

## **DELL Server Update Utility Application User Guide**

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**DELL Server Update Utility Application** 



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## 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.

## **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 currently installed on the system with the versions of the components 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.

NOTE: SUU carries updates only from Dell's 12G and later PowerEdge servers. TheSUU 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 support site

## What is new in this release

Support for enabling the stop on update failure feature. See Enable stop on update failure.



**NOTE:** SUU 22.11.00 is the last version that supports 12G PowerEdge server update packages.

## 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 <a href="Perequisite Failure Messages">Prerequisite Failure Messages</a> .
Compliance Report	Displays a list of component versions installed on the system that do not match the versions on the repository. For more information, see <u>Compliance Report</u> .
Upgrading or Downgrading	If the versions vary from the repository version, you can upgrade, dow ngrade, or update the system components. For more information, see <a href="Upgrading System Components">Upgrading System Components</a> and <a href="Downgrading System Components">Downgrading System Components</a> .
Launching SUU in a UI mode or from N etwork Location	Enables you to run SUU, upgrade, downgrade, update components o n multiple systems. For more information, see <u>Launching SUU in a GUI mode</u> .
CLI Commands	Displays the list of commands to perform comparisons and updates in the CLI mode. For more information, see <u>List of CLI Commands</u> .
Dependency	Feature which provides information about the available updates for a device. SUU enables certain tools and applications to determine if pre requisites are met. These conditions or requirements are called dependencies. The types of dependency are pre-requisites and co-re quisites. For more information, see <a href="Compliance Report">Compliance Report</a> .
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 updat e is unsuccessful.

## 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 <a href="https://www.dell.com/esmmanuals">https://www.dell.com/esmmanuals</a>

## 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:
  - For Dell Enterprise Systems Management and Dell Remote Enterprise Systems Management
     —<a href="https://www.dell.com/esmmanuals">https://www.dell.com/esmmanuals</a>
  - For Dell Virtualization Solutions—www.dell.com/virtualizationsolutions
  - For Dell OpenManage—https://www.dell.com/openmanagemanuals
  - For iDRAC—https://www.dell.com/idracmanuals
  - For Dell OpenManage Connections Enterprise Systems Management
     https://www.dell.com/OMConnectionsEnterpriseSystemsManagement
  - For Dell Serviceability Tools—https://www.dell.com/serviceabilitytools
- · Dell support site:
  - 1. Go to <a href="https://www.dell.com/support">https://www.dell.com/support</a>.
  - 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 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
- · Prerequisite failure message
- Locate Server Update Utility
- · Compliance report
- Export the compliance report
- Upgrade system components

- · Downgrade system components
- Enable stop on update failure

#### 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 <a href="https://www.dell.com/support">https://www.dell.com/support</a>.
- 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.



- 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**

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 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 2. Criticality Levels** 

Criticality Level	Status
Urgent	The update contains changes to improve the reliability a nd availability of the system. It is recommended that yo u apply this update immediately.
Recommended	The update contains feature enhancements or changes that keep the system software current and compatible w ith other system modules (firmware, BIOS, drivers, and application). It is recommended that you apply this upda te during the next scheduled update cycle.
Optional	The update contains changes that impact only certain c onfigurations, or provides new features that might apply to the environment. It is recommended that you review t he 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.** 

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.

You can export reports only to a local folder.

#### 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 Compliance 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 Compliance Report.

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

#### **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 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

he 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 compliance 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 earli er	Support with SUU 22.03 .00 and later
Display the help message.	—?   —h   –help	?  help
Launch the SUU Graphical user Interface.  NOTE: On systems running Linux o perating systems, this option can be used only from the X Window system.	—g   —gui	Use suulauncher

