



## C Commands

---

- [callhome](#), page 3
- [catalog-version](#), page 4
- [cdp](#), page 5
- [cert-chain](#), page 8
- [cert](#), page 9
- [certificate](#), page 10
- [channel-group](#), page 11
- [channel-mode](#), page 13
- [ciphers](#), page 16
- [clear-encryption-key](#), page 17
- [clear-pwd-history](#), page 18
- [clear endpoints](#), page 19
- [clear snapshot file](#), page 20
- [clear snapshot job](#), page 21
- [clear techsupport controllers](#), page 22
- [clear techsupport switch](#), page 23
- [clear troubleshoot epxt session report](#), page 24
- [clear troubleshoot eptoep session report](#), page 25
- [clock display-format](#), page 26
- [clock show-offset](#), page 27
- [clock timezone](#), page 28
- [cluster-device](#), page 29
- [cluster-device query-device-health](#), page 30
- [cluster-device query-device-statistics](#), page 31

- [cluster-device query-device-validation](#), page 32
- [cluster-interface](#), page 33
- [comm-policy](#), page 34
- [configure-avs](#), page 35
- [configure-dvs](#), page 36
- [configure](#), page 37
- [connection intra service](#), page 38
- [connection terminal](#), page 39
- [connector](#), page 40
- [console](#), page 41
- [contract-id](#), page 42
- [contract](#), page 43
- [contract consumer](#), page 44
- [contract deny](#), page 47
- [contract enforce](#), page 49
- [contract provider](#), page 50
- [controller-group](#), page 53
- [controller](#), page 54
- [cost](#), page 55
- [country](#), page 56
- [crypto aes](#), page 57
- [crypto ca](#), page 58
- [crypto keyring](#), page 59
- [crypto webtoken](#), page 60
- [csr](#), page 61
- [customer-id](#), page 62

# callhome

**callhome common**

**Description:** Callhome common policy configuration mode

**Syntax:**

common	Callhome common policy configuration mode
--------	---

**Command Mode:** configure : Configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]  
(config)# callhome common
```

# catalog-version

**catalog-version** <version>

**Description:** Change catalog version

**Syntax:**

<version>	firmware version
-----------	------------------

**Command Mode:** firmware : Firmware upgrade configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# firmware
(config-firmware)# catalog-version <version>
```

# cdp

## cdp enable|default

**Description:** Configure CDP parameters on DVS uplink ports

**Syntax:**

enable	Enable CDP
default	Remove CDP override policy

**Command Mode:** configure-dvs : Configure a VMware Domain as DVS type

**Command Path:**

```
# configure [['terminal', 't']]
(config)# vmware-domain <WORD>
(config-vmware)# configure-dvs
(config-vmware-dvs)# cdp enable|default
```

## cdp enable|default

**Description:** Configure CDP parameters on AVS uplink ports

**Syntax:**

enable	Enable CDP
default	Remove CDP override policy

**Command Mode:** configure-avs : Configure a VMware Domain as AVS (N1K) type

**Command Path:**

```
# configure [['terminal', 't']]
(config)# vmware-domain <WORD>
(config-vmware)# configure-avs
(config-vmware-avs)# cdp enable|default
```

## cdp enable

**Description:** Configure CDP interface parameters

**Syntax:**

enable	Configure CDP parameters
--------	--------------------------

**Command Mode:** template policy-group : Configure Policy Group Parameters

**Command Path:**

```
# configure [['terminal', 't']]
(config)# template policy-group <WORD>
(config-pol-grp-if)# cdp enable
```

**cdp enable****Description:** Configure CDP interface parameters**Syntax:**

enable	Configure CDP parameters
--------	--------------------------

**Command Mode:** template port-channel : Configure Port-Channel Parameters**Command Path:**

```
# configure [['terminal', 't']]
(config)# template port-channel <WORD>
(config-if)# cdp enable
```

**cdp enable****Description:** Configure CDP interface parameters**Syntax:**

enable	Configure CDP parameters
--------	--------------------------

**Command Mode:** interface ethernet : Ethernet IEEE 802.3z**Command Path:**

```
# configure [['terminal', 't']]
(config)# leaf <101-4000>
(config-leaf)# interface ethernet <ifRange>
(config-leaf-if)# cdp enable
```

**cdp enable****Description:** Configure CDP interface parameters**Syntax:**

enable	Configure CDP parameters
--------	--------------------------

**Command Mode:** interface port-channel : Port Channel interface**Command Path:**

```
# configure [['terminal', 't']]
(config)# leaf <101-4000>
```

```
(config-leaf)# interface port-channel <WORD> [fex <fex>]
(config-leaf-if)# cdp enable
```

