

Dell EMC OpenManage Server Update Utility

Version 22.03.00

Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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About OpenManage Server Update Utility

OpenManage Server Update Utility is an application available in an ISO for identifying and applying updates to the system. Copy the ISO to a USB drive or to the network drive.

You can use SUU to update the Dell PowerEdge system or to view the updates available for system that supports SUU. SUU compares the versions of components currently installed on the system with the versions of the components packaged on the Dell PowerEdge Server Update Utility media. SUU displays a comparison report of the versions and provides various options for updating the components.

Only users with administrator (Microsoft Windows) or root (Linux) privileges can perform updates using SUU.

NOTE: SUU carries updates only from Dell's 12G and later PowerEdge servers. The SUU ISO is split into two components, such as for Microsoft Windows operating system: 64-bit, for Linux operating system: 64-bit.

Topics:

- [What is new in this release](#)
- [Key features and functionalities](#)
- [Supported operating systems](#)
- [Accessing support content from the Dell EMC support site](#)

What is new in this release

- Support for new SUU UI.
- Support for new CLI commands.
- View a modified folder structure of the repository.

The following features are no longer supported:

- **Enable System Set Update**
- Updating OpenManage Server Administrator (OMSA) on Linux
- Exporting the comparison report in HTML format from the UI is not supported in 22.03.00. To export using CLI in JSON format, use `SUU --compliance --output=c:\compliancereport.json`.

Key features and functionalities

This section describes key features and functionalities of SUU.

Table 1. Features and Functionalities

Feature	Description
Prerequisite Failure Messages	List of error messages displayed when the prerequisite conditions are not met. For more information, see Prerequisite Failure Messages .
Comparison Report	Displays a list of component versions installed on the system that do not match the versions on the repository. For more information, see Comparison Report .
Upgrading or Downgrading	Allows you to upgrade, downgrade, or update the system components if the versions vary from the repository version. For more information, see Upgrading System Components and Downgrading System Components .
Launching SUU in a GUI mode or from Network Location	Enables you to run SUU, upgrade, downgrade, update components on multiple systems. For more information, see Launching SUU in a GUI mode .
CLI Commands	Displays the list of commands to perform comparisons and updates in the CLI mode. For more information, see List of CLI Commands .

Table 1. Features and Functionalities (continued)

Feature	Description
Dependency	Feature which provides information about the available updates for a device. SUU enables certain tools and applications to determine if a set of conditions or requirements are met. These conditions or requirements are called dependencies. Following are the types of dependency: Pre-requisites and Corequisites. For more information, see Comparison Report .

Supported operating systems

Microsoft Windows operating systems:

- Microsoft Windows Server 2016
- Microsoft Windows Server 2019
- Microsoft Windows Server 2022

Linux operating systems:

- SUSE Linux Enterprise Server 15
- Red Hat Enterprise Linux 8.4
- Red Hat Enterprise Linux 7.9

For detailed information on various systems and operating systems on which SUU is supported, see the Dell Systems Software Support Matrix at <https://www.dell.com/esmmanuals>.

Accessing support content from the Dell EMC support site

Access supporting content related to an array of systems management tools using direct links, going to the Dell EMC support site, or using a search engine.

- Direct links:
 - For Dell EMC Enterprise Systems Management and Dell EMC Remote Enterprise Systems Management—<https://www.dell.com/esmmanuals>
 - For Dell EMC Virtualization Solutions—www.dell.com/virtualizationsolutions
 - For Dell EMC OpenManage—<https://www.dell.com/openmanagemanuals>
 - For iDRAC—<https://www.dell.com/idracmanuals>
 - For Dell EMC OpenManage Connections Enterprise Systems Management—<https://www.dell.com/OMConnectionsEnterpriseSystemsManagement>
 - For Dell EMC Serviceability Tools—<https://www.dell.com/serviceabilitytools>
- Dell EMC support site:
 1. Go to <https://www.dell.com/support>.
 2. Click **Browse all products**.
 3. From the **All products** page, click **Software**, and then click the required link.
 4. Click the required product and then click the required version.

Using search engines, type the name and version of the document in the search box.

About user interface mode

The Graphical User Interface (UI) provides an interactive approach to perform comparisons and updates. You can use the UI to:

- View the system comparison report, which displays the system inventoried device versions, applicable DUP versions, and the devices that require an update.
- Perform an upgrade or downgrade.
- To view the supported components of all the platforms in SUU, see the `DellSoftwareBundleReport.html` file on the support site.

