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CHAPTER 1

Cisco Nexus 1000V Series Switch Commands

This chapter provides information about the VSG-related commands on the Nexus 1000V Switch.

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clear vsn connection

To clear VSG connections, use the **clear vsn connection** command.

```
clear vsn connection [module module-number]
```

Syntax Description	module	(Optional) Clears a specific module.
	<i>module-number</i>	(Optional) Module number. The range of values is from 3 to 66.

Defaults	None
----------	------

Command Modes	EXEC Global configuration (config)
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Supported User Roles	network-admin network-operator
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Command History	Release	Modification
	4.0(4)SV1(1)	This command was introduced.

Examples	This example shows how to clear VSG connections: <pre>vsm# clear vsn connection</pre>
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Related Commands	Command	Description
	show vsn	Displays VSG information.

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clear vsn statistics

To clear VSG statistics, use the **clear vsn statistics** command.

```
clear vsn statistics [module module-number | vlan vlan-number ip ip-address [module
module-number]]
```

Syntax Description		
module	(Optional)	Clears a module.
<i>module-number</i>	(Optional)	Module number. The range of values is from 3 to 66.
vlan	(Optional)	Clears a VLAN.
<i>vlan-number</i>	(Optional)	VLAN number.
ip	(Optional)	Clears a device at a specific IP address.
<i>ip-address</i>	(Optional)	IP address. The format is A.B.C.D.

Defaults None

Command Modes EXEC
Global configuration (config)

Supported User Roles network-admin
network-operator

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

Examples This example shows how to clear VSG statistics:
vsm# **clear vsn statistics**

Related Commands	Command	Description
	show vsn	Displays VSG information.

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switchport mode

To set the port mode of an interface, use the **switchport mode** command. To remove the port mode configuration, use the **no** form of this command.

```
switchport mode { access | private-vlan { host | promiscuous } | trunk }
```

```
no switchport mode { access | private-vlan { host | promiscuous } | trunk }
```

Syntax Description

access	Sets the port mode access.
private-vlan	Sets the port mode to private VLAN.
host	Sets the port mode private VLAN to host.
promiscuous	Sets the port mode private VLAN to promiscuous.
trunk	Sets the port mode to trunk.

Defaults

Switchport mode is not set.

Command Modes

Interface configuration (config-if)
Port profile configuration (config-port-prof)

Supported User Roles

network-admin

Command History

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

Examples

This example shows how to set the port mode of an interface:

```
vsm# configure
vsm(config)# interface vethernet 1
vsm(config-if)# switchport mode private-vlan host
vsm(config-if)#
```

This example shows how to remove the mode configuration:

```
vsm# configure
vsm(config)# interface vethernet 1
vsm(config-if)# no switchport mode private-vlan host
vsm(config-if)#
```

Related Commands

Command	Description
show interface	Displays interface information.

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switchport access vlan

To set the access mode of an interface, use the **switchport access vlan** command. To remove the access mode configuration, use the **no** form of this command.

switchport access vlan *vlan-id*

no switchport access vlan *vlan-id*

Syntax Description	<i>vlan-id</i>	VLAN identification number. The range of values is from 1 to 3967.
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Defaults	Access mode is not set.
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Command Modes	Interface configuration (config-if) Port profile configuration (config-port-prof)
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SupportedUserRoles	network-admin
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Command History	Release	Modification
	4.0(4)SV1(1)	This command was introduced.

Examples This example shows how to set the access mode of an interface:

```
vsm# configure
vsm(config)# interface vethernet 1
vsm(config-if)# switchport access vlan 100
vsm(config-if)#
```

This example shows how to remove the access mode configuration:

```
vsm# configure
vsm(config)# interface vethernet 1
vsm(config-if)# no switchport access vlan
vsm(config-if)#
```

Related Commands	Command	Description
	show interface	Displays interface information.

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state (port profile)

To enable the operational state of a port profile, use the **state** command. To disable the operational state of a port profile, use the **no** form of the command.

state enabled

no state enabled

Syntax Description	enabled	Enables or disables the port profile.
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Defaults	Disabled	
-----------------	----------	--

Command Modes	Port profile configuration (config-port-prof)	
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SupportedUserRoles	network-admin	
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Command History	Release	Modification
	4.0(4)SV1(1)	This command was introduced.

