

# **Dell EMC OpenManage Server Update Utility**

## **Version 21.09.00**

## 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. SUU is no longer a DVD-based application. 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 YX2X generation of the 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 the following new platforms:

- Dell EMC PowerEdge R650xs
- Dell EMC PowerEdge R750xs
- Dell EMC PowerEdge R450
- Dell EMC PowerEdge R550

## 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="#">Prerequisite Failure Messages</a> .
Fixing Prerequisite Failures	Allows you to fix the hardware failures. For more information, see <a href="#">Fixing the Hardware Prerequisite Failure</a> .
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 <a href="#">Comparison Report</a> .
Upgrading or Downgrading or Updating System Components	Allows you to upgrade, downgrade, or update the system components if the versions vary from the repository version. For more information, see <a href="#">Upgrading System Components</a> , <a href="#">Downgrading System Components</a> , and <a href="#">Updating System Component</a> .
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 <a href="#">Launching SUU in a GUI mode</a> .
CLI Commands	Displays the list of commands to perform comparisons and updates in the CLI mode. For more information, see <a href="#">List of CLI Commands</a> .

**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 <a href="#">Comparison Report</a> .

## Supported operating systems

Microsoft Windows operating systems:

- Microsoft Windows Server 2019
- Microsoft Windows Server 2016
- Microsoft Windows Server 2012 R2

Linux operating systems:

- SUSE Linux Enterprise Server 15
- Red Hat Enterprise Linux 8.0 (64-bit)
- Red Hat Enterprise Linux 7.9 (64-bit)
- Red Hat Enterprise Linux 6.10 (64-bit)

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/esmanuals>.

## 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/esmanuals>
  - For Dell EMC Virtualization Solutions—[www.dell.com/virtualizationsolutions](http://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 graphical user interface mode

The Graphical User Interface (GUI) provides an interactive approach to perform comparisons and updates. You can use the GUI 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, downgrade, or a system set update.
- Browse the repository to view the supported components of all the platforms in the SUU.

### Topics:

- [Launching SUU in a GUI mode](#)
- [Prerequisite failure messages](#)
- [Fixing the hardware prerequisite failure](#)
- [Comparison report](#)
- [Upgrading system components](#)
- [Downgrading system components](#)
- [Updating system components](#)
- [Updating failures](#)

## Launching 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 installed or choose the path where the ISO is mounted.
2. To launch the SUU GUI, double-click the `suulauncher.exe` file.  
The components that need to be updated are displayed in the **Comparison Report**.  
 **NOTE:** The `suulauncher.exe` file is applicable for systems running Microsoft Windows.  
 **NOTE:** The `./suu -g` command is applicable for systems running Linux.
3. Click **Update**, **Upgrade**, or **Downgrade**.  
 **NOTE:** To update all the components in a single session, select **Enable System Set Update** before clicking **Update**
4. Click **Yes** to continue or **No** to cancel.  
If you click **Yes**, SUU displays the **Update** dialog box that displays the progress of the update, upgrade, or downgrade.
5. Click **OK** when the update, upgrade, or downgrade is complete.  
The updates are reflected in the **Comparison Report**.

## Prerequisite failure messages

The failure messages and their respective fixes displayed as follows:

Software Prerequisite Failure Message

Prerequisite Failure Message:

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

Hardware Prerequisite Failure Message

Prerequisite Failure Message:

Your system does not meet the required prerequisites for some of the hardware component(s). Therefore, all the rows for the hardware component(s) are disabled in the Comparison Report. Click Continue to update the applicable Dell OpenManage software component.

#### Software and Hardware Prerequisite Failure Message

##### Prerequisite Failure Message:


Your system does not meet the required prerequisites for some of the hardware component(s) and for installing the Dell OpenManage software component. Therefore, all the rows will be disabled in the Comparison Report.

