



Sample cnSGW-C Configuration

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Sample Configuration

The following is a sample configuration.

```
show running-config
profile compliance compl
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 npcfsmpolicycontrol
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 udml
nf-client-profile UP1
failure-handling-profile FH4
query-params [ dnn ]
exit
profile network-element pcf pcfl
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 pfcps
message N4SessionEstablishmentReq
cause-code pfcps-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
profile failure-handling gtp1
interface gtpc message S5S8CreateBearerReq
cause-code temp-fail
action retry timeout 1000 max-retry 2
exit
interface gtpc message S5S8UpdateBearerReq
cause-code temp-fail
action retry timeout 1000 max-retry 2
exit
interface gtpc message S5S8DeleteBearerReq
cause-code temp-fail
action retry timeout 1000 max-retry 2
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 pcf1
network-element-profiles udm udm1
charging-profile chgprf1
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 pcf1
network-element-profiles udm udm1
charging-profile chgprf1
virtual-mac b6:6d:47:47:47:47
ssc-mode 2 allowed [ 3 ]
session type IPV4 allowed [ IPV6 IPV4V6 ]
upf apn intershat
dncr true
exit
profile dnn intershat1
network-element-profiles chf chf1
network-element-profiles amf amf1
network-element-profiles pcf pcf1
network-element-profiles udm udm1
charging-profile chgprf1
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 chgprf1
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 chgprf1
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
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
    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
    exit
```

```

profile smf smf1
  locality      LOC1
  allowed-nssai [ slicel ]
  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 threl
  sgw-charging-profile ch1
  locality          LOC2
  fqdn              cisco.com.apn.epc.mnc456.mcc123
  charging-mode     gtp
  exit
profile sgw-charging-threshold threl
  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/Yq1BzgzkeZFmx5SzvnrARyZAdVacCSyCirYOvcC\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 100000000000001
    supi-stop-range  999999999999999
    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 ncl
exit
policy operator opPol1
  policy dnn          polDnn
  policy network-capability ncl
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 ncl
  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 pfcpl
    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 pfc
    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 209.165.201.141
  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:AKCp8ihVrCfvm9puwTSt8oKKG6HxP1Fn8sLY5fzqWYrR3NhrBmjjJrUHaxfZD3ziQpiLkAy1Q3
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
exit
```