Examples	This example shows how to enable the operational state of a port profile:	
	<pre>vsm# configure vsm(config)# port-profile testprofile vsm(config-port-prof)# state enabled vsm(config-port-prof)#</pre>	

Related Commands	Command	Description
		show port-profile

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copy running-config startup-config

To copy the running configuration to the startup configuration, use the **copy running-config startup-config** command.

copy running-config startup-config

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any command mode

SupportedUserRoles network-admin
network-operator

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

Usage Guidelines Use this command to save configuration changes in the running configuration to the startup configuration in persistent memory. When a device reload or switchover occurs, the saved configuration is applied.

Examples This example shows how to save the running configuration to the startup configuration:

```
vsm# copy running-config startup-config
[#####] 100%
```

Related Commands	Command	Description
	show running-config	Displays the running configuration.
	show running-config diff	Displays the differences between the running configuration and the startup configuration.
	show startup-config	Displays the startup configuration.
	write erase	Erases the startup configuration in the persistent memory.

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vnm-policy-agent

To enter Virtual Network Management Center (VNMC) policy agent mode, use the **vnm-policy-agent** command.

vnm-policy-agent

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Global configuration (config)

SupportedUserRoles network-admin

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

Usage Guidelines Use the VNMC policy agent configuration mode to configure policy agents.

Examples This example shows how enter policy agent mode:

```
vsm# configure
vsm(config)# vnm-policy-agent
vsm(config-vnm-policy-agent)#
```

Related Commands	Command	Description
	configure	Enters global configuration mode.

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log-level

To set logging severity levels for the Virtual Network Management Center (VNMC) policy agent, use the **log-level** command. To reset logging levels, use the **no** form of the command.

log-level { **critical** | **debug0** | **debug1** | **debug2** | **debug3** | **debug4** | **info** | **major** | **minor** | **warn** }

no { **critical** | **debug0** | **debug1** | **debug2** | **debug3** | **debug4** | **info** | **major** | **minor** | **warn** }

Syntax Description

critical	Sets the logging level to critical.
debug0	Sets the logging level to debug 0.
debug1	Sets the logging level to debug 1.
debug2	Sets the logging level to debug 2.
debug3	Sets the logging level to debug 3.
debug4	Sets the logging level to debug 4.
info	Sets the logging level to information.
major	Sets the logging level to major.
minor	Sets the logging level to minor.
warn	Sets the logging level to warning.

Command Default

None

Command Modes

VNMC policy agent configuration (config-vnm-policy-agent)

Supported User Roles

network-admin

Command History

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

Examples

This example shows how to set the logging level to critical:

```
vsm# configure
vsm(config)# vnm-policy-agent
vsm(config-vnm-policy-agent)# log-level critical
```

■ log-level

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Related Commands

Command	Description
vnm-policy-agent	Enables the VNM policy agent configuration mode.

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policy-agent-image

To designate the policy agent image local URL as bootflash, use the **policy-agent-image** command. To remove the designation, use the no form of the command.

policy-agent-image bootflash:

no policy-agent-image bootflash:

Syntax Description	bootflash:	Designates the policy agent image local URL as bootflash.
Command Default	None	
Command Modes	VNMC policy agent configuration (config-vnm-policy-agent)	
SupportedUserRoles	network-admin	
Command History	Release	Modification
	4.0(4)SV1(1)	This command was introduced.
Examples	<p>This example shows how to designate the local URL that contains the policy agent image:</p> <pre>vsm# configure vsm(config)# vnm-policy-agent vsm(config-vnm-policy-agent)# policy-agent-image bootflash:</pre>	
Related Commands	Command	Description
	vnm-policy-agent	Enables the VNM policy agent configuration mode.

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pop

To pop a mode off the stack or to restore a mode, use the **pop** command.

pop *file-name*

Syntax Description	<i>file-name</i>	File name.
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Command Default	None
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Command Modes	EXEC
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SupportedUserRoles	network-admin
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Command History	Release	Modification
	4.0(4)SV1(1)	This command was introduced.

Examples	This example shows how to restore from a file called file1:
----------	---

```
vsm# pop file1
```

Related Commands	Command	Description
	push	Pushes the current mode onto the stack.

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push

To push the current mode onto stack or to save it, use the **push** command.

push *file-name*

Syntax Description	<i>file-name</i>	File name.
Command Default	None	
Command Modes	EXEC	
SupportedUserRoles	network-admin	
Command History	Release	Modification
	4.0(4)SV1(1)	This command was introduced.
Examples	The following example shows how to push file1 onto the stack: vsm# push file1	
Related Commands	Command	Description
	pop	Pops the current mode off the stack.

