Installing Cisco Nexus 1000V Using Cisco Virtual Switch Update Manager

This chapter contains the following sections:

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 versions of the Release 5.2(1)SV3(1.1) VSM:

- 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.

Before You Begin

Know the following about the switch:

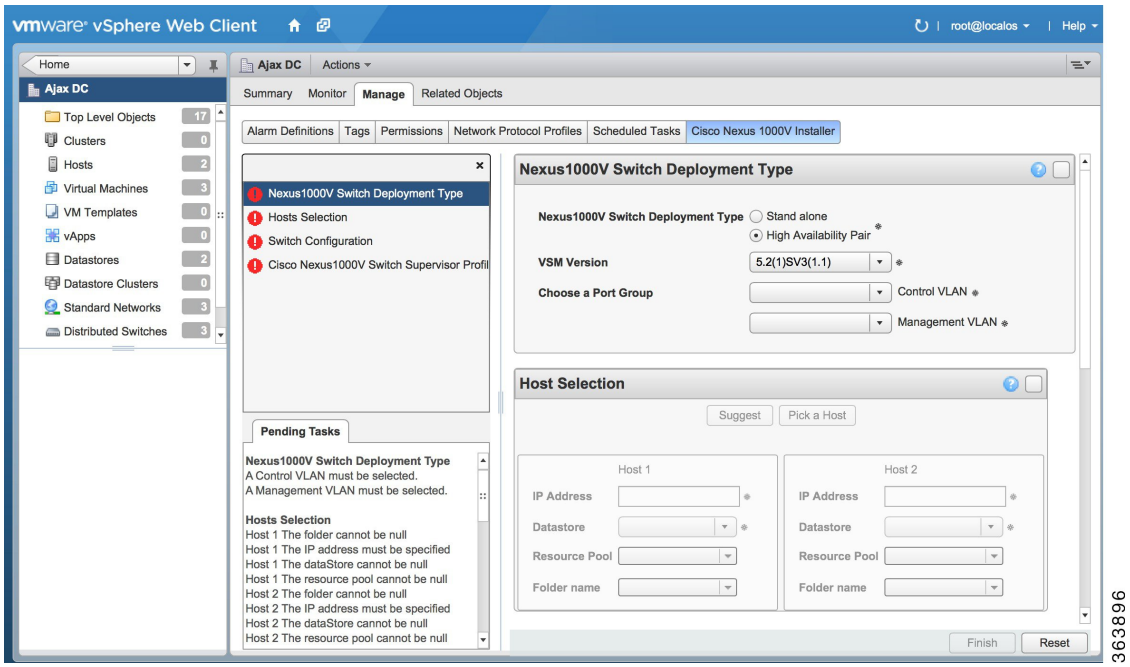
- VM port group for the control traffic of the switch
- VM port group for the management traffic of the switch
- IP address for management
- Subnet mask
- Gateway IP address
- Datacenter in which the switch will be installed
- Domain ID (a unique ID for the switch)

- Password

Step 1 Log in to VMware vSphere Web Client.

Step 2 In the vSphere Client, choose **Cisco Virtual Switch Update Manager** > **Install Cisco Nexus 1000V Distributed Switch** > **Datacenter**. The Cisco Nexus 1000V Installer pane appears.

Figure 1: Cisco Nexus 1000V Installer Pane



Step 3 (Optional) You can also access the Cisco Nexus 1000V Installer in vSphere Client by choosing **vCenter** > **Datacenter**.

Step 4 Choose **Manage** > **Cisco Nexus 1000V Installer**.

Step 5 In the **Cisco Nexus 1000V Switch Deployment Type** area, complete the following fields:

Name	Description
HIgh Availability Pair radio button	Installs the switch as a HA pair. By default, the **High Availability Pair** is selected.
Standalone radio button	Installs the switch in a standalone mode. **Note** We recommend that you install the Cisco Nexus 1000V in an HA pair.
VSM Version drop-down list	Select the Cisco Nexus 1000V version to be installed. By default, the latest version is selected.
Control VLAN drop-down list	Choose the control port group for the switch. The control port group is used for the control traffic.

Name	Description
Management VLAN drop-down list	Choose the management port group for the switch. **Note** The Cisco Nexus 1000V VSM uses the management network to communicate with vCenter server and ESXi.

Step 6 Click **Suggest**. This will automatically select two hosts based on the details provided in the Cisco Nexus 1000V Switch deployment type area.

Step 7 In the **Host Selection** area, complete the following fields:

Name	Description
IP Address 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 **Pick a host** to drag and drop hosts.
Datastore drop-down list	Choose the system-selected datastore that you want to override. Choose a datastore for each host.
Resource Pool drop-down list	Choose the resource pool for each host. **Note** 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.
Folder Name drop-down list	Choose the folder name for each host. **Note** 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 8 In the **Switch Configuration** area, complete the following fields:

Name	Description
Domain ID 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.

Name	Description
Deployment Type radio button	Configures the deployment type. By default, **Management IP Address** is selected. **Note** • If you select the Management IP address, then this IP address is used for both, the VSM management operations as well as the VSM to VEM communications. • If you select the Control IP address, then this IP address is used only for the VSM to VEM communications.
Control:IP/Name field	The IP address for switch connectivity.
Control: Mask field	The sub net mask.
Control: Gateway IP/Name field	The gateway IP address.
Default Port Profile checkbox	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. The sample port profiles are created as user references and includes default and mandatory commands that are required to configure this feature. You can modify the port profiles based on the network configuration.

Step 9 In the **VIrtual Supervisor Module (VSM) configuration** area, complete the following fields:

Name	Description
Switch Name field	The name of the switch. The name must: have the following: • Start with a letter (A-Z, a-z). • Contain up to 32 case-sensitive letters (A-Z, a-z), numbers (0-9), or hyphens (-). • Not contain any other special characters or spaces. When a switch VM is created in the vCenter, the same name is used for the primary and the secondary switch. For a standalone deployment, the VSM VM is the *switch name*. For a HA deployment, the primary VSM VM is the *switch name_primary* and the secondary switch is the *switch name_secondary*.

Name	Description
IP Address field	The IP address of the switch. The IP address is used for the management of the Cisco Nexus 1000V switch.
Subnet Mask field	The subnet mask for the above entered IP address.
Gateway Address field	The gateway IP address for the above entered IP address.
Username field	By default, the user name is admin. This field is not editable.
Password field	The admin user password. This password is used to log in to the switch for administration.
Confirm Password field	The admin user password that you reenter for confirmation.

Step 10 Click **Finish** to install the Cisco Nexus 1000V switch.

Step 11 In the vSphere Web Client, choose **Home** > **vCenter** > **Datacenters** > **Select Datacenter** > **Monitor** > **Tasks** to view the status of the Cisco Nexus 1000V switch installation.
A typical installation of the switch takes about four minutes. In the vCenter Web Client, you can view the tasks by the task object, user, or the task status.

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.