



CHAPTER 3

Configuring the Domain

This chapter describes how to configure the Cisco Nexus 1000V domain, including creating the domain and assigning VLANs.

This chapter includes the following topics:

- [Information About the Domain, page 3-1](#)
- [Creating the Domain, page 3-1](#)
- [Creating the Control VLAN for the Domain, page 3-3](#)
- [Creating the Packet VLAN for the Domain, page 3-5](#)
- [Feature History for Domains, page 3-7](#)

Information About the Domain

You must create a domain name for Cisco Nexus 1000V and then add control and packet VLANs for communication and management. This process is part of the initial setup of the a Cisco Nexus 1000V when installing the software. If you need to create a domain later, you can do so using the **setup** command or the procedures described in this chapter.

Creating the Domain

Use this procedure to create a domain name for the Cisco Nexus 1000V that identifies the VSM and VEMs; and then add control and packet VLANs for communication and management. This process is part of the initial setup of the Cisco Nexus 1000V when installing the software. If you need to create a domain after initial setup, you can do so using this procedure.

BEFORE YOU BEGIN

Before beginning this procedure, you must know or do the following:

- If two or more VSMS share the same control and/or packet VLAN, the domain helps identify the VEMs managed by each VSM.
- You are logged in to the CLI in EXEC mode.
- You must have a unique domain ID for this Cisco Nexus 1000V instance.
- You must identify the VLANs to be used for control and packet traffic.

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- Cisco recommends using distinct vlans for control and packet traffic.
- Cisco recommends using distinct vlans for different instances of Nexus 1000V (different domains)
- The **svs mode** command in the SVS Domain Configuration mode is not used and has no effect on a configuration.
- For information about changing a domain ID after adding a second VSM see the *Cisco Nexus 1000V High Availability and Redundancy Reference, Release 4.0(4)SVI(1)*.

SUMMARY STEPS

1. **config t**
2. **svs-domain**
3. **domain id** *domain-id*
4. **control vlan** *vlan-id*
5. **packet vlan** *vlan-id*
6. **exit**
7. **show svcs-domain**
8. **copy running-config startup-config**

DETAILED STEPS

	Command	Purpose
Step 1	config t Example: n1000v# config t n1000v(config)#	Places you into CLI Global Configuration mode.
Step 2	svs-domain Example: n1000v(config)# svcs-domain n1000v(config-svs-domain)#	Places you into the SVS Domain Configuration mode.
Step 3	domain id <i>number</i> Example: n1000v(config-svs-domain)# domain id 100 n1000v(config-svs-domain)#	Creates the domain ID for this Cisco Nexus 1000V instance.
Step 4	control vlan <i>number</i> Example: n1000v(config-svs-domain)# control vlan 190 n1000v(config-vlan)#	Assigns the control VLAN for this domain.
Step 5	packet vlan <i>number</i> Example: n1000v(config-vlan)# packet vlan 191 n1000v(config-vlan)#	Assigns the packet VLAN for this domain.

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	Command	Purpose
Step 6	<pre>show svcs-domain</pre> <p>Example: n1000v(config-vlan)# show svcs-domain </p>	Displays the domain configuration.
Step 7	<pre>exit</pre> <p>Example: n1000v(config-vlan)# exit n1000v(config)# </p>	Returns you to CLI Global Configuration mode.
Step 8	<pre>copy running-config startup-config</pre> <p>Example: n1000v(config)# copy running-config startup-config </p>	(Optional) Copies the running configuration to the startup configuration.

Example:

```
n1000v# config t
n1000v(config)# svcs-domain
n1000v(config-svs-domain)# domain id 100
n1000v(config-svs-domain)# control vlan 190
n1000v(config-svs-domain)# packet vlan 191
n1000v(config-vlan)# exit

n1000v (config)# show svcs domain
SVS domain config:
  Domain id:    100
  Control vlan: 190
  Packet vlan:  191
  L2/L3 Aipc mode: L2
  L2/L3 Aipc interface: mgmt0
  Status: Config push to VC successful.

n1000v(config)#
n1000v(config)# copy run start
[#####] 100%
n1000v(config)#
```

Creating the Control VLAN for the Domain

Use this procedure to add a control VLAN to the domain.

BEFORE YOU BEGIN

Before beginning this procedure, you must know or do the following:

- You are logged in to the CLI in EXEC mode.
- You have already configured and enabled the required switched virtual interface (SVI) using the document, *Cisco Nexus 1000V Interface Configuration Guide, Release 4.0(4)SVI(1)*. The SVI is also called the VLAN interface and provides communication between VLANs.
- You are familiar with how VLANs are numbered. For more information, see the document, *Cisco Nexus 1000V Layer 2 Switching Configuration Guide, Release 4.0(4)SVI(1)*.
- Newly-created VLANs remain unused until Layer 2 ports are assigned to them.