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registration-ip

To set the service registry IP address, use the **registration-ip** command. To discard the service registry IP address, use the **no** form of the command.

registration-ip *ip-address*

no registration-ip *ip-address*

Syntax Description	<i>ip-address</i>	Service registry IP address. The format is A.B.C.D.
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Command Default	None
------------------------	------

Command Modes	VNMC policy agent configuration mode (config-vnm-policy-agent)
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SupportedUserRoles	network-admin
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Command History	Release	Modification
	4.0(4)SV1(1)	This command was introduced.

Examples This example shows how to set the service registry IP address:

```
vsm# configure
vsm(config)# vnm-policy-agent
vsm(config-vnm-policy-agent)# registration-ip 209.165.200.233
vsm(config-vnm-policy-agent)#
```

Related Commands	Command	Description
	vnm-policy-agent	Enters the VNM policy agent configuration mode.

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shared-secret

To set the shared secret password for communication between the Virtual Security Gateway (VSG), the Virtual Supervisor Module (VSM), and the Virtual Network Manager Center (VNMC), use the **shared-secret** command. To discard the shared secret password, use the **no** form of the command.

shared-secret *shared-secret-password*

no shared-secret *shared-secret-password*

Syntax Description	<i>shared-secret-password</i> Shared secret password. The range of valid values is from 1 to 64. You must use at least one upper case character.				
Command Default	None				
Command Modes	VNM policy agent configuration mode (config-vnm-policy-agent)				
SupportedUserRoles	network-admin				
Command History	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.0(4)SV1(1)</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	4.0(4)SV1(1)	This command was introduced.
Release	Modification				
4.0(4)SV1(1)	This command was introduced.				
Usage Guidelines	None				
Examples	<p>The following example shows how to set the shared secret password:</p> <pre>vsm# configure vsm(config)# vnm-policy-agent vsm(config-vnm-policy-agent)# shared-secret password123 vsm(config-vnm-policy-agent)#</pre>				
Related Commands	<table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>vnm-policy-agent</td> <td>Enters VNM policy agent configuration mode.</td> </tr> </tbody> </table>	Command	Description	vnm-policy-agent	Enters VNM policy agent configuration mode.
Command	Description				
vnm-policy-agent	Enters VNM policy agent configuration mode.				

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show vnm-pa status

To display the installation status of a policy agent, use the **show vnm-pa status** command.

```
show vnm-pa status
```

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Global configuration (config)

SupportedUserRoles network-admin
network-operator

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

Usage Guidelines You can use the following operators with the **show vnm-pa status** command:

- >—Redirects the output to a file.
- >>—Redirects the output to a file in append mode.
- |—Pipes the command output to a filter.

Examples This example shows how to display the installation status of the policy agent:

```
vsm# configure
vsm(config)# show vnm-pa status
VNM Policy-Agent status is - Installed Successfully. Version 1.0(0.512)-vsm
vsm(config)#
```

Related Commands	Command	Description
	vnm-policy-agent	Enters VNMC policy agent configuration mode.

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port-profile

To create a port profile and enter port profile configuration mode, use the **port-profile** command. To remove the port profile configuration, use the **no** form of the command.

port-profile *profile-name*

no port-profile *profile-name*

Syntax Description	<i>profile-name</i>	Port profile name. The range of valid values is from 1 to 80.
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	The port profile name must be unique for each port profile.	
Examples	<p>This example shows how to create a port profile called AccessProf:</p> <pre>vsm# configure vsm(config)# port-profile AccessProf vsm(config-port-prof)#</pre> <p>This example shows how to remove the port profile called AccessProf:</p> <pre>vsm# configure vsm(config)# no port-profile AccessProf vsm(config)#</pre>	
Related Commands	Command	Description
	show port-profile	Displays information about the port profiles.