## Fixing the hardware prerequisite failure


When you launch SUU in the GUI mode and the prerequisites check for the hardware component fails, install the hardware prerequisites before proceeding with the upgrade, downgrade, or update of the components. DUP HDD firmware update utility, related to system memory utilization, requires minimum of 8GB to 16GB RAM in the server.

To install the hardware prerequisites:

1. Use the Prerequisites media to bring the system up to meet the prerequisite levels.

 **NOTE:** Set the boot order in the system BIOS such that the media drive is placed ahead of the system hard-drive.

2. If the system fails to meet the prerequisites, restart the system with the Prerequisites media.

 **NOTE:** An additional restart may be required to complete the prerequisite update. Do not remove the media until the information on the screen prompts you to do so.

3. When prompted, replace the Prerequisites media with the DSU media and restart the system.

## Creating a prerequisites media


To create the Prerequisites media:

1. Go to <https://www.dell.com/support>.
2. On the support page, browse the available products, **View Products > Servers, Storage, & Networking > PowerEdge**.
3. Select the **Product Model**.
4. Click **Drivers & Download**.
5. From the **Category** drop-down list, select **Systems Management**. You can also select the importance of the drivers. The available options are **[All], Urgent, Recommended, Optional**.
6. From the table of results displayed, click **CD ISO - PowerEdge Updates Prerequisites v1.0** in the **File Title(s)** column.
7. Click **Download Now** to save the PE Updates prereq cd.iso file on the system. Copy this file to a system that has a media-burning program and create a bootable media from the provided .iso file. This bootable media is the Prerequisites media.

## Comparison report

SUU compares the version of the component 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**:

- **Select** — Select a component.
- **Status** — Displays the status as icons, where each of the icons represents different status: upgrade, downgrade, only pre-requisites update, both pre-requisites and co-requisites updates, only co-requisites.
- **Criticality** — Denotes the importance of the update.
- **Package Name** — Displays the package name from the inventory.
- **Component** — Displays the name of the component.
- **Type** — Displays the type of devices 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.  
 **NOTE:** If you select the **Apply Corequisites** check box, then the listed co-requisites are applied.

## 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.
Inapplicable	The update is not applicable on the system. The component version on the system is the same as the repository version and hence, no update is required.

## Comparison report features

You can view, sort or export the **Comparison Report**.

**Table 3. Comparison Report Features**

Tasks	Action
Viewing Report	To view the report, in the left pane, click the system's host name.
Sorting Columns	To sort columns, click the column names.  <b>NOTE:</b> The columns are sorted in the ascending or descending order.
Exporting Report	To export the report, click <b>Export Report</b> .  <b>NOTE:</b> You can save the report in a .csv, .html, or .xml format on the system.  For systems running Windows operating system, make sure the name of the report or the path does not exceed 260 characters. For systems running Linux operating system, make sure that the name of the report does not exceed 255 characters or the path does not exceed 4096 characters.

## Upgrading system components

SUU compares the version of the components 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 **Upgrade** button on the upper-right corner of the **Comparison Report**.

To upgrade the repository components:

1. Select the components that you want to upgrade.
2. Click **Upgrade** to apply the components that you have selected.
3. In the **Confirm Update** dialog box, click **Yes** to confirm and continue or **No** to cancel.  
While upgrading the components, SUU displays an update report. After completion, SUU displays an **Update Complete** dialog box.
4. Click **OK**.

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

**i** **NOTE:** When you perform an upgrade, SUU copies all the update packages into a temporary directory on the system: `<%systemdrive%>:\dell\suu`, on systems running Microsoft Windows operating system and `/var/log/dell/suu`, 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.

## Downgrading 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 on the upper-right corner of the Comparison Report.

To downgrade the repository components:

1. Select **Enable Downgrade**.  
SUU disables **Enable System Set Update** and selects only those component versions that are later than the repository version to downgrade.
2. Select **Downgrade**. All downgradeable components are automatically selected.
3. In the **Confirm Update** dialog box, click **Yes** to confirm and continue or **No** to cancel.  
While downgrading the components, SUU displays an update report. After completion, SUU displays an **Update Complete** dialog box.
4. Click **OK**.  
The status of the downgrade can be viewed in the **Comparison Report**.

