V Commands

This chapter describes the Cisco Nexus 1000V commands that begin with V.

vem

To configure a Virtual Ethernet Module (VEM), use the **vem** command. To remove a VEM configuration, use the **no** form of this command.

vem *module-number* [- *module-number*]

no vem *module-number* [- *module-number*]

Syntax Description

module-number	Specifies a module number. The range of valid values is 3 to 66.

Defaults

None

Command Modes

Global configuration (config)

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Specify a range of VEMs by using a dash. For example, 3-9 or 20-30.

Examples

This example shows how to create a VEM and enter the VEM slot configuration mode:

```
n1000v# configure terminal
n1000v(config)# vem 10
```

```
n1000v(config-vem-slot)#
```

This example shows how to remove a VEM:

```
n1000v# configure terminal
n1000v(config)# no vem 10
n1000v(config)#
```

Related Commands

Command	Description
show module vem	Displays information about the VEM module.

version 9

To designate NetFlow export version 9 in the NetFlow exporter, use the **version 9** command. To remove version 9, use the **no** form of this command.

version 9

no version 9

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

NetFlow flow exporter configuration (config-flow-exporter)

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Examples

This example shows how to configure version 9 for a Netflow flow exporter:

```
n1000v# config t
n1000v(config)# flow exporter ExportTest
n1000v(config-flow-exporter)# version 9
n1000v(config-flow-exporter-version-9)#
```

This example shows how to remove version 9 from the Netflow flow exporter:

```
n1000v# config t
n1000v(config)# flow exporter ExportTest
n1000v(config-flow-exporter)# version 9
n1000v(config-flow-exporter-version-9)# no version 9
n1000v(config-flow-exporter)#
```

Related Commands

Command	Description
option exporter-stats timeout	Specifies a timeout period for resending NetFlow flow exporter data.
option interface-table timeout	Specifies a timeout period for resending the NetFlow flow exporter interface table.
template data timeout	Specifies a timeout period for resending NetFlow flow exporter template data.

Command	Description
flow exporter	Creates a Flexible NetFlow flow exporter.
flow record	Creates a Flexible NetFlow flow record.
flow monitor	Creates a Flexible NetFlow flow monitor.
show flow exporter	Displays information about the NetFlow flow exporter.
show flow record	Displays information about NetFlow flow records.
show flow monitor	Displays information about the NetFlow flow monitor.

virtual-service-domain

To classify and separate traffic for network services, use the **virtual-service-domain** command. To remove a virtual service domain, use the **no** form of this command.

virtual-service-domain *vsd-name*

no virtual-service-domain

Syntax Description

vsd-name	Creates and names a virtual service domain.

Defaults

None

Command Modes

Port profile configuration (config-port-prof)

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(2)	This command was introduced.

Examples

This example shows how to configure a port profile for a VSD:

```
n1000v# config t
n1000v(config)# port-profile vsd1_member
n1000v(config-port-prof)# vmware port-group
n1000v(config-port-prof)# switchport access vlan 315
n1000v(config-port-prof)# virtual-service-domain vsd1
n1000v(config-port-prof)# no shutdown
n1000v(config-port-prof)# state enabled
```

This example shows how to remove the virtual service domain configuration:

```
n1000v# config t
n1000v(config)# port-profile vsd1_member
n1000v(config-port-prof)# no virtual-service-domain vsd1
```

Related Commands

Command	Description
show virtual-service-domain	Displays a list of the VSDs currently configured in the VSM, including VSD names and port profiles.

vlan

To create a VLAN and enter the VLAN configuration mode, use the **vlan** command. To remove a VLAN, use the **no** form of this command.

vlan {*id* | **dot1Q tag native**}

no vlan {*id* | **dot1Q tag native**}

Syntax Description

id	VLAN identification number. The range of valid values is 1 to 4094.
dot1Q tag native	Specifies an IEEE 802.1Q virtual LAN.

Defaults

The default VLAN is VLAN 1.

Command Modes

Global configuration (config)

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Specify a VLAN range by using a dash. For example, 1-9 or 20-30.

Examples

This example shows how to create a VLAN and enter the VLAN configuration mode:

```
n1000v# configure terminal
n1000v(config)# vlan 10
n1000v(config-vlan)#
```

This example shows how to remove a VLAN:

```
n1000v# configure terminal
n1000v(config)# no vlan 10
n1000v(config)#
```

Related Commands

Command	Description
show vlan	Displays VTP VLAN status.

vlan policy deny

To enter the VLAN configuration mode and deny all VLAN access for the role, use the **vlan policy deny** command.

