



Sample cnSGW-C Configuration

- [Sample Configuration, on page 1](#)

Sample Configuration

The following is a sample configuration.

```
show running-config
profile compliance comp1
service nsmf-pdusession
  version uri v1
  version full 1.0.0
  version spec 15.4.0
exit
service namf-comm
  version uri v1
  version full 1.0.0
  version spec 15.4.0
exit
service n1
  version uri v1
  version full 1.0.0
  version spec 15.4.0
exit
service n2
  version uri v1
  version full 1.0.0
  version spec 15.4.0
exit
service nudm-sdm
  version uri v1
  version full 1.0.0
  version spec 15.4.0
exit
service nudm-uecm
  version uri v1
  version full 1.0.0
  version spec 15.4.0
exit
service nnrf-disc
  version uri v1
  version full 1.0.0
  version spec 15.4.0
exit
service nnrf-nfm
  version uri v1
```

```

    version full 1.0.0
    version spec 15.4.0
  exit
  service npcf-smpolicycontrol
    version uri v1
    version full 1.0.0
    version spec 15.4.0
  exit
  service nchf-convergedcharging
    version uri v1
    version full 1.0.0
    version spec 15.3.0
  exit
exit
profile network-element amf amf1
  nf-client-profile      AP1
  failure-handling-profile FH3
  query-params [ dnn ]
exit
profile network-element udm udm1
  nf-client-profile      UP1
  failure-handling-profile FH4
  query-params [ dnn ]
exit
profile network-element pcf pcf1
  nf-client-profile      PP1
  failure-handling-profile FH1
  query-params [ dnn ]
  rulebase-prefix        cbn#
  predefined-rule-prefix  crn#
exit
profile network-element chf chf1
  nf-client-profile      CP1
  failure-handling-profile FH2
  query-params [ dnn ]
  nf-client-profile-offline CP2
exit
profile network-element chf chgser1
exit
profile network-element upf upf1
  node-id      upf1@sgw.com
  n4-peer-address ipv4 209.165.200.234
  n4-peer-port 8805
  dnn-list [ cisco.com intershat starent.com ]
  capacity 65535
  priority 65535
exit
profile upf-group group1
  failure-profile FH1
exit
profile icmpv6 icmpprf1
  options virtual-mac b6:6d:57:45:45:45
exit
profile charging chgprf1
  method [ offline ]
exit
profile charging-characteristics 1
  charging-profile chgprf1
exit
profile failure-handling FH1
  interface pfc
    message N4SessionEstablishmentReq
    cause-code pfc-entity-in-congestion action retry-terminate max-retry 2
    cause-code system-failure action terminate

```

```

        cause-code service-not-supported action terminate
        cause-code no-resource-available action retry-terminate max-retry 3
        cause-code no-response-received action retry-terminate max-retry 1
        cause-code reject action terminate
    exit
    message N4SessionModificationReq
        cause-code mandatory-ie-incorrect action terminate
        cause-code session-ctx-not-found action terminate
        cause-code reject action terminate
    exit
exit
exit
profile failure-handling gtp1
    interface gtpc message S5S8CreateBearerReq
        cause-code temp-fail
        action retry timeout 1000 max-retry 2
    exit
exit
    interface gtpc message S5S8UpdateBearerReq
        cause-code temp-fail
        action retry timeout 1000 max-retry 2
    exit
exit
    interface gtpc message S5S8DeleteBearerReq
        cause-code temp-fail
        action retry timeout 1000 max-retry 2
    exit
exit
exit
profile access access1
    n26 idft enable timeout 15
    n2 idft enable timeout 15
    gtpc gtpc-failure-profile gtp1
exit
profile dnn default-profile
    network-element-profiles chf chf1
    network-element-profiles amf amf1
    network-element-profiles pcf pcfl
    network-element-profiles udm udm1
    charging-profile chgprfl
    virtual-mac      b6:6d:47:47:47:47
    ssc-mode 2 allowed [ 3 ]
    session type IPV4 allowed [ IPV6 IPV4V6 ]
    upf apn starent.com
exit
profile dnn intershat
    network-element-profiles chf chf1
    network-element-profiles amf amf1
    network-element-profiles pcf pcfl
    network-element-profiles udm udm1
    charging-profile chgprfl
    virtual-mac      b6:6d:47:47:47:47
    ssc-mode 2 allowed [ 3 ]
    session type IPV4 allowed [ IPV6 IPV4V6 ]
    upf apn intershat
    dcnr              true
exit
profile dnn intershat1
    network-element-profiles chf chf1
    network-element-profiles amf amf1
    network-element-profiles pcf pcfl
    network-element-profiles udm udm1
    charging-profile chgprfl
    virtual-mac      b6:6d:47:47:47:48

