



Upgrading Unified Manager on Red Hat Enterprise Linux

Active IQ Unified Manager 9.16

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Upgrading Unified Manager on Red Hat Enterprise Linux

You can upgrade Unified Manager when a new version is available.

Patch releases of Unified Manager software, when provided by NetApp, are installed using the same procedure as new releases.

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.

Supported upgrade path for Unified Manager versions

Active IQ Unified Manager supports a specific upgrade path for each version.

Not all versions of Unified Manager can perform an in-place upgrade to later versions. The Unified Manager upgrades are limited to an N-2 model, meaning an upgrade can only be performed within the next 2 releases on all platforms. For example, you can perform an upgrade to Unified Manager 9.16 from Unified Manager 9.13 and 9.14 only.

If you are running a version that is earlier than the supported versions, your Unified Manager instance will need to be upgraded to one of the supported versions first, and then upgraded to the current version.

For example, if your installed version is Unified Manager 9.9 and you want to upgrade to Unified Manager 9.14, you follow a sequence of upgrades.

Sample upgrade path:

1. Upgrade 9.11 → 9.13
2. Upgrade 9.13 → 9.14
3. Upgrade 9.14 → 9.16

For more information on the upgrade path matrix, see this [knowledge base \(KB\) article](#).

Upgrading Unified Manager

You can upgrade from Unified Manager 9.13 or 9.14 to 9.16 by downloading and running the installation file on the Linux platform.

Before you begin

- The system on which you are upgrading Unified Manager must meet the system and software requirements.

See [Hardware system requirements](#).

See [Linux software and installation requirements](#).

- You must have a subscription to the Red Hat Enterprise Linux Subscription Manager.

- You must install, or upgrade to the correct version of OpenJDK prior to upgrading Unified Manager.

See [Upgrading JRE on Linux](#).

- To avoid data loss, you must have created a backup of the Unified Manager database in case there is an issue during the upgrade. NetApp recommends that you move the backup file from the `/opt/netapp/data` directory to an external location.
- During upgrade, you may be prompted to confirm whether you want to keep the previous, default settings for retaining performance data for 13 months or to change it to 6 months. On confirming, the historical performance data is purged after 6 months.
- You should have completed any running operations, because Unified Manager is unavailable during the upgrade process.
- MySQL Community Edition is automatically upgraded during Unified Manager upgrade. If the installed version of MySQL on your system is earlier than 8.0.37, the Unified Manager upgrade process automatically upgrades MySQL to 8.0.37.

Steps

1. Log in to the target Red Hat Enterprise Linux server.
2. Download the Unified Manager bundle to the server.

See [Downloading Unified Manager for Linux](#).

3. Navigate to the target directory and expand the Unified Manager bundle:

```
unzip ActiveIQUnifiedManager-<version>.zip
```

The required RPM modules for Unified Manager are unzipped to the target directory.

4. Verify that the following module is available in the directory:

```
ls *.rpm
```

```
netapp-um<version>.x86_64.rpm
```

5. Run the pre-installation script to ensure that there are no system configuration settings or any installed software that might conflict with the upgrade:

```
sudo ./pre_install_check.sh
```

The pre-installation script checks that the system has a valid Red Hat Enterprise Linux subscription, and that it has access to the required software repositories. If the script identifies any issues, you must fix the issues and continue with the upgrade.

If there are any missing packages detected, perform the steps mentioned in [Additional steps to perform for missing packages](#). If there are no missing packages, continue with the next steps.

6. Upgrade Unified Manager using the following script:

```
upgrade.sh
```

This script automatically executes the RPM modules, upgrading the necessary supporting software and the Unified Manager modules that run on them. Additionally, the upgrade script checks whether there are any system configuration settings or any installed software that might conflict with the upgrade. If the script

identifies any issues, you must fix the issues before upgrading Unified Manager. If you have previously installed packages, such as *net-snmp* before you upgraded Unified Manager, the MySQL dependency might uninstall the package during upgrade. You need to install the package manually again for continuing to use it.

7. After the upgrade is complete, scroll back through the messages until you see the message displaying an IP address or URL for the Unified Manager web UI, the maintenance user name (umadmin), and the default password.

The message is similar to the following:

```
Active IQ Unified Manager upgraded successfully.  
Use a web browser and one of the following URLs to access the Unified  
Manager GUI:
```

```
https://default_ip_address/      (if using IPv4)  
https://[default_ip_address]/    (if using IPv6)  
https://fully_qualified_domain_name/
```

Enter the specified IP address or URL in a new window of a supported web browser to start the Unified Manager web UI, and then log in by using the same maintenance user name (umadmin) and password that you set earlier.

Additional steps to perform for missing packages

If there are any missing packages detected at your site during upgrade, or if your system is not connected to the internet, or you are not using the Red Hat Enterprise Linux repositories, perform the following steps to determine whether you are missing any required packages and download those packages.



These steps need to be performed after step 5 of the main procedure. This procedure upgrades Unified Manager and you do not need to run any additional steps for upgrade.

