NetApp

Installing, upgrading, and removing Unified Manager software on VMware vSphere

OnCommand Unified Manager 9.5

NetApp
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On VMware vSphere systems, you can install Unified Manager software, upgrade to a newer version of software, or remove the Unified Manager virtual appliance.

Overview of the deployment process on VMware

The deployment workflow describes the tasks that you must perform before you can use Unified Manager.
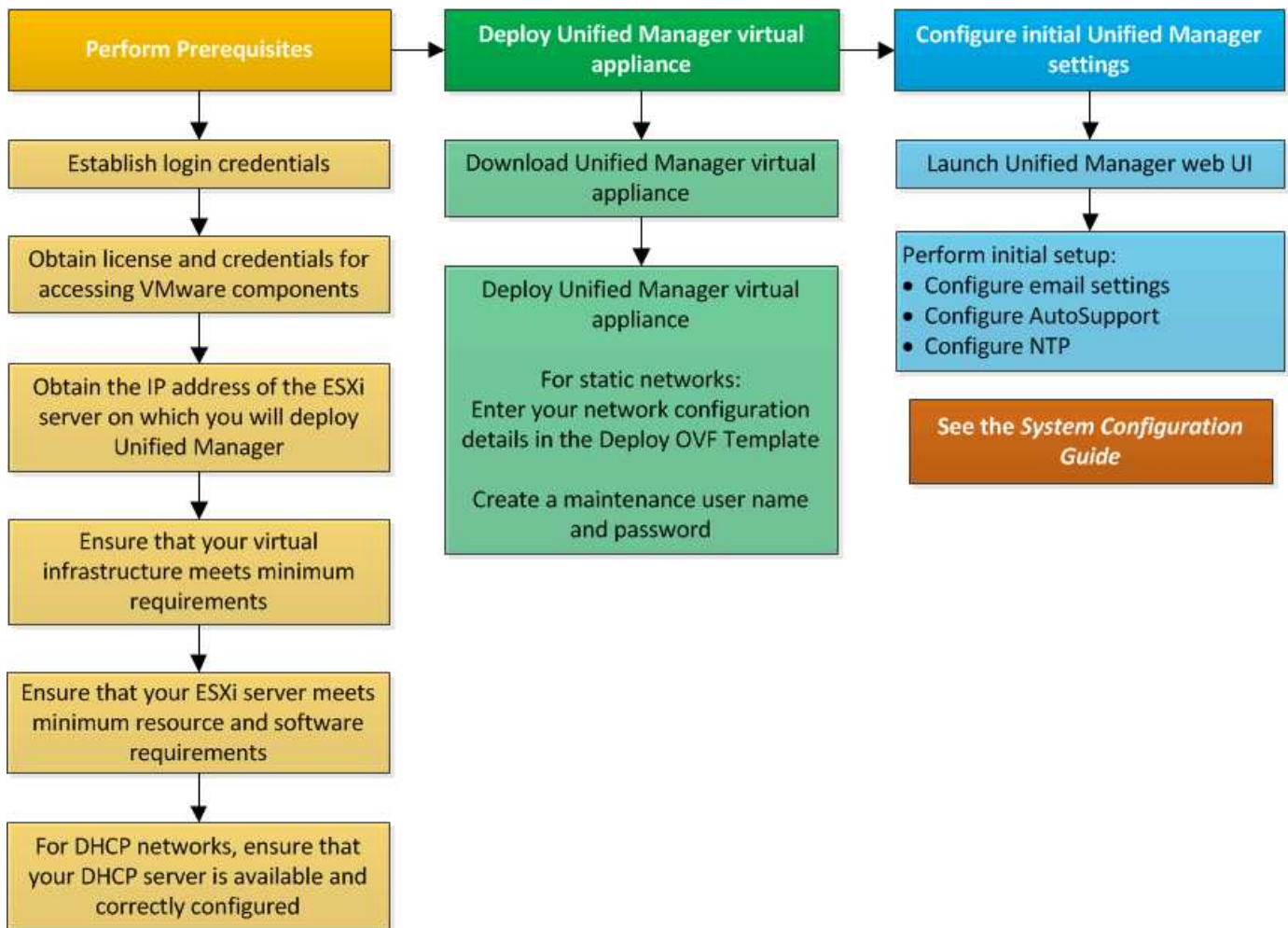
Deploying Unified Manager

Deploying Unified Manager includes downloading software, deploying the virtual appliance, creating a maintenance user name and password, and performing the initial setup in the web UI.