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show running-config

To display the running configuration, use the **show running-config** command.

```
show running-config [aaa | aclmgr | all | am | arp | cdp | diff | exclude | expand-port-profile |
icmpv6 | igmp | interface | ip | ipqos | ipv6 | l3vm | license | monitor | ntp | port-profile |
port-security | radius | rpm | security | snmp | vdc-all | vlan | vshd]
```

Syntax Description

aaa	(Optional) Displays the Authentication, Authorization and Accounting (AAA) configuration.
aclmgr	(Optional) Displays the running configuration for Access Control List (ACL) manager.
all	(Optional) Displays the current operating configurations.
am	(Optional) Displays Application Management (AM) information.
arp	(Optional) Displays Address Resolution Protocol (ARP) information.
cdp	(Optional) Displays the Cisco Discovery Protocol (CDP) configuration.
diff	(Optional) Displays the difference between the running and startup configurations.
exclude	(Optional) Excludes the running configuration of specified features.
expand-port-profile	(Optional) Displays port profile information.
icmpv6	(Optional) Displays Internet Control Message Protocol (ICMPv6) information.
igmp	(Optional) Displays Internet Group Management Protocol (IGMP) information.
interface	(Optional) Displays interface configurations.
ip	(Optional) Displays Internet Protocol (IP) information.
ipqos	(Optional) Displays the running configuration for the IP Quality of Service (QoS) manager.
ipv6	(Optional) Displays IPv6 information.
l3vm	(Optional) Displays Layer 3 Virtual Machine (L3VM) information
license	(Optional) Displays the licensing configuration.
monitor	(Optional) Displays Ethernet Switched Port Analyzer (SPAN) session information.
ntp	(Optional) Displays Network Time Protocol (NTP) information.
port-profile	(Optional) Displays port-profile configurations.
port-security	(Optional) Displays port-security configurations.
radius	(Optional) Displays the Remote Authentication Dial In User Service (RADIUS) configuration.
rpm	(Optional) Displays RPM information
security	(Optional) Displays the security configurations.
snmp	(Optional) Displays the Simple Network Management Protocol (SNMP) configuration.
vdc-all	(Optional) Displays all VDC configurations.

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vlan	(Optional) Displays Virtual Large Area Network (VLAN) information.
vshd	(Optional) Displays the running configuration for VSHD.

Command Default None

Command Modes EXEC

SupportedUserRoles network-admin
network-operator

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

Usage Guidelines You can use the following operators with the **show running-config** command:

- >—Redirects the output to a file.
- >>—Redirects the output to a file in append mode.
- |—Pipes the command output to a filter.

Examples This example shows how to display the running configuration:

```
vsm# show running-config

!Command: show running-config
!Time: Tue Jan  4 17:20:05 2011

version 4.2(1)SV1(4)
no feature telnet

username admin password 5 $1$z3M0/3no$j77mpF9f/mqmd7/mEZ6RR1 role network-admin
username adminbackup password 5 $1$Oip/C5Ci$oOdx7oJS1BCFpNRmQK4na. role network-operator

banner motd #Nexus 1000v Switch#

ip domain-lookup
ip domain-lookup
switchname vsm
vem 3
  host vmware id 765186a7-eb7c-11de-b059-8843e1389748
vem 4
  host vmware id 90a97ac6-31d7-11df-ad65-68efbdf622ca
vem 5
  host vmware id 833fe152-3f8b-11df-bd70-68efbdf64970
snmp-server user admin network-admin auth md5 0x5ed3cfea7c44550ac3d18475f28b118b
priv 0x5ed3cfea7c44550ac3d18475f28b118b localizedkey

vrf context management
```

