# F Commands

# fabric-external

**fabric-external <NUMBER>**

**Description:** Intrasite/Intersite Connectivity Profile

**Syntax:**

| | |
|---|---|
| *<ID>* | Fabric ID. Number range from=0 to=9223372036854775807 |

**Command Mode:** configure : Configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# fabric-external <NUMBER>
```

# fabric-interface ethernet

### fabric-interface ethernet

**Description:** Ethernet IEEE 802.3z

**Syntax:**

| | |
|---|---|
| *arg* | interface range |

**Command Mode:** leaf : Configure Leaf Node

**Command Path:**

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

### fabric-interface ethernet

**Description:** Ethernet IEEE 802.3z

**Syntax:**

| | |
|---|---|
| *arg* | interface range |

**Command Mode:** spine : Configure Spine Node

**Command Path:**

```
# configure [['terminal', 't']]
(config)# spine <101-4000>
(config-spine)# fabric-interface ethernet
```

# fabric clear

**fabric <nodes> clear <scope>**

**Description:** clear switch information

**Syntax:**

| | |
|---|---|
| <*nodes*> | node list |
| <*scope*> | switch command |

**Command Mode:** exec : Exec Mode

**Command Path:**

```
# fabric <nodes> clear <scope>
```

**Usage Notes:**

When clearing virtual fibre channel (VFC) interface counters using the **fabric** *node* **clear counters interface vfc** *slot/port* command, allow up to eight seconds after sending the command for the counters to clear.

# fabric show

**fabric <nodes> show <scope>**

**Description:** Show switch information

**Syntax:**

| | |
|---|---|
| <*nodes*> | node list |
| <*scope*> | switch command |

**Command Mode:** exec : Exec Mode

**Command Path:**

```
# fabric <nodes> show <scope>
```

# fail-auth-epg

**fail-auth-epg tenant <arg> application <arg> epg <arg>**

**Description:** Set default EPg name if authentication fails

**Syntax:**

| | |
|---|---|
| tenant | Tenant hosting the EPg |
| *arg* | |
| application | Application Name |
| *arg* | |
| epg | Deploy EPg if authentication fails |
| *arg* | |

**Command Mode:** policy-map type port-authentication : Create node level port authentication policy

**Command Path:**

```
# configure [['terminal', 't']]
(config)# policy-map type port-authentication <WORD>
(config-pmap-port-authentication)# fail-auth-epg tenant <> application <> epg <>
```

# fail-auth-vlan

**fail-auth-vlan <vlan-id>**

**Description:** Set default vlan encap if authentication fails

**Syntax:**

| | |
|---|---|
| <*vlan-id*> | Configure Vlan ID |

**Command Mode:** policy-map type port-authentication : Create node level port authentication policy

**Command Path:**

```
# configure [['terminal', 't']]
(config)# policy-map type port-authentication <WORD>
(config-pmap-port-authentication)# fail-auth-vlan <vlan-id>
```

# fc-channel-group

### fc-channel-group <WORD>

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

**Syntax:**

| | |
|---|---|
| *WORD* | Port-Channel name (Max Size 64) |

**Command Mode:** interface fc : FC Interface

**Command Path:**

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

### fc-channel-group <WORD>

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

**Syntax:**

| | |
|---|---|
| *WORD* | Port-Channel name (Max Size 64) |

**Command Mode:** interface fc : FC Interface

**Command Path:**

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

# fc-policy-group

### fc-policy-group <WORD>

**Description:** Associate an FC Interface Policy Group to this Interface Group

**Syntax:**

| | |
|---|---|
| *WORD* | FC Interface Policy Group Name (Max Size 64) |

**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)# fc-policy-group <WORD>
```

### fc-policy-group <WORD>

**Description:** Convert interface to FC and Associate FC Policy Group

**Syntax:**

| | |
|---|---|
| *WORD* | FC Interface Policy Group Name (Max Size 64) |

**Command Mode:** interface fc : FC Interface

**Command Path:**

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

### fc-policy-group <WORD>

**Description:** Convert interface to FC and Associate FC Policy Group

**Syntax:**

| | |
|---|---|
| *WORD* | FC Interface Policy Group Name (Max Size 64) |

**Command Mode:** interface fc : FC Interface

**Command Path:**

```
# configure [['terminal', 't']]
(config)# spine <101-4000>
(config-spine)# interface fc <ifRange>
(config-leaf-fc-if)# fc-policy-group <WORD>
```

# fc

### fc

**Description:** Enable fc BD

**Command Mode:** bridge-domain : Configuration for bridge-domain

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# bridge-domain <WORD>
(config-tenant-bd)# fc
```

# fcoe

### fcoe vsan <NUMBER> vlan <NUMBER>

**Description:** Configure fcoe parameters

**Syntax:**

| | |
|---|---|
| vsan | Configure Vsan ID |
| <*vsan-id*> | Configure Vsan ID. Number range from=1 to=4093 |
| vlan | Configure Vlan ID |
| <*vlan-id*> | Configure Vlan ID. Number range from=1 to=4094 |

**Command Mode:** vsan-domain : Configure vsan domain

**Command Path:**

