Dell Server Update Utility Version 24.xx.00
User's Guide

D&LL Technologies

Notes, cautions, and warnings

(i) **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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Revision history

View the revision history of this document.

Table 1. Revision history

Revision	Date	Description
A00	March 2024	SUU 24.03.00—SUU ISO content refresh

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About Dell Server Update Utility

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 that are installed on the system with the versions of the components that are packaged on the Dell PowerEdge Server Update Utility media. SUU displays a compliance 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.

(i) **NOTE:** SUU carries updates only from PowerEdge 13th generation and later servers. The SUU ISO is split into two components, such as for the Microsoft Windows operating system: 64–bit, for Linux operating system: 64–bit.

Topics:

- New features
- Key features and functionalities
- Supported operating systems
- Accessing support content from the Dell support site

New features

Table 2. New features in Server Update Utility 24.03.00

Functional area	Feature description	Summary of benefits
Content refresh	Content refresh	The SUU ISO content has been refreshed to include the latest updates.

For more information about the user documentation, see the Server Update Utility product support page on dell.com/support.

Key features and functionalities

This section describes the key features and functionalities of SUU.

Table 3. 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.
Compliance Report	It displays a list of component versions that are installed on the system that do not match the versions on the repository. For more information, see Compliance Report.
Upgrading or Downgrading	If the versions vary from the repository version, you can upgrade, downgrade, or update the system components. For more information, see Upgrading System Components and Downgrading System Components.
Launching SUU in a UI mode or from Network Location	It enables you to run SUU, upgrade, downgrade, update components on multiple systems. For more information, see Launching SUU in a GUI mode.
CLI Commands	It displays the list of commands to perform comparisons and updates in the CLI mode. For more information, see List of CLI Commands.

Table 3. 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 prerequisites are met. These conditions or requirements are called dependencies. The types of dependency are pre-requisites and co-requisites. For more information, see Compliance Report.
Export report	Export the compliance report in HTML format from the UI and CLI.
Stop on update failure	Stop updating the remaining components when any component update is unsuccessful.

Supported operating systems

Microsoft Windows operating systems:

- Windows Server 2019
- Windows Server 2022

Linux operating systems:

- SUSE Linux Enterprise Server 15
- Red Hat Enterprise Linux 9.1
- Red Hat Enterprise Linux 8.7

Accessing support content from the Dell support site

Access supporting content related to an array of systems management tools using direct links, going to the Dell support site, or using a search engine.
- Direct links:
  - OpenManage Integration for VMware vCenter
  - Dell OpenManage Enterprise
  - iDRAC
  - Dell Serviceability tools
- Dell support site:
  1. Go to Dell Support site.
  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.

Type the name and version of the document in the Search box.

About user interface mode

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

- View the system compliance 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 UI mode

Before starting SUU in a UI mode, ensure that there is enough storage space in the system.

You can run SUU from a network location or from the location where the SUU ISO is mounted. When SUU ISO is mounted, autoplay is enabled. 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 UI:
   - Double-click the `suulauncher.exe` file on Microsoft Windows.
   - Use the `./suulauncher` command from the ISO path on Linux.

