax Description

mcc *mobile_country_code* **mnc** *mobile_network_code*

mcc *mobile_country_code*

Specify the mobile country code. For example, 123.

Must be a string in a two digit pattern.

mnc *mobile_network_code*

Specify the two- or three-digit mobile network code. For example, 23, 456.

Must be a string in the two-or-three-digit pattern. For information on the two-or-three-digit pattern, see the Input Pattern Types section.

Usage Guidelines

Use this command to configure the TAI list.

You can configure a maximum of 16 elements with this command.

tai-group tais tailist tac

Configures TAI group TAC values.

Command Modes	Exec > Global Configuration (config) > TAI Group Configuration (config-tai-group- <i>tai_group_name</i>) > TAI S List Configuration (config-tais- <i>tai_name</i>)
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Syntax Description	tac list <i>list_of_tac_values</i>
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list *list_of_tac_values*

Specify the list of TAC values.

Must be an integer in the range of 0-65535.

You can configure a maximum of 16 elements with this keyword.

Usage Guidelines	Use this command to configure TAI group TAC values.
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tai-group tais tailist tac range

Configures the TAC range.

Command Modes

Exec > Global Configuration (config) > TAI Group Configuration (config-tai-group-*tai_group_name*) > TAIS List Configuration (config-tais-*tai_name*)

Syntax Description

range start *tac_range_start* **end** *tac_range_end*

end *tac_range_end*

Specify the end value of the TAC range. Must be greater than the start value.

Must be an integer in the range of 0-65535.

start *tac_range_start*

Specify the start value of the TAC range. Must be lesser than the end value.

Must be an integer in the range of 0-65535.

Usage Guidelines

Use this command to configure the TAC range.

You can configure a maximum of 16 elements with this command.

tai-group tais tailist timezone

Configures timezone for Tracking Area Identity (TAI) list.

Command Modes Exec > Global Configuration (config) > TAI Group Configuration (config-tai-group-tai_group_name) > TAI S List Configuration (config-tais-tai_name)

Syntax Description [**timezone offset { + | - } hours value [minutes { 0 | 15 | 30 | 45 } | daylight { 0 | 1 | 2 }]**]

[**timezone offset { + | - } hours value [minutes { 0 | 15 | 30 | 45 } | daylight { 0 | 1 | 2 }]**]

- { + | - }—Specify the offset direction from the Universal Time (UTC).
- **hours value**—Specify the offset from UTC in hours. Accepted value must be an integer 0—14.
- **minutes { 0 | 15 | 30 | 45 }**—Specify the offset minutes that are added to the hours value.
- **daylight { 0 | 1 | 2 }**—Specify the number of hours with which the time zone should be offset due to daylight savings time.

Usage Guidelines Use this command to configure timezone and daylight saving values for TAI list.

tai-group tais tailist network name

Configures short and full network name under Tracking Area Identity (TAI) list.

Command Modes	Exec > Global Configuration (config) > TAI Group Configuration (config-tai-group- <i>tai_group_name</i>) > TAI List Configuration (config-tais- <i>tai_name</i>)
Syntax Description	<pre>network-name { short <i>short_network_name</i> full <i>full_network_name</i> }</pre> network-name { short <i>short_network_name</i> full <i>full_network_name</i> } • short <i>short_network_name</i>—Specify the short name for the network. • full <i>full_network_name</i>—Specify the full name for the network.
Usage Guidelines	Use this command to configure short and full name of the network in a TAI list.

terminal

Configures the terminal parameters.

Command Modes

Exec

Syntax Description

terminal *terminal_type*

terminal_type

Specify the terminal type.

Must be one of the following:

- ansi
- generic
- linux
- vt100
- xterm

Usage Guidelines

Use this command to configure the terminal parameters.

timestamp

Configures the timestamp parameters.

Command Modes

Exec

Syntax Description

timestamp { enable | disable }

timestamp { enable | disable }

Specify the configuration to enable or disable the timestamp display.

Usage Guidelines

Use this command to configure the timestamp capability.

tracing

Configures debug settings for AMF NGAP endpoint.

Command Modes	Exec > Global Configuration (config)
Syntax Description	tracing enable-trace-percent <i>tracing_percentage</i> append-messages { false true } append-messages { false true } Specify to enable or disable appending messages. Must be one of the following: • false • true Default Value: true. enable-trace-percent <i>tracing_percentage</i> Specify the tracing percentage. Must be an integer in the range of 0-100. Default Value: 100.
Usage Guidelines	Use this command to configure debug settings for the AMF NGAP endpoint.

tracing endpoint

Configures tracing endpoint.

Command Modes

Exec > Global Configuration (config)

Syntax Description

tracing endpoint host *host_name* **port** *port_number*

host *host_name*

Specify the host name.

Must be a string.

Default Value: jaeger-collector.

port *port_number*

Specify the port number.

Must be an integer.

Default Value: 9411.

Usage Guidelines

Use this command to configure tracing endpoint.

who

Displays information on currently logged on users.

Command Modes

Exec

Syntax Description

who

Usage Guidelines

Use this command to view information on currently logged on users. The command output displays the Session, User, Context, From, Protocol, Date, and Mode information.

who