## Updating system components

SUU compares the version of the components installed on the system with the versions available in the repository. If system component versions are later than the repository version and vice versa, SUU enables the **Update** button on the upper-right corner of the Comparison Report.

To upgrade and downgrade components in a single session:

1. Select **Enable System Set Update**.  
SUU disables **Enable Downgrade** and **Upgrade changes to Update**. All the components that can be updated are selected in the Comparison Report.
2. Click the **Update** button.  
The **Confirm Update** dialog box with a list of components to be updated is displayed.
3. Click **Yes** to proceed with the update or **No** to cancel the update.  
If you click **Yes**, SUU displays the **Update** dialog box that shows the progress of the update.
4. Click **OK** when the update is complete.  
The status of the update is reflected in the **Comparison Report**.

## Updating failures

While updating the system components, if a particular component update is unsuccessful, you can choose to continue or stop updating the other components. If you select **Stop on Update Failures**, SUU stops updating the other components.

**i** **NOTE:** **Stop on Update Failures** is enabled only if you have selected more than one component for an update.

# 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 DSU root directory. If you are running SUU from a network shared location, copy the DSU 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.

## Topics:

- [Launching SUU in CLI mode](#)
- [List of CLI commands](#)

## Launching 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 installed or choose the path where the ISO is loaded.
2. Run commands `suu - c` or `suu - u`, displays the comparison report and updates all the components.

## List of CLI commands

**Table 4. CLI Commands List**

CLI Command Syntax	Command Description
<code>— ?   — h   — help</code>	Displays the help message.
<code>— g   — gui</code>	Launches the SUU Graphical user Interface. <b>i</b> <b>NOTE:</b> On systems running Linux operating systems this option can be used only from the X Window system.
<code>— u   — update</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. Not recommended always.
<code>— e   — upgradeonly</code>	Upgrades 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 GUI.
<code>— n   — downgradeonly</code>	Downgrades all the system components greater than the repository components to the repository versions. <b>i</b> <b>NOTE:</b> SUU does not allow you to downgrade individual components.
<code>— p   — progress</code>	Shows the progress of the upgrade or downgrade.
<code>— c   — comparison</code>	Compares the current component.
<code>— d   — directory</code>	Directs the event logs to a different directory than the default location.

**Table 4. CLI Commands List (continued)**

<b>CLI Command Syntax</b>	<b>Command Description</b>
— s   — stoponfail	Stops the update if a failure occurs during the update of the first component.
— iprog   — inventoryprogress	Shows the progress (in percentage) of the comparison between the components in the system and the components in the repository.
— nc   — nocoreq	Filters the corequisites applicable on the system.

# Integrating Server Update Utility with other components

The different possibilities of integrating SUU with other components are:

- [Integrating SUU with OpenManage Essentials](#)
- [Creating a custom SUU using Repository Manager](#)
- [Exporting as a SUU](#)

## Topics:

- [Integrating SUU with OpenManage Essentials](#)
- [Creating a custom SUU using Repository Manager](#)
- [Exporting as a SUU](#)

## Integrating SUU with OpenManage Essentials

OpenManage Essentials is a hardware management application that provides a comprehensive view of systems, devices, and components in the enterprise's network. With OpenManage Essentials, a web-based and one-to-many systems management application for systems and other devices, you can:

- Discover and inventory the systems.
- Monitor systems health.
- View and manage system alerts.
- Perform system updates.
- View hardware inventory and compliance reports.