**cdp enable**

**Description:** Configure CDP interface parameters

**Syntax:**

enable	Configure CDP parameters
--------	--------------------------

**Command Mode:** interface : Provide VPC Name

**Command Path:**

```
# configure [['terminal', 't']]
(config)# vpc context leaf <101-4000> <101-4000> [fex <fex>]
(config-vpc)# interface vpc <WORD> [fex <fex>]
(config-vpc-if)# cdp enable
```

# cert-chain

**cert-chain** <WORD>

**Description:** Set The PEM-encoded chain of trust from the trustpoint to a trusted root authority.

**Syntax:**

<WORD>	The PEM-encoded chain of trust from the trustpoint to a trusted root authority
--------	--

**Command Mode:** crypto ca : Configure certificate authority related information

**Command Path:**

```
# configure [['terminal', 't']]
(config)# crypto ca <WORD>
(config-ca)# cert-chain <WORD>
```



# cert

**cert** <CERTIFICATE>

**Description:** Provide a certificate, that contains public key and signed information.

**Syntax:**

<CERTIFICATE>	Provide a certificate in quotes, that contains public key and signed information
---------------	--

**Command Mode:** crypto keyring : A keyring mode to create and hold an SSL certificate

**Command Path:**

```
# configure [['terminal', 't']]
(config)# crypto keyring <WORD>
(config-keyring)# cert <CERTIFICATE>
```

# certificate

**certificate** <WORD>

**Description:** Create AAA user certificate in X.509 format.

**Syntax:**

<i>WORD</i>	Name for the user certificate
-------------	-------------------------------

**Command Mode:** username : Create a locally-authenticated user account

**Command Path:**

```
# configure [['terminal', 't']]
(config)# username <WORD>
(config-username)# certificate <WORD>
```

# channel-group

## channel-group <WORD> [vpc]

**Description:** Create Port Channel

**Syntax:**

<i>WORD</i>	Port-Channel/VPC Name (Max Size 64)
vpc	(Optional) Configure channel-group as VPC

**Command Mode:** leaf-interface-group : Configure Leaf Interface Group

**Command Path:**

```
# configure [['terminal', 't']]
(config)# leaf-interface-profile <WORD>
(config-leaf-if-profile)# leaf-interface-group <WORD>
(config-leaf-if-group)# channel-group <WORD> [vpc]
```

## channel-group <WORD> [vpc]

**Description:** Configure Port Channel on Fex

**Syntax:**

<i>WORD</i>	Port-Channel/VPC Name (Max Size 64)
vpc	(Optional) Create the channel-group as a VPC

**Command Mode:** fex-interface-group : Configure Fex Interface Group

**Command Path:**

```
# configure [['terminal', 't']]
(config)# fex-profile <WORD>
(config-fex-profile)# fex-interface-group <WORD>
(config-fex-if-group)# channel-group <WORD> [vpc]
```

## channel-group <WORD> [vpc]

**Description:** Associate a Channel Group to this Interface

**Syntax:**

<i>WORD</i>	Port-Channel/VPC Name (Max Size 64)
vpc	(Optional) Create the channel-group as a VPC

**Command Mode:** interface ethernet : Ethernet IEEE 802.3z

**Command Path:**

```
# configure [['terminal', 't']]
(config)# leaf <101-4000>
(config-leaf)# interface ethernet <ifRange>
(config-leaf-if)# channel-group <WORD> [vpc]
```

# channel-mode

## channel-mode on|active|passive|mac-pinning

**Description:** Configure LACP mode override on DVS uplink ports

**Syntax:**

on	Set channeling mode to ON (static)
active	Set channeling mode to ACTIVE
passive	Set channeling mode to PASSIVE
mac-pinning	Set channeling mode to MAC-PINNING

**Command Mode:** configure-dvs : Configure a VMware Domain as DVS type

**Command Path:**

```
# configure [['terminal', 't']]
(config)# vmware-domain <WORD>
(config-vmware)# configure-dvs
(config-vmware-dvs)# channel-mode on|active|passive|mac-pinning
```

## channel-mode on|active|passive|mac-pinning

**Description:** Configure LACP mode override on AVS uplink ports

**Syntax:**

on	Set channeling mode to ON (static)
active	Set channeling mode to ACTIVE
passive	Set channeling mode to PASSIVE
mac-pinning	Set channeling mode to MAC-PINNING