1. View the list of available and unavailable packages:

```
yum install netapp-um<version>.x86_64.rpm --assumeno
```

The items in the “Installing:” section are the packages that are available in the current directory, and the items in the “Installing for dependencies:” section are the packages that are missing on your system.

2. On a different system that has the internet access, run the following command to download the missing packages.

```
yum install package_name --downloadonly --downloaddir=.
```

The packages are downloaded in the directory specified as `--downloaddir=.`

Because the plug-in “yum-plugin-downloadonly” is not always enabled on Red Hat Enterprise Linux systems, you might need to enable the functionality to download a package without installing it:

```
yum install yum-plugin-downloadonly
```

3. Copy the downloaded packages to the directory where you unzipped the Unified Manager bundle on the installation system.
4. Change directories to that directory and run the following command for installing the missing packages, along with their dependencies.

```
yum install *.rpm
```

5. Start the Unified Manager server. Run these commands:

```
systemctl start ocie
```

```
systemctl start ocieau
```

This process completes the Unified Manager upgrade process. Enter the specified IP address or URL in a new window of a supported web browser to start the Unified Manager web UI, and then log in by using the same maintenance user name (umadmin) and password that you set earlier.

Upgrading the host OS from Red Hat Enterprise Linux 7.x to 8.x

If you previously installed Unified Manager on a Red Hat Enterprise Linux 7.x system and need to upgrade to Red Hat Enterprise Linux 8.x, you must follow one of the procedures listed in this topic. In both cases you must create a backup of Unified Manager on the Red Hat Enterprise Linux 7.x system, and then restore the backup onto a Red Hat Enterprise Linux 8.x system. Note that the supported versions of Red Hat Enterprise Linux are from 8.0 to 8.10.

The difference between the two options listed below is that in one case you are performing the Unified Manager restore onto a new 8.x server, and in the other case you are performing the restore operation onto the same server.

Because this task requires that you create a backup of Unified Manager on the Red Hat Enterprise Linux 7.x system, you should create the backup only when you are prepared to complete the entire upgrade process so that Unified Manager is offline for the shortest period of time. Gaps in collected data appear in the Unified Manager UI for the period of time during which the Red Hat Enterprise Linux 7.x system is shut down and before the new Red Hat Enterprise Linux 8.x is started.

See [Managing backup and restore operations](#) if you need to review detailed instructions for the backup and restore processes.

Follow these steps if you have a spare system on which you can install Red Hat Enterprise Linux 8.x software so that you can perform the Unified Manager restore on that system while the Red Hat Enterprise Linux 7.x system is still available.

1. Install and configure a new server with Red Hat Enterprise Linux 8.x software.

See [Linux software and installation requirements](#).

2. On the Red Hat Enterprise Linux 8.x system, install the same version of Unified Manager software that you have on the existing Red Hat Enterprise Linux 7.x system.

See [Installing Unified Manager on Linux](#).

Do not launch the UI or configure any clusters, users, or authentication settings when the installation is complete. The backup file populates this information during the restore process.

3. On the Red Hat Enterprise Linux 7.x system, from the Administration menu in the web UI, create a Unified Manager backup and then copy the backup file (.7z file) and the contents of the database repository directory (/database-dumps-repo subdirectory) to an external location.
4. On the Red Hat Enterprise Linux 7.x system, shut down Unified Manager.
5. On the Red Hat Enterprise Linux 8.x system, copy the backup file (.7z file) from the external location to /opt/netapp/data/ocum-backup/ and the database repository files to the /database-dumps-repo subdirectory under the /ocum-backup directory.
6. Enter the following command to restore the Unified Manager database from the backup file:

```
um backup restore -f /opt/netapp/data/ocum-backup/<backup_file_name>
```

7. Enter the IP address or URL into your web browser to start the Unified Manager web UI, and then log in to the system.

Once you have verified that the system is operating properly you can remove Unified Manager from the Red Hat Enterprise Linux 7.x system.

Upgrading the host OS on the same server

Follow these steps if you do not have a spare system on which you can install Red Hat Enterprise Linux 8.x software.

1. From the Administration menu in the web UI, create a Unified Manager backup and then copy the backup file (.7z file) and the contents of the database repository directory (/database-dumps-repo subdirectory) to an external location.
2. Remove the Red Hat Enterprise Linux 7.x image from the system and completely wipe the system.
3. Install and configure Red Hat Enterprise Linux 8.x software on the same system.

See [Linux software and installation requirements](#).

4. On the Red Hat Enterprise Linux 8.x system, install the same version of Unified Manager software that you had on the Red Hat Enterprise Linux 7.x system.

See [Installing Unified Manager on Linux](#).

Do not launch the UI or configure any clusters, users, or authentication settings when the installation is complete. The backup file populates this information during the restore process.

5. Copy the backup file (.7z file) from the external location to /opt/netapp/data/ocum-backup/ and the database repository files to the /database-dumps-repo subdirectory under the /ocum-backup directory.
6. Enter the following command to restore the Unified Manager database from the backup file:

```
um backup restore -f /opt/netapp/data/ocum-backup/<backup_file_name>
```

7. Enter the IP address or URL into your web browser to start the Unified Manager web UI, and then log in to the system.

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