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```

ip route 0.0.0.0/0 10.193.72.1
vlan 1,61-65
port-channel load-balance ethernet source-mac
port-profile default max-ports 32
port-profile default port-binding static
port-profile type vethernet vm-clear
  vmware port-group
  switchport mode access
  switchport access vlan 63
  no shutdown
  state enabled
port-profile type vethernet vsn-service
  vmware port-group
  switchport mode access
  switchport access vlan 64
  no shutdown
  max-ports 1024
  state enabled
port-profile type ethernet system-uplink
  vmware port-group
  switchport trunk allowed vlan 61-70
  switchport mode trunk
  no shutdown
  system vlan 61-62
  state enabled
port-profile type vethernet vsg129-2
  vmware port-group
  switchport mode access
  switchport access vlan 63
  org root/Canon
  vn-service ip-address 10.10.129.2 vlan 64 security-profile sp-vsg2-1
  no shutdown
  state enabled
port-profile type vethernet vsg134-1
  vmware port-group
  switchport mode access
  switchport access vlan 63
  vn-service ip-address 10.10.134.1 vlan 64 mgmt-ip-address 10.10.73.132 security-profile
  sp1
  no shutdown
  state enabled
port-profile type vethernet vsg136-1
  vmware port-group
  switchport mode access
  switchport access vlan 63
  vn-service ip-address 10.10.136.1 vlan 64 mgmt-ip-address 10.10.73.137 security-profile
  sp1
  no shutdown
  state enabled
port-profile type vethernet vsg129_2-svc-vlan65
  vmware port-group
  switchport mode access
  switchport access vlan 65
  vn-service ip-address 10.10.129.2 vlan 64 mgmt-ip-address 10.10.73.131 security-profile
  sp1
  no shutdown
  state enabled
port-profile type vethernet vm-clear-vlan65
  vmware port-group
  switchport mode access
  switchport access vlan 65
  no shutdown
  state enabled
port-profile type ethernet Unused_Or_Quarantine_Uplink

```

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```
vmware port-group
shutdown
description Port-group created for Nexus1000V internal usage. Do not use.
state enabled
port-profile type vethernet Unused_Or_Quarantine_Veth
vmware port-group
shutdown
description Port-group created for Nexus1000V internal usage. Do not use.
state enabled
port-profile type vethernet vm-clear-vlan63
vmware port-group
switchport mode access
switchport access vlan 63
no shutdown
state enabled

vdc vsm id 1
limit-resource vlan minimum 16 maximum 2049
limit-resource monitor-session minimum 0 maximum 2
limit-resource vrf minimum 16 maximum 8192
limit-resource port-channel minimum 0 maximum 768
limit-resource u4route-mem minimum 32 maximum 32
limit-resource u6route-mem minimum 16 maximum 16
limit-resource m4route-mem minimum 58 maximum 58
limit-resource m6route-mem minimum 8 maximum 8

interface mgmt0
ip address 10.10.73.130/21

interface Vethernet1
inherit port-profile vm-clear-vlan63
description UD134-1,Network Adapter 2
vmware dvport 7489 dvswitch uuid "90 33 3b 50 c2 11 2a 50-ae c5 0f 07 b2 b3 23 2c"
vmware vm mac 0050.56BB.0029

interface Vethernet2
inherit port-profile vsg136-1
description UD136-1,Network Adapter 2
vmware dvport 7458 dvswitch uuid "90 33 3b 50 c2 11 2a 50-ae c5 0f 07 b2 b3 23 2c"
vmware vm mac 0050.56BB.0032

interface Vethernet3
inherit port-profile vm-clear-vlan63
description US136-1,Network Adapter 2
vmware dvport 7492 dvswitch uuid "90 33 3b 50 c2 11 2a 50-ae c5 0f 07 b2 b3 23 2c"
vmware vm mac 0050.56BB.0030

interface Vethernet4
inherit port-profile vsg129-2
description US129-1,Network Adapter 2
vmware dvport 6563 dvswitch uuid "90 33 3b 50 c2 11 2a 50-ae c5 0f 07 b2 b3 23 2c"
vmware vm mac 0050.56BB.003E

interface Vethernet5
inherit port-profile vm-clear-vlan63
description US129-2,Network Adapter 2
vmware dvport 7491 dvswitch uuid "90 33 3b 50 c2 11 2a 50-ae c5 0f 07 b2 b3 23 2c"
vmware vm mac 0050.56BB.0040

interface Vethernet6
inherit port-profile vsn-service
description VSG134-1,Network Adapter 1
vmware dvport 3683 dvswitch uuid "90 33 3b 50 c2 11 2a 50-ae c5 0f 07 b2 b3 23 2c"
vmware vm mac 0050.56BB.002C
```

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```

interface Vethernet7
  inherit port-profile vsn-service
  description VSG129-2,Network Adapter 1
  vmware dvport 3686 dvswitch uuid "90 33 3b 50 c2 11 2a 50-ae c5 0f 07 b2 b3 23 2c"
  vmware vm mac 0050.56BB.0037

interface Vethernet8
  inherit port-profile vsn-service
  description VSG136-1,Network Adapter 1
  vmware dvport 3684 dvswitch uuid "90 33 3b 50 c2 11 2a 50-ae c5 0f 07 b2 b3 23 2c"
  vmware vm mac 0050.56BB.0034