## Selecting a catalog source using SUU

1. Launch **OpenManage Essentials**.
2. Click **Manage** > **System Update** > **Select a Catalog Source**.
3. Click **Use file System source (SUU)**.
4. Click **Browse** and select either the **catalog.xml** or **catalog.cab** file.
5. Click **Import now**.

## Creating a custom SUU using Repository Manager

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

1. Launch 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.

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 **Browse For Folder** 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 bootable ISO CD using the appropriate software.

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

## Exporting as a SUU

You can export a selected Dell-recommended or a custom bundle as a fully functional SUU.

To export a Dell-recommended or a custom bundle as a functional SUU:

1. Open a repository from **My Repositories** or import a repository from **Application**.
2. Click the **Bundles** tab.
3. Select the bundle that you want to export from the list of displayed bundle, and click **Export**.
4. In the **Export Bundles** window, select **Export as SUU**, and select one of the following.
  - **Export as SUU to Directory** to create a SUU pack in the provided directory.
  - **Export as SUU to ISO** to create an ISO image of the SUU pack.

The system checks for availability of the latest SUU plug-in. If a plug-in is available, the version number of the plug-in is displayed and the application prompts you to proceed with the exporting process.


- While Repository Manager checks for availability of the required SUU plug-ins, the **Checking to see if the required plug-in is installed...** dialog box is displayed.
- If the latest plug-in is already downloaded the following message displays: *Required plug-in found* The version number of the plug-in found is also displayed.
- When ftp.dell.com is accessible and latest plug-ins exist on your system, the **Update plug-in** link displays. When you click the link, the plug-ins from the system are updated.
- If you attempt installing plug-ins by clicking the *Click here to install the plug-in*, when ftp.dell.com is not accessible and plug-ins do not exist on your system, the following error message is displayed: *Plug-in file not found in configured location. Press "OK" to open Plug-in update settings.*

**i** **NOTE:** Ensure that the system connects to the internet and the ftp.dell.com is accessible.

5. Click **Next**.
6. From the **Browse For Folder** window, navigate to the folder on the local drive, where you want to export the SUU, and click **OK**.
7. If **Export SUU** job goes to the **Jobs Queue**. You can see the **Status** and **Progress** under the **Jobs Queue** list.
8. In the **Export Summary** window, click **Errors/Warnings** to check for errors or warnings.

The following are the different errors that may occur:

- File type of a component does not match with the bundle that it belongs to. For example, a Linux DUP is displayed in a Windows bundle.
- The supported platform of a component does not match the bundle supported list. For example a PowerEdge R210 BIOS displays a PowerEdge T710 bundle.
- The operating system supported for the bundle is Windows or Linux. For example, export M1000e bundle to SUU. Other operating systems are considered as errors.

 **NOTE:** If multiple update components are applicable to the same device within a bundle, Repository Manager preserves only the latest version of the component in a custom SUU. All the other duplicated components are removed from the bundle.

9. Click **Finish**.

# 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.

### Progress of inventory not displayed

The progress of Inventory is not displayed and below message is displayed while launching SUU.

Unable to show information for inventory. Please wait for inventory to complete  
Later, the comparison report is displayed to update the firmware in SUU.

### SUU GUI fails to open in Red Hat Enterprise Linux 7.2 operating system


If SUU GUI, is unable to launch in Red Hat Enterprise Linux 7.2 (64-bit) operating system perform the following:

- Run the command in the terminal:
  - `#echo -e "Section \"Device\"\nIdentifier \"Device0\"\nOption \"SWCursor\" \"True\"\nEndSection" > /etc/X11/xorg.conf.d/xorg.conf`
- On completion of the command, ensure that the contents are:
  - `#cat /etc/X11/xorg.conf.d/xorg.conf`
  - `Section "Device"`
  - `Identifier "Edifice"`
  - `Option "SWCursor" "True"`
  - `EndSection`
- Type the command, `#systemctl restart gdm.service` to restart the GDM service. The user will be logged off after running the command.