Topics:

- [Start SUU in a GUI mode](#)
- [Prerequisite failure message](#)
- [Locate Server Update Utility](#)
- [Comparison report](#)
- [Upgrade system components](#)
- [Downgrade system components](#)

Start SUU in a GUI mode

You can run SUU from a network location or from the location where the SUU ISO is mounted. To update components on multiple systems:

1. Access the system on the network on which SUU is available or choose the path where the ISO is mounted.
2. To start the SUU GUI:
 - Double-click the `suulauncher.exe` file on Microsoft Windows.
 - Use the `./suulauncher` command from the ISO path on Linux.

The components that need to be updated are displayed in the **Comparison Report**.
3. Select the components to upgrade or downgrade.
4. Click **Apply**.
The updates are reflected in the **Comparison Report**.


Prerequisite failure message

Prerequisite failure message:

Your system does not meet the required prerequisites for installing some of the components. Therefore, the row for the component is disabled in the Comparison Report. Click Continue to update the applicable components.

Locate Server Update Utility

1. Go to <https://www.dell.com/support>.
2. In the **Search** box, enter a Service Tag or model.
The product page is displayed.
3. Click **Drivers & Download**.
4. From the **Operating system** list, change the operating system, if necessary.

 **NOTE:** Ubuntu and ESXi are not supported.

5. From the **Category** list, select **Systems Management**.

6. From the table of results, select **Dell EMC Server Update Utility > Download**.
7. To download other formats, expand **Dell EMC Server Update Utility** and click **Other formats**.
.html and .txt formats are displayed.

Comparison report

SUU compares the version of the component that is installed on the system with the versions available in the repository and displays the results in a **Comparison Report**. The following are the fields that are displayed in the **Comparison Report**. **Enable System Set Update** and sorting are no longer supported.

- **Select**—Select a component.
- **Status**—Displays the existing status as icons, where each of the icons represents different status—upgrade, downgrade, and compliant.
- **Criticality**—Denotes the importance of the update.
- **Package Name**—Displays the package name from the inventory.
- **Component**—Displays the component name.
- **Type**—Displays the type of devices that are listed from the inventory.
- **Current version**—Displays the current version of the systems.
- **Latest version**—Displays the latest available version to be updated in the repository.
- **Pre-requisites**—Displays the list of pre-requisites that must be applied.
- **Co-requisites**—Displays the list of co-requisites to be applied for the device, which are optional.
- **Progress**—Displays the status—pending, not started, or completed—when an upgrade or downgrade is initiated.

Criticality levels

The **Criticality** column in the **Comparison Report** denotes the importance of applying the update. For more information on the criticality levels and their corresponding status, see the table.


Table 2. Criticality Levels

Criticality Level	Status
Urgent	The update contains changes to improve the reliability and availability of the system. It is recommended that you apply this update immediately.
Recommended	The update contains feature enhancements or changes that keeps the system software current and compatible with other system modules (firmware, BIOS, drivers, and application). It is recommended that you apply this update during the next scheduled update cycle.
Optional	The update contains changes that impact only certain configurations, or provides new features that may/may not apply to the environment. It is recommended that you review the update specifications to determine if it applies to the system.

Upgrade system components

SUU compares the version of the components that are installed on the system with the versions available in the repository. If the system component versions are earlier than the repository version, SUU enables the **Apply** button on the upper-right corner of the **Comparison Report**.

To upgrade the repository components:

1. Select the components that you want to upgrade.
 **NOTE:** The components that must be upgraded are preselected.
2. Click **Apply**.

The status of the upgrade and progress can be viewed in the Comparison Report.

NOTE: When you perform an upgrade, SUU copies all the update packages into a temporary directory on the system:
C:\ProgramData\Dell\DELL EMC System Update on systems running Microsoft Windows operating system and
usr/libexec/dell_dup on systems running Linux operating systems. SUU deletes this temporary directory after the
upgrade process is complete. If a restart is required to complete the upgrade process, the directory is saved until the restart
process is complete.

Downgrade system components

SUU compares the components installed on the system with the component versions available in the repository. If the system component versions later than the repository versions, SUU enables the **Enable Downgrade** button.