interface Ethernet3/2
  inherit port-profile system-uplink

interface Ethernet4/6
  inherit port-profile system-uplink

interface Ethernet5/6
  inherit port-profile system-uplink

interface control0
  line console
  boot kickstart bootflash:/ks.bin sup-1
  boot system bootflash:/sys.bin sup-1
  boot kickstart bootflash:/ks.bin sup-2
  boot system bootflash:/sys.bin sup-2
  svcs-domain
    domain id 61
    control vlan 61
    packet vlan 62
    svcs mode L2
  svcs connection vcenter
    protocol vmware-vim
    remote ip address 10.10.79.32 port 80
    vmware dvs uuid "90 33 3b 50 c2 11 2a 50-ae c5 0f 07 b2 b3 23 2c" datacenter-name NAME/S
    connect
  vnm-policy-agent
    registration-ip 10.193.73.144
    shared-secret *****
    policy-agent-image bootflash:/vnmc-vsmpa.1.0.0.512.bin
    log-level
vsm#

```

Related Commands

Command	Description
show aaa	Displays AAA information.

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vn-service ip-address

To assign a data IP address, a VLAN number, and a profile to a VSG, use the **vn-service ip-address** command. To disable the data IP address, use the **no** form of the command.

```
vn-service ip-address ip-address vlan vlan-number [fail {close | open} | security-profile
profile-name]
```

```
no vn-service ip-address ip-address vlan vlan-number [fail {close | open} | security-profile
profile-name]
```

Syntax Description		
<i>ip-address</i>		IP address. The format is A.B.C.D.
vlan <i>vlan-number</i>		Service VLAN number. The range of values is from 1 to 3967 and 4048 to 4093.
fail		States are either fail close or fail open.
close		Drops packets if the VSG is down.
open		Passes packets through if the VSG is down.
security-profile <i>profile-name</i>		Security profile name.

Command Default Fail close.

Command Modes Port profile configuration (config-port-prof)

Supported User Roles network-admin

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

Usage Guidelines This command configures the IP, VLAN, and security-profile for the VSG, and optionally allows for a fail safe configuration.

Fail mode specifies what the behavior is when the VEM does not have connectivity to the VSG. The default fail mode is **close**, which means that the packets will be forwarded. **open** fail mode means that packets will be dropped.

The security profile name must match one of the security profiles created on the VSG.

The IP address must match the data interface IP address on the VSG.

Examples This example shows how to assign the IP address and VLAN number, and how to specify that packets are to be dropped:

```
vsm# configure
```

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Enter configuration commands, one per line. End with CNTL/Z.

```
vsm(config)# port-profile pP1
vsm(config-port-prof)# vn-service ip-address 209.165.200.236 vlan 2 fail open
vsm(config-port-prof)#
```

Related Commands

Command	Description
show virtual-service-domain	Displays virtual service domain information.

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org

To create a VNMC organization (domain), use the **org** command. To delete a VNMC organization, use the **no org** form of the command.

org *organization-name*

no org [*organization-name*]

Syntax Description	<i>organization-name</i>	The organization name. The range of values is from 1 to 251.
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Command Default	None
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Command Modes	Port profile configuration (config-port-prof)
---------------	---

SupportedUserRoles	network-admin
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Command History	Release	Modification
	4.0(4)SV1(1)	This command was introduced.

Usage Guidelines	<p>VNMC organizations are VNMC domains.</p> <p>You can hierarchically manage VNMC organizations. A user that is assigned at a top level organization has automatic access to all organizations under it. For example, an engineering organization can contain a software engineering organization and a hardware engineering organization. A locale containing only the software engineering organization has access to system resources only within that organization. However, a locale that contains the engineering organization has access to the resources for both the software engineering and hardware engineering organizations.</p>
------------------	--

Examples	<p>This example shows how to create an organization:</p> <pre>vsm# configure Enter configuration commands, one per line. End with CNTL/Z. vsm(config)# port-profile pP1 vsm(config-port-prof)# org orgpP1 vsm(config-port-prof)#</pre>
----------	---

Related Commands	Command	Description
	vn-service	Sets the IP address for a virtual firewall.

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show vsn brief

To display a brief amount of information about the Cisco Virtual Security Gateway (VSG), use the **show vsn brief** command.

```
show vsn brief
```

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes EXEC

SupportedUserRoles network-admin
network-operator

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

Usage Guidelines You can use the following operators with the **show vsn brief** command:

- >—Redirects the output to a file.
- >>—Redirects the output to a file in append mode.
- |—Pipes the command output to a filter.

Examples This example shows how to display information about VSGs:

```
vsm# show vsn brief
```

```

VLAN          IP-ADDR          MAC-ADDR  FAIL-MODE  STATE  MODULE
 64          192.168.136.1    00:50:56:bb:00:34    Close    Up    5
 64          192.168.129.2    00:50:56:bb:00:37    Close    Up    3
vsm#
```

Related Commands	Command	Description
	show vsn port vethernet	Displays information about the Cisco VSG.

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show vsn connection

To display VSG connections, use the **show vsn connection** command.