```

```

pcscf-profile    PCSCF_Prof_2
ssc-mode 1
session type IPV4
exit
profile dnn intershat2
network-element-profiles chf chf
network-element-profiles amf amf
network-element-profiles pcf pcf
network-element-profiles udm udm
charging-profile chgprfl
virtual-mac      b6:6d:47:47:47:49
ssc-mode 2 allowed [ 3 ]
session type IPV4 allowed [ IPV6 IPV4V6 ]
upf apn intershat2
exit
profile dnn starent.com
network-element-profiles chf chf1
network-element-profiles amf amf1
network-element-profiles pcf pcf1
network-element-profiles udm udm1
charging-profile chgprfl
virtual-mac      b6:6d:47:47:47:47
ssc-mode 2 allowed [ 3 ]
session type IPV4 allowed [ IPV6 IPV4V6 ]
upf apn starent.com
exit
profile qos abc
ambr ul "250 Kbps"
ambr dl "500 Kbps"
qi5      7
arp priority-level 14
arp preempt-cap NOT_PREEMPT
arp preempt-vuln PREEMPTABLE
priority 120
max data-burst 2000
exit
profile nf-client nf-type udm
udm-profile UP1
locality LOC1
priority 30
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 209.165.201.21
primary ip-address port 8001
exit
exit
service name type nudm-uecm
endpoint-profile EP1
capacity 30
uri-scheme http
endpoint-name EP1
primary ip-address ipv4 209.165.201.21
primary ip-address port 8001
exit
exit
exit

```

```

service name type nudm-ee
endpoint-profile EP1
  capacity 30
  api-uri-prefix PREFIX
  api-root ROOT
  uri-scheme http
  endpoint-name EP1
  priority 56
  primary ip-address ipv4 209.165.201.21
  primary ip-address port 8001
exit
exit
exit
exit
exit
exit
profile nf-client nf-type pcf
pcf-profile PP1
  locality LOC1
  priority 30
  service name type npcfc-am-policy-control
  endpoint-profile EP1
  capacity 30
  uri-scheme http
  endpoint-name EP1
  priority 56
  primary ip-address ipv4 209.165.201.21
  primary ip-address port 8003
  exit
exit
exit
service name type npcfc-smpolicycontrol
endpoint-profile EP1
  capacity 30
  uri-scheme http
  endpoint-name EP1
  priority 56
  primary ip-address ipv4 209.165.201.21
  primary ip-address port 8003
  exit
exit
exit
exit
exit
exit
profile nf-client nf-type amf
amf-profile AP1
  locality LOC1
  priority 30
  service name type namf-comm
  endpoint-profile EP2
  capacity 30
  uri-scheme http
  endpoint-name EP1
  priority 56
  primary ip-address ipv4 209.165.201.21
  primary ip-address port 8002
  exit
exit
exit
exit
exit
exit
profile nf-client nf-type chf