### DUP fails on 64-bit Red Hat Enterprise Linux operating system

If DUP fails to run on a 64-bit Red Hat Enterprise Linux operating system, manually install the following RPMs:

- `compat-libstdc++-33.i686`
- `libstdc++-4.4.4-13.el6.i686`
- `libxml2.i686`
- `libXp.i686`
- `libXtst.i686`
- `nss-softokn-freebl-3.12.9-11.el6.i686`

 **NOTE:** The RPMs are available on the Red Hat Enterprise Linux 6 x64 media.

## Enabling operating system devices

SUU does not inventory or update devices that are disabled in the operating system, though these devices may be displayed in the **Comparison Report**. To update the disabled devices, make the appropriate changes in the operating system and restart SUU.

## Linux systems library

On Linux systems, `libstdc++-libc6.2-2.so.5` and `libstdc++-libc6.2-2.so.3` libraries are required to run SUU. These libraries are available only if you have installed Red Hat Enterprise Linux on the system. If the system does not have these libraries and if you are running a supported version of Red Hat Enterprise Linux, install the `compat-libstdc++` RPM from RedHat.com or from the Red Hat CD.

## Running Linux updates

SUU uses the DUP to update the various system components. During a Linux update, the DUP creates the `.spsetup` file using the Linux lockfile utility at `/var/lock`. This file is created when one of the following situations occur:

- A kernel panic
- A system restart command during a DUP procedure, preventing a TERM signal from interrupting or stopping a running process

If one of these conditions occur, a `/var/lock/.spsetup` file is created, causing SUU to report a successful update and prompt the user to restart the system. When you run SUU again and run the Comparison Report, the comparison procedure reports no change in device status. If this situation occurs and if you are not running an update, delete the `/var/lock/.spsetup` file.

## Running SUU With the Progress Option

While running SUU with the `-p` (progress) option, the SUU current instance log location is reported and not the SUU update log location.

## Updating Multiple Devices

When updating multiple, identical devices on the same system, SUU applies the update to all instances of all devices. For example, if your system is configured with three controllers running firmware or driver versions 1.1, 1.2, and 1.3, and the repository contains version 1.2, the update applies firmware version 1.2 to all devices.

## Updating PERC Firmware

If you have multiple PowerEdge Expandable RAID Controller (PERC) cards installed on a system, you have to run the SUU update more than once to update the firmware of all PERC cards. This procedure ensures that all the PERC cards are updated even if the cards failed to update during the initial SUU update.

PERC update packages may fail if other processes, such as a consistency check or background initialization (BGI) are running on the controller. Ensure that such processes are not in progress before running the update package.

## Restarting the system inventory in the same session

If there is insufficient space in the `var` or `tmp` folder SUU does not allow you to restart the system inventory in the same session.

In Linux, if the space is not enough in the `var` or `tmp` folder, SUU displays the following error message: `Not enough space available in /var or /tmp folder. Make sure you have at least 100MB.`

Ensure that you have sufficient space in the `var` or `tmp` folder and restart SUU to start the system inventory.

## Running SUU over a network

- When SUU is running over a network and is performing a system inventory, if the system gets disconnected from the network, SUU displays a blank **Comparison Report**. To view the contents of the **Comparison Report**, ensure that you are connected to the network and restart SUU.
- When SUU is running over a network and the **Comparison Report** is displayed, if the system gets disconnected from the network and then if you click the **Update** button, SUU does not update any components. To update the components, ensure that you are connected to the network and restart SUU.

## Deleting the temporary folder

When you run SUU over a network, JRE creates temporary files in the `<%systemdrive%>:\Documents and Settings\<%user%>\Local Settings\Temp\hsperfdata_<%user%>` directory on systems running Microsoft Windows (W2ks systems) and in the `/var` folder on systems running Linux. Delete these temporary files.

For the W2k8 systems the files are created at `<%systemdrive%>:\users\<%user%>\AppData\Local\Temp\<number>\hsperfdata_<%user%>`.

