



CHAPTER 4

Installing the Cisco Virtual Network Management Center

This chapter provides procedures for installing the Cisco Virtual Network Management Center (VNMC).

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Information About Installing the Cisco VNMC

You can install the Cisco VNMC on a virtual machine by deploying the OVF template using a preexisting Open Virtual Appliance (OVA), or by creating a virtual machine and using the optical disk media (ISO) installer. Once installed, you register the Cisco VSG and the Cisco Nexus 1000V switch with the Cisco VNMC. When registration is complete, the Cisco VNMC can manage the Cisco VSG and the Cisco Nexus 1000V switch.

Information About Deploying the OVF Template

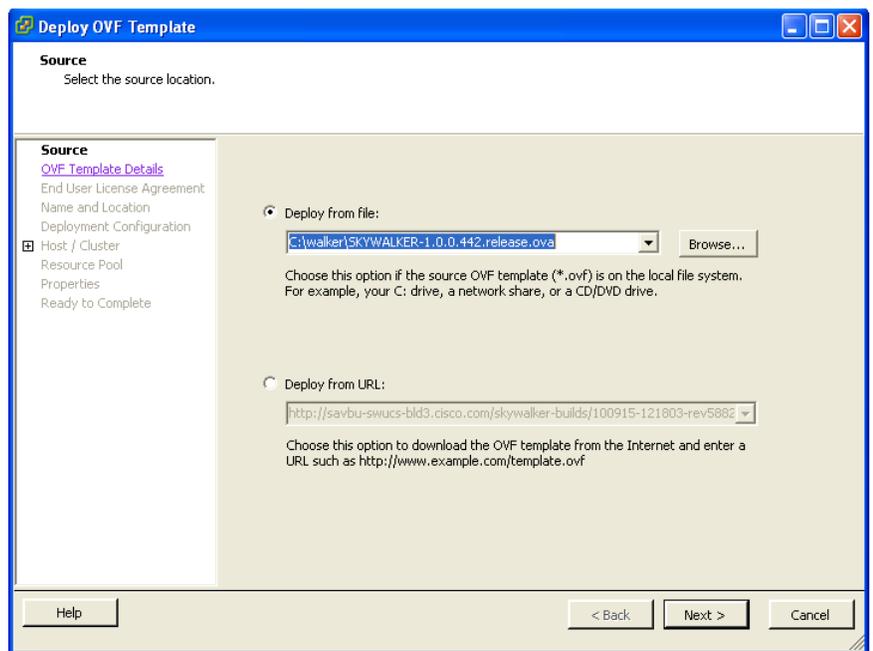
All the properties fields in the OVF template must have values. The selection you make on the Deployment Configuration page controls which fields are required and which fields are not. Optional and unused fields are automatically filled with null values. If you want to use an optional field, change the value. Password fields are not masked in the OVF Template wizard and can be viewed post-deployment. Red error messages display under a field if an invalid value is entered. When a field changes validity, going from an invalid value to a valid value or valid value to an invalid value, the focus changes to the top of the window.

During initial power on, all input is validated. Once validated, the Cisco VNMC is installed, and the Virtual Machine (VM) is configured and then rebooted.

[Figure 4-1](#) shows the first page of the OVF template.

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Figure 4-1 Deploy OVF Template—Source



Installing the Cisco VNMC by Deploying the OVF Template

You can install the Cisco VNMC by deploying the OVF template.



Note

During initial power on, extra validation is performed on user values. If any of the values are invalid, a console message appears warning that the values must be corrected. The installation does not start until all values are correct.

BEFORE YOU BEGIN

Ensure that you have all the proper networking information available, including the IP address that you will use for the Cisco VNMC.

If you are using the vSphere 4.0 OVF template for deployment, see [Appendix A, “Examples of Cisco VNMC OVA Template Deployment and Cisco VNMC ISO Installations.”](#)

PROCEDURE

- Step 1** Open your VMware client.
- Step 2** Download the .ova file using one of the following methods:
 - a.** Use a conventional download method to download the Cisco VNMC .ova file from <http://www.cisco.com/en/US/products/ps11213/index.html>, and then start the OVF template.
 - b.** Start the OVF template and download the Cisco VNMC .ova as follows:
 - Use your OVF template to select a file on your local machine.