To remove the policy restrictions, use the **no** form of this command.

vlan policy deny

no vlan policy deny

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Role configuration (config-role)

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

After executing this command, access to any VLAN must be explicitly defined for this role by using the **permit vlan** command.

Examples

This example shows how to enter the VLAN configuration mode and deny all VLAN access for the role:

```
n1000v# config t
n1000v(config)# role name network-observer
n1000v(config-role)# vlan policy deny
n1000v(config-role-vlan)#
```

This example shows how to remove policy restrictions:

```
n1000v# config t
n1000v(config)# role name network-observer
n1000v(config-role)# no vlan policy deny
n1000v(config-role-vlan)#
```

Related Commands

Command	Description
role name	Specifies a user role and enters role configuration mode.

Command	Description
permit vlan	Specifies the VLAN that users assigned to this role can access.
show role	Displays the role configuration.

vmware dvs datacenter-name

To create a VMware virtual switch, use the **vmware dvs datacenter-name** command. To remove the virtual switch, use the **no** form of this command.

vmware dvs datacenter-name [*folder/*] *name*

no vmware dvs

Syntax Description

folder	(Optional) Name of the folder.
name	Switch name.

Defaults

None

Command Modes

SVS connection configuration (config-svs-conn)

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

To create a virtual switch, you must be in the SVS connection configuration mode. Use the **svs connection** command to create a connection and enter that mode. The number of SVS connections that can be created is limited to one.

After the VSM creates a DVS in the vCenter, if the ESX administrator changes the DVS folder name in the vCenter, the VSM administrator must manually update the DVS name in the VSM too using the **vmware dvs datacenter-name** command. This action is required because the DVS name is not automatically updated in the VSM, and if the names do not match, the connection between the VSM and DVS is broken.

Examples

This example shows how to create a VMware virtual switch:

```
n1000v# configure terminal
n1000v(config)# svs connect s1
n1000v(config-svs-conn)# vmware dvs datacenter-name dc1
n1000v(config-svs-conn)#
```

This example shows how to remove a VMware virtual switch:

```
n1000v# configure terminal
n1000v(config)# svs connect s1v
n1000v(config-svs-conn)# no vmware dvs datacenter-name dc1
n1000v(config-svs-conn)#
```

Related Commands

Command	Description
show svs	Displays SVS information.
show vmware	Displays VMware information.

vmware port-group

To create a VMware port group, use the **vmware port-group** command. To remove the VMware port group, use the **no** form of this command.

vmware port-group *name*

no vmware port-group *name*

Syntax Description

name	Specifies the name of the VMware port group.

Defaults

None

Command Modes

Port profile configuration (config-port-prof)

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

To create the VMware port group, you must be in port profile configuration mode.

Examples

This example shows how to create a VMware port group:

```
n1000v# configure terminal
n1000v(config)# port-profile testprofile
n1000v(config-port-prof)# vmware port-group testgroup
n1000v(config-port-prof)#
```

This example shows how to remove the VMware port group:

```
n1000v# configure terminal
n1000v(config)# port-profile testprofile
n1000v(config-port-prof)# no vmware port-group testgoup
n1000v(config-port-prof)#
```

Related Commands

Command	Description
show port-profile name	Displays configuration information about a particular port-profile.

vmware vc extension-key

To create an extension key, use the **vmware vc extension-key** command.

vmware vc extension-key *key*

Syntax Description		
	key	Extension key number. The range of valid values is 1 to 80.

Defaults

The key does not exist.

Command Modes

Global configuration (config)

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

An extension key is used to connect to an instance of Virtual Center.

Examples

This example shows how to create an extension key:

```
n1000v# configure terminal
n1000v(config)# vmware vc extension-key 10
n1000v(config)#
```

Related Commands

Command	Description
show vmware vc extension-key	Displays extension key information.

vmware vem upgrade complete

To clear the upgrade status, use the **vmware vem upgrade complete** command.

vmware vem upgrade complete

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Once you have cleared the upgrade status, you cannot repeat this procedure.