```
# configure [['terminal', 't']]
(config)# vsan-domain <name>
(config-vsan)# fcoe vsan <NUMBER> vlan <NUMBER>
```

### fcoe fcmap <WORD>

**Description:** Configure fcoe parameters

**Syntax:**

| | |
|---|---|
| fcmap | FC Map |
| *WORD* | Configure FC Map, range is from 0E:FC:00 to 0E:FC:FF |

**Command Mode:** template fc-fabric-policy : Configure FC Fabric Policy(Max Size 64)

**Command Path:**

```
# configure [['terminal', 't']]
(config)# template fc-fabric-policy <WORD>
(config-fc-fabric-policy)# fcoe fcmap <WORD>
```

### fcoe vsan <NUMBER> vlan <NUMBER>

**Description:** Configure fcoe parameters

**Syntax:**

| | |
|---|---|
| vsan | Configure Vsan ID |
| <*vsan-id*> | Configure Vsan ID. Number range from=1 to=4093 |
| vlan | Configure Vlan ID |

| | |
|---|---|
| *<vlan-id>* | Configure Vlan ID. Number range from=1 to=4094 |

**Command Mode:** template vsan-attribute : Configure Vsan Attributes(Max Size 64)

**Command Path:**

```
# configure [['terminal', 't']]
(config)# template vsan-attribute <WORD>
(config-vsan-attr)# fcoe vsan <NUMBER> vlan <NUMBER>
```

# fcoe fcmap

### fcoe fcmap <WORD>

**Description:** Configure FC Map

**Syntax:**

| | |
|---|---|
| *WORD* | Configure FC Map, range is from 0E:FC:00 to 0E:FC:FF |

**Command Mode:** leaf : Configure Leaf Node

**Command Path:**

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

### fcoe fcmap <WORD>

**Description:** Configure FC Map

**Syntax:**

| | |
|---|---|
| *WORD* | Configure FC Map, range is from 0E:FC:00 to 0E:FC:FF |

**Command Mode:** spine : Configure Spine Node

**Command Path:**

```
# configure [['terminal', 't']]
(config)# spine <101-4000>
(config-spine)# fcoe fcmap <WORD>
```

# fcoe fka-adv-period

### fcoe fka-adv-period <NUMBER>

**Description:** Configure FIP Keep Alive Interval

**Syntax:**

| | |
|---|---|
| <*interval*> | FIP Keep Alive Timer. Number range from=4 to=60 |

**Command Mode:** template fc-leaf-policy : Configure FC Leaf Policy(Max Size 64)

**Command Path:**

```
# configure [['terminal', 't']]
(config)# template fc-leaf-policy <WORD>
(config-fc-leaf-policy)# fcoe fka-adv-period <NUMBER>
```

### fcoe fka-adv-period <NUMBER>

**Description:** Configure FIP Keep Alive Interval

**Syntax:**

| | |
|---|---|
| <*interval*> | FIP Keep Alive Timer. Number range from=4 to=60 |

**Command Mode:** leaf : Configure Leaf Node

**Command Path:**

```
# configure [['terminal', 't']]
(config)# leaf <101-4000>
(config-leaf)# fcoe fka-adv-period <NUMBER>
```

### fcoe fka-adv-period <NUMBER>

**Description:** Configure FIP Keep Alive Interval

**Syntax:**

| | |
|---|---|
| <*interval*> | FIP Keep Alive Timer. Number range from=4 to=60 |

**Command Mode:** spine : Configure Spine Node

**Command Path:**

```
# configure [['terminal', 't']]
(config)# spine <101-4000>
(config-spine)# fcoe fka-adv-period <NUMBER>
```

# fcoe vsan vlan loadbalancing

### fcoe vsan <NUMBER> vlan <NUMBER> loadbalancing src-dst-id|src-dst-ox-id

**Description:** Configure loadbalancing

**Syntax:**

| | |
|---|---|
| vsan | Configure Vsan ID |
| <*vsan-id*> | Configure Vsan ID. Number range from=1 to=4093 |
| vlan | Configure Vlan ID |
| <*vlan-id*> | Configure Vlan ID. Number range from=1 to=4094 |
| src-dst-id | Load balaning based on src-dst-id |
| src-dst-ox-id | Load balaning based on the src-dst-ox-id |

**Command Mode:** vsan-domain : Configure vsan domain

**Command Path:**

```
# configure [['terminal', 't']]
(config)# vsan-domain <name>
(config-vsan)# fcoe vsan <NUMBER> vlan <NUMBER> loadbalancing src-dst-id|src-dst-ox-id
```

### fcoe vsan <NUMBER> vlan <NUMBER> loadbalancing src-dst-id|src-dst-ox-id

**Description:** Configure loadbalancing

**Syntax:**

| | |
|---|---|
| vsan | Configure Vsan ID |
| <*vsan-id*> | Configure Vsan ID. Number range from=1 to=4093 |
| vlan | Configure Vlan ID |
| <*vlan-id*> | Configure Vlan ID. Number range from=1 to=4094 |
| src-dst-id | Load balaning based on src-dst-id |
| src-dst-ox-id | Load balaning based on the src-dst-ox-id |

**Command Mode:** template vsan-attribute : Configure Vsan Attributes(Max Size 64)

**Command Path:**

