



Installing Prime Network Services Controller in VMware Environments

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VMware Installation Overview

You can install Prime Network Services Controller on VMware by using either an ISO or an OVA image. The installation time varies from 10 to 20 minutes, depending on the host and the storage area network load.

To install Prime Network Services Controller on VMware, complete the following tasks:

Task	Comments
1. Configuring VMware for PNSC	Required for ISO installations only.
2. Installing Prime Network Services Controller	Use the procedure appropriate for your environment: <ul style="list-style-type: none">• Installing Prime Network Services Controller Using the ISO Image, on page 5• Installing Prime Network Services Controller Using the OVA Image
3. Performing VMware Post-Installation Tasks	Required for all installations.

Installing Prime Network Services Controller Using the OVA Image

This procedure describes how to deploy the Prime Network Services Controller OVA image on VMware.

Before you begin

- Set your keyboard to United States English.
- Confirm that the Prime Network Services Controller OVA image is available from the VMware vSphere Client.
- Make sure that all system requirements are met.
- Gather the information identified in [Information Required for Configuration and Installation](#).

SUMMARY STEPS

1. Using the VMware vSphere Client, log in to the vCenter server.
2. Choose the host on which to deploy the Prime Network Services Controller VM.
3. Right-click **Host** and select **Deploy OVF Template** from the Pop-up menu.
4. In the wizard, provide the information as described in the following table:
5. Click **Finish**.
6. After Prime Network Services Controller is successfully deployed, click **Close**.
7. Power on the Prime Network Services Controller VM.

DETAILED STEPS

- Step 1** Using the VMware vSphere Client, log in to the vCenter server.
- Step 2** Choose the host on which to deploy the Prime Network Services Controller VM.
- Step 3** Right-click **Host** and select **Deploy OVF Template** from the Pop-up menu.
- Step 4** In the wizard, provide the information as described in the following table:

Screen	Action
Source	Choose the Prime Network Services Controller OVA.
OVF Template Details	Review the details.
End User License Agreement	Review the agreement and click Accept .
Name and Location	Enter a name and choose a location for the template.
Deployment Configuration	Choose Installer .
Datastore	Select the data store for the VM. The storage can be local or shared remote, such as NFS or SAN.
Disk Format	Choose either Thin provisioned format or Thick provisioned format to store the VM virtual disks.
Network Mapping	Choose the management network port group for the VM.
Properties	Address any errors that are indicated in red colored text below a selection box. You can enter placeholder information as long as your entry meets the field requirements.

Screen	Action
A. IP Address	VM management IP address.
B. IP Netmask	VM subnet mask.
C. Gateway	Gateway IP address.
D. DNS	<ul style="list-style-type: none"> • VM hostname • VM domain • DNS server IP address
E. NTP	NTP server IP address.
F. Operation Mode	<ul style="list-style-type: none"> • Standalone—Operates as a standalone VM. • Orchestrator—Integrates through an orchestrator with a northbound application. <p>Note Prime Network Services Controller does not support Orchestrator mode.</p>
G. Passwords	<ul style="list-style-type: none"> • Administrator password • Shared secret password
H. Restore	You can safely ignore the Restore fields.
Ready to Complete	<p>Review the deployment settings.</p> <p>Caution Any discrepancies can cause VM booting issues. Carefully review the IP address, subnet mask, and gateway information for accuracy.</p>

Step 5 Click **Finish**.

A progress indicator shows the task progress until Prime Network Services Controller is deployed.

Step 6 After Prime Network Services Controller is successfully deployed, click **Close**.

Step 7 Power on the Prime Network Services Controller VM.

Installing Prime Network Services Controller Using an ISO Image

To install Prime Network Services Controller in a VMware environment using an ISO image, complete the tasks described in the following topics:

Configuring VMware for Prime Network Services Controller

Before you install Prime Network Services Controller (PNSC) on VMware using an ISO image, you must configure a VM for Prime Network Services Controller. This procedure describes how to configure the VM so that you can install Prime Network Services Controller on it.

Before you begin

Confirm that the system requirements have been met and gather the information required for configuration. See *Preparing for Installation* chapter.

