

Sample AMF Configuration

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Sample Configuration

Use **show** command to view the sample configuration that is provided only for reference. You must create and modify your own configuration file according to the specific needs of your deployment.

```
show running-config | nomore
group nf-mgmt NFMGMT1
 nrf-mgmt-group MGMT
 locality       LOC1
exit
group nrf discovery NRFDISCOVERY
 service type nrf nnrf-disc
  endpoint-profile
   name       ep1
   uri-scheme http
   version
    uri-version v1
     full-version 1.1.1.[1]
    exit
   exit
   endpoint-name en1
    priority 56
    primary ip-address ipv4 209.165.201.3
    primary ip-address port 8095
   exit
  exit
 exit
exit
group nrf mgmt MGMT
 service type nrf nnrf-nfm
  endpoint-profile
   name       mgmt-prof
   uri-scheme http
   endpoint-name mgmt-1
    primary ip-address ipv4 209.165.201.3
    primary ip-address port 8095
   exit
  exit
 exit
exit
amf-global
 amf-name AMF1
```

```
call-control-policy CCP1
 disable-init-csr-reg false
 am-policy skip false
 default-slice name n26 sst 1 sdt 000000
 timers t3560 value 10
 timers t3560 retry 3
 timers t3550 value 5
 timers t3550 retry 3
 timers t3570 value 5
 timers t3570 retry 3
 timers t3522 value 5
 timers t3522 retry 3
 timers tidt value 3480
 timers context-transfer-guard n14-interface value 5
 timers context-transfer-guard n26-interface value 5
 timers tpurge value 0
 timers t3502 value 60
 timers t3512 value 3240
 timers ho-supervisory value 500
 tai-group            VoPS_tailist
 policy context-release force-smf-update true
 feature-support-ie ims-vops-service-3gpp supported true
 feature-support-ie pcscf-restoration-supported true
 feature-support-ie iwk-without-n26-supported
 feature-support-ie redirection-eps-fallback supported
 security-algo 1 ciphering-algo 5G-EA0
 security-algo 1 integity-prot-algo 5G-IA0
 security-algo 2 ciphering-algo 128-5G-EA1
 security-algo 2 integity-prot-algo 128-5G-IA1
 security-algo 3 ciphering-algo 128-5G-EA2
 security-algo 3 integity-prot-algo 128-5G-IA2
 paging-priority map arp 5 ngap-paging-priority 0
 paging-priority map arp 8 ngap-paging-priority 2
exit
dnn-policy Spectrum-Mobile
 network-element-profile-list smf SMF1
exit
dnn-policy emergency
 network-element-profile-list smf SMF1
exit
dnn-policy ims
 ims-enabled true
 network-element-profile-list smf SMF1
exit
dnn-policy internet
 network-element-profile-list smf SMF1
exit
dnn-policy intershat
 network-element-profile-list smf SMF1
exit
dnn-policy starent
 network-element-profile-list smf SMF1
exit
dnn-policy starent.com
 network-element-profile-list smf SMF1
exit
operator-policy OPR-POLICY-1
 ccp-name        CCP1
 paging-map-name pm1
 network-element-profile-list ausf AUSF1
 network-element-profile-list smf SMF1
 network-element-profile-list pcf PCF1
 network-element-profile-list udm UDM1
 network-element-profile-list amf AMF2
```

```
 network-element-profile-list nssf NSSF1
exit
supi-policy 001
 operator-policy-name OPR-POLICY-1
exit
supi-policy 314
 operator-policy-name OPR-POLICY-1
exit
paging-map pm1
 precedence 1
  trigger-type        arp
  arp-value           5
  paging-profile-name pp4
 exit
 precedence 2
  trigger-type        arp
  arp-value           8
  paging-profile-name pp4
 exit
 precedence 3
  trigger-type        dereg
  dereg-value         udm_init
  paging-profile-name pp4
 exit
 precedence 4
  trigger-type        ppi