```
# configure [['terminal', 't']]
(config)# template vsan-attribute <WORD>
(config-vsan-attr)# fcoe vsan <NUMBER> vlan <NUMBER> loadbalancing src-dst-id|src-dst-ox-id
```

# fctimer e-d-tov

### fctimer e-d-tov <NUMBER>

**Description:** Configure e_d_tov value

**Syntax:**

| | |
|---|---|
| <*interval*> | FC Fabric error detect timeout. Number range from=1000 to=4000 |

**Command Mode:** template fc-fabric-policy : Configure FC Fabric Policy(Max Size 64)

**Command Path:**

```
# configure [['terminal', 't']]
(config)# template fc-fabric-policy <WORD>
(config-fc-fabric-policy)# fctimer e-d-tov <NUMBER>
```

### fctimer e-d-tov <NUMBER>

**Description:** Configure e_d_tov value

**Syntax:**

| | |
|---|---|
| <*interval*> | FC Fabric error detect timeout. Number range from=1000 to=4000 |

**Command Mode:** leaf : Configure Leaf Node

**Command Path:**

```
# configure [['terminal', 't']]
(config)# leaf <101-4000>
(config-leaf)# fctimer e-d-tov <NUMBER>
```

### fctimer e-d-tov <NUMBER>

**Description:** Configure e_d_tov value

**Syntax:**

| | |
|---|---|
| <*interval*> | FC Fabric error detect timeout. Number range from=1000 to=4000 |

**Command Mode:** spine : Configure Spine Node

**Command Path:**

```
# configure [['terminal', 't']]
(config)# spine <101-4000>
(config-spine)# fctimer e-d-tov <NUMBER>
```

# fctimer r-a-tov

### fctimer r-a-tov <NUMBER>

**Description:** Configure r_a_tov value

**Syntax:**

| | |
|---|---|
| <*interval*> | FC Fabric resolution allocation timeout. Number range from=5000 to=10000 |

**Command Mode:** template fc-fabric-policy : Configure FC Fabric Policy(Max Size 64)

**Command Path:**

```
# configure [['terminal', 't']]
(config)# template fc-fabric-policy <WORD>
(config-fc-fabric-policy)# fctimer r-a-tov <NUMBER>
```

### fctimer r-a-tov <NUMBER>

**Description:** Configure r_a_tov value

**Syntax:**

| | |
|---|---|
| <*interval*> | FC Fabric resolution allocation timeout. Number range from=5000 to=10000 |

**Command Mode:** leaf : Configure Leaf Node

**Command Path:**

```
# configure [['terminal', 't']]
(config)# leaf <101-4000>
(config-leaf)# fctimer r-a-tov <NUMBER>
```

### fctimer r-a-tov <NUMBER>

**Description:** Configure r_a_tov value

**Syntax:**

| | |
|---|---|
| <*interval*> | FC Fabric resolution allocation timeout. Number range from=5000 to=10000 |

**Command Mode:** spine : Configure Spine Node

**Command Path:**

```
# configure [['terminal', 't']]
(config)# spine <101-4000>
(config-spine)# fctimer r-a-tov <NUMBER>
```

# feature

### feature analytics|netflow

**Description:** Select Netflow

**Syntax:**

| | |
|---|---|
| analytics | Select Analytics |
| netflow | Select Netflow |

**Command Mode:** node-control : Create a Node Control Policy

**Command Path:**

```
# configure [['terminal', 't']]
(config)# node-control policy <WORD>
(config-node)# feature analytics|netflow
```

# fex-interface-group

**fex-interface-group <WORD>**

**Description:** Configure Fex Interface Group

**Syntax:**

| | |
|---|---|
| *WORD* | Fex Interface Group Name (Max Size 64) |

**Command Mode:** fex-profile : Configure Fex Profile

**Command Path:**

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

# fex-profile

**fex-profile <WORD>**

**Description:** Configure Fex Profile

**Syntax:**

| | |
|---|---|
| *WORD* | Fex Profile Name (Max Size 64) |

**Command Mode:** configure : Configuration Mode

**Command Path:**

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

# fex

### fex associate <NUMBER> template <WORD>

**Description:** Configure Fex on the Interface

**Syntax:**

| | |
|---|---|
| associate | Associate the port to a FEX |
| *NUMBER* | Fex Number. Number range from=101 to=199 |
| template | Associate a template |
| *WORD* | Fex Template Name (Max Size 64) |

**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)# fex associate <NUMBER> template <WORD>
```

### fex associate <arg>

**Description:** Configure Fex on the Interface

**Syntax:**

| | |
|---|---|
| associate | Associate the port to a FEX |
| *arg* | Fex Number. Number range from=101 to=199 |

**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)# fex associate <>
```

### fex associate <arg>

**Description:** Configure Fex on the Interface

**Syntax:**

| | |
|---|---|
| associate | Associate the port to a FEX |
| *arg* | Fex Number. Number range from=101 to=199 |

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

**Command Path:**

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

# file

### file <FILENAME>

**Description:** Snapshot file name

**Syntax:**

| | |
|---|---|
| *FILENAME* | Snapshot file name |

**Command Mode:** snapshot download : Configuration snapshot download setup mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# snapshot download <WORD>
(config-download)# file <FILENAME>
```

