



# Installing Cisco Nexus 1000V Using Cisco Virtual Switch Update Manager

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## Information About Installing Cisco Nexus 1000V Using Cisco Virtual Switch Update Manager

The Cisco Virtual Switch Update Manager is the graphical user interface (GUI) that you use to install the VSMs in high availability (HA) or standalone mode and the VEMs on ESX/ESXi hosts. The Cisco Virtual Switch Update Manager GUI is an integral part of the VMware vSphere Web Client and can only be accessed by logging into the VMware vSphere Web Client.

Cisco Virtual Switch Update Manager enables you to install the following releases VSM:

- Release 5.2(1)SV3(1.2)
- Release 5.2(1)SV3(1.1)
  - Release 4.2(1)SV1(5.2b)
  - Release 4.2(1)SV2(1.1a)
  - Release 4.2(1)SV2(2.3)
  - Release 4.2(1)SV2(2.2)

See [Migrating Hosts to Cisco Nexus 1000V Using Cisco Virtual Switch Update Manager](#) to install VEM using Cisco Virtual Switch Update Manager.

See the *Cisco Nexus 1000V and VMware Compatibility Information* for more information on the compatibility information for Cisco Nexus 1000V.

See the corresponding *Cisco Nexus 1000V Installation and Upgrade Guide* to manually install the Cisco Nexus 1000V versions that are not supported by the Cisco Virtual Switch Update Manager.

## Prerequisites for Installing the Cisco Nexus 1000V Using Cisco Virtual Switch Update Manager

The Cisco Nexus 1000V installation using Cisco Virtual Switch Update Manager has the following prerequisites:

- You have installed Cisco Virtual Switch Update Manager.
- You have installed and prepared vCenter Server for host management using the instructions from VMware.
- You have installed VMware vSphere Web Client.
- You have installed the VMware Enterprise Plus license on the hosts.
- You are familiar with the Cisco Nexus 1000V topology diagram.
- You must create port groups for the Control and Management VLANs on the Cisco Nexus 1000V.
- You must have the Distributed Switch—Create, Extension-Register, Update privilege permissions enabled on the vCenter Server.
- ESXi host must be running 4.1 or later releases.

## Guidelines and Limitations for Installing Cisco Nexus 1000V Using Cisco Virtual Switch Update Manager

The Cisco Nexus 1000V installation using Cisco Virtual Switch Update Manager has the following guidelines and limitations:

- We recommend that you install the VSMS in a high availability mode on the Cisco Nexus 1000V. For information about high availability and redundancy, see the *Cisco Nexus 1000V High Availability and Redundancy Configuration Guide*. Cisco Virtual Switch Update Manager supports standalone mode, but we do not recommend that you use this mode in a production environment.
- Cisco Virtual Switch Update Manager always deploys with VSM HA pairs by default. We recommend that you install primary and secondary VSM VMs on separate hosts.
- Only Layer 3 mode of deployment is supported by the Cisco Virtual Switch Update Manager with ESXi host only.
- The Cisco Nexus 1000V VSM always uses the following two network interfaces in the same order as follows:
  - 1 Control Interface

## 2 Management Interface

- The VM hardware version has no dependencies; so the VM hardware version can be upgraded if required.
- Do not deploy vCenter server and VSM in different data centers. It is not supported.
- We recommend that you monitor and install all the relevant patch applications from the VMware ESX host server.

# Installing the Cisco Nexus 1000V Using Cisco Virtual Switch Update Manager

You can install Cisco Nexus 1000V using Cisco Virtual Switch Update Manager. You install the Cisco Nexus 1000V switch by creating a new VSM or by using an existing VSM that is on a Cisco Nexus Cloud Services Platform (CSP). The VSM must not have been used to create a switch before you use it to install the Cisco Nexus 1000V switch.

**Note**

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If you want to install a Cisco Nexus 1000V switch by using a VSM, you must first create the VSM on a CSP.

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### Before You Begin

Know the following about the switch:

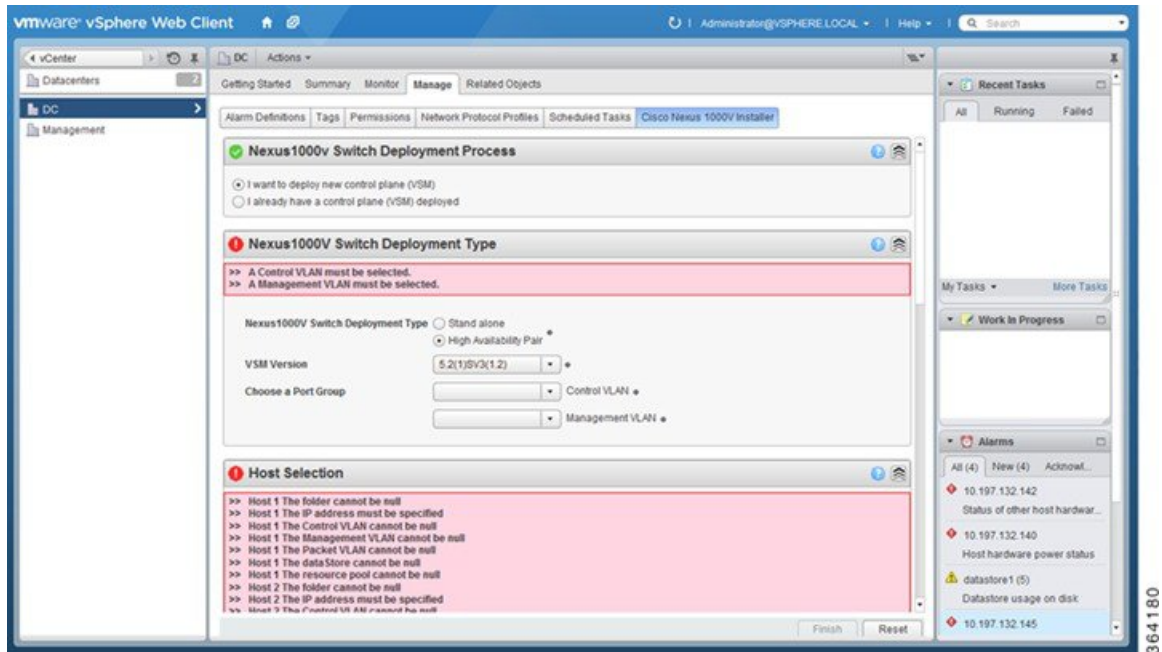
- VM port group for the control traffic of the switch
- VM port group for the management traffic of the switch
- IP address for management
- Subnet mask
- Gateway IP address
- Data center in which the switch will be installed
- Domain ID (a unique ID for the switch)
- Password (the default username is admin)

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**Step 1**

Log in to VMware vSphere Web Client and choose **Home > Cisco Virtual Switch Update Manager > Nexus 1000V > Install**, and then choose the data center. The installation screen appears.

Figure 1: Cisco Nexus 1000V Installer Pane



**Step 2** Complete one of the following sets of steps:

If you want to create a switch with...	Then...
An existing VSM	<ol style="list-style-type: none"> <li>1 In the <b>Nexus 1000v Switch Deployment</b> area, choose <b>I already have a control plane deployed</b>.</li> <li>2 In the <b>Virtual Supervisor Module (VSM) configuration</b> area, enter an IP address of an already existing VSM in the <b>IP address</b> field, and enter a password in the <b>Password</b> field. <ul style="list-style-type: none"> <li><b>Note</b> If you check the <b>Default Port Profile</b> check box, the default port profile is enabled. Also, sample port profiles are created for the different features in the VSM, and the port profiles are pushed to the VSM. The sample port profiles are created as user references and include default and mandatory commands that are required to configure this feature. You can modify the port profiles based on the network configuration.</li> </ul> </li> <li>3 Click <b>Finish</b>.</li> <li>4 Skip to the next section; you do not need to complete the remaining steps in this section because the switch is created when you complete the previous step.</li> </ol>

If you want to create a switch with...	Then...
A new VSM	<ol style="list-style-type: none"> <li>1 In the <b>Nexus 1000v Switch Deployment</b> area, choose <b>I want to deploy new control plane (VSM)</b>.</li> <li>2 Complete the remaining steps in this section to create the switch.</li> </ol>

**Step 3**

In the **Cisco Nexus 1000V Switch Deployment Type** area, complete the following fields:

Name	Description
<b>High Availability Pair</b> radio button	Installs the switch as a HA pair. By default, the <b>High Availability Pair</b> is selected.
<b>Standalone</b> radio button	Installs the switch in a standalone mode. <b>Note</b> We recommend that you install the Cisco Nexus 1000V in an HA pair.
<b>VSM Version</b> drop-down list	Choose the Cisco Nexus 1000V version to be installed. By default, the latest version is selected.
<b>Control VLAN</b> drop-down list	Choose the control port group for the switch. The control port group is used for the control traffic.
<b>Management VLAN</b> drop-down list	Choose the management port group for the switch. <b>Note</b> The Cisco Nexus 1000V VSM uses the management network to communicate with vCenter Server and ESXi.

**Step 4**

Click **Suggest** to choose two hosts based on the details provided in the **Cisco Nexus 1000V Switch Deployment Type** area.

**Step 5**

In the **Host Selection** area, complete the following fields:

Name	Description
<b>IP Address</b> field	The IP address of the hosts on which the switch will be deployed.  The primary switch is deployed on Host 1 and the secondary switch is deployed on Host 2.  You can override system choices by dragging and dropping hosts. Click <b>Pick a host</b> to drag and drop hosts.
<b>Datastore</b> drop-down list	Choose the system-selected datastore that you want to override. Choose a datastore for each host.