   The components that must be updated are displayed in the **Compliance Report**.
3. Select the components to upgrade or downgrade.
4. Click **Apply**.
   The updates are reflected in the **Compliance 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 Compliance Report. Click Continue
to update the applicable components.
```

Locate Server Update Utility

1. Go to Dell support site.
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.

   (i) **NOTE:** Ubuntu and ESXi are not supported.

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

Compliance report

Ensure that:

- The Xterm library is installed in the Linux operating system.
- The supported drivers are up to date for updating the network firmware. For example, if the firmware version is the latest, the driver version should also be the latest.
- The adapter base driver and the port 0 of the adapter must be loaded or enabled for the Firmware Update Package to function correctly.

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 **Compliance Report**. The following are the fields that are displayed in the **Compliance 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 a 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 **Compliance Report** denotes the importance of applying the update. For more information about the criticality levels and their corresponding status, see the table.

Table 4. 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 keep 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 might apply to the environment. It is recommended that you review the update specifications to determine if it applies to the system.

Export the compliance report

1. To export a report from the UI in .html format, click **Export**.
2. To export a report from the CLI in .json and .html formats, use `SUU --compliance --output=c:\compliancereport.json` and `SUU --compliance --output=c:\compliancereport.html --output-format=HTML`.

You can export reports only to a local folder.

Upgrade system components

SUU compares the versions 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 **Compliance Report**.

To upgrade the repository components:

1. Select the components that you want to upgrade.

   (i) **NOTE:** The components that must be upgraded are preselected.

2. Click **Apply**.

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

(i) **NOTE:** When you perform an upgrade, SUU copies all the update packages into a temporary directory on the system: `C:\ProgramData\Dell\DELL 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.

Hard drive update is not supported in HBA mode.

If the DUP upgrade is unsuccessful:

1. Verify if secure boot is enabled. Windows: Run `Confirm-SecureBootUEFI` in PowerShell. Linux: `mokutil --sb-state`
2. If secure boot is enabled, do one of the following:
   - Disable secure boot.
   - Ensure that the prerequisites are met as mentioned in the Dell Update Package release notes.

Downgrade system components

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

To downgrade the repository components:

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

Enable stop on update failure

When stop on update failure is enabled and any component update is unsuccessful, SUU stops updating the remaining components.

1. Launch the SUU UI.
2. Select **Stop on Update Failure**.

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

List of CLI commands

Table 5. CLI Commands List

Task	Support with SUU 21.12.00 and earlier	Support with SUU 22.03.00 and later
Display the help message.	`-? | -h | --help`	`-? | -h | --help`
Launch the SUU Graphical user Interface. ⓘ **NOTE:** On systems running Linux operating systems, this option can be used only from the X Window system.	`-g | -gui`	Use suulauncher
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 always recommended.	`-u | --update`	● `--update` ● `--u (--apply-upgrades)` ● Combination of `-u(--apply-upgrades) + --n(noninteractive)`
Upgrade all components to repository versions that are greater than the current versions installed on the system. You cannot upgrade individual components using CLI. Use the UI to upgrade individual components.	`-e | --upgradeonly`	● `--update` ● `--u (--apply-upgrades)`

Table 5. CLI Commands List (continued)

Task	Support with SUU 21.12.00 and earlier	Support with SUU 22.03.00 and later
Downgrade all the system components greater than the repository components to the repository versions (i) **NOTE:** SUU does not allow you to downgrade individual components.	`—n | —d | --downgradeonly`	• `--n` is noninteractive. • `--downgradeonly` Same behavior as `—d(--apply-downgrades)` • Displays packages that can be downgraded
Show the progress of the upgrade or downgrade.	`—p | --progress`	`--progress --output`
Compare the current component.	`—c | --compliance`	`--compliance`
Direct the event logs to a different directory than the default location.	`—d | --directory`	`--output-log-file` UI event logging is not supported.
Export the compliance report.	Not applicable	`--output` (i) **NOTE:** The export option is supported from SUU 22.07.00.
Stop updating the remaining components when any component update is unsuccessful.	`—s | --stoponfail`	`--stoponfailure` (i) **NOTE:** Stop on update failure is supported from SUU 22.11.00.
Show the progress (in percentage) of the comparison between the components in the system and the components in the repository.	`—iprog|--inventoryprogress`	Not Supported
Filter the corequisities applicable on the system.	`—nc | --nocoreq`	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

Table 6. Use case for CLI commands

Task	Attributes	Syntax and Example
View compliance on a host server.	`--compliance`	Format: `suu --compliance` Example `suu --compliance`
Display the help message.	`--help /h or -h`	Format: `suu --help` Example: `suu --help`

Table 6. Use case for CLI commands (continued)

Task	Attributes	Syntax and Example
Display the version.	--version /v or -v	`suu --version` Example: `suu --version`
Update all components.	/u or -u --update --apply-upgrades	Format: `suu --update` Example: `suu --update`
Downgrade all components.	/d or -d --apply-downgrades	Format: `suu  --apply-downgrades` Example: `suu  --apply-downgrades`

Display the progress of an update or downgrade.	--progress,
	
	--output
	
	/o or -o
	
	--output-format (Optional)
	
	/f or -f (Optional)
		Format:
		
		`suu  --progress --output=<File>`
		
		Example 1:
		
		`suu  --progress --output=c:/Desktop/`
		`user.json`
		
		Example 2:
		
		`suu  --progress --output=c:/Desktop/`
		`user.json --output-format=JSON`

Export the compliance report.	--output	Format:
		
		`suu --compliance --output=<File>`
		
		Example 1:
		
		`suu --compliance --output=c:`
		`\compliancereport.json`
		
		Example 2:
		
		`suu --compliance --output=c:`
		`\compliancereport.html --output-format=HTML`

Stop updating the remaining components when any component update is unsuccessful.	--stoponfailure	Format and example
		
		`suu --apply-upgrades --stoponfailure`
		
		`suu --apply-downgrade --stoponfailure`

Integrating Server Update Utility with other components

The different possibilities of integrating SUU with other components are:

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

Topics:

Use SUU repository from OpenManage Enterprise console

The catalog containing the firmware and drivers (64-bit Windows) can be downloaded using the Dell 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 **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 13th generation servers.

   - 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 username 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 username 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, a message is displayed: `Connection to path failed`. It 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 by 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 that 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 plug-in, the **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, go 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 a 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, go to the predefined location where the ISO is created.

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 start 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]

Why SUU is not starting on Red Hat Enterprise Linux 6.10?

SUU is not supported on Red Hat Enterprise Linux 6.10. For more information about the supported operating systems, see Supported operating systems. [233323]

What happens when updating multiple devices on a system?

When SUU applies an update to multiple identical devices on a system, the latest update is applied to all instances of all devices. For example, if the system has three controllers with firmware or driver version 1.2, 1.3, and 1.4, and the repository version is 1.4. SUU applies version 1.4 to all instances of all devices [136620].

What happens when updating NIC base driver?

When a NIC teaming application is installed on a system and if the driver is compatible with the teaming application, SUU updates the NIC base driver . To verify driver compatibility, run DUP on the system to update the driver and read the generated messages.[138648]

Why are the devices that are disabled in the operating system are not updated?

SUU does not update or inventory the devices that are disabled in the operating system. To update or inventory these devices, enable the devices in the operating system and then start SUU. [142111]

How to launch SUU on Linux from Windows share?

To launch SUU on systems running Linux (x64-bit) from Windows CIFS share, mount the extracted SUU x32 ISO CIFS share using `-o sce=nounix,noserverino` options on:

- SUSE Linux Enterprise Server 10 and 11
- Red Hat Enterprise Linux 6.2 and 6.3 operating systems (BITS032613)

For example, `mount -t cifs -o sce=nounix,noserverino -o username=<user id> <Windows CIFS share> <Linux mount location>`.