- Step 1** Download a Prime Network Services Controller ISO image to your client machine. In case of vSphere 6.5 and greater, upload the PNSC ISO image to datastore.
- Step 2** Open the VMware vSphere Client (for version 5.5 or 6.0) or Web client (version 6.5a).
- Step 3** Right-click the host on which to install the ISO image, and then choose **New Virtual Machine**.
- Step 4** Create a new VM by providing the information as described in the following table:

Screen	Action
Configuration	Choose Custom .
Name and Location	Enter a name and choose a location for the VM.
Storage	Choose the data store.
Virtual Machine Version	Choose Version 8 .
Guest Operating System	Choose Linux and Red Hat Enterprise Linux 5 (64-bit).
CPUs	Set the number of virtual sockets to 4.
Memory	Set the memory to 4 GB.
Network	<ul style="list-style-type: none"> • Set the number of NICs to 1. A single NIC is required for Prime Network Services Controller. • Choose a NIC. • From the Adapter drop-down list, choose E1000. Prime Network Services Controller supports only E1000 adapters.
SCSI Controller	Choose LSI Logic Parallel .
Select a Disk	Choose Create a new virtual disk .
Create a Disk	<ol style="list-style-type: none"> a. Disk Size—Enter a minimum of 20 GB. b. Disk Provisioning—Choose Thin Provision or Thick Provision. c. Location—Specify the location of the data store.
Advanced Options	Specify options as needed.

- Step 5** For VMware vSphere version 5.5 and 6.0, in the Ready to Complete screen, review the information for accuracy, check the **Edit the Virtual Machine Settings Before Completion** check box, and then click **Continue**.
- Step 6** In the Virtual Machine Properties dialog box in the Hardware tab, do the following:

- a. Click **Memory** and in the Memory Size field, choose **4 GB**.
- b. Click **CPUs** and in the Number of Virtual Sockets field, choose **4**.
- c. Click **New Hard Disk** and then click **Add** to create a new hard disk. The disk requires a minimum of 20 GB.
- d. Create an additional hard disk with 200 GB memory with thin provisioning. For VMware vSphere 6.5 webclient, choose the **Network** and **ISO disk** from the datastore and select the **Connect** check box.
- e. After you supply the information in the Add Hardware Wizard, click **Finish** to create the new disk and to return to the Virtual Machine Properties dialog box.
- f. For VMware vSphere 6.5 webclient, choose the Network for the VM. For the Image choose your uploaded ISO disk from datastore.

Step 7 In the **Options** tab, choose **Boot Options**, check the **Force BIOS Setup** check box, and then click **Finish**.

Step 8 After the new VM is created, power it on.

Step 9 For VMware vSphere 5.5 and 6.0, mount the ISO to the VM CD ROM drive as follows:

- a. Right-click the VM and choose **Open Console**.
- b. From the VM console, click **Connect/Dsiconnect the CD/DVD Devices of the Virtual Machine**.
- c. Choose **CD/DVD Drive 1**.
- d. Choose **Connect to ISO image on local disk**.
- e. Choose the ISO image that you downloaded in Step 1.

Installing Prime Network Services Controller Using the ISO Image

This procedure describes how to install the ISO image on a VM that has been configured for Prime Network Services Controller.

Before you begin

Confirm the following items:

- All system requirements are met.
- You have the information identified in [Information Required for Configuration and Installation](#).
- You have configured the hypervisor for the Prime Network Services Controller installation procedure.
- A VM has been created for Prime Network Services Controller and has network access.
- You can access the VM console.

Step 1 Open the VM console if it is not already open.

If you have just finished configuring the hypervisor, the Prime Network Services Controller installer displays within a few minutes.

- Step 2** In the Network Configuration screen, click **Edit** in the Network Devices area, enter the IP address and netmask for the Prime Network Services Controller VM, and click **OK**.
- Step 3** In the Network Configuration area, enter the hostname, domain name, and IP addresses for the gateway, DNS server, and NTP server.
- Step 4** In the Modes screen, choose the required modes, and click **Next**:
- Prime Network Services Controller Operation Mode: Choose **Standalone**. This release of Prime Network Services Controller is available in Standalone mode only.
 - Prime Network Services Controller Configuration:
 - Prime Network Services Controller Installation—Choose if this is the initial Prime Network Services Controller installation on the VM.
 - Restore Prime Network Services Controller—Choose to restore a previous Prime Network Services Controller installation.
- Step 5** In the Administrative Access screen, enter the administrator and shared secret passwords with confirming entries. For information on creating a strong password, see [Shared Secret Password Criteria](#).
- Note** If you configure a weak shared secret password, no error message is generated during entry here, but the shared secret password is not usable when the VM is started during the installation process.
- Step 6** In the Summary screen, confirm that the information is accurate, and then click **Finish**. Prime Network Services Controller installs on the VM. This takes a few minutes.
- Step 7** When prompted, disconnect from the media source and then click **Reboot**. For vSphere 6.5a Webclient, you need to power off the VM and edit the configuration to uncheck the **Connect** check box for ISO disk and then power on the VM again to complete the reboot. Prime Network Services Controller is then installed on the VM.
- Step 8** To confirm that Prime Network Services Controller is accessible, connect to Prime Network Services Controller through the console for the CLI or a browser for the GUI.
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