### file <FILENAME>

**Description:** Snapshot file name

**Syntax:**

| | |
|---|---|
| *FILENAME* | Snapshot file name |

**Command Mode:** snapshot import : Configuration import setup mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# snapshot import <WORD>
(config-import)# file <FILENAME>
```

### file <FILENAME>

**Description:** Snapshot file name

**Syntax:**

| | |
|---|---|
| *FILENAME* | Snapshot file name |

**Command Mode:** snapshot upload : Configuration snapshot upload setup mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# snapshot upload <WORD>
(config-upload)# file <FILENAME>
```

# filter

### filter <WORD>

**Description:** Set the LDAP filter to be used in a user search

**Syntax:**

| | |
|---|---|
| <*WORD*> | filter used in user search (Max Size 63) |

**Command Mode:** ldap-server host : LDAP server DNS name or IP address

**Command Path:**

```
# configure [['terminal', 't']]
(config)# ldap-server host <A.B.C.D|A:B::C:D|WORD>
(config-host)# filter <WORD>
```

# filter tenant application

**filter tenant <tenant_name> application <application_name> epg <epg_name>**

**Description:** application

**Syntax:**

| | |
|---|---|
| tenant | tenant |
| *tenant_name* | tenant name (Max Size 63) |
| *application_name* | application name (Max Size 64) |
| epg | epg |
| *epg_name* | epg name (Max Size 64) |

**Command Mode:** source interface ethernet : Configure monitor for ethernet access interfaces

**Command Path:**

```
# configure [['terminal', 't']]
(config)# monitor access session <session_name>
(config-monitor-access)# source interface ethernet <ethernet> leaf <leaf Id>
(config-monitor-access-source)# filter tenant <tenant_name> application <application_name>
 epg <epg_name>
```

**filter tenant <tenant_name> application <application_name> epg <epg_name>**

**Description:** application

**Syntax:**

| | |
|---|---|
| tenant | tenant |
| *tenant_name* | tenant name (Max Size 63) |
| *application_name* | application name (Max Size 64) |
| epg | epg |
| *epg_name* | epg name (Max Size 64) |

**Command Mode:** source interface port-channel : Configure monitor for port-channel interfaces

**Command Path:**

```
# configure [['terminal', 't']]
(config)# monitor access session <session_name>
(config-monitor-access)# source interface port-channel <port-channel list> leaf <leaf Id>
[fex <fex Id>]
(config-monitor-access-source)# filter tenant <tenant_name> application <application_name>
 epg <epg_name>
```

### filter tenant <tenant_name> application <application_name> epg <epg_name>

**Description:** application

**Syntax:**

| | |
|---|---|
| tenant | tenant |
| *tenant_name* | tenant name (Max Size 63) |
| *application_name* | application name (Max Size 64) |
| epg | epg |
| *epg_name* | epg name (Max Size 64) |

**Command Mode:** source interface vpc : Configure monitor for VPC interfaces

**Command Path:**

```
# configure [['terminal', 't']]
(config)# monitor access session <session_name>
(config-monitor-access)# source interface vpc <vpc list> leaf <leaf Id1> <leaf Id2> [fex
<fex Ids>]
(config-monitor-access-source)# filter tenant <tenant_name> application <application_name>
 epg <epg_name>
```

# filter tenant bd

**filter tenant <tenant_name> bd <bd_name>**

**Description:** BD filter

**Syntax:**

| | |
|---|---|
| tenant | tenant |
| *tenant_name* | tenant name |
| *bd_name* | BD name |

**Command Mode:** source interface ethernet : Configure monitor for ethernet fabric interfaces

**Command Path:**

```
# configure [['terminal', 't']]
(config)# monitor fabric session <session_name>
(config-monitor-fabric)# source interface ethernet <ethernet> switch <switch Id>
(config-monitor-fabric-source)# filter tenant <tenant_name> bd <bd_name>
```

# filter tenant l3out

**filter tenant <tenant_name> l3out <L3Out name> address <IPv4 or IPv6 prefix format> [vlan <vlan>]**

**Description:** L3Out

**Syntax:**

| | |
|---|---|
| tenant | tenant |
| *tenant_name* | tenant name (Max Size 63) |
| *L3Out name* | L3Out name (Max Size 64) |
| address | IP prefix and network mask |
| *IPv4 or IPv6 prefix format* | IPv4 or IPv6 prefix format |
| *vlan* | (Optional) VLAN of the interface |

**Command Mode:** source interface ethernet : Configure monitor for ethernet access interfaces

**Command Path:**

```
# configure [['terminal', 't']]
(config)# monitor access session <session_name>
(config-monitor-access)# source interface ethernet <ethernet> leaf <leaf Id>
(config-monitor-access-source)# filter tenant <tenant_name> l3out <L3Out name> address <IPv4
 or IPv6 prefix format> [vlan <vlan>]
```