  ppi-value           7
  paging-profile-name pp1
 exit
 precedence 5
  trigger-type        5qi
  fiveqi-value        5
  paging-profile-name pp4
 exit
 precedence 6
  trigger-type        dereg
  dereg-value         amf_init
  paging-profile-name pp4
 exit
 precedence 7
  trigger-type        ppi
  ppi-value           6
  paging-profile-name pp5
 exit
 precedence 9
  trigger-type        dnn
  dnn-value           Spectrum-Mobile
  paging-profile-name pp4
 exit
exit
paging-profile pm1
exit
paging-profile pp1
 paging-stage 1
  paging-algo pa1
 exit
exit
paging-profile pp2
 paging-stage 1
  paging-algo pa2
 exit
exit
paging-profile pp3
 paging-stage 2
```

```
  paging-algo pa4
 exit
 paging-stage 3
  paging-algo pa1
 exit
 paging-stage 4
  paging-algo pa2
 exit
 paging-stage 5
  paging-algo pa3
 exit
exit
paging-profile pp4
 paging-stage 1
  paging-algo pa1
 exit
 paging-stage 2
  paging-algo pa2
 exit
 paging-stage 3
  paging-algo pa3
 exit
 paging-stage 4
  paging-algo pa6
 exit
 paging-stage 5
  paging-algo pa4
 exit
exit
paging-profile pp5
 paging-stage 5
  paging-algo pa5
 exit
exit
paging-algo pa1
 action              last_gnb_last_tai
 max-n-gnb           3
 t3513-timeout       2
 max-paging-attempts 1
exit
paging-algo pa2
 action              last_n_gnb_last_tai
 max-n-gnb           3
 t3513-timeout       3
 max-paging-attempts 2
exit
paging-algo pa3
 action              all_gnb_last_tai
 max-n-gnb           5
 t3513-timeout       4
 max-paging-attempts 3
exit
paging-algo pa4
 action              all_gnb_all_tai
 max-n-gnb           5
 t3513-timeout       5
 max-paging-attempts 5
exit
paging-algo pa5
 action              all_gnb_all_tai
 max-n-gnb           5
 t3513-timeout       10
 max-paging-attempts 5
exit
```

```
 paging-algo pa6
  action              all_gnb_remaining_tai_seq
  max-n-gnb           5
  t3513-timeout       5
  max-paging-attempts 1
 exit
exit
profile network-element amf AMF2
 nf-client-profile        AMF2
 failure-handling-profile FH1
 query-params [ target-plmn ]
exit
profile network-element pcf PCF1
 nf-client-profile        PP1
 failure-handling-profile FH1
exit
profile network-element udm UDM1
 nf-client-profile        UP1
 failure-handling-profile FH1
exit
profile network-element ausf AUSF1
 nf-client-profile        AUP1
 failure-handling-profile FH1
exit
profile network-element smf SMF1
 nf-client-profile SMF1
 query-params [ dnn ]
exit
profile network-element nssf NSSF1
 nf-client-profile NSSF1
exit
profile nf-client nf-type ausf
 ausf-profile AUP1
  locality LOC1
   priority 30
   service name type nausf-auth
    endpoint-profile EP1
     capacity   30
     uri-scheme http
     endpoint-name EP1
      priority 56
      primary ip-address ipv4 209.165.201.3
      primary ip-address port 8047
     exit
    exit
   exit
  exit
 exit
exit
profile nf-client nf-type udm
 udm-profile UP1
  locality LOC1
   service name type nudm-sdm
    endpoint-profile EP1
     capacity   30
     uri-scheme http
     version
      uri-version v2
      exit
     exit
     endpoint-name EP1
      primary ip-address ipv4 209.165.201.3
      primary ip-address port 9001
     exit
```

```
    exit
   exit
   service name type nudm-uecm
    endpoint-profile EP1
     capacity   30
     uri-scheme http
     endpoint-name EP1
      primary ip-address ipv4 209.165.201.3
      primary ip-address port 9001
     exit
    exit
   exit
  exit
 exit
exit
profile nf-client nf-type pcf
 pcf-profile PP1