```

```
chf-profile CP1
locality LOC1
priority 30
service name type nchf-convergedcharging
endpoint-profile EP1
  capacity 30
  uri-scheme http
  version
  uri-version v2
  exit
exit
endpoint-name EP1
priority 56
primary ip-address ipv4 209.165.201.21
primary ip-address port 8004
exit
exit
exit
exit
chf-profile CP2
locality LOC1
priority 31
service name type nchf-convergedcharging
endpoint-profile EP1
  capacity 30
  uri-scheme http
  version
  uri-version v2
  exit
exit
endpoint-name EP1
priority 56
primary ip-address ipv4 209.165.201.21
primary ip-address port 9040
exit
exit
exit
exit
exit
profile nf-pair nf-type UDM
nrf-discovery-group udmdiscovery
locality client LOC1
locality preferred-server LOC1
locality geo-server GEO
exit
profile nf-pair nf-type AMF
nrf-discovery-group udmdiscovery
locality client LOC1
locality preferred-server LOC1
locality geo-server GEO
exit
profile nf-pair nf-type PCF
nrf-discovery-group udmdiscovery
locality client LOC1
locality preferred-server LOC1
locality geo-server GEO
exit
profile nf-pair nf-type UPF
nrf-discovery-group udmdiscovery
locality client LOC1
locality preferred-server LOC1
locality geo-server GEO
```

```
exit
profile nf-pair nf-type CHF
  nrf-discovery-group udmdiscovery
  locality client LOC1
  locality preferred-server LOC1
  locality geo-server GEO
exit
profile nf-client-failure nf-type udm
profile failure-handling FH4
  service name type nudm-sdm
  message type UdmSdmGetUESMSSubscriptionData
  status-code httpv2 403
  retry 3
  action retry-and-ignore
  exit
  status-code httpv2 404
  action continue
  exit
  status-code httpv2 413
  retry 3
  action retry-and-continue
  exit
  status-code httpv2 501,504
  retry 3
  action retry-and-terminate
  exit
  status-code httpv2 503
  action terminate
  exit
  exit
message type UdmSdmSubscribeToNotification
  status-code httpv2 403
  retry 3
  action retry-and-ignore
  exit
  status-code httpv2 404
  action continue
  exit
  status-code httpv2 413
  retry 3
  action retry-and-continue
  exit
  status-code httpv2 501,504
  retry 3
  action retry-and-terminate
  exit
  status-code httpv2 503
  action terminate
  exit
  exit
exit
service name type nudm-uecm
message type UdmUecmRegisterSMF
  status-code httpv2 403
  retry 3
  action retry-and-ignore
  exit
  status-code httpv2 404
  action continue
  exit
  status-code httpv2 413
  retry 3
  action retry-and-continue
  exit
```

```

        status-code httpv2 501,504
        retry 3
        action retry-and-terminate
    exit
    status-code httpv2 503
    action terminate
    exit
exit
exit
exit
exit
profile nf-client-failure nf-type pcf
profile failure-handling FH1
service name type npcfsmpolicycontrol
message type PcfSmpolicycontrolCreate
    status-code httpv2 0,403
    action retry-and-ignore
    exit
    status-code httpv2 400
    action continue
    exit
    status-code httpv2 404
    action terminate
    exit
    status-code httpv2 500
    retry 2
    action retry-and-ignore
    exit
    status-code httpv2 503
    retry 2
    action retry-and-continue
    exit
exit
message type PcfSmpolicycontrolUpdate
    status-code httpv2 0,403
    action retry-and-ignore
    exit
    status-code httpv2 400
    action continue
    exit
    status-code httpv2 404
    action terminate
    exit
    status-code httpv2 500
    retry 2
    action retry-and-ignore
    exit
    status-code httpv2 503
    retry 2
    action retry-and-continue
    exit
exit
message type PcfSmpolicycontrolDelete
    status-code httpv2 0,403
    action retry-and-ignore
    exit
    status-code httpv2 400
    action continue
    exit
    status-code httpv2 404
    action terminate
    exit
    status-code httpv2 500
    retry 2