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- Use your OVF template to download the file from cisco.com.

Step 3 Follow the steps presented by the OVF template to install the Cisco VNMC:

- a. When you reach the Deployment Configuration page, from the Configuration drop-down list, choose **VNM Installer**.
- b. When you reach the Properties page, enter values in the appropriate fields:
 - In the IP Address area, enter the IP address, the gateway, and the netmask of the virtual machine.
 - (Optional) In the VNM DNS area, enter an IP address that is the IP address of your DNS server.
 - In the VNM DNS area, enter a hostname and a domain name.
 - In the VNM Password area, enter the password for the admin account and the shared secret password.



Note Passwords are not masked when you enter them.



Note You do not need to enter any values in the Cisco VNMC Restore area.

Step 4 When you reach the page that summarizes your template settings, verify them and click **Finish**.

A progress dialog box appears. When the progress dialog box reaches 100%, another dialog box appears to let you know the status of your installation.

Step 5 Click **Close**.

The Cisco VNMC is installed.

Step 6 Power on the virtual machine.



Note Additional input validation is performed when you first boot up. You may have to reenter values during boot up.

When you open your console, the login prompt should appear.

Restoring the Cisco VNMC by Deploying the OVF Template

You can restore the Cisco VNMC by deploying the OVF template.

BEFORE YOU BEGIN

You must have a full-state backup to restore. Ensure that you have the location of your full-state backup, including the transfer protocol, the remote IP address, the credentials, and the filename.

During the restore, the virtual machine must have initial network connectivity. Ensure that you have all the proper networking information available to retrieve the full-state backup, including the IP address of your Cisco VNMC.

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During the initial boot after completing the OVF template, the full-state backup is downloaded. If any issues with the restore occur, boot will stop and display an error message. The VM will also be rebooted on restore.

PROCEDURE

-
- Step 1** Open your VMware client.
- Step 2** Download the .ova file using one of the following methods:
- a. Use a conventional download method to download the Cisco VNMC .ova file from <http://www.cisco.com/en/US/products/ps11213/index.html>, and then start the OVF template.
 - b. Start the OVF template and download the Cisco VNMC .ova as follows:
 - Use your OVF template to select a file on your local machine.
 - Use your OVF template to download the file from cisco.com.
- Step 3** Follow the steps presented by the OVF template to restore the Cisco VNMC:
- a. When you reach the Deployment Configuration page, from the Configuration drop-down list, choose **VNM Restore**.
 - b. When you reach the Properties page, enter values in the appropriate fields:
 - In the IP Address area, enter the IP address, the gateway, and the netmask of the virtual machine.
 - In the VNM Restore area, enter all restore information.
-  **Note** Passwords are not masked when you enter them.
-
- Step 4** When you reach the page that summarizes your template settings, verify them and click **Finish**.
A progress dialog box appears. When the progress dialog box reaches 100%, another dialog box appears to let you know the status of your installation.
- Step 5** Click **Close**.
The Cisco VNMC is restored.
- Step 6** Power on the virtual machine.
When you open your console, the login prompt should appear.
-

Installing the Cisco VNMC Using an ISO Image

You can install or restore an instance of Cisco VNMC using an ISO image.

BEFORE YOU BEGIN

Ensure that your hard drive size is at least 25 Gb.

See [Appendix A, “Examples of Cisco VNMC OVA Template Deployment and Cisco VNMC ISO Installations,”](#) for a detailed example of an ISO installation.