To downgrade the repository components:

1. Select **Enable Downgrade**.
All downgradeable components are selected.
2. Click **Apply**.
The status of the downgrade can be viewed in the **Comparison Report**.

About command line interface mode

The Command Line Interface (CLI) mode allows you to run commands from a command prompt to perform comparisons and updates.

Run SUU in CLI mode, in the SUU root directory. If you are running SUU from a network shared location, copy the SUU ISO contents to a shared directory and run the CLI from the shared directory.

You can use the CLI to:

- Perform comparisons and updates. For the list of commands, see [List of CLI Commands](#).
- View the progress of the update in a separate file.

Topics:

- [Start SUU in CLI mode](#)
- [List of CLI commands](#)
- [Use case for CLI commands](#)

Start SUU in CLI mode

You can run SUU from the directory where the SUU ISO is mounted. To update components on multiple systems in the CLI mode:

1. Access the system on which SUU is mounted or choose the path where the ISO is loaded.
2. The following commands display the comparison report and updates all the components: `suu --compliance` or `suu -u` or `suu --update`

List of CLI commands

Table 3. CLI Commands List



Task	Support with SUU 21.12.00 and earlier	Support with SUU 22.03.00 and later
Display the help message	<code>—? —h --help</code>	<code>—? —h --help</code>
Launch the SUU Graphical user Interface.  NOTE: On systems running Linux operating systems, this option can be used only from the X Window system.	<code>—g —gui</code>	Use <code>suulauncher</code>
Update the system components to the repository level. Components in your system that are of a higher version than the components in the repository are downgraded without prompting you for confirmation. It is not recommended always.	<code>—u --update</code>	<ul style="list-style-type: none"> • <code>--update</code> • <code>--u (--apply-upgrades)</code> • Combination of <code>—u(--apply-upgrades) + --n(noninteractive)</code>
Upgrade all components repository versions that are greater than the current versions installed on the system. You cannot upgrade individual components using CLI. To do this, use the UI.	<code>—e --upgradeonly</code>	<ul style="list-style-type: none"> • <code>--update</code> • <code>--u (--apply-upgrades)</code>
Downgrade all the system components greater than the repository components to the repository versions	<code>—n —d --downgradeonly</code>	<ul style="list-style-type: none"> • <code>--n</code> is noninteractive

Table 3. CLI Commands List (continued)

Task	Support with SUU 21.12.00 and earlier	Support with SUU 22.03.00 and later
 NOTE: SUU does not allow you to downgrade individual components.		<ul style="list-style-type: none"> <code>--downgradeonly</code> Same behavior as <code>--d(--apply-downgrades)</code> Displays packages that can be downgraded
Show the progress of the upgrade or downgrade	<code>--p --progress</code>	<code>--progress</code> <code>--output</code>
Compare the current component	<code>--c --compliance</code>	<code>--compliance</code>
Direct the event logs to a different directory than the default location.	<code>--d --directory</code>	<code>--output-log-file</code> UI event logging is not supported
Stop the update if a failure occurs during the update of the first component.	<code>--s --stoponfail</code>	Not Supported
Show the progress (in percentage) of the comparison between the components in the system and the components in the repository	<code>--iprog --inventoryprogress</code>	Not Supported
Filter the corequisites applicable on the system	<code>--nc --nocoreq</code>	Not Supported

Use case for CLI commands

For Windows, the commands are used with a backslash and for Linux with a hyphen. For example:

- Windows—Use `/h` or `/v`
- Linux—Use `-h` or `-v`

Task	Attributes	Syntax and Example
View compliance on a host server	<code>--compliance</code>	Format: <pre>suu --compliance</pre> Example <pre>suu --compliance</pre>
Display the help message	<code>--help</code> <code>/h</code> or <code>-h</code>	Format: <pre>suu --help</pre> Example: <pre>suu --help</pre>
Display the version	<code>--version</code> <code>/v</code> or <code>-v</code>	<pre>suu --version</pre> Example: <pre>suu --version</pre>

Task	Attributes	Syntax and Example
Update all components	/u or -u --update --apply-upgrades	Format: <pre>suu --update</pre> Example: <pre>suu --update</pre>
Downgrade all components	/d or -d --apply-downgrades	Format: <pre>suu --apply-downgrades</pre> Example: <pre>suu --apply-downgrades</pre>
Display the progress of update or downgrade	--progress, --output /o or -o --output-format (Optional) /f or -f (Optional)	Format: <pre>suu --progress --output=<File></pre> Example 1: <pre>suu --progress --output=c:/Desktop/ user.json</pre> Example 2: <pre>suu --progress --output=c:/Desktop/ user.json --output-format=JSON</pre>