```



```
        action retry-and-ignore
    exit
    status-code httpv2 503
        retry 2
        action retry-and-continue
    exit
    exit
    exit
    exit
    exit
profile nf-client-failure nf-type chf
profile failure-handling FH2
service name type nchf-convergedcharging
message type ChfConvergedchargingCreate
    status-code httpv2 0,500,504
        action continue
    exit
    status-code httpv2 400,404
        retry 3
        action retry-and-terminate
    exit
    status-code httpv2 403
        retry 3
        action retry-and-ignore
    exit
    status-code httpv2 503
        action terminate
    exit
    exit
message type ChfConvergedchargingUpdate
    status-code httpv2 0,500,504
        action continue
    exit
    status-code httpv2 400,404
        retry 3
        action retry-and-terminate
    exit
    status-code httpv2 403
        retry 3
        action retry-and-ignore
    exit
    status-code httpv2 503
        action terminate
    exit
    exit
message type ChfConvergedchargingDelete
    status-code httpv2 0,500,504
        action continue
    exit
    status-code httpv2 400,404
        retry 3
        action retry-and-terminate
    exit
    status-code httpv2 403
        retry 3
        action retry-and-ignore
    exit
    status-code httpv2 503
        action terminate
    exit
    exit
    exit
    exit
```

```

profile smf smf1
  locality      LOC1
  allowed-nssai [ slice1 ]
  plmn-id mcc 123
  plmn-id mnc 456
  service name nsmf-pdu
    type          pdu-session
    schema         http
    service-id     1
    version        1.Rn.0.0
    http-endpoint base-url http://smf-service
    icmpv6-profile icmpprf1
    compliance-profile compl
    access-profile access1
    subscriber-policy polSub
  exit
exit
profile sgw sgw1
  sgw-charging-threshold thre1
  sgw-charging-profile ch1
  locality      LOC2
  fqdn          cisco.com.apn.epc.mnc456.mcc123
  charging-mode gtp
exit
profile sgw-charging-threshold thre1
  cc profile value 1
    volume total 100000
    buckets 1
    duration 60
  exit
  cc profile value 2
    volume uplink 100000
    volume downlink 100000
    buckets 1
    duration 120
  exit
exit
profile sgw-charging-profile ch1
  gtp-triggers volume-limit enable
  gtp-triggers time-limit enable
  gtp-profile pf1
exit
profile gtp-profile pf1 gtp
  local-storage
    file
      rotation
      volume 5
      cdr-count 1000
      time-interval 60
    exit
    name
      prefix NYPCF508
      format .%Y-%m-%d%H-%M-%S.%4Q
      max-file-seq-num 4
      start-file-seq-num 1
      recover-file-seq-num false
    exit
    purge-processed-files purge-interval 10
    format custom5
  exit
  push
    encrypted-url
    "$8$6vhjkoHt8RL2noFs/ON6ZJavTDzwGS2KUn/Yq1BzgkezFmx5SzvnaRYzAdVacCSyCirYOvcC\nTFnHpBNim3QY3Q=="

```

```

    exit
  exit
  dictionary custom24
exit
policy subscriber polSub
precedence 1
  sst          02
  sdt          Abf123
  serving-plmn mcc 123
  serving-plmn mnc 456
  supi-start-range 1000000000000001
  supi-stop-range  9999999999999999
  gpsi-start-range 1000000000
  gpsi-stop-range  9999999999
  operator-policy  opPol1
exit
precedence 511
  operator-policy defOprPol1
exit
exit
policy operator defOprPol1
  policy dnn          defPolDnn
  policy network-capability nc1
exit
policy operator opPol1
  policy dnn          polDnn
  policy network-capability nc1
exit
policy dnn defPolDnn
  profile default-profile
  dnn dnn2 profile profile2
  dnn intershat profile intershat
  dnn intershat1 profile intershat1
  dnn starent.com profile starent.com
exit
policy dnn polDnn
  profile default-profile
  dnn dnn2 profile profile2
  dnn intershat profile intershat
  dnn intershat1 profile intershat1
  dnn intershat2 profile intershat2
  dnn starent.com profile starent.com
exit
policy network-capability nc1
  nw-support-local-address-tft true
exit
nssai name slice1
  sst 2
  sdt Abf123
  dnn [ dnn1 intershat intershat1 intershat2 ]
exit
ipam
  instance 1
  source local
  address-pool poolv4
  vrf-name ISP
  tags
    dnn starent.com
  exit
  ipv4
    split-size
    per-cache 1024
    per-dp    256
  exit

```

```

        address-range 209.165.202.129 209.165.200.253
    exit
exit
address-pool poolv4DNN2
    vrf-name ISP
    tags
        dnn intershat1
    exit
    ipv4
        split-size
            per-cache 1024
            per-dp    256
        exit
        address-range 209.165.200.241 209.165.200.244
    exit
exit
address-pool poolv4DNN3
    vrf-name ISP
    static
    tags
        dnn intershat2
    exit
    ipv4
        split-size
            per-cache 512
            per-dp    512
        exit
        address-range 209.165.200.247 209.165.200.248
    exit
    ipv6
        prefix-ranges
            split-size
                per-cache 8192
                per-dp    8192
            exit
            prefix-range 2002:db0:: length 48
        exit
    exit
exit
address-pool poolv4vDNN
    vrf-name ISP
    tags
        dnn intershat1
    exit
    ipv4
        split-size
            per-cache 1024
            per-dp    256
        exit
        address-range 209.165.200.245 209.165.200.244
    exit
exit
address-pool poolv6
    vrf-name ISP
    tags
        dnn intershat
    exit
    ipv6
        prefix-ranges
            split-size
                per-cache 8192
                per-dp    1024
            exit
            prefix-range 2001:db0:: length 48