**Command Mode:** configure-avs : Configure a VMware Domain as AVS (N1K) type

**Command Path:**

```
# configure [['terminal', 't']]
(config)# vmware-domain <WORD>
(config-vmware)# configure-avs
(config-vmware-avs)# channel-mode on|active|passive|mac-pinning
```

**channel-mode on|active|passive|mac-pinning****Description:** Configure channeling mode**Syntax:**

on	Set channeling mode to ON (static)
active	Set channeling mode to ACTIVE
passive	Set channeling mode to PASSIVE
mac-pinning	Set channeling mode to MAC-PINNING

**Command Mode:** template port-channel : Configure Port-Channel Parameters**Command Path:**

```
# configure [['terminal', 't']]
(config)# template port-channel <WORD>
(config-if)# channel-mode on|active|passive|mac-pinning
```

**channel-mode on|active|passive|mac-pinning****Description:** Configure channeling mode**Syntax:**

on	Set channeling mode to ON (static)
active	Set channeling mode to ACTIVE
passive	Set channeling mode to PASSIVE
mac-pinning	Set channeling mode to MAC-PINNING

**Command Mode:** interface port-channel : Port Channel interface**Command Path:**

```
# configure [['terminal', 't']]
(config)# leaf <101-4000>
(config-leaf)# interface port-channel <WORD> [fex <fex>]
(config-leaf-if)# channel-mode on|active|passive|mac-pinning
```

**channel-mode on|active|passive|mac-pinning****Description:** Configure channeling mode**Syntax:**

on	Set channeling mode to ON (static)
----	------------------------------------

active	Set channeling mode to ACTIVE
passive	Set channeling mode to PASSIVE
mac-pinning	Set channeling mode to MAC-PINNING

**Command Mode:** interface : Provide VPC Name

**Command Path:**

```
# configure [['terminal', 't']]
(config)# vpc context leaf <101-4000> <101-4000> [fex <fex>]
(config-vpc)# interface vpc <WORD> [fex <fex>]
(config-vpc-if)# channel-mode on|active|passive|mac-pinning
```

# ciphers

**ciphers** <WORD>

**Description:** HTTPS cipher suite

**Syntax:**

<i>WORD</i>	Provide a valid cipher name
-------------	-----------------------------

**Command Mode:** https : HTTPS communication policy group

**Command Path:**

```
# configure [['terminal', 't']]
(config)# comm-policy <WORD>
(config-comm-policy)# https
(config-https)# ciphers <WORD>
```



# clear-encryption-key

**clear-encryption-key**

**Description:** Clears AES encryption key

**Command Mode:** crypto aes : AES encryption configuration

**Command Path:**

```
# configure [['terminal', 't']]
(config)# crypto aes
(config-aes)# clear-encryption-key
```

# clear-pwd-history

## clear-pwd-history

**Description:** Clears the password history of a locally-authenticated user

**Command Mode:** username : Create a locally-authenticated user account

### Command Path:

```
# configure [['terminal', 't']]
(config)# username <WORD>
(config-username)# clear-pwd-history
```

# clear endpoints

**clear endpoints leaf <node-id> tenant <tenant-name> bridge-domain <bd-name> vlan <NUMBER>**

**Description:** Clear endpoints

**Syntax:**

leaf	Leaf Number
<i>node-id</i>	Leaf Number (Max Size 4000). Number range from=0 to=9223372036854775807
tenant	Tenant Hosting the endpoints
<i>tenant-name</i>	Tenant Hosting the endpoints (Max Size 63)
bridge-domain	Bridge-Domain Hosting the endpoints
<i>bd-name</i>	Bridge-Domain Hosting the endpoints (Max Size 64)
vlan	The encapsulation VLAN Hosting the endpoints
<1-4094>	The number of the encapsulation VLAN, from 1 to 4094. For example, for vlan-23 you enter 23 in this field.

**Command Mode:** exec : Exec Mode

**Command Path:**

```
# clear endpoints leaf <WORD> tenant <WORD> bridge-domain <WORD> vlan <NUMBER>
```

# clear snapshot file

**clear snapshot file** <WORD>

**Description:** Remove snapshot file

**Syntax:**

<i>WORD</i>	Snapshot file name
-------------	--------------------

**Command Mode:** exec : Exec Mode

**Command Path:**

```
# clear snapshot file <WORD>
```

# clear snapshot job

**clear snapshot job <WORD>**

**Description:** Remove snapshot job

**Syntax:**

<i>WORD</i>	Snapshot job name
-------------	-------------------

**Command Mode:** exec : Exec Mode

**Command Path:**

```
# clear snapshot job <WORD>
```

# clear techsupport controllers

**clear techsupport controllers** <NUMBER> <WORD>

**Description:** Clear techsupport status for controllers

**Syntax:**

<1-32>	Controller id. Number range from=1 to=32
<i>WORD</i>	Techsupport collection time