  locality LOC1
   priority 30
   service name type npcf-am-policy-control
    endpoint-profile EP1
     capacity   30
     uri-scheme http
     endpoint-name EP1
      priority 30
      primary ip-address ipv4 209.165.201.3
      primary ip-address port 9082
     exit
     endpoint-name EP2
      priority 20
      primary ip-address ipv4 209.165.201.3
      primary ip-address port 9082
     exit
    exit
   exit
  exit
 exit
exit
profile nf-client nf-type amf
 amf-profile AMF2
  locality LOC1
   priority 56
   service name type namf-comm
    endpoint-profile EP1
     capacity   30
     priority   30
     uri-scheme http
     endpoint-name EP1
      priority 30
      primary ip-address ipv4 209.165.201.3
      primary ip-address port 9052
     exit
    exit
   exit
  exit
 exit
exit
profile nf-client nf-type smf
 smf-profile SMF1
  locality LOC1
   priority 56
   service name type nsmf-pdusession
    endpoint-profile EP1
     capacity   30
```

```
     priority   30
     uri-scheme http
     endpoint-name EP1
      priority 30
      primary ip-address ipv4 209.165.201.3
      primary ip-address port 9050
     exit
    exit
   exit
  exit
 exit
exit
profile nf-pair nf-type NRF
 nrf-discovery-group NRFDISCOVERY
 locality client  LOC1
 locality preferred-server LOC1
 locality geo-server GEO
exit
profile nf-pair nf-type UDM
 nrf-discovery-group NRFDISCOVERY
 locality client  LOC1
 locality preferred-server LOC1
 locality geo-server GEO
 cache invalidation true
exit
profile nf-pair nf-type AMF
 nrf-discovery-group NRFDISCOVERY
 locality client  LOC1
 locality preferred-server LOC1
 locality geo-server GEO
exit
profile nf-pair nf-type SMF
 nrf-discovery-group NRFDISCOVERY
 locality client  LOC1
 locality preferred-server LOC1
 locality geo-server GEO
 cache invalidation false
exit
profile nf-pair nf-type AUSF
 nrf-discovery-group NRFDISCOVERY
 locality client  LOC1
 locality preferred-server LOC1
 locality geo-server GEO
 cache invalidation true
exit
profile nf-pair nf-type PCF
 nrf-discovery-group NRFDISCOVERY
 locality client  LOC1
 locality preferred-server LOC1
 locality geo-server GEO
 cache invalidation true
exit
profile nf-pair nf-type NSSF
 nrf-discovery-group NRFDISCOVERY
 locality client  LOC1
 locality preferred-server LOC1
 locality geo-server GEO
exit
profile nf-client-failure nf-type udm
 profile failure-handling FH1
  service name type nudm-uecm
  exit
 exit
exit
```

```
profile nf-client-failure nf-type pcf
 profile failure-handling FH1
  service name type npcf-am-policy-control
   message type PcfAmfPolicyControlCreate
    status-code httpv2 201
     action continue
    exit
   exit
  exit
 exit
exit
amf-services AMF
 amf-name             AMF1
 validate-Tais        false
 locality             LOC1
 operator-policy-name OPR-POLICY-1
 peer-mme gummei mcc 311 mnc 480 group-id 32888 mme-code 36 address 209.165.201.4
 peer-mme gummei mcc 314 mnc 020 group-id 32777 mme-code 1 address 209.165.201.4
 peer-mme tai-match priority 1 mcc 311 mnc 480 tac 23 address 209.165.201.4
 peer-mme tai-match priority 1 mcc 314 mnc 020 tac 23 address 209.165.201.4
 pgw fqdn Spectrum-Mobile smf-network-element-profile SMF1
 guamis mcc 314 mnc 020 region-id 206 set-id 129 pointer 5
 tai-groups TAI-GRP1
 exit
 slices name SLICE1
  sst 3
  sdt 000000
 exit
 slices name SLICE2
  sst 1
  sdt 000000
 exit
exit
tai-group name TAI-GRP1
 tais name TAI-LIST-1
  mcc 314 mnc 020
   tac list [ 5431 5432 5433 ]
  exit