Integrating Server Update Utility with other components

The different possibilities of integrating SUU with other components are:

- Use SUU repository from OpenManage Enterprise console on page 12
- Creating a custom SUU using Repository Manager

Topics:

- Use SUU repository from OpenManage Enterprise console
- Create a custom SUU using Repository Manager


Use SUU repository from OpenManage Enterprise console

Catalog containing the firmware and drivers (64-bit Windows) can be downloaded using the Dell EMC Server Update Utility ISO (SUU) and saved on a network share.

NOTE:

- For local network shares using Windows 2019 or later, the catalog must be generated using SUU version 22.03.00 and later.
- OpenManage Enterprise supports UI internationalization, however, it is recommended that the functional content such as the file names and catalog content are entered only in English.

1. On the **Catalog Management** page, click **Add**.
2. In the **Add Update Catalog** dialog box:
 - a. In the **Name** box, enter a catalog name.
 - b. For the Catalog Source, select the option **Network Path**.
The **Share Type** drop-down menu is displayed.
 - c. Select one of the following:

-  **NOTE:** Ensure to enable SMBv1 in the **SMB Settings** before you begin any firmware tasks which need communication with any chassis or the PowerEdge YX2X and YX3X servers that have iDRAC version 2.50.50.50 and earlier.

- NFS
 - i. In the **Share Address** box, enter the IP address of the system where the firmware catalog is stored on the network.
 - ii. In the **Catalog File Path** box, enter the full file path of the catalog file location. Example path:
nfsshare\catalog.xml
- CIFS
 - i. In the **Share Address** box, enter the IP address of the system where the firmware catalog is stored on the network.
 - ii. In the **Catalog File Path** box, enter the full file path of the catalog file location. Example path:
Firmware\m630sa\catalog.xml
 - iii. In the **Domain** box, enter the domain name of the device.
 - iv. In the **User Name** box, enter the user name of the device where the catalog is stored.
 - v. In the **Password** box, enter the password of the device to access the share. Type the username and password of the shared folder where the catalog.xml file is stored.
- HTTP

- i. In the **Share Address** box, enter the IP address of the system where the firmware catalog is stored on the network.
 - ii. In the **Catalog File Path** box, enter the full file path of the catalog file location. Example path: *compute/catalog.xml*.
 - HTTPS
 - i. In the **Share Address** box, enter the IP address of the system where the firmware catalog is stored on the network.
 - ii. In the **Catalog File Path** box, enter the full file path of the catalog file location. Example path: *compute/catalog.xml*.
 - iii. In the **User Name** box, enter the user name of the device where the catalog is stored.
 - iv. In the **Password** box, enter the password of the device where the catalog is stored.
 - v. Select the **Certificate Check** check box.

The authenticity of the device where the catalog file is stored is validated and a Security Certificate is generated and displayed in the **Certificate Information** dialog box.
 - d. After you have entered the **Share Address** and the **Catalog File Path**, the **Test now** link is displayed. To validate a connection to the catalog click **Test now**. If the connection to the catalog is established, a *Connection Successful* message is displayed. If connection to the share address or the catalog file path is not established, *Connection to path failed* error message is displayed. This is an optional step.
 - e. In the **Update Catalog** box, select either **Manually** or **Automatically**.
If the **Update Catalog** is selected as **Automatically**, select either **Daily** or **Weekly** as the update frequency and enter time in the 12-hour format.
3. Click **Finish**. The **Finish** button appears only after you have entered all the fields in the dialog box.
A new firmware catalog is created and listed in the Catalog table on the **Catalog Management** page.

Create a custom SUU using Repository Manager

You can create a custom SUU for the system using DRM.