**Command Mode:** exec : Exec Mode

**Command Path:**

```
# clear techsupport controllers <NUMBER> <WORD>
```

# clear techsupport switch

**clear techsupport switch** <NUMBER> <WORD>

**Description:** Clear techsupport status for switch

**Syntax:**

<101-4000>	Switch id. Number range from=101 to=4000
WORD	Techsupport collection time

**Command Mode:** exec : Exec Mode

**Command Path:**

```
# clear techsupport switch <NUMBER> <WORD>
```

# clear troubleshoot epext session report

**clear troubleshoot epext session <ession\_name> report**

**Description:** Remove all non-pending reports of a troubleshoot session

**Syntax:**

session	session
<i>ession_name</i>	Session name

**Command Mode:** exec : Exec Mode

**Command Path:**

```
# clear troubleshoot epext session <ession_name> report
```



# clear troubleshoot eptoe session report

**clear troubleshoot eptoe session <session\_name> report**

**Description:** Remove all non-pending reports of a troubleshoot session

**Syntax:**

<code>session</code>	session
<code>session_name</code>	Session name

**Command Mode:** exec : Exec Mode

**Command Path:**

```
# clear troubleshoot eptoe session <session_name> report
```

# clock display-format

**clock display-format local|utc**

**Description:** Configure Clock Display Format

**Syntax:**

local	Local display format
utc	UTC display format

**Command Mode:** configure : Configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# clock display-format local|utc
```

# clock show-offset

**clock show-offset enable**

**Description:** Enable/Disable Display of the Offset

**Syntax:**

enable	Enable/Disable Display of the Offset from UTC
--------	---

**Command Mode:** configure : Configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]  
(config)# clock show-offset enable
```

# clock timezone

**clock timezone** <timeZone>

**Description:** Configure clock timezone

**Syntax:**

<i>timeZone</i>	The Timezone Selection
-----------------	------------------------

**Command Mode:** configure : Configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# clock timezone <timeZone>
```

# cluster-device

**cluster-device** <WORD> [vcenter <WORD>] [vm <WORD>]

**Description:** Configure L4-L7 Cluster Device

**Syntax:**

<i>WORD</i>	device name (Max Size 64)
<i>WORD</i>	(Optional) vcenter name (Max Size 64)
<i>WORD</i>	(Optional) vm name (Max Size 128)

**Command Mode:** l4l7 cluster name : Add a L4-L7 Service Device Cluster

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# l4l7 cluster name <WORD> type <type> vlan-domain <domain-name> [service
<service>] [function <function>]
(config-cluster)# cluster-device <WORD> [vcenter <WORD>] [vm <WORD>]
```

# cluster-device query-device-health

**cluster-device <WORD> [vcenter <WORD>] [vm <WORD>] query-device-health**

**Description:** Re-query for Device Health

**Syntax:**

<i>WORD</i>	device name (Max Size 64)
<i>WORD</i>	(Optional) vcenter name (Max Size 64)
<i>WORD</i>	(Optional) vm name (Max Size 128)

**Command Mode:** l4l7 cluster name : Add a L4-L7 Service Device Cluster

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# l4l7 cluster name <WORD> type <type> vlan-domain <domain-name> [service
<service>] [function <function>]
(config-cluster)# cluster-device <WORD> [vcenter <WORD>] [vm <WORD>] query-device-health
```

# cluster-device query-device-statistics

**cluster-device** <WORD> [vcenter <WORD>] [vm <WORD>] query-device-statistics

**Description:** Re-query for Device Statistics

**Syntax:**

<i>WORD</i>	device name (Max Size 64)
<i>WORD</i>	(Optional) vcenter name (Max Size 64)
<i>WORD</i>	(Optional) vm name (Max Size 128)

**Command Mode:** l4l7 cluster name : Add a L4-L7 Service Device Cluster

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# l4l7 cluster name <WORD> type <type> vlan-domain <domain-name> [service
<service>] [function <function>]
(config-cluster)# cluster-device <WORD> [vcenter <WORD>] [vm <WORD>] query-device-statistics
```

# cluster-device query-device-validation

**cluster-device <WORD> [vcenter <WORD>] [vm <WORD>] query-device-validation**

**Description:** Re-query for Device Validation

**Syntax:**

<i>WORD</i>	device name (Max Size 64)
<i>WORD</i>	(Optional) vcenter name (Max Size 64)
<i>WORD</i>	(Optional) vm name (Max Size 128)