```

```

        exit
    exit
exit
address-pool poolv6DNN2
    vrf-name ISP
    tags
        dnn intershat1
    exit
    ipv6
        prefix-ranges
            split-size
                per-cache 8192
                per-dp 1024
            exit
            prefix-range 2001:ef0:: length 48
        exit
    exit
exit
address-pool poolv6vDNN
    vrf-name ISP
    tags
        dnn intershat1
    exit
    ipv6
        prefix-ranges
            split-size
                per-cache 8192
                per-dp 1024
            exit
            prefix-range 2001:ab0:: length 48
        exit
    exit
exit
exit
exit
cdl system-id 1
cdl enable-geo-replication true
cdl deployment-model small
cdl zookeeper replica 1
cdl remote-site 2
db-endpoint host 209.165.202.157
db-endpoint port 8882
kafka-server 209.165.202.157 10001
exit
exit
cdl datastore session
    geo-remote-site [ 2 ]
    slice-names [ cnSGW1 cnSGW2 ]
    endpoint replica 1
    endpoint external-ip 209.165.202.156
    endpoint external-port 8882
    index map 1
    index write-factor 1
    slot replica 1
    slot map 1
    slot write-factor 1
    features instance-aware-notification enable true
    features instance-aware-notification system-id 1
    slice-names [ cnSGW1 ]
    exit
    features instance-aware-notification system-id 2
    slice-names [ cnSGW2 ]
    exit
exit

```

```

cdl kafka replica 1
cdl kafka external-ip 209.165.202.156 10001
exit
etcd replicas 1
instance instance-id 1
endpoint li
  replicas 1
  vip-ip 209.165.200.237
exit
endpoint nodemgr
  replicas 1
  nodes 1
exit
endpoint gtp
  replicas 1
  interface s5
    vip-ip 209.165.201.11
  exit
  interface s5e
    vip-ip 209.165.201.21
  exit
  interface s11
    vip-ip 209.165.200.237
  exit
exit
endpoint pfcp
  replicas 1
  interface sxa
    heartbeat
    interval 0
  exit
exit
interface n4
  heartbeat
  interval 0
  retransmission-timeout 3
  max-retransmissions 5
  exit
exit
endpoint radius-dns
  replicas 1
  vip-ip 209.165.201.21
exit
endpoint service
  replicas 1
exit
endpoint protocol
  replicas 1
  internal-vip 209.165.201.11
  vip-ip 209.165.201.21
  interface sxa
    vip-ip 209.165.201.21
  exit
  interface n4
    vip-ip 209.165.201.11
  exit
exit
endpoint gtpprime
  replicas 2
  nodes 1
exit
endpoint sgw-service
  replicas 1

```

```

exit
endpoint geo
  replicas 1
  nodes 2
  interface geo-internal
    vip-ip 209.165.200.233 vip-port 7001
  exit
  interface geo-external
    vip-ip 209.165.200.234 vip-port 7002
  exit
exit
endpoint sbi
  replicas 1
  vip-ip 209.165.201.21
exit
endpoint bgpspeaker
  replicas 1
  nodes 2
exit
exit
instance instance-id 2
  endpoint li
    replicas 1
    vip-ip 209.165.200.238
  exit
  endpoint nodemgr
    replicas 1
    nodes 1
  exit
  endpoint gtp
    replicas 1
    interface s5
      vip-ip 209.165.201.12
    exit
    interface s5e
      vip-ip 209.165.201.141
    exit
    interface s11
      vip-ip 209.165.200.238
    exit
  exit
  endpoint pfcp
    replicas 1
    interface sxa
      heartbeat
        interval 0
    exit
  exit
  interface n4
    heartbeat
      interval 0
      retransmission-timeout 3
      max-retransmissions 5
    exit
  exit
exit
endpoint radius-dns
  replicas 1
  vip-ip 209.165.201.141
exit
endpoint service
  replicas 1
exit
endpoint protocol