 exit
 tais name TAI-LIST-2
  mcc 314 mnc 020
   tac list [ 20 21 22 ]
  exit
 exit
 tais name TAI-LIST-3
  mcc 001 mnc 00
   tac list [ 20 30 40 ]
  exit
 exit
 tais name TAI-LIST-4
  mcc 314 mnc 020
   tac list [ 5440 5441 5442 5443 5444 5445 5446 ]
  exit
 exit
 tais name TAI-LIST-5
  mcc 314 mnc 020
   tac list [ 50 51 52 ]
  exit
 exit
exit
tai-group name TAI-GRP2
 tais name TAI-LIST-1
  mcc 314 mnc 020
   tac list [ 5434 5435 5436 ]
```

```
  exit
 exit
 tais name TAI-LIST-2
  mcc 314 mnc 020
   tac list [ 5437 5438 5439 5440 ]
  exit
 exit
 tais name TAI-LIST-3
  mcc 314 mnc 020
   tac list [ 40 41 42 43 44 ]
  exit
 exit
exit
tai-group name VoPS_tailist
 tais name tai-list1
  ims-voice-over-ps-supported true
  mcc 314 mnc 020
   tac list [ 1111 2222 3333 ]
  exit
 exit
exit
infra metrics verbose load-balancer
 level production
exit
client outbound host ping timeout 3000
client outbound host ping interval 5000
instance instance-id 1
 endpoint li
  replicas 1
  nodes    2
  vip-ip 209.165.201.5
  vip-ip 209.165.201.6
 exit
 endpoint sctp
  replicas 2
  nodes    2
  vip-ip 209.165.201.7 vip-port 1000
  vip-ipv6 2001:172:17::8 vip-ipv6-port 1000
 exit
 endpoint nodemgr
  replicas 1
  nodes    2
 exit
 endpoint gtp
  nodes 1
  retransmission timeout 2 max-retry 5
  vip-ip 209.165.201.6
 exit
 endpoint service
  replicas 2
  nodes    2
 exit
 endpoint protocol
  replicas 2
  nodes    2
  vip-ip 209.165.201.6
 exit
 endpoint ngap
  replicas 2
 exit
 endpoint sbi
  replicas     2
  loopbackPort 8091
  instancetype IPv4
```

```
  vip-ip 209.165.201.9 vip-port 8070
 exit
exit
logging level application error
logging level transaction error
logging level tracing error
logging name amf-protocol-ep.amf-app.nas level application error
logging name amf-protocol-ep.amf-app.nas level transaction error
logging name amf-rest-ep.amf-app.nrf level application error
logging name amf-service.amf-app.Config level application error
logging name amf-service.amf-app.Config level transaction error
logging name amf-service.amf-app.NwConfig level application error
logging name amf-service.amf-app.NwConfig level transaction error
logging name amf-service.amf-app.ausf level application error
logging name amf-service.amf-app.ausf level transaction error
logging name amf-service.amf-app.gen level application error
logging name amf-service.amf-app.gen level transaction error
logging name amf-service.amf-app.messageprocessor level application error
logging name amf-service.amf-app.messageprocessor level transaction error
logging name amf-service.amf-app.nas level application error
logging name amf-service.amf-app.nas level transaction error
logging name amf-service.amf-app.ngap level application error
logging name amf-service.amf-app.ngap level transaction error
logging name amf-service.amf-app.pcf level application error
logging name amf-service.amf-app.pcf level transaction error
logging name amf-service.amf-app.subs level application error
logging name amf-service.amf-app.subs level transaction error
logging name amf-service.amf-app.udm level application error
logging name amf-service.amf-app.udm level transaction error
logging name infra.cache_client.core
logging name infra.config.core
logging name infra.message_log.core
logging name infra.resource_monitor.core
logging name infra.sctp_server.core level application error
logging name infra.topology.core
deployment
 app-name               amf5
 cluster-name           clu005