Before you begin

- You must have completed the system requirements for deployment.

  [System requirements](#)

- You must have the following information:
  - Login credentials for the NetApp Support Site
  - Credentials for accessing the VMware vCenter Server and vSphere Web Client (for vSphere version 6.5) or vSphere Client (for vSphere version 5.5 or 6.0)
  - IP address of the ESXi server on which you are deploying the Unified Manager virtual appliance
  - Details about the data center, such as storage space in the datastore and memory requirements
  - IPv6 must be enabled on the host if you are planning to use IPv6 addressing.
  - CD-ROM or ISO image of VMware Tools

About this task

You can deploy Unified Manager as a virtual appliance on a VMware ESXi server.

You must access the maintenance console by using the VMware console, and not by using SSH.

VMware Tools are not included in the Unified Manager `.ova` file, and must be installed separately.

After you finish

After finishing the deployment and initial setup, you can either add clusters, or configure additional network settings in the maintenance console, and then access the web UI.

Downloading the Unified Manager OVA file

You must download the Unified Manager `.ova` file from the NetApp Support Site to deploy Unified Manager as a virtual appliance.

Before you begin

You must have login credentials for the NetApp Support Site.

About this task

The `.ova` file contains the Unified Manager software configured in a virtual appliance.

Steps

1. Log in to the NetApp Support Site, and navigate to the Download page for installing Unified Manager on the VMware vSphere.

   [NetApp Downloads: Software](#)

2. Download and save the `.ova` file to a local directory or network directory that is accessible to your vSphere Client.

3. Verify the checksum to ensure that the software downloaded correctly.

Deploying the Unified Manager virtual appliance

You can deploy the Unified Manager virtual appliance after you download the `.ova` file from the NetApp Support Site. You must use the vSphere Web Client (for vSphere version 6.5) or vSphere Client (for vSphere version 5.5 or 6.0) to deploy the virtual appliance on an ESXi server. When you deploy the virtual appliance, a virtual machine is created.

Before you begin

You must have reviewed the system requirements. If changes are required to meet the system requirements, you must implement the changes before deploying the Unified Manager virtual appliance.

Virtual infrastructure requirements

VMware software and installation requirements

If you use DHCP, you must ensure that the DHCP server is available, and that the DHCP and virtual machine (VM) network adapter configurations are correct. DHCP is configured by default.

If you use a static networking configuration, you must ensure that the IP address is not duplicated in the same subnet, and that the appropriate DNS server entries have been configured.

You must have the following information before deploying the virtual appliance:

- Credentials for accessing the VMware vCenter Server and vSphere Web Client (for vSphere version 6.5) or vSphere Client (for vSphere version 5.5 or 6.0)
- IP address of the ESXi server on which you are deploying the Unified Manager virtual appliance
- Details about the data center, such as availability of storage space
- If you are not using DHCP, you must have the IPv4 or IPv6 addresses for the networking devices to which you are planning to connect:
  - Fully qualified domain name (FQDN) of the host
  - IP address of the host
  - Network mask
  - IP address of the default gateway
  - Primary and secondary DNS addresses
  - Search domains
- CD-ROM or ISO image for the VMware Tools

About this task

VMware Tools are not included in the `.ova` file. You must install the VMware Tools separately.

When the virtual appliance is deployed, a unique self-signed certificate for HTTPS access is generated. When accessing the Unified Manager web UI, you might see a browser warning about untrusted certificates.

VMware High Availability for the Unified Manager virtual appliance is supported.

Steps

1. In the vSphere Client, click **File** > **Deploy OVF Template**.

2. Complete the **Deploy OVF Template** wizard to deploy the Unified Manager virtual appliance.

   On the Networking Configuration page:

   - Leave all the fields blank when using DHCP and IPv4 addressing.

