

Dell EMC Repository Manager Version 3.3.2

User's Guide

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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Introduction

The Dell EMC Repository Manager (DRM) ensures that the systems are up-to-date with the latest BIOS, driver, firmware, and software. DRM allows you to:

- Create repositories of customized components and updates.
- Create groups of related updates for systems running the Microsoft Windows and Linux operating system .
- Generate comparison reports and update baselines of custom repositories.

The customized repositories are made up of Dell EMC Update Packages (DUPs) or Non-DUPs (such as .exe, .msi, .bin or any other file formats) files. DUPs are software utilities that are provided to update specific software and firmware components. You can arrange these components to group the related updates together. You can import the repository content in all the three formats, however, you can export the repository content in **catalog.xml** format only.

This guide describes the installation process of Dell EMC Repository Manager (DRM) on the supported versions of operating systems.

Topics:

- [Prerequisites for installing DRM](#)
- [Accessing support content from the Dell EMC support site](#)
- [Other documents you may need](#)

Prerequisites for installing DRM

This section lists the specific prerequisites to be considered before installing DRM.

Hardware requirements

Table 1. Hardware requirements


Requirement	Details
Processor	1 GHz Pentium processor or equivalent
RAM	4 GB
Hard Disk	1 GB of available space
Display	1024 x 768 high color, 32-bit
Optical Drive (Optional)	CD/DVD writer

Software requirements

DRM works on a wide range of Operating Systems for Windows and Linux. Listed are the specific Operating Systems that DRM is tested with:

- Microsoft Windows Server 2016
- Microsoft Windows Server 2019
- Microsoft Windows 10 (64-bit)
- RedHat Enterprise Linux 8.0
- RedHat Enterprise Linux 7.7
- SUSE Linux 15
- Ubuntu 18.04

Optional requirements

- **Internet connectivity** – To access, create, work with bundles, update catalogs, plug-ins, and repositories.
 **NOTE:** You can use the local repositories on DRM without internet connectivity.
- **CD/DVD or USB burning software** – To create a bootable CD/DVD or bootable USB.

Downloading DRM

You can download DRM from [DRM Knowledge Base](#) page or [dell.com/support](#).

To download DRM from [dell.com/support](#)

1. In the support site, click **Drivers & Downloads**.
2. In **Enter a Service Tag, Serial Number, Service Request, Model, or Keyword** search box, provide the system details.
3. In **Drivers & Downloads** section, all the applicable drivers are displayed. You can manually search the complete list or use the different search fields to find the DRM installer.
4. Select the **Download Actions** check-box against DRM, and click **Download**.

Accessing support content from the Dell EMC support site

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

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

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

Other documents you may need

In addition to this guide, you can access the following guides available at the support site.

- *Dell EMC Repository Manager Quick Installation Guide*
- *Dell EMC System Update User's Guide*
- *Dell EMC Systems Management - OpenManage Software Support Matrix*
- *Dell EMC Update Packages User's Guide*
- *Dell EMC Server Update Utility User's Guide*
- *Dell EMC OpenManage Server Administrator Installation Guide*
- *Dell EMC OpenManage Essentials User's Guide*
- *Dell EMC OpenManage Enterprise User's Guide*

- *Dell EMC OpenManage Integration for VMware vCenter*
- *Dell EMC OpenManage Integration for Microsoft System Center Version 7.1 for System Center Configuration Manager and System Center Virtual Machine Manager*

Installing and maintaining DRM

DRM can be installed on the supported Microsoft Windows and Linux operating systems. For the list of supported operating systems, see [Software requirements](#).

For more information about installing DRM on supported operating systems, see Installing, upgrading, and uninstalling DRM chapter in the **Dell EMC Repository Manager Quick Start Guide**.

For more information about using DRM by Command Line Interface, see Appendix A.

Using Dell EMC Repository Manager

Using DRM, you can perform some of the basic tasks, such as:

- Work with repositories
- Modify repository
- Delete repositories
- Work with components
- Export catalog
- Search repository based on filters and search criteria you specify
- Copy components to new and existing repositories
- Work with jobs queue
- Search Dell Support Site

Topics:

- [Configuring settings](#)
- [Creating repository](#)
- [Working with repositories](#)
- [Working with components](#)
- [Working with jobs](#)
- [Creating deployment tools](#)
- [Working with filters](#)
- [Launching support site](#)
- [Save and mail logs](#)

Configuring settings

This section describes the process to configure the settings. You can configure the network settings, notifications, plug-in, data storage settings.

Configuring network settings

About this task

This section describes the process to configure the network settings.

Steps

1. Click the **Dell EMC Repository Manager** drop-down menu.
2. On the **Manage** section, click **Application Preferences**.
The **Preferences** window is displayed.
3. In the **Network** section, you can:
 - Only **HTTPS** protocol is supported for **Web Download Protocol**.
 - As an optional step, set the number of concurrent downloads.
 - As an optional step, you can choose proxy configuration. Provide the **Proxy Server Address**, **Proxy Port**, and the appropriate credentials.


 **NOTE:** Ensure to provide a proxy port number when you set proxy in Command line interface(CLI).

Table 2. Port information

Port numbers	Protocols and file sharing
8090	DRM Service
443	HTTPS
80	HTTP through proxy server
137—139 and 445	CIFS and SMB

4. Click **Apply**.

Configuring notifications

About this task


This section describes the process to configure the notification.

Steps

1. Click the **Dell EMC Repository Manager** drop-down menu.
2. On the **Manage** section, click **Application Preferences**.
The **Preferences** window is displayed.
3. In the **Notification** section, select the relevant option if you want a notification for catalog update or jobs.
4. In the **Email Configuration** section, click **Configure**.
5. From the **Email Type** drop-down menu, select the method through which you want to send the mail. The available options are **SMTP** and **Microsoft Exchange**.