 dc-name                sys005
 resource cpu 9000
 logical-nf-instance-id 5
exit
k8 label protocol-layer key smi.cisco.com/node-type-2 value protocol
exit
k8 label service-layer key smi.cisco.com/node-type-3 value service
exit
k8 label oam-layer key smi.cisco.com/node-type value oam
exit
k8 label sctp-layer key smi.cisco.com/node-type-2 value protocol
exit
instances instance 1
 system-id  sys005
 cluster-id clu005
 slice-name 1
exit
local-instance instance 1
datastore notification-ep host 209.165.201.8
datastore notification-ep port 8012
datastore session-db endpoints datastore-ep-session.cdl-amf.svc.cluster.local
 port 8882
exit
system mode running
helm default-repository base-repos
helm repository base-repos
```

```
 url https://charts.209.165.201.10.nip.io/amf.2021.04.0.i112
exit
k8s name          amf-cndp-b19-3
k8s namespace     amf-ins5
k8s nf-name       amf
k8s registry      docker.209.165.201.10.nip.io/amf.2021.04.m0.i26
k8s single-node   false
k8s use-volume-claims true
k8s ingress-host-name 209.165.201.11.nip.io
k8s nodes amf-cndp-b19-3-main-1
 node-type   master
 worker-type master
exit
k8s nodes amf-cndp-b19-3-main-2
 node-type   master
 worker-type master
exit
k8s nodes amf-cndp-b19-3-main-3
 node-type   master
 worker-type master
exit
aaa authentication users user admin
 uid        1117
 gid        1117
 password   $1$iQJO2wld$7jGfAw6qA3j0mfXeSvk5e/
 ssh_keydir /tmp/admin/.ssh
 homedir    /tmp/admin
exit
aaa ios level 0
 prompt "\h> "
exit
aaa ios level 15
 prompt "\h# "
exit
aaa ios privilege exec
 level 0
  command action
  exit
  command autowizard
  exit
  command enable
  exit
  command exit
  exit
  command help
  exit
  command startup
  exit
 exit
 level 15
  command configure
  exit
 exit
exit
nacm write-default deny
nacm groups group LI
 user-name [ liadmin ]
exit
nacm groups group admin
 user-name [ admin ]
exit
nacm rule-list admin
 group [ admin ]
 rule li-deny-tap
```

```
  module-name       lawful-intercept
  path              /lawful-intercept
  access-operations *
  action            deny
 exit
 rule li-deny-clear
  module-name       tailf-mobile-amf
  path              /clear/lawful-intercept
  access-operations *
  action            deny
 exit
 rule any-access
  action permit
 exit
exit
nacm rule-list confd-api-manager
 group [ confd-api-manager ]
 rule any-access
  action permit
 exit
exit
nacm rule-list ops-center-security
 group [ * ]
 rule change-self-password
  module-name       ops-center-security
  path              /smiuser/change-self-password
  access-operations exec
  action            permit
 exit
 rule smiuser
  module-name       ops-center-security
  path              /smiuser
  access-operations exec
  action            deny
 exit
exit
nacm rule-list lawful-intercept
 group [ LI ]
 rule li-accept-tap
  module-name       lawful-intercept
  path              /lawful-intercept
  access-operations *
  action            permit
 exit
 rule li-accept-clear
  module-name       tailf-mobile-amf
  path              /clear/lawful-intercept
  access-operations *
  action            permit
 exit
exit
nacm rule-list any-group
 group [ * ]
 rule li-deny-tap
  module-name       lawful-intercept
  path              /lawful-intercept
  access-operations *
  action            deny
 exit
 rule li-deny-clear
  module-name       tailf-mobile-amf
  path              /clear/lawful-intercept
  access-operations *
  action            deny
```

```
 exit
exit
```