Update the system components to the rep ository level. Components in your system that are of a higher version than the comp onents in the repository are downgraded without prompting you for confirmation. It is not recommended always.	—u   -update	<ul> <li>-update</li> <li>-u (-apply- upgrades)</li> <li>Combination of —u(-a pply- upgrades) + — n (noninteractive)</li> </ul>
Upgrade all components 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.	—е   –upgradeonly	<ul><li>-update</li><li>-u (-apply upgrades)</li></ul>
Downgrade all the system components greater than the repository components to the repository versions  NOTE: SUU does not allow you to downgrade individual components.	—n   —d   –downgradeonly	<ul> <li>-n is noninteractive.</li> <li>-downgradeonly Sam e behavior as —d(- apply-downgrades)</li> <li>Displays packages tha t can be downgraded</li> </ul>
Show the progress of the upgrade or dow ngrade.	—p   –progress	-progress -output
Compare the current component.	—c   –compliance	-compliance
Direct the event logs to a different director y than the default location.	—d   -directory	-output-log-file UI event logging is not su pported.
Export the compliance report.	Not applicable	-output  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  NOTE: Stop on up date failure is supported f rom 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 s ystem.	—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

	T	T
Task	Attributes	Syntax and Example
View compliance on a h ost server.	-compliance	Format: suucompliance Example suucompliance
Display the help messag e.	-help /h or -h	Format: suuhelp Example: suuhelp
Display the version.	-version /v or -v	suuversion  Example: suuversion
Update all components.	/u or -u  —update  —apply-upgrades	Format: suuupdate Example: suuupdate
Downgrade all compone nts.	/d or -d —apply-downgrades	Format: suuapply-downgrades  Example: suuapply-downgrades
Display the progress of u pdate or downgrade.	-progress, -output /o or -o -output-format (Optional) /f or -f (Optional)	Format: suuprogressoutput= <file> Example 1: suuprogressoutput=c:/Desktop/ user.json Example 2:suuprogressoutput=c:/Desktop/ user.jsono utput-format=JSON</file>

Export the compliance r eport.	-output	Format:  suucomplianceoutput= <file>  Example 1:  suucomplianceoutput=c:  \compliancereport.json  Example 2:  suucomplianceoutput=c: \compliancereport.html</file>
Stop updating the remaining components when any component update is unsuccessful.	-stoponfailure	Format and example suuapply-upgradesstoponfailure suuapply-downgradestoponfailure

## **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
- 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 Server Update Utility ISO (SUU) and saved on a network share.



- 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.
  - NOTE: If you select Export as SUU to directory, the output package creates the SUU contents in the form of a directory.
  - 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.

Tha 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.
  - **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 compliance report

QLogic firmware is not listed in the SUU compliance 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 in the compliance report might be misaligned

The columns in the compliance 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
- /

## 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.

(i)

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 compliance report

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

#### Unable to autorun SUU on Linux

If SUU does not autorun when mounted on Linux, install the xterm Red Hat Package Manager file.

#### Unable to update the standard NVMe controller driver

The standard NVMe controller driver is not updated using SUU because SUU is unable to display the correct NVMe driver details in the compliance report.

#### Broadcom NetXtreme firmware not available in SUSE Linux operating system

The Broadcom NetXtreme firmware is not displayed in the compliance report in SUU because the version details obtained from the inventory of the firmware is unsuccessful. [250152]

## Unable to install Intel Network Firmware on Red Hat Enterprise Linux operating system

Unable to install the Intel Network Firmware on Red Hat Enterprise Linux operating system. [246973]

#### The BIOS update might be unsuccessful

The BIOS update might be unsuccessful. For more information, see the SUU logs. [247359]

#### Mellanox driver not available in Windows operating system

The Mellanox ConnectX-5 and ConnectX-6 drivers are not displayed in the compliance report in SUU because the inventory of these drivers is unsuccessful. [247441]



## 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]

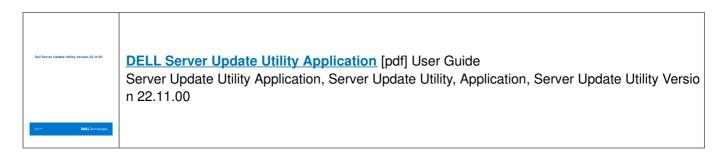
# When I start SUU on Linux, why a message about deleting the stale lock file /root/suulauncher-root is displayed?

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]

## **Documents / Resources**



Manuals+,