**Command Mode:** l4l7 cluster name : Add a L4-L7 Service Device Cluster

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# l4l7 cluster name <WORD> type <type> vlan-domain <domain-name> [service
<service>] [function <function>]
(config-cluster)# cluster-device <WORD> [vcenter <WORD>] [vm <WORD>] query-device-validation
```



# cluster-interface

**cluster-interface** <WORD> [vlan <NUMBER>]

**Description:** Configure L4-L7 Cluster Interface

**Syntax:**

<i>WORD</i>	Cluster interface name (Max Size 16)
<vlan>	(Optional) Static Encap/VLAN to user for this cluster interface. Number range from=1 to=4094

**Command Mode:** l4l7 cluster name : Add a L4-L7 Service Device Cluster

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# l4l7 cluster name <WORD> type <type> vlan-domain <domain-name> [service
<service>] [function <function>]
(config-cluster)# cluster-interface <WORD> [vlan <NUMBER>]
```

# comm-policy

**comm-policy <WORD>**

**Description:** Configure any communication policy, ssh/telnet/shellinabox/http/https

**Syntax:**

<i>WORD</i>	Provide a communication policy name
-------------	-------------------------------------

**Command Mode:** configure : Configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# comm-policy <WORD>
```

# configure-avs

## configure-avs

**Description:** Configure a VMware Domain as AVS (N1K) type

**Command Mode:** vmware-domain : Create a VMM VMware Domain

### Command Path:

```
# configure [['terminal', 't']]
(config)# vmware-domain <WORD>
(config-vmware)# configure-avs
```

# configure-dvs

## configure-dvs

**Description:** Configure a VMware Domain as DVS type

**Command Mode:** vmware-domain : Create a VMM VMware Domain

### Command Path:

```
# configure [['terminal', 't']]
(config)# vmware-domain <WORD>
(config-vmware)# configure-dvs
```

# configure

**configure** [['terminal', 't']]

**Description:** Configuration Mode

**Syntax:**

terminal	(Optional) configure using terminal
terminal	(Optional) configure using terminal

**Command Mode:** exec : Exec Mode

**Command Path:**

```
# configure [['terminal', 't']]
```

## connection intra service

**connection** <WORD> intra\_service service1 <WORD> connector1 <WORD> service2 <WORD> connector2 <WORD>

**Description:** Configure l4l7 connection between service nodes

**Syntax:**

<i>WORD</i>	Connection name (Max Size 64)
service1	Service node 1
<i>WORD</i>	service-node-1 name (Max Size 64)
connector1	Connector on service node 1 that connects to the connection
<i>WORD</i>	service-node-1 connector name (Max Size 64)
service2	Service node 2
<i>WORD</i>	service-node-2 name (Max Size 64)
connector2	Connector on service node 2 that connects to the connection
<i>WORD</i>	service-node-2 connector name (Max Size 64)

**Command Mode:** l4l7 graph : Configure L4-L7 Service Graph

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# l4l7 graph <WORD> [contract <contract-option>]
(config-graph)# connection <WORD> intra_service service1 <WORD> connector1 <WORD> service2
<WORD> connector2 <WORD>
```

# connection terminal

**connection <WORD> terminal provider|consumer service <WORD> connector <WORD>**

**Description:** Configure l4l7 connection to terminal

**Syntax:**

<i>WORD</i>	Connection name (Max Size 64)
provider	Provider terminal
consumer	Consumer terminal
service	Service node that connects to a terminal node
<i>WORD</i>	service node name (Max Size 64)
connector	Connector on the service node that connects to a terminal node
<i>WORD</i>	connector name (Max Size 64)

**Command Mode:** l4l7 graph : Configure L4-L7 Service Graph

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# l4l7 graph <WORD> [contract <contract-option>]
(config-graph)# connection <WORD> terminal provider|consumer service <WORD> connector <WORD>
```

# connector

**connector <WORD> [cluster-interface <WORD>]**

**Description:** Configure Connector for a Service Node

**Syntax:**

<i>WORD</i>	Connector name (Max Size 64)
<i>WORD</i>	(Optional) Cluster Interface name (Max Size 16)

**Command Mode:** service : Configure L4-L7 Service

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# 1417 graph <WORD> [contract <contract-option>]
(config-graph)# service <WORD> [device-cluster-tenant <WORD>] [device-cluster <WORD>] [mode
<Available Modes>]
(config-service)# connector <WORD> [cluster-interface <WORD>]
```