**filter tenant <tenant_name> l3out <L3Out name> address <IPv4 or IPv6 prefix format> [vlan <vlan>]**

**Description:** L3Out

**Syntax:**

| | |
|---|---|
| tenant | tenant |
| *tenant_name* | tenant name (Max Size 63) |
| *L3Out name* | L3Out name (Max Size 64) |
| address | IP prefix and network mask |
| *IPv4 or IPv6 prefix format* | IPv4 or IPv6 prefix format |
| *vlan* | (Optional) VLAN of the interface |

**Command Mode:** source interface port-channel : Configure monitor for port-channel interfaces

**Command Path:**

```
# configure [['terminal', 't']]
(config)# monitor access session <session_name>
```

```
(config-monitor-access)# source interface port-channel <port-channel list> leaf <leaf Id>
[fex <fex Id>]
(config-monitor-access-source)# filter tenant <tenant_name> l3out <L3Out name> address <IPv4
 or IPv6 prefix format> [vlan <vlan>]
```

# filter tenant vrf

**filter tenant <tenant_name> vrf <vrf_name>**

**Description:** VRF filter

**Syntax:**

| | |
|---|---|
| tenant | tenant |
| *tenant_name* | tenant name |
| *vrf_name* | vrf name |

**Command Mode:** source interface ethernet : Configure monitor for ethernet fabric interfaces

**Command Path:**

```
# configure [['terminal', 't']]
(config)# monitor fabric session <session_name>
(config-monitor-fabric)# source interface ethernet <ethernet> switch <switch Id>
(config-monitor-fabric-source)# filter tenant <tenant_name> vrf <vrf_name>
```

# fips mode

### fips mode enable

**Description:** Enable FIPS mode

**Syntax:**

| | |
|---|---|
| enable | Enable FIPS mode |

**Command Mode:** configure : Configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# fips mode enable
```

# firewall-logging

### firewall-logging server-group <WORD> [severity severity <severity-info>] [polling-interval <polling-interval>] [action-type <action-type>]

**Description:** Configure firewall-logging on AVS/AVE

**Syntax:**

| | |
|---|---|
| server-group | Specify server group name |
| *WORD* | Logging server-group name (Max Size 64) |
| *severity <severity-info>* | (Optional) Specify severity info |
| *polling-interval* | (Optional) Specify polling interval time in seconds. Number range from=60 to=86400 |
| *action-type* | (Optional) Specify action type |

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

**Command Path:**

```
# configure [['terminal', 't']]
(config)# vmware-domain <WORD> [delimiter <WORD>] [access-mode <access-mode>]
(config-vmware)# configure-avs
(config-vmware-avs)# firewall-logging server-group <WORD> [severity severity <severity-info>]
 [polling-interval <polling-interval>] [action-type <action-type>]
```

### firewall-logging server-group <WORD> [severity severity <severity-info>] [polling-interval <polling-interval>] [action-type <action-type>]

**Description:** Configure firewall-logging on AVS/AVE

**Syntax:**

| | |
|---|---|
| server-group | Specify server group name |
| *WORD* | Logging server-group name (Max Size 64) |
| *severity <severity-info>* | (Optional) Specify severity info |
| *polling-interval* | (Optional) Specify polling interval time in seconds. Number range from=60 to=86400 |
| *action-type* | (Optional) Specify action type |

**Command Mode:** configure-ave : Configure a Cisco AVE domain

**Command Path:**

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

```
(config-vmware)# configure-ave
(config-vmware-ave)# firewall-logging server-group <WORD> [severity severity <severity-info>]
 [polling-interval <polling-interval>] [action-type <action-type>]
```

# firewall

### firewall mode enabled|disabled|learning

**Description:** Configure firewall mode on AVS/AVE

**Syntax:**

| | |
|---|---|
| mode | firewall mode |
| enabled | Enabled mode |
| disabled | Disabled mode |
| learning | Learning mode |

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

**Command Path:**

```
# configure [['terminal', 't']]
(config)# vmware-domain <WORD> [delimiter <WORD>] [access-mode <access-mode>]
(config-vmware)# configure-avs
(config-vmware-avs)# firewall mode enabled|disabled|learning
```

### firewall mode enabled|disabled|learning

**Description:** Configure firewall mode on AVS/AVE

**Syntax:**

| | |
|---|---|
| mode | firewall mode |
| enabled | Enabled mode |
| disabled | Disabled mode |
| learning | Learning mode |

**Command Mode:** configure-ave : Configure a Cisco AVE domain

**Command Path:**

```
# configure [['terminal', 't']]
(config)# vmware-domain <WORD> [delimiter <WORD>] [access-mode <access-mode>]
(config-vmware)# configure-ave
(config-vmware-ave)# firewall mode enabled|disabled|learning
```

# firmware-version

### firmware-version <version>

**Description:** Set target firmware version

**Syntax:**

| | |
|---|---|
| <*version*> | firmware version |

**Command Mode:** controller-group : Controller Upgrade Configuration Mode

**Command Path:**

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

### firmware-version <version>

**Description:** Set target firmware version

**Syntax:**

| | |
|---|---|
| <*version*> | firmware version |

**Command Mode:** switch-group : Create switch firmware upgrade policy

**Command Path:**

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

# firmware

### firmware

**Description:** Firmware upgrade configuration Mode

**Command Mode:** configure : Configuration Mode

**Command Path:**

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

# firmware repository add

**firmware repository add <WORD>**

**Description:** Add firmware image to repository

**Syntax:**

| | |
|---|---|
| *WORD* | Firmware image filename(absolute path) |

**Command Mode:** exec : Exec Mode

**Command Path:**