Examples

This example shows how to clear the upgrade status:

```
n1000v# vmware vem upgrade complete
n1000v#
```

Related Commands

Command	Description
show vmware vem upgrade status	Monitors the upgrade of the Virtual Ethernet Module (VEM) to a new software version.
vmware vem upgrade notify	Notifies the vCenter Server that the software on the Virtual Supervisor Module (VSM) has been upgraded.
vmware vem upgrade proceed	Begins the upgrade of the virtual machine (VM).

vmware vem upgrade notify

To notify the vCenter Server that the software on the Virtual Supervisor Module (VSM) has been upgraded, and that a Virtual Ethernet Module (VEM) upgrade is available, use the **vmware vem upgrade notify** command.

vmware vem upgrade notify

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Examples

This example shows how to notify the vCenter Server that the software on the Virtual Supervisor Module (VSM) has been upgraded, and that a VEM upgrade is available:

```
n1000v# vmware vem upgrade notify
n1000v#
```

Related Commands

Command	Description
show vmware vem upgrade status	Monitors the upgrade of the VEMs to a new software version.
vmware vem upgrade proceed	Begins the upgrade of the virtual machine (VM).
vmware vem upgrade complete	Clears the upgrade status.

vmware vem upgrade proceed

To begin the upgrade of the virtual machine (VM), use the **vmware vem upgrade proceed** command.

vmware vem upgrade proceed

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Examples

This example shows how to begin the upgrade of the VM:

```
n1000v# vmware vem upgrade proceed
n1000v#
```

Related Commands

Command	Description
show vmware vem upgrade status	Monitors the upgrade of the Virtual Ethernet Module (VEM) to a new software version.
vmware vem upgrade notify	Notifies the vCenter Server that the software on the Virtual Supervisor Module (VSM) has been upgraded.
vmware vem upgrade complete	Clears the upgrade status.

vxlan udp port

To configure a VXLAN user datagram protocol (UDP) port for VXLAN encapsulation, use the **vxlan udp port** command. To remove a VXLAN UDP port, use the **no** form of this command.

vxlan udp port [*port_number*]

no vlan udp port [*port_number*]

Syntax Description

port_number	VXLAN UDP destination port number. The range is from 1024 to 65535. The number that you specify for this command must be a port number that is used by VXLAN encapsulation. Port 4789 is used by the Internet Assigned Numbers Authority (IANA).

Defaults

The default port number is either 4789 or 8472, depending on the installation. See the Usage Guidelines for this command.

Command Modes

Global configuration (config)

SupportedUserRoles

network-admin

Command History

Release	Modification
5.2(3)SV3(1.1)	This command was introduced.

Usage Guidelines

You must permit this port through any intermediate firewall.

In Cisco Nexus 1000V for VMware Release 4.2(1)SV2(2.1) and earlier, the default UDP port number was 8472. Beginning with Release 5.2(1)SV3(1.1), the default UDP port number has changed to the IANA-approved UDP port number 4789. This change affects the Cisco Nexus 1000V for VMware software installation, upgrade, and VXLAN configuration in the following ways:

- When you upgrade to Release 5.2(1)SV3(1.1) from an earlier release that has VXLAN configured, the switch retains the UDP port number of 8472. You are not required to change the UDP number to 4789; however if you decide to change it, make sure that the VEMs are upgraded to Release 5.2(1)SV3(1.1) as well. Otherwise the **vxlan udp port** command is not available and you cannot change the UDP number.
- When you upgrade to Release 5.2(1)SV3(1.1) from an earlier release that does not have VXLAN configured, and then you configure VXLAN, the switch is configured with the default UDP port number 4789.
- When you perform a fresh Cisco Nexus 1000V for VMware installation of Release 5.2(1)SV3(1.1) and you configure VXLAN, the switch is configured with the default UDP port number 4789.

- You can change the UDP port number at any time using the **vxlan udp port** command. However, when upgrading to Release 5.2(1)SV3(1.1) from an earlier release, ensure that the VSM and VEMs are at the same release before using the **vxlan udp port** command. Otherwise the **vxlan udp port** command is not available and you cannot change the UDP port number.

Examples

This example shows how to configure a VXLAN UDP destination port:

```
n1000v# configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
n1000v(config)# vxlan udp port 4789
n1000v(config)#
```

This example shows how to remove a VXLAN UDP destination port:

```
n1000v# configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
n1000v(config)# no vxlan udp port 8472
n1000v(config)#
```

Related Commands

This command has no related commands.