



Configuring the Domain

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Information About Domains

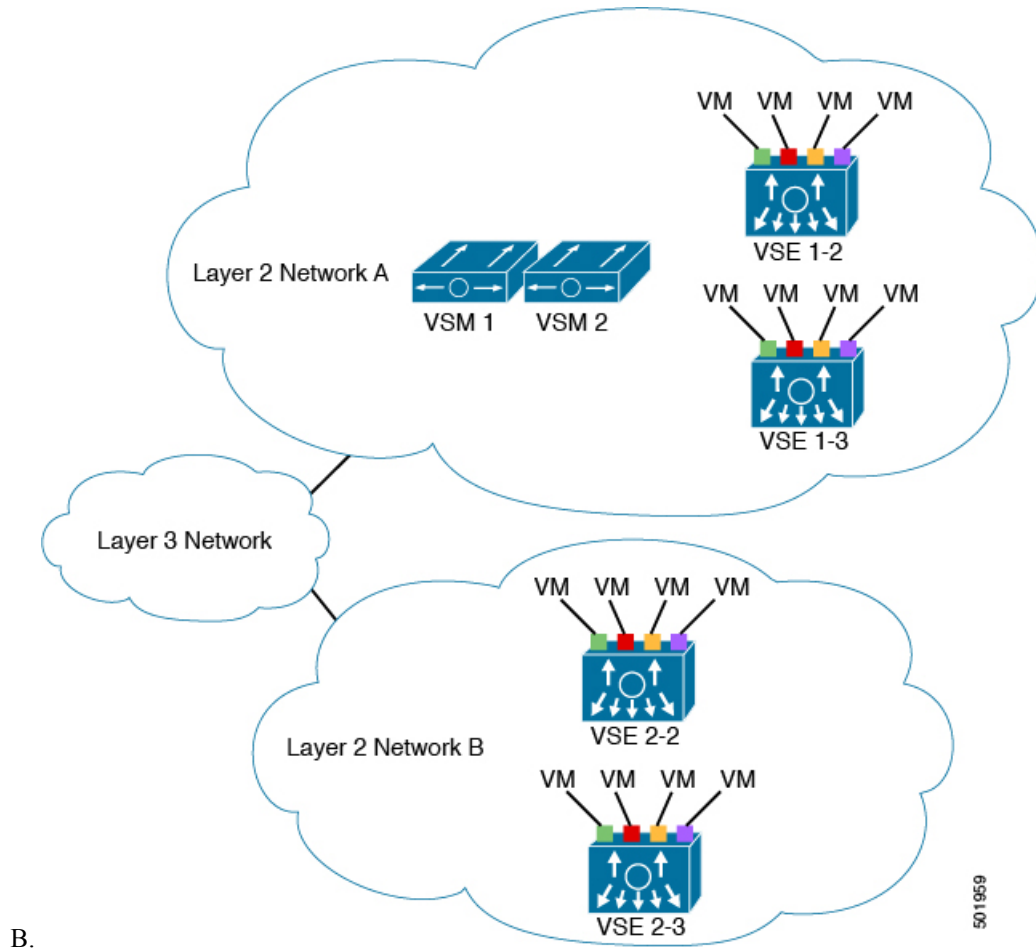
You must create a domain for the Cisco Nexus 1000VE. This process is part of the initial setup of the Cisco Nexus 1000VE when you install the software. If you need to create a domain later, you can do so by using the **svs-domain** command or the procedures described in this chapter.

Layer 3 Control

Layer 3 control, or IP connectivity, is supported between the Virtual Supervisor Module (VSM) and the Virtual Service Engine (VSE) for control and packet traffic. With Layer 3 control, a VSM can be Layer 3 accessible and can control VSEs that reside in a separate Layer 2 network. In the Layer 3 mode, all the VSEs that are managed by VSM and the VSM can be in different networks.

Figure 1: Example of Layer 3 Control IP Connectivity

In this figure, VSM 1 controls VSEs in Layer 2 Network A and VSM 2 controls VSEs in Layer 2 Network



B.