```
# firmware repository add <WORD>
```

# firmware repository delete

### firmware repository delete <WORD>

**Description:** Remove firmware image from repository

**Syntax:**

| | |
|---|---|
| *WORD* | Firmware image name |

**Command Mode:** exec : Exec Mode

**Command Path:**

```
# firmware repository delete <WORD>
```

# firmware upgrade controller-group

### firmware upgrade controller-group

**Description:** Trigger controller-group upgrade

**Command Mode:** exec : Exec Mode

**Command Path:**

```
# firmware upgrade controller-group
```

# firmware upgrade switch-group

**firmware upgrade switch-group <WORD>**

**Description:** Trigger switch-group upgrade

**Syntax:**

| | |
|---|---|
| *WORD* | switch-group name (Max Size 64) |

**Command Mode:** exec : Exec Mode

**Command Path:**

```
# firmware upgrade switch-group <WORD>
```

# first-file

**first-file <FILENAME>**

**Description:** First snapshot file name

**Syntax:**

| | |
|---|---|
| *FILENAME* | First snapshot file name |

**Command Mode:** snapshot rollback : Configuration rollback setup mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# snapshot rollback <WORD>
(config-rollback)# first-file <FILENAME>
```

# first-hop-security

### first-hop-security

**Description:** Configuration for first hop security

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

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# first-hop-security
```

# first-hop-security security-policy

### first-hop-security security-policy <WORD>

**Description:** Associate the bridge domain with a first hop security policy

**Syntax:**

| | |
|---|---|
| *WORD* | first hop security policy name to be associated (Max Size 64) |

**Command Mode:** bridge-domain : Configuration for bridge-domain

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# bridge-domain <WORD>
(config-tenant-bd)# first-hop-security security-policy <WORD>
```

# first-hop-security trust-control

### first-hop-security trust-control <WORD>

**Description:** Bind the EPG to a trust control policy

**Syntax:**

| | |
|---|---|
| *WORD* | trust control to associate (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)# first-hop-security trust-control <WORD>
```

# first-name

### first-name <WORD>

**Description:** Set the first name of the locally-authenticated user.

**Syntax:**

| | |
|---|---|
| *WORD* | first name (Max Size 32) |

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

**Command Path:**

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

# flood-on-encapsulation

### flood-on-encapsulation

**Description:** Flood on encapsulation for EPG

**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)# flood-on-encapsulation
```

# flow-exporter

### flow-exporter <WORD>

**Description:** Configure external analytics reachability information

**Syntax:**

| | |
|---|---|
| *WORD* | Analytics config server name |

**Command Mode:** analytics : Configure external analytics reachability information

**Command Path:**

```
# configure [['terminal', 't']]
(config)# analytics cluster <WORD>
(config-analytics)# flow-exporter <WORD>
```

# flow direction

### flow direction ingress|egress|both

**Description:** Configure Netflow Direction (Valid only for AVS domain)

**Syntax:**

| | |
|---|---|
| ingress | Ingress Direction |
| egress | Egress Direction |
| both | Bidirectional |

**Command Mode:** vmware-domain : Associate EPG to a VMWare Domain

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# application <WORD>
(config-tenant-app)# epg <WORD> [type <WORD>]
(config-tenant-app-epg)# vmware-domain member <WORD> [encap <WORD>] [primary-encap <WORD>]
 [allow-micro-segmentation] [deploy <WORD>] [push <WORD>] [binding-type
staticBinding|dynamicBinding|ephemeral] [port-allocation fixed|elastic] [num-ports <WORD>]
 [delimiter <WORD>]
(config-tenant-app-epg-domain)# flow direction ingress|egress|both
```

# flow exporter

### flow exporter <WORD>

**Description:** Configure NetFlow Exporter Policy

**Syntax:**

| | |
|---|---|
| *WORD* | VMM Exporter Policy Name |

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

**Command Path:**

```
# configure [['terminal', 't']]
(config)# vmware-domain <WORD> [delimiter <WORD>] [access-mode <access-mode>]
(config-vmware)# configure-dvs
(config-vmware-dvs)# flow exporter <WORD>
```

### flow exporter <WORD>

**Description:** Configure NetFlow Exporter Policy

**Syntax:**

| | |
|---|---|
| *WORD* | VMM Exporter Policy Name |

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

**Command Path:**

```
# configure [['terminal', 't']]
(config)# vmware-domain <WORD> [delimiter <WORD>] [access-mode <access-mode>]
(config-vmware)# configure-avs
(config-vmware-avs)# flow exporter <WORD>
```

### flow exporter <WORD>

**Description:** Configure NetFlow Exporter Policy

**Syntax:**

| | |
|---|---|
| *WORD* | VMM Exporter Policy Name |

**Command Mode:** configure-ave : Configure a Cisco AVE domain

**Command Path:**