# console

**console [severity severity <severity-value>]**

**Description:** Enable the logging to console (switches only)

**Syntax:**

<i>severity &lt;severity-value&gt;</i>	(Optional) The severity level for the logs
--	--

**Command Mode:** logging : Logging server group configuration mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# logging server-group <WORD>
(config-logging)# console [severity severity <severity-value>]
```

# contract-id

**contract-id <WORD>**

**Description:** Service contract id of the customer

**Syntax:**

<i>WORD</i>	The contract id (Max Size 512) surrounded by quotes
-------------	---

**Command Mode:** destination-profile : Configure destination profile Parameters

**Command Path:**

```
# configure [['terminal', 't']]
(config)# callhome common
(config-callhome)# destination-profile
(config-callhome-destnprof)# contract-id <WORD>
```

# contract

**contract** <WORD> [type <type>]

**Description:** Configure binary contracts between Application EPGs

**Syntax:**

<i>WORD</i>	Name of the contract to create (Max Size 64)
<i>type</i>	(Optional) whitelist (permit) or blacklist(deny) or oob-mgmt type of contract

**Command Mode:** tenant : tenant configuration mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# contract <WORD> [type <type>]
```

# contract consumer

**contract consumer <WORD> [qos-class <WORD>]**

**Description:** Add the supplied contract to be consumed by any AEPg on this VRF

**Syntax:**

<i>WORD</i>	Whitelist contract to consume (Max Size 64)
<i>WORD</i>	(Optional) Qos Level

**Command Mode:** vrf : Configuration for vrf

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# vrf context <WORD>
(config-tenant-vrf)# contract consumer <WORD> [qos-class <WORD>]
```

**contract consumer <WORD> [imported] [label <WORD>] [qos-class <WORD>]**

**Description:** Add a contract consumed by this AEPg, along with an optional list of subject labels

**Syntax:**

<i>WORD</i>	Whitelist contract to consume (Max Size 64)
imported	(Optional) used for contracts imported from other tenants
<i>WORD</i>	(Optional) Per-Contract label (Max Size 64)
<i>WORD</i>	(Optional) Qos Level

**Command Mode:** epg : AEPg configuration mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# application <WORD>
(config-tenant-app)# epg <WORD> [type <WORD>]
(config-tenant-app-epg)# contract consumer <WORD> [imported] [label <WORD>] [qos-class <WORD>]
```

**contract consumer <contractName> [imported] [label <WORD>]**

**Description:** Add a contract consumed by this EPG, along with an optional list of subject labels

**Syntax:**

<i>&lt;contractName&gt;</i>	Whitelist contract to consume
imported	(Optional) Used for contracts imported from other tenants
<i>WORD</i>	(Optional) Per-Contract label (Max Size 64)

**Command Mode:** external-l3 epg : External L3 EPG configuration mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# external-l3 epg <WORD> [oob-mgmt] [l3out <l3out>]
(config-tenant-l3ext-epg)# contract consumer <contractName> [imported] [label <WORD>]
```

**contract consumer <contractName> [label <label>]**

**Description:** Add a contract consumed by this In-band Epg, along with an optional list of subject labels

**Syntax:**

<i>&lt;contractName&gt;</i>	link to contract name
<i>label</i>	(Optional)

**Command Mode:** inband-mgmt : Enter Inside In-band management mode to modify inband properties or create new inband

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# inband-mgmt epg <WORD>
(config-inb-epg)# contract consumer <contractName> [label <label>]
```

**contract consumer <WORD> [imported] [label <WORD>] [qos-class <WORD>]**

**Description:** Add a contract consumed by this EPG, along with an optional list of subject labels

**Syntax:**

<i>WORD</i>	Whitelist contract to consume (Max Size 64)
imported	(Optional) used for contracts imported from other tenants
<i>WORD</i>	(Optional) Per-Contract label (Max Size 64)
<i>WORD</i>	(Optional) Qos Level

**Command Mode:** external-l2 : L2 external EPG creation/configuration

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# external-l2 epg <WORD>
(config-tenant-l2ext-epg)# contract consumer <WORD> [imported] [label <WORD>] [qos-class
<WORD>]
```

**contract consumer <WORD> [imported]****Description:** Add a consumer contract**Syntax:**

<i>WORD</i>	Whitelist contract to consume
imported	(Optional) Used for contracts imported from other tenants

**Command Mode:** match prefix-list : Match entries of a prefix-list**Command Path:**