```
show vsn connection [ip | module | vlan]
```

Syntax Description	ip	(Optional) Displays connections to a specific IP address.
	mode	(Optional) Displays connections to a specific module.
	vlan	(Optional) Displays connections to a specific VLAN.

Command Default None

Command Modes EXEC

Supported User Roles network-admin
network-operator

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

Usage Guidelines You can use the following operators with the **show vsn connection** command:

- >—Redirects the output to a file.
- >>—Redirects the output to a file in append mode.
- |—Pipes the command output to a filter.

Examples This example shows how to display VSG connections:

```
vsm# show vsn connection
#VSN VLAN: 64, IP-ADDR: 192.168.136.1
  Module: 5
#VSN VLAN: 64, IP-ADDR: 192.168.129.2
  Module: 3
vsm#
```

Related Commands	Command	Description
	show vsn port	Displays port information.
	vethernet	

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show vsn detail

To display detailed information about the Cisco Virtual Security Gateway (VSG), use the **show vsn detail** command.

show vsn detail

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes EXEC

SupportedUserRoles network-admin
network-operator

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

Usage Guidelines You can use the following operators with the **show vsn detail** command:

- >—Redirects the output to a file.
- >>—Redirects the output to a file in append mode.
- |—Pipes the command output to a filter.

Examples This example shows how to display detailed information about VSGs:

```
vsm# show vsn detail
#VSN VLAN: 64, IP-ADDR: 192.168.136.1
  Module: 5
#VSN VLAN: 64, IP-ADDR: 192.168.129.2
  Module: 3
ankaa-vsm-master# show vsn detail
#VSN VLAN: 64, IP-ADDR: 192.168.136.1
  MODULE          VSN-MAC-ADDR  FAIL-MODE  VSN-STATE
    5  00:50:56:bb:00:34    Close  No-License
#VSN VLAN: 64, IP-ADDR: 192.168.129.2
  MODULE          VSN-MAC-ADDR  FAIL-MODE  VSN-STATE
    3  00:50:56:bb:00:37    Close  No-License

#VSN Ports, Port-Profile, Org and Security-Profile Association:
#VSN VLAN: 64, IP-ADDR: 192.168.136.1
  Port-Profile: vsg136-1, Security-Profile: default, Org: Not-Available
  Module Vethernet
```

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```
      5 2
#VSN VLAN: 64, IP-ADDR: 192.168.129.2
      Port-Profile: vsg129-2, Security-Profile: default, Org: Not-Available
      Module Vethernet
      3 10, 4
vsm#
```

Related Commands

Command	Description
show vsn port vethernet	Displays information about the Cisco VSG.

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show vsn port vethernet

To display information about vethernet ports, use the **show vsn port vethernet** command.

show vsn port vethernet *port-number*

Syntax Description	<i>port-number</i>	Port number. The range of valid values is from 1 to 1048575.
Command Default	None	
Command Modes	EXEC	
SupportedUserRoles	network-admin network-operator	
Command History	Release	Modification
	4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

You can use the following operators with the **show vsn port vethernet** command:

- >—Redirects the output to a file.
- >>—Redirects the output to a file in append mode.
- |—Pipes the command output to a filter.

Examples

This example shows how to display information about vethernet port 2:

```
vsm# show vsn port vethernet 2

Veth           : Veth2
VM Name        : UD136-1
VM uuid        : 42 3b e1 60 17 e6 92 c4-3b 47 f4 b7 4c a0 be 1b
DV Port        : 7458
DVS uuid       : 90 33 3b 50 c2 11 2a 50-ae c5 0f 07 b2 b3 23 2c
Flags          : 0x148
VSN Data IP    : 192.168.136.1
Security Profile : sp1
Org            : Not set
VNSP id        : 1
IP addresses:
vsm#
```

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Related Commands

Command	Description
show vsn statistics	Displays VSG statistics.