Name	Description
<b>Resource Pool</b> drop-down list	Choose the resource pool for each host.  <b>Note</b> If you do not choose a resource pool and the host is a cluster, the resource pool for the switch is the root resource pool of the cluster.  If you do not choose a resource pool and the host is in a standalone mode, then the resource pool for the switch will be the root resource pool of the host.
<b>Folder Name</b> drop-down list	Choose the folder name for each host.  <b>Note</b> If the folder name is not displayed in the drop-down list, the switch VM is created in the root VM folder of the datacenter.

**Step 6** In the **Switch Configuration** area, complete the following fields:

Name	Description
<b>Domain ID</b> field	The domain ID for the switch.  The domain ID is common for both the primary and secondary switches and it should be unique for every new switch. The range for the domain is from 1 to 1023.
<b>Deployment Type</b> radio button	Configures the deployment type.  By default, <b>Management IP Address</b> is selected.  <b>Note</b> <ul style="list-style-type: none"> <li>• If you choose the Management IP address, then this IP address is used for the VSM management operations and the VSM-to-VEM communications.</li> <li>• If you choose the Control IP address, then this IP address is used only for the VSM to VEM communications.</li> </ul>
<b>Control:IP/Name</b> field	The IP address for switch connectivity.
<b>Control: Mask</b> field	The subnet mask.
<b>Control: Gateway IP/Name</b> field	The gateway IP address.

**Step 7** In the **Virtual Supervisor Module (VSM) configuration** area, complete the following fields:

Name	Description
<b>Switch Name</b> field	<p>The name of the switch. The name must have the following:</p> <ul style="list-style-type: none"> <li>• Start with a letter (A-Z, a-z).</li> <li>• Contain up to 32 case-sensitive letters (A-Z, a-z), numbers (0-9), or hyphens (-).</li> <li>• Not contain any other special characters or spaces.</li> </ul> <p>When a switch VM is created in vCenter, the same name is used for the primary and the secondary switch.</p> <p>For a standalone deployment, the VSM VM is the <i>switch name</i>.</p> <p>For a HA deployment, the primary VSM VM is the <i>switch name_primary</i> and the secondary switch is the <i>switch name_secondary</i>.</p>
<b>IP Address</b> field	The IP address of the switch. The IP address is used for the management of the Cisco Nexus 1000V switch.
<b>Subnet Mask</b> field	The subnet mask for the above entered IP address.
<b>Gateway Address</b> field	The gateway IP address for the above entered IP address.
<b>Username</b> field	By default, the user name is admin. This field is not editable.
<b>Default Port Profiles</b> checkbox	<p>If checked, the default port profile is enabled and this creates sample port profiles for the different features in the VSM, and pushes it to the VSM.</p> <p>The sample port profiles are created as user references and include default and mandatory commands that are required to configure this feature. You can modify the port profiles based on the network configuration.</p>
<b>Password</b> field	<p>The admin user password.</p> <p>This password is used to log in to the switch for administration.</p>
<b>Confirm Password</b> field	The admin user password that you reenter for confirmation.

**Step 8** Click **Finish** to install the Cisco Nexus 1000V switch.

**Step 9** Check the status of the installation by completing the following steps:

- Open a new tab in your browser and enter the same vCenter IP address to open the web client again.
- Log in to the web client and in the navigation pane, click **Tasks**.

The **Task Console** opens in the work pane, displaying a list of tasks with the most recent task at the top.

- c) Find the task in the **Task Name** column and then view the status in the **Status** column. The **Status** column shows whether the task is complete or is in progress. You can click the refresh icon to display new tasks and learn how much of the task is complete in terms of percentage.

**Note** Several tasks might appear above the primary task you just performed. They might be associated with your primary task.

The Nexus 1000V installation is confirmed when the primary task `Create Nexus 1000v Switch` has the status `Completed`. A typical installation of the switch takes about 4 minutes.

### What to Do Next

Install VEM as described in the procedure [Migrating Hosts to the Cisco Nexus 1000V Using Cisco Virtual Switch Update Manager](#).

## Feature History for Installing Cisco Nexus 1000V using Cisco Virtual Switch Update Manager

This table includes only the updates for those releases that have resulted in additions or changes to the feature.

Feature Name	Releases	Feature Information
Installing Cisco Nexus 1000V for VMware vSphere using Cisco Virtual Switch Update Manager	Release 1.0	This feature was introduced.
Installing a Cisco Nexus 1000V switch using an existing VSM	Release 1.1	Users now have the option of installing a Cisco Nexus 1000V switch using an existing VSM or a Nexus 1010 or Nexus 1110 switch.
Installing Cisco Nexus 1000V for VMware vSphere using Cisco Virtual Switch Update Manager	Release 1.1	Users can check status of installation with VSUM in the vCenter Task Console.