```
# configure [['terminal', 't']]
(config)# vmware-domain <WORD> [delimiter <WORD>] [access-mode <access-mode>]
(config-vmware)# configure-ave
(config-vmware-ave)# flow exporter <WORD>
```

### flow exporter <WORD> destination address <A.B.C.D or A:B::C:D> transport udp <dstPort>

**Description:** Configure Netflow Exporter

**Syntax:**

| | |
|---|---|
| *WORD* | Exporter Name (Max Size 64) |
| destination | Configure destination address |
| address | Configure destination address |
| *A.B.C.D or A:B::C:D* | IP address in format i.i.i.i or IPv6 address in format xxxx:xxxx, xxxx::xx |
| transport | Configure Transport Port |
| udp | Configure Transport Port |
| *dstPort* | Configure Transport Port |

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

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# flow exporter <WORD> destination address <A.B.C.D or A:B::C:D> transport
udp <dstPort>
```

### flow exporter <WORD> destination address <A.B.C.D or A:B::C:D> transport udp <dstPort>

**Description:** Configure Netflow Exporter

**Syntax:**

| | |
|---|---|
| *WORD* | Exporter Name (Max Size 64) |
| destination | Configure destination address |
| address | Configure destination address |
| *A.B.C.D or A:B::C:D* | IP address in format i.i.i.i or IPv6 address in format xxxx:xxxx, xxxx::xx |
| transport | Configure Transport Port |
| udp | Configure Transport Port |
| *dstPort* | Configure Transport Port |

**Command Mode:** configure : Configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# flow exporter <WORD> destination address <A.B.C.D or A:B::C:D> transport udp
<dstPort>
```

# flow monitor

### flow monitor enable

**Description:** Configure Netflow Monitor

**Syntax:**

| | |
|---|---|
| enable | Enable Netflow Monitor |

**Command Mode:** vmware-domain : Associate EPG to a VMWare Domain

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# application <WORD>
(config-tenant-app)# epg <WORD> [type <WORD>]
(config-tenant-app-epg)# vmware-domain member <WORD> [encap <WORD>] [primary-encap <WORD>]
 [allow-micro-segmentation] [deploy <WORD>] [push <WORD>] [binding-type
staticBinding|dynamicBinding|ephemeral] [port-allocation fixed|elastic] [num-ports <WORD>]
 [delimiter <WORD>]
(config-tenant-app-epg-domain)# flow monitor enable
```

### flow monitor <WORD>

**Description:** Configure Netflow Monitor

**Syntax:**

| | |
|---|---|
| *WORD* | Monitor Name (Max Size 64) |

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

**Command Path:**

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

### flow monitor <WORD>

**Description:** Configure Netflow Monitor

**Syntax:**

| | |
|---|---|
| *WORD* | Monitor Name (Max Size 64) |

**Command Mode:** configure : Configuration Mode

**Command Path:**

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

```
(config)# flow monitor <WORD>
```

# flow node-policy

### flow node-policy <WORD>

**Description:** Netflow Node Policy Configuration

**Syntax:**

| | |
|---|---|
| *WORD* | Netflow Node Policy Name (Max Size 64) |

**Command Mode:** template leaf-policy-group : Configure Leaf Policy Group

**Command Path:**

```
# configure [['terminal', 't']]
(config)# template leaf-policy-group <WORD>
(config-leaf-policy-group)# flow node-policy <WORD>
```

### flow node-policy <WORD>

**Description:** Node-policy name

**Syntax:**

| | |
|---|---|
| *WORD* | Netflow Node Policy Name (Max Size 64) |

**Command Mode:** leaf : Configure Leaf Node

**Command Path:**

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

### flow node-policy <WORD>

**Description:** Node-policy name

**Syntax:**

| | |
|---|---|
| *WORD* | Netflow Node Policy Name (Max Size 64) |

**Command Mode:** spine : Configure Spine Node

**Command Path:**

```
# configure [['terminal', 't']]
(config)# spine <101-4000>
(config-spine)# flow node-policy <WORD>
```

### flow node-policy <WORD>

**Description:** Configure Netflow Node Policy Parameters

**Syntax:**

| | |
|---|---|
| *WORD* | Netflow Node Policy Name (Max Size 64) |

**Command Mode:** configure : Configuration Mode

**Command Path:**

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

# flow record

### flow record <WORD>

**Description:** Configure Netflow Record

**Syntax:**

| | |
|---|---|
| *WORD* | Record Name (Max Size 64) |

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

**Command Path:**

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

### flow record <WORD>

**Description:** Configure Netflow Record

**Syntax:**

| | |
|---|---|
| *WORD* | Exporter Name (Max Size 64) |

**Command Mode:** configure : Configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# flow record <WORD>
```

# flow timeout collection

### flow timeout collection <arg>

**Description:** Collection time interval

**Syntax:**

| | |
|---|---|
| *arg* | Configure collection timeout value in seconds. Number range from=60 to=36000 |

**Command Mode:** flow node-policy : Configure Netflow Node Policy Parameters

**Command Path:**