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show vsn statistics

To display VSG statistics, use the **show vsn statistics** command.

```
show vsn statistics [ip | module | vlan]
```

Syntax Description	
ip	(Optional) Displays IP statistics.
module	(Optional) Displays module statistics.
vlan	(Optional) Displays VLAN statistics.

Command Default None

Command Modes EXEC

Supported User Roles network-admin
network-operator

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

Usage Guidelines You can use the following operators with the **show vsn statistics** command:

- >—Redirects the output to a file.
- >>—Redirects the output to a file in append mode.
- |—Pipes the command output to a filter.

Examples This example shows how to display statistics for a module:

```
vsm# show vsn statistics module 3
#VSN VLAN: 64, IP-ADDR: 192.168.129.2
Module: 3
#VPath Packet Statistics      Ingress      Egress      Total
Total Seen                    8249         24572       32821
Policy Redirects              7796         23260       31056
No-Policy Passthru            441          1267        1708
Policy-Permits Rcvd           7796         23260       31056
Policy-Denies Rcvd            0             0            0
Permit Hits                    10           45           55
Deny Hits                     0             0            0
Decapsulated                   7796         23260       31056
Fail-Open                      0             0            0
Badport Err                    0             0            0
VSN Config Err                 0             0            0
ARP Resolve Err                2             0            2
```


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```

Encap Err                                0                0                0
All-Drops                                2                0                2
Total Rcvd From VSN                                31056
Non-Cisco Encap Rcvd                                0
VNS-Port Drops                                0
Policy-Action Err                                0
Decap Err                                        0
L2-Frag Sent                                    0
L2-Frag Rcvd                                    0
L2-Frag Coalesced                               0

#VPath Flow Statistics
Active Flows                                0 Active Connections                                0
Forward Flow Create                          7799 Forward Flow Destroy                              7799
Reverse Flow Create                          7799 Reverse Flow Destroy                              7799
Flow ID Alloc                                15598 Flow ID Free                                       15598
Connection ID Alloc                          7799 Connection ID Free                               7799
L2 Flow Create                                0 L2 Flow Destroy                                    0
L3 Flow Create                                4 L3 Flow Destroy                                    4
L4 TCP Flow Create                           0 L4 TCP Flow Destroy                                0
L4 UDP Flow Create                          15594 L4 UDP Flow Destroy                              15594
L4 Oth Flow Create                           0 L4 Oth Flow Destroy                                0
Embryonic Flow Create                        0 Embryonic Flow Bloom                              0
L2 Flow Timeout                              0 L2 Flow Offload                                    0
L3 Flow Timeout                              5 L3 Flow Offload                                    2
L4 TCP Flow Timeout                          0 L4 TCP Flow Offload                                0
L4 UDP Flow Timeout                          23393 L4 UDP Flow Offload                              31054
L4 Oth Flow Timeout                          0 L4 Oth Flow Offload                                0
Flow Lookup Hit                              23314 Flow Lookup Miss                                  15598
Flow Dual Lookup                             38912 L4 TCP Tuple-reuse                                0
Flow Classify Err                            0 Flow ID Alloc Err                                0
Conn ID Alloc Err                            0 Hash Alloc Err                                    0
Flow Exist                                   0 Flow Entry Exhaust                                0
Flow Removal Err                             0 Bad Flow ID Receive                              0
Flow Entry Miss                              0 Flow Full Match Err                              0
Bad Action Receive                           0 Invalid Flow Pair                                0
Invalid Connection                           0
Hash Alloc                                   0 Hash Free                                        0
InvalFID Lookup                              0 InvalFID Lookup Err                              0
Deferred Delete                              0

```

vsm#

Related Commands

Command	Description
show vsn port vethernet	Displays information about the Cisco VSG.

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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	
<i>id</i>	VLAN identification number. The range of valid values is from 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)

Supported User Roles	
	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:

```
vsm# configure
vsm (config)# vlan 100
vsm (config-vlan)#
```

This example shows how to remove a VLAN:

```
switch# configure
switch(config)# no vlan 100
switch(config)#
```

Related Commands	Command	Description
	show vlan	Displays VTP VLAN status.

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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 the command.

vmware port-group *name*

no vmware port-group *name*

Syntax Description	<i>name</i>	Name of the VMware port group.
--------------------	-------------	--------------------------------

Defaults	None
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Command Modes	Port profile configuration (config-port-prof)
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SupportedUserRoles	network-admin
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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 The following example shows how to create a VMware port group:

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

The following example shows how to remove the VMware port group:

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

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

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