   - Check the "Enable Auto IPv6 addressing" box, and leave all the other fields blank when using DHCP and IPv6 addressing.

   - If you want to use a static network configuration, you can complete the fields on this page and these settings are applied during deployment. You must ensure that the IP address is unique to the host on which it is deployed, that it is not already in use, and that it has a valid DNS entry.

3. After the Unified Manager virtual appliance is deployed to the ESXi server, power on the VM by right-clicking the VM, and then selecting **Power On**.

   If the Power On operation fails because of insufficient resources, you must add resources and then retry the installation.

4. Click the **Console** tab.

   The initial boot process takes a few minutes to complete.

5. Follow the prompt to install the VMware Tools on the VM.

   When using the vSphere Web Client with vSphere 6.5 you need to manually mount the VMware Tools ISO image. From the VM you need to select **Edit Settings** > **Virtual Hardware** > **CD/DVD drive x** > **Datastore ISO file** and then click **Browse** to select the file `linux.iso` as the mount image.

6. To configure your time zone, enter your geographic area and your city or region as prompted in the VM **Console** window.

   All the date information that is displayed uses the time zone that is configured for Unified Manager, regardless of the time zone setting on your managed devices. You should be aware of this when comparing time stamps. If your storage systems and the management server are configured with the same NTP server, they refer to the same instant in time, even if they appear differently. For example, if you create a Snapshot copy using a device that is configured using a different time zone than that of the management server, the time reflected in the time stamp is the management server time.

7. If no DHCP services are available, or if there is an error in the details for the static network configuration, select one of the following options:

If you use…	Then do this…
DHCP	Select **Retry DHCP**. If you plan to use DHCP, you should ensure that it is configured correctly. If you use a DHCP-enabled network, the FQDN and DNS server entries are given to the virtual appliance automatically. If DHCP is not properly configured with DNS, the host name "OnCommand" is automatically assigned and associated with the security certificate. If you have not set up a DHCP-enabled network, you must manually enter the networking configuration information.
A static network configuration	a. Select **Enter the details for static network configuration**. The configuration process takes a few minutes to complete. b. Confirm the values that you entered, and select **Y**.

8. At the prompt, enter a maintenance user name, and click **Enter**.

   The maintenance user name must start with a letter from a-z, followed by any combination of -, a-z, or 0-9.

9. At the prompt, enter a password, and click **Enter**.

   The VM console displays the URL for the Unified Manager web UI.

After you finish

You can access the web UI to perform the initial setup of Unified Manager, as described in the *OnCommand Unified Manager System Configuration Guide*.

Upgrading Unified Manager on VMware

You can upgrade to Unified Manager version 9.5 only from instances of Unified Manager 7.3 or 9.4.

About this task

During the upgrade process, Unified Manager is unavailable. You should complete any running operations before upgrading Unified Manager.

If Unified Manager is paired with an instance of OnCommand Workflow Automation, and there are new versions of software available for both products, you must disconnect the two products and then set up a new Workflow Automation connection after performing the upgrades. If you are performing an upgrade to only one of the products, then you should log into Workflow Automation after the upgrade and verify that it is still acquiring data from Unified Manager.

Downloading the Unified Manager ISO image

Before upgrading Unified Manager, you must download the Unified Manager ISO image from the NetApp Support Site.

Before you begin

You must have login credentials for the NetApp Support Site.

Steps

1. Log in to the NetApp Support Site and navigate to the Software Download page.
2. Download and save the `.iso` image file to a local directory or network directory that is accessible to your vSphere Client.
3. Verify the checksum to ensure that the software downloaded correctly.

Related information

NetApp Support

Upgrading the Unified Manager virtual appliance

You can upgrade from Unified Manager version 7.3 or 9.4 to Unified Manager 9.5.

Before you begin

- You must have downloaded the `.iso` file from the NetApp Support Site.
- The system on which you are upgrading Unified Manager must meet the system and software requirements.