```
# configure [['terminal', 't']]
(config)# leaf <101-4000>
(config-leaf)# vrf context tenant <WORD> vrf <WORD> [l3out <l3out>]
(config-leaf-vrf)# route-map <WORD>
(config-leaf-vrf-route-map)# match prefix-list <WORD>
(config-leaf-vrf-route-map-match)# contract consumer <WORD> [imported]
```

# contract deny

## contract deny <WORD>

**Description:** Attach a taboo contract to this AEPg

**Syntax:**

<i>WORD</i>	Name of the blacklist contract (Max Size 64)
-------------	--

**Command Mode:** epg : AEPg configuration mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# application <WORD>
(config-tenant-app)# epg <WORD> [type <WORD>]
(config-tenant-app-epg)# contract deny <WORD>
```

## contract deny <contractName>

**Description:** Attach a taboo contract to this EPG

**Syntax:**

<contractName>	Name of the blacklist contract
----------------	--------------------------------

**Command Mode:** external-l3 epg : External L3 EPG configuration mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# external-l3 epg <WORD> [oob-mgmt] [l3out <l3out>]
(config-tenant-l3ext-epg)# contract deny <contractName>
```

## contract deny <contractName>

**Description:** Attach a taboo contract to this InBand Epg

**Syntax:**

<contractName>	Name of the blacklist contract
----------------	--------------------------------

**Command Mode:** inband-mgmt : Enter Inside In-band management mode to modify inband properties or create new inband

**Command Path:**

```
# configure [['terminal', 't']]
```

```
(config)# tenant <WORD>
(config-tenant)# inband-mgmt epg <WORD>
(config-inb-epg)# contract deny <contractName>
```

### contract deny <WORD>

**Description:** Attach a taboo contract to this EPG

#### Syntax:

<i>WORD</i>	Name of the blacklist contract (Max Size 64)
-------------	--

**Command Mode:** external-l2 : L2 external EPG creation/configuration

#### Command Path:

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# external-l2 epg <WORD>
(config-tenant-l2ext-epg)# contract deny <WORD>
```



# contract enforce

**contract enforce [ingress] [egress]**

**Description:** Add a policy enforcement

**Syntax:**

ingress	(Optional) Policy will be applied at the Ingress Node
egress	(Optional) Policy will be applied at the Egress Node

**Command Mode:** vrf : Configuration for vrf

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# vrf context <WORD>
(config-tenant-vrf)# contract enforce [ingress] [egress]
```

# contract provider

**contract provider <WORD> [qos-class <WORD>]**

**Description:** Add the supplied contract to be provided by any AEPg on this VRF

**Syntax:**

<i>WORD</i>	Whitelist contract provided (Max Size 64)
<i>WORD</i>	(Optional) Qos Level

**Command Mode:** vrf : Configuration for vrf

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# vrf context <WORD>
(config-tenant-vrf)# contract provider <WORD> [qos-class <WORD>]
```

**contract provider <WORD> [label <WORD>] [qos-class <WORD>]**

**Description:** Contract provided by this AEPg, along with an optional list of subject labels

**Syntax:**

<i>WORD</i>	Whitelist contract to provide (Max Size 64)
<i>WORD</i>	(Optional) Per-Contract label (Max Size 64)
<i>WORD</i>	(Optional) Qos Level

**Command Mode:** epg : AEPg configuration mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# application <WORD>
(config-tenant-app)# epg <WORD> [type <WORD>]
(config-tenant-app-epg)# contract provider <WORD> [label <WORD>] [qos-class <WORD>]
```

**contract provider <contractName> [label <WORD>]**

**Description:** Add a contract provided by this EPG, along with an optional list of subject labels

**Syntax:**

<contractName>	Whitelist contract to provide
----------------	-------------------------------

<i>WORD</i>	(Optional) Per-Contract label (Max Size 64)
-------------	---

**Command Mode:** external-l3 epg : External L3 EPG configuration mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# external-l3 epg <WORD> [oob-mgmt] [l3out <l3out>]
(config-tenant-l3ext-epg)# contract provider <contractName> [label <WORD>]
```

**contract provider <contractName> [label <label>]**

**Description:** Add a contract provided by this AEPg, along with an optional list of subject labels

**Syntax:**

<i>&lt;contractName&gt;</i>	link to contract name
<i>label</i>	(Optional)