```
# configure [['terminal', 't']]
(config)# flow node-policy <WORD>
(config-flow-node-pol)# flow timeout collection <>
```

# flow timeout template

**flow timeout template <arg>**

**Description:** Template time interval

**Syntax:**

| | |
|---|---|
| *arg* | Configure template timeout value in seconds. Number range from=60 to=64000 |

**Command Mode:** flow node-policy : Configure Netflow Node Policy Parameters

**Command Path:**

```
# configure [['terminal', 't']]
(config)# flow node-policy <WORD>
(config-flow-node-pol)# flow timeout template <>
```

# flow vm-exporter

**flow vm-exporter <WORD> destination address <A.B.C.D or A:B::C:D> transport udp <dstPort>**

**Description:** Configure NetFlow Exporter for VM Networking

**Syntax:**

| | |
|---|---|
| *WORD* | NetFlow Exporter Name (Max Size 64) |
| destination | Configure destination address |
| address | Configure destination address |
| *A.B.C.D or A:B::C:D* | IP address in format i.i.i.i or IPv6 address in format xxxx:xxxx, xxxx::xx |
| transport | Configure Transport Port |
| udp | Configure Transport Port |
| *dstPort* | Configure Transport Port |

**Command Mode:** configure : Configuration Mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# flow vm-exporter <WORD> destination address <A.B.C.D or A:B::C:D> transport udp
<dstPort>
```

# force-pwd-change

### force-pwd-change

**Description:** Force the user to change password in next login

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

**Command Path:**

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

# forged-transmits

### forged-transmits accept

**Description:** Enable/disable forged transmits on trunk

**Syntax:**

| | |
|---|---|
| accept | enable |

**Command Mode:** trunk-portgroup : Configure a trunk port group in the VMWare domain

**Command Path:**

```
# configure [['terminal', 't']]
(config)# vmware-domain <WORD> [delimiter <WORD>] [access-mode <access-mode>]
(config-vmware)# trunk-portgroup <>
(config-vmware-trunk)# forged-transmits accept
```

# format

### format xml|short-txt|aml

**Description:** Configure the format of the message

**Syntax:**

| | |
|---|---|
| xml | Xml |
| short-txt | Short-txt |
| aml | Aml |

**Command Mode:** destination : Configure destination Parameters

**Command Path:**

```
# configure [['terminal', 't']]
(config)# callhome common
(config-callhome)# destination-profile
(config-callhome-destnprof)# destination <WORD>
(config-callhome-destnprof-destn)# format xml|short-txt|aml
```

### format xml|short-txt|aml

**Description:** Configure the format of the message

**Syntax:**

| | |
|---|---|
| xml | Xml |
| short-txt | Short-txt |
| aml | Aml |

**Command Mode:** destination : Configure destination Parameters

**Command Path:**

```
# configure [['terminal', 't']]
(config)# smartcallhome common
(config-smartcallhome)# destination-profile
(config-callhome-destnprof)# destination <WORD>
(config-callhome-destnprof-destn)# format xml|short-txt|aml
```

### format xml|json

**Description:** Snapshot format: xml or json

**Syntax:**

| | |
|---|---|
| xml | XML format |

| | |
|---|---|
| json | JSON format |

**Command Mode:** snapshot export : Configuration export setup mode

**Command Path:**

```
# configure [['terminal', 't']]
(config)# snapshot export <WORD>
(config-export)# format xml|json
```

# forward-error-correction

### forward-error-correction <WORD>

**Description:** Forward Error Correction

**Syntax:**

| | |
|---|---|
| *WORD* | Forward Error Correction Mode |

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

**Command Path:**

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

### forward-error-correction <WORD>

**Description:** Forward Error Correction

**Syntax:**

| | |
|---|---|
| *WORD* | Forward Error Correction Mode |

**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)# forward-error-correction <WORD>
```

### forward-error-correction <WORD>

**Description:** Forward Error Correction

**Syntax:**

| | |
|---|---|
| *WORD* | Forward Error Correction Mode |

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

**Command Path:**

```
# configure [['terminal', 't']]
(config)# spine <101-4000>
(config-spine)# interface ethernet <ifRange>
(config-leaf-if)# forward-error-correction <WORD>
```

# function-profile

### function-profile <WORD>

**Description:** Configure function profile container

**Syntax:**

| | |
|---|---|
| *WORD* | Provide a container name for function profiles |

**Command Mode:** l4l7 resource-pool : Configure L4-L7 Service Resource Pool

**Command Path:**

```
# configure [['terminal', 't']]
(config)# tenant <WORD>
(config-tenant)# l4l7 resource-pool <WORD>
(config-resource-pool)# function-profile <WORD>
```

# fwdnonecn

### fwdnonecn enabled|disabled

**Description:** Set forwarding for Non ECN (Explicit congestion notification for WRED

**Syntax:**

| | |
|---|---|
| enabled | Enable non ECN forwarding |
| disabled | Disable non ECN forwarding |

**Command Mode:** algo : Configure the global QOS policies

**Command Path:**

```
# configure [['terminal', 't']]
(config)# qos parameters <WORD>
(config-qos)# algo wred|tail-drop
(config-qos-algo)# fwdnonecn enabled|disabled
```