## Updating the H661 Firmware

On Dell's 12th generation of PowerEdge servers or later, if the CERC ATA RAID controllers are configured with the H661 firmware, SUU cannot update the firmware to the latest version. To update the firmware, use the **-force** option to manually apply the DUP with the latest firmware version.

## Using the RAC virtual media

Do not use the Virtual Media to remotely run the SUU on a system. This procedure disconnects the Virtual Media connection, interrupting the SUU update procedure.

## Using special characters in the SUU directory Name


SUU does not run from a directory that contains special characters such as `"`, `:`, `/`, `\`, `$`, and so on. For example, when a USB drive is attached to the system running SUSE Linux Enterprise Server operating system, by default it gets mounted to a directory name that contains special characters. For example, `/media/USB:1:2/`.

It is recommended to use a directory name without any special characters while running SUU.

## Fails to update on RHEL 8.0 and SUSE Linux 15 operating system

If SUU fails to update on systems running RHEL 8.0 and SUSE Linux 15 operating system, manually install the following packages:

- `libncurses` package
- `bc` package

 **NOTE:** These RPMs are available on the OS media.

## Fails to update on Windows 2012 R2 operating system

If SUU fails to update on systems running Microsoft Windows 2012 R2 operating system with an error: **Another instance of SUU already running. Only one instance of SUU is allowed at a time...** perform the following -

- Go to `C:\Windows\Temp\`.
- Delete `BAUpdate.xml`.
- Re-launch SUU.

## Running RAC DUP packages

On Dell's 12th generation of PowerEdge servers or later, if you launch SUU when a Remote Access Controller (RAC) DUP package (RAC 4/P or RAC 4/i) is running, the DUP package update stops. To resolve this issue, run SUU only after the RAC DUP package update is complete.

## Updating firmware, driver, or diagnostics on an operating system

While running:

- SAS drive firmware (SWB-XJ1HM) update on Linux, the update fails.
- Dell 64-bit UEFI diagnostics (SWB-2XN5C) update on Windows Server and Linux operating systems, the update fails.
- Marvell Unify Configuration (SWB-MFM32) driver update on Windows Server operating system, the update fails for a duplicate inventory of a Standard SATA AHCI Controller driver.

## Frequently asked questions

### When I run `suu -c` on a Linux system, I get an error saying, "Problem running Inventory Collector." What causes this error and how can I fix it?

The Inventory Collector subcomponent of SUU requires the `libstdc++-libc6.2-2.so.3` shared library on the system. Install the `compat-libstdc++` RPM from RedHat.com or from the Red Hat CD, if you are running a supported version of Red Hat Enterprise Linux or from the SUSE Linux Enterprise Server CD, if you are running SUSE Linux Enterprise Server on the system.

### Why do get a pop-up box titled "Unsafe Removal of Device"?

A part of the SUU update requires updating the backplane firmware. If the operating system queries the backplane during a flash update and the backplane does not respond, the operating system receives an indication that the device was removed unsafely. After the backplane firmware is updated, you can see a message displaying that a new device was added.

### When using the SUU GUI to perform an update, a message is displayed asking me to see the User's Guide for information on possible causes of why a server object is not displayed in the tree.

To perform updates, you must be running SUU on a supported system and must have the correct user access rights. For systems running Windows you must have administrator rights and for systems running Linux you must have root rights. For the list of supported servers and operating systems, see the Dell Systems Software Support Matrix at <https://www.dell.com/esmmanuals>.

### When I run SUU, I do not see the Comparison Report? and I cannot update the system?

You must have local administrator to run SUU on systems running Windows operating systems. To obtain local administrator rights, you must either belong to the local administrators group or use the local administrator account. On systems running Linux, only root (user id 0) users can see the Comparison Report and perform updates.

## Why do I get a message saying, "Inventory operation exceeded specified time-out" when I try to run a DUP and SUU concurrently?