**Command Mode:** inband-mgmt : Enter Inside In-band management mode to modify inband properties or create new inband

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# inband-mgmt epg <WORD>
(config-inb-epg)# contract provider <contractName> [label <label>]
```

**contract provider <WORD> [label <WORD>] [qos-class <WORD>]**

**Description:** Add a contract provided by this EPG, along with an optional list of subject labels

**Syntax:**

<i>WORD</i>	Whitelist contract to provide (Max Size 64)
<i>WORD</i>	(Optional) Per-Contract label (Max Size 64)
<i>WORD</i>	(Optional) Qos Level

**Command Mode:** external-l2 : L2 external EPG creation/configuration

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# external-l2 epg <WORD>
(config-tenant-l2ext-epg)# contract provider <WORD> [label <WORD>] [qos-class <WORD>]
```

**contract provider <contractName>****Description:** Add a contract provided by this AEPg, along with an optional list of subject labels**Syntax:**

<i>&lt;contractName&gt;</i>	Name of the contract to be provided
-----------------------------	-------------------------------------

**Command Mode:** oob-mgmt : Creates/Modify the out of band mgmt under the tenant mgmt**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# oob-mgmt epg <epgval>
(config-oob-epg)# contract provider <contractName>
```

**contract provider <WORD>****Description:** Add a provider contract**Syntax:**

<i>WORD</i>	Whitelist contract to provide
-------------	-------------------------------

**Command Mode:** match prefix-list : Match entries of a prefix-list**Command Path:**

```
# configure [['terminal', 't']]
(config)# leaf <101-4000>
(config-leaf)# vrf context tenant <WORD> vrf <WORD> [l3out <l3out>]
(config-leaf-vrf)# route-map <WORD>
(config-leaf-vrf-route-map)# match prefix-list <WORD>
(config-leaf-vrf-route-map-match)# contract provider <WORD>
```

# controller-group

**controller-group**

**Description:** Controller Upgrade Configuration Mode

**Command Mode:** firmware : Firmware upgrade configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# firmware
(config-firmware)# controller-group
```

# controller

**controller**

**Description:** Configure Controller Node

**Syntax:**

<i>arg</i>	
------------	--

**Command Mode:** configure : Configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]  
(config)# controller
```

# cost

**cost** <NUMBER>

**Description:** Set OSPF cost for the interface

**Syntax:**

<0-65535>	OSPF cost. Number range from=0 to=65535
-----------	---

**Command Mode:** template ospf interface-policy : Configure OSPF Interface Policy Templates

**Command Path:**

```
# configure [['terminal', 't']]
(config)# leaf <101-4000>
(config-leaf)# template ospf interface-policy <WORD> tenant <WORD>
(config-interface-policy)# cost <NUMBER>
```

# country

**country** <WORD>

**Description:** Set The two-letter ISO code for the country where the organization is located.

**Syntax:**

<WORD>	The two-letter ISO code for the country where the organization is located
--------	---

**Command Mode:** csr : A csr mode to create and hold an SSL certificate

**Command Path:**

```
# configure [['terminal', 't']]
(config)# crypto keyring <WORD>
(config-keyring)# csr
(config-csr)# country <WORD>
```



# crypto aes

**crypto aes**

**Description:** AES encryption configuration

**Command Mode:** configure : Configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]  
(config)# crypto aes
```

# crypto ca

**crypto ca** <WORD>

**Description:** Configure certificate authority related information

**Syntax:**

<i>WORD</i>	Trustpoint label (Max Size 64)
-------------	--------------------------------

**Command Mode:** configure : Configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# crypto ca <WORD>
```

# crypto keyring

**crypto keyring <WORD>**

**Description:** A keyring mode to create and hold an SSL certificate

**Syntax:**

<i>WORD</i>	Provide a keyring name
-------------	------------------------

**Command Mode:** configure : Configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# crypto keyring <WORD>
```

# crypto webtoken

**crypto webtoken**

**Description:** The cryptographic data used for generating and verifying web tokens.

**Command Mode:** configure : Configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]  
(config)# crypto webtoken
```

## CSR

### csr

**Description:** A csr mode to create and hold an SSL certificate

**Command Mode:** crypto keyring : A keyring mode to create and hold an SSL certificate

**Command Path:**

```
# configure [['terminal', 't']]
(config)# crypto keyring <WORD>
(config-keyring)# csr
```

# customer-id

**customer-id** <WORD>

**Description:** The customer id

**Syntax:**

<i>WORD</i>	The customer id (Max Size 512) surrounded by quotes
-------------	---

**Command Mode:** destination-profile : Configure destination profile Parameters

**Command Path:**

```
# configure [['terminal', 't']]
(config)# callhome common
(config-callhome)# destination-profile
(config-callhome-destnprof)# customer-id <WORD>
```