1. Start DRM.
 2. Create or open a repository.
 3. Select the bundles you want to export. From the list of displayed bundles, click **Export**.
 4. In the **Export Bundles** dialog box, click **Next**.
 5. In the Export Destination dialog box, select **Export as SUU to ISO** and click **Next**.
Checking to see if the required plugin is installed... is displayed.
- i** **NOTE:** If you select **Export as SUU to directory**, the output package creates the SUU contents in the form of a directory.
- i** **NOTE:** If the system does not have the required plugin, **Click here to install the Plugin** link is displayed.
6. To install the required plug-ins, Click the **Click here to install the Plugin** link.
The installation process may take several minutes.
 7. After the plug-in is downloaded, the **Report** dialog box is displayed. **Close** the dialog box.
 8. After the latest plug-in is installed, the version of the installed Plugin is displayed. Click **Next**.
 9. From the dialog box, navigate to the folder on the local drive, where you want to save the ISO file, and then click **OK**.
 10. Click **Finish**.
 11. Click **Accept** to accept the security warning.
- i** **NOTE:** When you attempt to download from another website or web page, and if security warning is displayed accept the files. The **Name**, **Publisher**, **Certificate Type**, and **Expiration Date** of the file appears in the window to ensure the authenticity.
12. After the SUU ISO is created, the **Report** dialog box is displayed. **Close** the report dialog box.
 13. Burn the ISO CD using an appropriate software.

To access the ISO file navigate to the predefined location where the ISO is created.

Known issues and frequently asked questions

This section describes some known issues and frequently asked questions for SUU.

Topics:

- [Known issues](#)
- [Frequently asked questions](#)

Known issues

The following are some known issues with SUU.

QLogic firmware not listed in the Comparison Report

QLogic firmware is not listed in the SUU comparison report. [217822]

Unable to start SUU from a network share

Workaround: Map the network share on a local system and start SUU. [218284]

Ensure that the directory name does not include any special characters.

Information displayed on the Comparison Report might be misaligned

The columns in the Comparison report might be misaligned because of the resolution settings. [218830]

CLI command error

When the following commands are run, an unknown error is displayed and the CLI is exited: [218834]

- /o
- /f

Some of the components are noncompliant even when the update is successful

The following components might appear as noncompliant even when the update is successful:

- SM Bus Controller Driver
- Chipset INF

Workaround: Run `Get-PnpDevice -PresentOnly | Where-Object {($_.Status -ne 'OK') -and($_.Problem -ne 'CM_PROB_NONE' -and $_.Problem -ne 'CM_PROB_DISABLED')}` to check if Chipset Drivers are installed. If they are not installed, download and install the AMD Chipset Driver manually.

iDRAC upgrade fails when there is an intermediate version between the latest and the current versions

When iDRAC is upgraded to the latest version from an earlier version with an intermediate version and when SUU ISO is mounted from the iDRAC virtual console, the intermediate update occurs and the iDRAC virtual console is disconnected. The latest update is unsuccessful. For example, iDRAC version 5.x is the latest and the current version is 3.x. iDRAC is upgraded to 4.x and then to 5.x.

 **NOTE:** The status of the upgrade might be displayed as not started, however, the upgrade is successful.

Workaround: Restart SUU and continue the upgrade.

Unable to start SUU that is exported from DRM

On linux systems, if the directory name contains special characters, SUU ISO or directory that is exported from DRM to a local folder or network share might fail to start. The directory contains the SUU ISO files and folders.

Workaround: Ensure that the directory name does not include any special characters.

SUU commands fail with symbol lookup error

When you run SUU commands on SUSE, the commands might fail and the following message is displayed:

```
Symbol lookup error
```

Workaround: Run the commands again.

Intel drivers not listed in the Comparison Report

Intel drivers for Windows 2016 are not listed in the SUU comparison report. [226045]

Unable to launch SUU immediately after mounting

When SUU is mounted, you are immediately prompted to start SUU. However, SUU does not launch when run from this prompt.

Frequently asked questions

Why components that are compliant can be updated multiple times?

SUU allows updating of components that are compliant. Ensure that you do not select the components that are compliant.

Why the term DSU is displayed in the CLI and log files?

The term DSU is displayed instead of SUU in multiple sections of the log file and CLI. There is no impact on the functionality of SUU.

Where can I view the status of an upgrade or downgrade?

The progress of an upgrade or downgrade is displayed in an output file. Create the progress output file using the command `--progress--output`. [217873]

When I launch SUU on Linux, why a message about deleting the stale lock file `/root/suulauncher-root` is displayed?

This message is displayed when the previous session of SUU on Linux was closed abruptly. Manually delete this file in `/home/admin/suulauncher-admin` folder. [226085]