```

```

replicas      1
internal-vip  209.165.201.11
vip-ip 209.165.201.141
interface sxa
    vip-ip 209.165.201.141
exit
interface n4
    vip-ip 209.165.201.12
exit
exit
endpoint gtpprime
    replicas 2
    nodes 1
exit
endpoint sgw-service
    replicas 1
exit
endpoint geo
    replicas 1
    nodes 2
    interface geo-internal
        vip-ip 209.165.200.235 vip-port 7001
    exit
    interface geo-external
        vip-ip 209.165.200.236 vip-port 7002
    exit
exit
endpoint sbi
    replicas 1
    vip-ip 209.165.201.141
exit
endpoint bgpspeaker
    replicas 1
    nodes 2
exit
exit
logging level application debug
logging level transaction debug
logging level tracing debug
logging name gtp-ep0.application.config level application debug
logging name gtp-ep0.application.gen level application trace
logging name gtp-ep1.application.config level application debug
logging name gtp-ep1.application.gen level application trace
logging name infra.cdr.core level application debug
logging name infra.cdr_sftp.core level application debug
logging name infra.config.core level application trace
logging name infra.config.core level transaction trace
logging name infra.config.core level tracing off
logging name infra.message_log.core level transaction trace
router bgp 65061
    bfd interval 250000 min_rx 250000 multiplier 3
    interface v4001
        neighbor 209.165.202.131 remote-as 65060 fail-over bfd
    exit
    policy-name allow-all ip-prefix 209.165.201.30/0 mask-range 0..32
exit
deployment
    app-name      smf
    cluster-name  Local
    dc-name       DC
    model         small
exit
k8 label protocol-layer key disktype value ssd
exit

```



```

geomonitor podmonitor pods bgpspeaker-pod
  retryCount 1
  retryInterval 200
  retryFailOverInterval 200
  failedReplicaPercent 40
exit
geomonitor podmonitor pods gtp-ep
  retryCount 1
  retryInterval 200
  retryFailOverInterval 200
  failedReplicaPercent 40
exit
geomonitor podmonitor pods li-ep
  retryCount 1
  retryInterval 200
  retryFailOverInterval 200
  failedReplicaPercent 40
exit
geomonitor podmonitor pods sgw-service
  retryCount 1
  retryInterval 200
  retryFailOverInterval 200
  failedReplicaPercent 40
exit
instances instance 1
  system-id DCNAME001
  cluster-id CLUSTER0001
  slice-name cnSGW1
exit
instances instance 2
  system-id DCNAME002
  cluster-id CLUSTER0002
  slice-name cnSGW2
exit
local-instance instance 1
system mode running
helm default-repository cn
helm repository cn
  access-token
sgw-deployer.gen:AKCp8ihVrCfvm9puwTSt8oKKG6HxPlFn8sLY5fzqWYr3NhrBmjjJrUHaxfZD3ziQpILkAy1Q3
url
https://engci-maven-master.cisco.com/artifactory/smi-fuse-internal-snapshot/mobile-cn-at-cn/cn-products/rel-2021.02/
exit
k8s name cn
k8s namespace cn
k8s nf-name smf
k8s registry dockerhub.cisco.com/smi-fuse-docker-internal
k8s single-node true
k8s use-volume-claims true
k8s image-pull-secrets regcred
k8s ingress-host-name 209.165.200.235.nip.io
aaa authentication users user admin
  uid 117
  gid 117
  password $1$g8J36yTY$1g/tM5a9pdsGMnKcspnxD.
  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 LI2
  user-name [ liadmin2 ]
exit
nacm groups group LI3
  user-name [ liadmin3 ]
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-smf
    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 LI2 LI3 ]
  rule li-accept-tap
    module-name      lawful-intercept
    path             /lawful-intercept
    access-operations *
    action           permit
  exit
  rule li-accept-clear
    module-name      tailf-mobile-smf
    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-smf
    path             /clear/lawful-intercept
    access-operations *
    action           deny
  exit
exit
```