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SUMMARY STEPS

1. **config t**
2. **vlan *vlan-id***
3. **name *vlan-name***
4. **state *vlan-state***
5. **exit**
6. **show vlan id *vlan-id***
7. **copy running-config startup-config**

DETAILED STEPS

	Command	Purpose
Step 1	config t Example: n1000v# config t n1000v(config)#	Places you into CLI Global Configuration mode.
Step 2	vlan 30 Example: n1000v(config)# vlan 30 n1000v(config-vlan)#	Creates VLAN ID 30 for control traffic and places you into CLI VLAN Configuration mode. Note If you enter a VLAN ID that is assigned to an internally allocated VLAN, the CLI returns an error message.
Step 3	name cp_control Example: n1000v(config-vlan)# name cp_control n1000v(config-vlan)#	Adds the descriptive name, cp_control, to this VLAN.
Step 4	state active Example: n1000v(config-vlan)# state active n1000v(config-vlan)#	Changes the operational state of the VLAN to active.
Step 5	show vlan id 30 Example: n1000v(config-vlan)# show vlan id 30	Displays the configuration for VLAN ID 30.
Step 6	exit Example: n1000v(config-vlan)# exit n1000v(config)#	Returns you to CLI Global Configuration mode.
Step 7	copy running-config startup-config Example: n1000v(config)# copy running-config startup-config	(Optional) Copies the running configuration to the startup configuration.

Example:
n1000v# **config t**
n1000v(config)# **vlan 30**

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```
n1000v(config-vlan)# name cp_control
n1000v(config-vlan)# state active
n1000v(config-vlan)# exit
n1000v(config)# show vlan id 30
```

VLAN Name	Status	Ports
30 cp_control	active	

```
VLAN Type MTU
----
5 enet 1500
```

```
Remote SPAN VLAN
-----
Disabled
```

Primary	Secondary	Type	Ports

```
n1000v(config)# copy run start
[#####] 100%
n1000v(config)#
```

Creating the Packet VLAN for the Domain

Use this procedure to add the packet VLAN to the domain.

BEFORE YOU BEGIN

Before beginning this procedure, you must know or do the following:

- You are logged in to the CLI in EXEC mode.
- You have already configured and enabled the required switched virtual interface (SVI) using the document, *Cisco Nexus 1000V Interface Configuration Guide, Release 4.0(4)SVI(1)*. The SVI is also called the VLAN interface and provides communication between VLANs.
- You are familiar with how VLANs are numbered. For more information, see the document, *Cisco Nexus 1000V Layer 2 Switching Configuration Guide, Release 4.0(4)SVI(1)*.
- Newly-created VLANs remain unused until Layer 2 ports are assigned to them.

SUMMARY STEPS

1. **config t**
2. **vlan *vlan-id***
3. **name *vlan-name***
4. **state *vlan-state***
5. **exit**
6. **show vlan id *vlan-id***
7. **copy running-config startup-config**

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DETAILED STEPS

	Command	Purpose
Step 1	config t Example: n1000v# config t n1000v(config)#	Places you into CLI Global Configuration mode.
Step 2	vlan 31 Example: n1000v(config)# vlan 31 n1000v(config-vlan)#	Creates VLAN ID 31 for packet traffic and places you into CLI VLAN Configuration mode. Note If you enter a VLAN ID that is assigned to an internally allocated VLAN, the CLI returns an error message.
Step 3	name cp_packet Example: n1000v(config-vlan)# name cp_packet n1000v(config-vlan)#	Adds the descriptive name, cp_packet, to this VLAN.
Step 4	state active Example: n1000v(config-vlan)# state active n1000v(config-vlan)#	Changes the operational state of the VLAN to active.
Step 5	show vlan id 31 Example: n1000v(config-vlan)# show vlan id 30	Displays the configuration for VLAN ID 31.
Step 6	exit Example: n1000v(config-vlan)# exit n1000v(config)#	Returns you to CLI Global Configuration mode.
Step 7	copy running-config startup-config Example: n1000v(config)# copy running-config startup-config	(Optional) Copies the running configuration to the startup configuration.

Example:
n1000v# **config t**
n1000v(config)# **vlan 31**
n1000v(config-vlan)# **name cp_packet**
n1000v(config-vlan)# **state active**
n1000v(config-vlan)# **exit**
n1000v(config)# **show vlan id 31**

```

VLAN Name                Status    Ports
-----
31   cp_packet              active
VLAN Type MTU
----
5    enet 1500
Remote SPAN VLAN
-----

```

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Disabled

Primary	Secondary	Type	Ports
-----	-----	-----	-----

```
n1000v(config)# copy run start
[#####] 100%
n1000v(config)#
```

Feature History for Domains

This section provides the domain feature release history.

Feature Name	Releases	Feature Information
Domains	4.0(4)SV1(1)	This feature was introduced.

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