Running SUU and a separate DUP concurrently gives unexpected results. SUU runs DUPs in the background. Therefore, you must not run DUPs separately. Either run SUU or DUP; do not run both at the same time.

## I cannot start SUU. The "Another instance of SUU is already running" message is displayed even though no other instances of SUU are running on the system.

On systems running Windows operating systems, open the Windows Task Manager, click the **Applications** tab, and check if SUU is running. On systems running Linux operating systems, open a terminal and type the `ps -eaf | grep suu` command to find out if SUU is running. If SUU is running, close the application, and restart SUU. If no other instances of SUU are running, then SUU may have encountered an abrupt shutdown for some reason. This results in the creation of lock files. To delete these lock files on systems running Windows operating system, navigate to the `<%systemdrive%>:\dell\suu` directory and delete the `suu.lck` file. To delete the lock files on systems running Linux operating system, run the: `chattr -i suu.lck rm -f suu.lck`. This removes the lock file from the log directory at `/var/log/dell/suu`.

## I cannot start the OpenManage Server Administrator after updating using SUU.

After updating the OpenManage Server Administrator using SUU, some of the OpenManage Server Administrator services may not run. Restart the system and start OpenManage Server Administrator.

## I cannot update BIOS versions using SUU.

For systems with a TCG 1.2 compliant Trusted Platform Module (TPM) chip, you cannot update BIOS using SUU and DUPs if:

- The Microsoft Windows BitLocker Drive Encryption feature is enabled.
- The Trusted Platform Module feature is set (using BIOS) to **ON** with Preboot Measurement.

 **NOTE:** For information about TPM security settings, see the Dell OpenManage Server Administrator Online Help or the Dell OpenManage Server Administrator User's Guide at <https://www.dell.com/esmmanuals>.

## I cannot run SUU, the "SUU Logging System has failed: There is not enough space on the disk" message is displayed.

While running SUU, make sure that the log directory at `<%systemdrive%>:\dell\suu` (on systems running Windows operating systems) and `/var/log/dell/suu` (on systems running Linux operating systems) contains at least 10 MB of free space. You can also save the log files in a different directory. For more information, see the SUU command line options.

# Identifying the series of your Dell EMC PowerEdge servers

The PowerEdge series of servers from Dell EMC are divided into different categories on the basis of their configuration. For easier reference, they are referred to as YX2X, YX3X, YX4X, YX4XX, or YX5XX series of servers. The structure of the naming convention is described below:

The letter Y denotes the alphabets in the server model number. The alphabets denote the form factor of the server. The form factors are described below:

- Cloud (C)
- Flexible(F)
- Modular (M or MX)
- Rack(R)
- Tower(T)

The letter X denotes the numbers in the server model number. The numbers denote multiple items about the server.

- The first X denotes the value stream or class of the server.
  - 1-5—iDRAC basic
  - 6-9—iDRAC Express
- The digit denotes the series of the server. It is retained in the server naming convention and not replaced by the letter X.
  - 0—series 10
  - 1—series 11
  - 2—series 12
  - 3—series 13
  - 4—series 14
  - 5—series 15
- The third X denotes the number of processor sockets a series of server supports. This is applicable only from series 14 of PowerEdge servers.
  - 1—one socket server
  - 2—two socket server
- The last X always denotes the make of the processor as described below:
  - 0—Intel
  - 5—AMD

**Table 5. PowerEdge servers naming convention and examples**

<b>YX3X servers</b>	<b>YX4X systems</b>	<b>YX4XX systems</b>	<b>YX5XX</b>
PowerEdge M630	PowerEdge M640	PowerEdge R6415	PowerEdge R6515
PowerEdge M830	PowerEdge R440	PowerEdge R7415	PowerEdge R7515
PowerEdge T130	PowerEdge R540	PowerEdge R7425	PowerEdge R6525