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PROCEDURE

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- Step 1** Open your client.
- Step 2** Download an ISO image from the Cisco.com.
- Step 3** Create a virtual machine on the appropriate host as follows:
- Ensure your virtual machine has the proper HDD size.
 - Ensure your virtual machine has 2-Gb RAM.
 - Choose **Red Hat Enterprise Linux 5 64-bit** as your operating system.
- Step 4** Boot your virtual machine from the ISO image.
The ISO installer appears.
- Step 5** Enter the appropriate values in the ISO installer.
- Step 6** Once the installation is completed, click **Reboot**.
The Cisco VNMC instance is created.
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Connecting to the Cisco VNMC

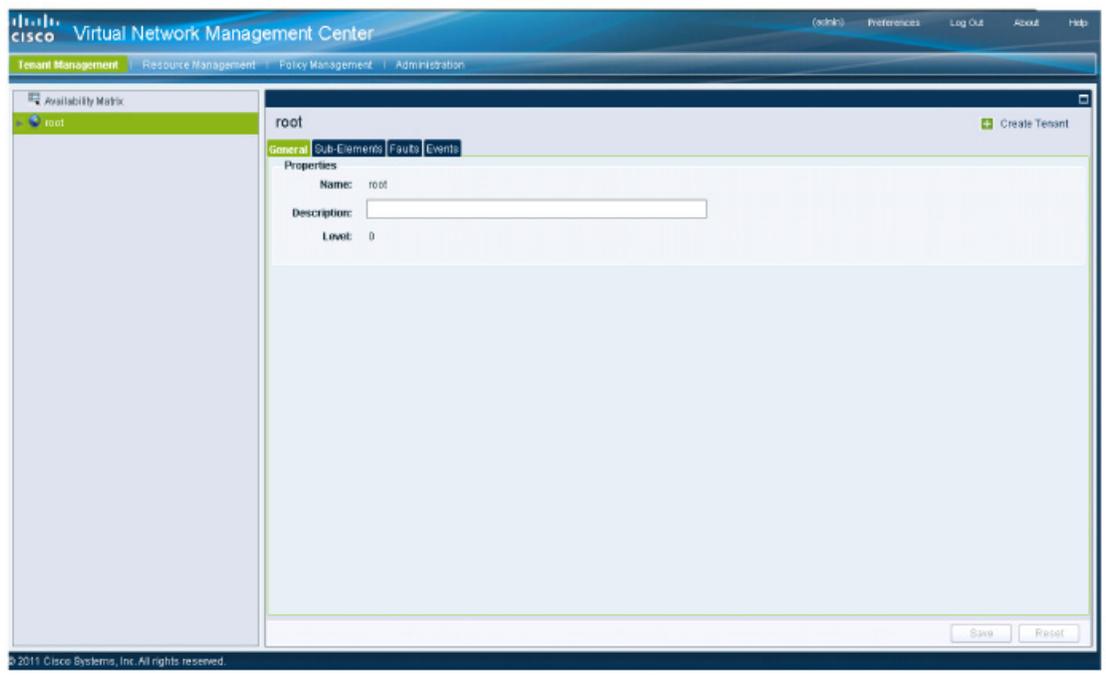
You can use your browser to connect to the Cisco VNMC.

PROCEDURE

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- Step 1** Open a browser.
- Step 2** In the browser Address field, enter the IP address that you designated for your Cisco VNMC instance and click **Go**.
The login dialog box for Cisco VNMC appears.
- Step 3** Using the appropriate username and password, log into the Cisco VNMC.
You are connected to the Cisco VNMC.
[Figure 4-2](#) shows the main window of the Cisco VNMC.

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Figure 4-2 Cisco Virtual Network Management Center, Main Window



Verifying Cisco VNM Providers

You can verify the Cisco VNM service providers as a way to ensure that the Cisco VNM is running properly.

PROCEDURE

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- Step 1** In the CLI, enter the **connect local-mgmt** command.
- ```
VNMC# connect local-mgmt
```
- Step 2** Enter the **service status** command.
- ```
VNMC(local-mgmt) # show providers
```
- Step 3** Ensure that the following providers are listed as running:
- **policy-mgr-svc_pol_dme**
 - **resource-mgr-svc_res_dme**
 - **vm-mgr-svc_vmm_dme**

You are ready to register the Cisco VSG and the Cisco Nexus 1000V.
