



# Installing VSM on the Cisco Nexus Cloud Services Platform

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## Information About Installing a VSM on the Cisco Nexus Cloud Services Platform

If you choose to install a Virtual Supervisor Module (VSM) on the Cisco Nexus Cloud Services Platform, you must install all primary and secondary VSMs on the Cisco Nexus Cloud Services Platform. You cannot install any other VSMs as a VM.

## Installing a VSM on the Cisco Nexus Cloud Services Platform



### Note

Virtual Ethernet Modules (VEMs) do not register to the VSM before a vmkernel interface (vmk) is migrated to a Layer 3 control-capable port profile. You must migrate a vmk to the Layer 3 port profile after you migrate host vmnics to Ethernet port profiles.

### Before You Begin

Copy the VSM ISO or OVA file to the `bootflash:repository/` of the Cisco Nexus Cloud Services Platform.

### Procedure

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**Step 1** Create a virtual service blade.

```
switch(config)# show virtual-service-blade summary
```

```

-----
Name           HA-Role      HA-Status    Status          Location
-----
switch(config)# virtual-service-blade vsm-1
switch(config-vsb-config)# virtual-service-blade-type new nexus-1000v.4.2.1.SV2.2.1.iso
switch(config-vsb-config)# show virtual-service-blade summary

-----
Name           HA-Role      HA-Status    Status          Location
-----
vsm-1         PRIMARY      NONE         VSB NOT PRESENT  PRIMARY
vsm-1         SECONDARY    NONE         VSB NOT PRESENT  SECONDARY

switch(config-vsb-config)#

```

**Step 2** Configure the control, packet, and management interface VLANs for static and flexible topologies.

```

switch(config-vsb-config)# interface management vlan 100
switch(config-vsb-config)# interface control vlan 101
switch(config-vsb-config)# interface packet vlan 101

```

**Step 3** Configure two vCPUs and the size of the RAM to 4 GB for the VSM.

```

switch(config-vsb-config)# ramsize 4096
switch(config-vsb-config)# numcpu 2

```

If desired, you can verify these settings with the following command:

```

switch(config-vsb-config)# show virtual-service-blade name vsm-1

```

**Step 4** Configure the Cisco Nexus 1000V for KVM on the Cisco Nexus Cloud Services Platform.

```

switch(config-vsb-config)# enable
Enter vsb image: [nexus-1000v.4.2.1.SV2.2.1.iso]
Enter domain id[1-1023]: 127
Management IP version [V4/V6]: [V4]
Enter Management IP address: 192.0.2.79
Enter Management subnet mask: 255.255.255.0
IPv4 address of the default gateway: 192.0.2.1
Enter HostName: n1000v
Enter the password for 'admin': password
Note: VSB installation is in progress, please use show virtual-service-blade commands to
check the installation status.
switch(config-vsb-config)#

```

**Step 5** Display the primary and secondary VSM status.

```

switch(config-vsb-config)# show virtual-service-blade summary

```

```

-----
Name           HA-Role      HA-Status    Status          Location
-----
vsm-1         PRIMARY      NONE         VSB POWER ON IN PROGRESS  PRIMARY

```

```
vsm-1          SECONDARY    ACTIVE    VSB POWERED ON    SECONDARY
```

**Step 6** Log in to the VSM.

```
switch(config)# virtual-service-blade vsm-1
switch(config-vs-b-config)# login virtual-service-blade vsm-1
Telnet escape character is '^\'
Trying 192.0.2.18...
Connected to 192.0.2.18.
Escape character is '^\'

Nexus 1000v Switch
n1000v login: admin
Password:
Cisco Nexus operating System (NX-OS) Software
TAC support: http://www.cisco.com/tac
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such license is available at
http://www.opensource.org/licenses/gpl-2.0.php and
http://www.opensource.org/licenses/lgpl-2.1.php
switch#
```

**Step 7** Enable the following features in the VSM to ensure that OpenStack can configure the networks appropriately:

- http-server
  - network-segmentation-manager
  - segmentation
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