  Virtual infrastructure requirements

  VMware software and installation requirements

- For vSphere 6.5 users, you must have installed the VMware Remote Console (VMRC).
- You must have the following information:
  - Login credentials for the NetApp Support Site
  - Credentials for accessing the VMware vCenter Server and vSphere Web Client (for vSphere version 6.5) or vSphere Client (for vSphere version 5.5 or 6.0)
  - Credentials for the Unified Manager maintenance user

About this task

During the upgrade process, Unified Manager is unavailable. You should complete any running operations before upgrading Unified Manager.

If you have paired Workflow Automation and Unified Manager, you must manually update the host name in Workflow Automation.

Steps

1. In the vSphere Client, click **Home** > **Inventory** > **VMs and Templates**.
2. Select the virtual machine (VM) on which the Unified Manager virtual appliance is installed.
3. If the Unified Manager VM is running, navigate to **Summary** > **Commands** > **Shut Down Guest**.
4. Create a backup copy—such as a snapshot or clone—of the Unified Manager VM to create an application-consistent backup.
5. From the vSphere Client, power on the Unified Manager VM.
6. Select the Unified Manager upgrade image:

If you are using…	Then do this…
vSphere 5.5 or 6.0	a. Click the **CD/DVD Drive** icon, and select **Connect to ISO image on local disk**. b. Select the `OnCommandUnifiedManager-9.5-virtual-update.iso` file, and click **Open**.
vSphere 6.5	a. Launch the VMware Remote Console. b. Click the **CDROM** icon, and select **Connect to Disk Image File (.iso)**. c. Select the `OnCommandUnifiedManager-9.5-virtual-update.iso` file, and click **Open**.

7. Click the **Console** tab.
8. Log in to the Unified Manager maintenance console.
9. In the **Main Menu**, select **Upgrade**.

   A message is displayed that Unified Manager will be unavailable during the upgrade process, and will resume after completion.

10. Type `y` to continue.

    A warning is displayed, reminding you to back up the virtual machine on which the virtual appliance resides.

11. Type `y` to continue.

    The upgrade process and the restart of Unified Manager services can take several minutes to complete.

12. Press any key to continue.

    You are automatically logged out of the maintenance console.

13. Log in to the maintenance console, and verify the version of Unified Manager.

You can log in to the web UI to use the upgraded version of Unified Manager. Note that you must wait for the discovery process to finish before performing any task in the UI.

Restarting the Unified Manager virtual machine

You can restart the Unified Manager virtual machine (VM) from the maintenance console. You must restart the VM after generating a new security certificate, or if there is a problem with the VM.

Before you begin

- The virtual appliance must be powered on.
- You must be logged in to the Unified Manager maintenance console as the maintenance user.

About this task

You can also restart the virtual machine from vSphere by using the VMware **Restart Guest** option.

Steps

1. In the maintenance console, select **System Configuration** > **Reboot Virtual Machine**.
2. Start the Unified Manager graphical user interface (GUI) from your browser, and log in.

Related information

VMware vSphere PowerCLI Cmdlets Reference: Restart-VMGuest

Removing Unified Manager from VMware

You can uninstall Unified Manager by destroying the virtual appliance on which the Unified Manager software is installed.

Before you begin

- You must have credentials for accessing VMware vCenter Server and vSphere Web Client (for vSphere version 6.5) or vSphere Client (for vSphere version 5.5 or 6.0).
- The Unified Manager server must not have an active connection to an external data provider.

  If there is an active connection, you must delete the connection by using the Unified Managermaintenance console.
- The Unified Manager server must not have an active connection to a Workflow Automation server.

  If there is an active connection, you must delete the connection by using the Administration menu.
- All clusters (data sources) must be removed from the Unified Manager server before you delete the virtual machine (VM).

Steps

1. Use the Unified Managermaintenance console to verify that the Unified Manager server does not have an active connection to an external data provider.

2. In the vSphere Client, click **Home** > **Inventory** > **VMs and Templates**.

3. Select the VM that you want to destroy, and click the **Summary** tab.

4. If the VM is running, click **Power** > **Shut Down Guest**.

5. Right-click the VM that you want to destroy, and click **Delete from Disk**.