Guidelines and Limitations

Follow these usage guidelines and limitations while configuring the domain:

Default Settings

Parameter	Default
VMware port group name (port-profile)	The name of the port profile
SVS mode (svs-domain)	Layer 3
Switchport mode (port-profile)	Access
State (port-profile)	Disabled

Parameter	Default
State (VLAN)	Active
Shut state (VLAN)	No shutdown

Creating a Domain

You can create a domain for the Cisco Nexus 1000VE that identifies the VSM and VSEs. This process is part of the initial setup of the Cisco Nexus 1000VE when you install the software. If you need to create a domain after the initial setup, you can do so by using this procedure.



Note We recommend you to use a distinct VLAN for each instance of the Cisco Nexus 1000VE (different domains).

Before you begin

Log in to the CLI in EXEC mode.

You must know the following information:

- If two or more VSMs share the same control and/or packet VLAN, the domain helps identify the VSEs managed by each VSM.
- A unique domain ID for this Cisco Nexus 1000VE instance.
- The **svs mode** command in the SVS domain configuration mode is not used and has no effect on a configuration.

Procedure

Step 1 switch# **configure terminal**

Enters global configuration mode.

Step 2 switch(config)# **svs-domain**

Enters SVS domain configuration mode.

Step 3 switch(config-svs-domain)# **domain id** *number*

Creates the domain ID for this Cisco Nexus 1000VE instance.

Step 4 switch(config-svs-domain)# **svs mode L3 interface mgmt0 | control0**

Configures Layer 3 transport mode for the VSM domain.

If configuring Layer 3 transport, you must designate which interface to use. The interface must already have an IP address configured.

Note Layer 2 configuration mode is not supported.

- Step 5** switch(config-svs-domain)# **[no] control type multicast**
Configures the control type multicast in Layer 3 mode on the VSM.
- Step 6** (Optional) switch(config--svs-domain)# **show svcs domain**
Displays the domain configuration.
- Step 7** (Optional) switch(config)# **copy running-config startup-config**
Copies the running configuration to the startup configuration.

Example

This example shows how to create a domain:

```
switch# configure terminal
switch(config)# svcs-domain
switch(config-svs-domain)# domain id 100
switch(config-svs-domain)# svcs mode l3 interface mgmt0
switch(config-svs-domain)# show svcs domain
SVS domain config:
  Domain id:      100
  Control vlan:  NA
  Packet vlan:   NA
  L2/L3 Control mode: L3
  L3 control interface: mgmt0
  Status: Config push to VC successful
  Control type multicast: No
  L3Sec Status: Enabled
switch(config-svs-domain)# control type multicast
switch(config)# show svcs domain
SVS domain config:
  Domain id:      100
  Control vlan:  NA
  Packet vlan:   NA
  L2/L3 Control mode: L3
  L3 control interface: mgmt0
  Status: Config push to VC successful.
  Control type multicast: Yes
  L3Sec Status: Enabled
switch(config)# copy running-config startup-config
[#####] 100%
switch(config)#
```

Managing Domain ID or Management IP Address

We recommend that you do not change the management IP address and the domain ID after the SVS connection is established. During an inevitable instance, if you have to change the management IP address or the domain ID, use this procedure to change it.

Before you begin

Log in to the CLI in EXEC mode.

Procedure

- Step 1** Change the management IP address or the domain ID in the VSM. For more information, you can see the example in the Creating a Domain section. One changed, the VSE modules are in an offline state.
- Step 2** SSH to the VSE with the administrator credentials and open the configuration file named `/etc/n1kv/n1kv.conf`.
- Step 3** To change the domain ID, enter the correct value of the domain ID in the **switch-domain** field.
- Step 4** To change the management IP address, enter the new management IP address in the **I3control-ipaddr** field.
- Step 5** Restart the Cisco Nexus 1000v services using the **service nexus1000v restart** command and verify that the module is online in the VSM.
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