If you select the **SMTP** option, you must provide the following details:


- Email ID
- Username
- Password
- Domain

 **NOTE:** There is an option to authenticate anonymously.

Also, provide the SMTP details such as:


- SMTP Server
- Port Number

 **NOTE:** You also have the option to bypass proxy or use SSL/TLS to establish communication.

 **NOTE:** It is recommended to have the message size in mail server that is configured to a minimum of 25 MB to ensure proper functioning of notification.


If you select the **Microsoft Exchange** option, you must provide the following details:

- Email ID
- Username
- Password
- Microsoft Exchange URL

 **NOTE:** Microsoft office 365 URL is not supported to send emails. For more information, see **KB article** on Dell support site.

6. Click **Save** to save the configuration.
7. Click **Apply**.

Results

 **NOTE:** A notification is sent to the email that has been configured. You can also add more emails to notify multiple users. To add multiple users, separate the recipients using a semicolon (;).

Configuring store settings

Prerequisites

- (For Linux users only) Ensure that you have **Read** and **Write** access to the `drmmuser` account in the particular directory including all sub level directories when you want to export, import, or download a repository, add a catalog, update a plugin or configure the storage location in **Application Preferences**.


About this task

This section describes the process to configure the storage settings.

Steps

1. Click on the **Dell EMC Repository Manager** drop-down menu.
2. On the **Manage** section, click **Application Preferences**.
The **Preferences** window is displayed.
3. In the **Store** section, you can choose the location to store the repositories.
4. You have the option to clear the files after exiting through **Clean up** option, delete update packages that are not referenced, or send alerts when the size of the file exceeds certain limit.
5. After selecting the preferences, click **Apply**.

Next steps

 **NOTE:** The repositories can be stored in a local storage location, a mapped network shared location, or Common Internet File System (CIFS) share location only.

Configuring plug-in settings

Prerequisites

- (For Linux users only) Ensure that you have **Read** and **Write** access to the `drmmuser` account in the particular directory including all sub level directories when you want to export, import, or download a repository, add a catalog, update a plugin or configure the storage location in **Application Preferences**.
- Add the signature file in the same location of the repository.
- Ensure that the plug-in and sign files have the same name.

For example, if the plug-in file name is *Systems-Management_Application_FT56W_LN64_1.6.0_A00.BIN*, then save the sign file as *Systems-Management_Application_FT56W_LN64_1.6.0_A00.BIN.sign*

- Add the signature file in the same location of the repository for files of the following formats:
 - `tar.gz`
 - `.cab`
 - `.bin`
- Update the plug-ins based on the deployment method you use:
 - Dell EMC System Update (BIN) for using Smart Deployment Script for Linux script type
 - Dell EMC System Update (EXE) for using Smart Deployment Script for Windows script type
 - Dell EMC Bootable ISO Plug-in for using Smart Bootable ISO script type

 **NOTE:** Forced Update option is supported on Bootable ISO Plug-in 902.2 and above.

- Dell EMC Server Update Utility x64 plug-in for using SUU ISO script type.


About this task

This section describes the process to configure the plug-in settings.

Steps


1. Click the **Dell EMC Repository Manager** drop-down menu.

2. On the **Manage** section, click **Application Preferences**.
The **Preferences** window is displayed.
3. In the **Plug-ins** section, you can:
 - Update the available plug-ins
 - Update Actions—Automatic download or notify when a new version of the plug-in is available

 **NOTE:** To ensure that you have the latest versions of the plug-ins, select the **Automatically download new versions of plug-ins when available** option.

 - Select the source of plug-in
4. Select the required plug-in from the **Plug-ins** section and click on **Update**.
5. Select the required option either to automatically install the updates or notify about the update.
6. Select the source of plug-in update from the **Source of Plug-in Update**. The available options are **Dell EMC Online** and **Folder**, that is the local location or the network shared location (Common Internet File System and Server Message Block v2).
7. Click **Apply**.

Example

-  **NOTE:** If multiple versions of the same plug-in are available in the selected plug-in update source location, in the **Preferences** window, all the versions of the plug-in is displayed instead of the most recent version. Click **Update** to update the list and view the most recent version of the plug-in.

Configuring catalogs settings

Prerequisites

Prerequisite:

- (For Linux users only) Ensure that you have **Read** and **Write** access to the `drmuser` account in the particular directory including all sub level directories when you want to export, import, or download a repository, add a catalog, update a plugin or configure the storage location in **Application Preferences**.
- Ensure that the catalog file and sign file have same names.
- Ensure that you add the catalog and signature files in the same location.
- Add the signature file in the same location of the repository for files of the following formats:
 - tar.gz
 - .cab
 - .bin


About this task


This section describes the process to configure the catalog settings.

Steps

1. Click the **Dell EMC Repository Manager** drop-down menu.
2. On the **Manage** section, click **Application Preferences**.
The **Preferences** window is displayed.
3. In the **Catalogs** section, you can add, delete, or update catalogs. A notification is displayed every two hours with the information about the catalog update.
4. You can choose the actions whenever an update is available. You can automatically download and update the new catalog or notify when a new catalog is available.
5. After selecting the preferences, click **Apply**.

Results

-  **NOTE:** A notification is displayed every two hours with the information about the catalog update.

-  **NOTE:** It is recommended to add a maximum number of 10 catalogs. Adding any catalog beyond this will impact DRM's performance. Hence, delete catalogs that are not in use.

Configuring DRM to use SUU as a content source

Prerequisites


Add the repository folder from the SUU ISO file to the local path using one of the following methods:

- If the SUU ISO file is mounted, copy the repository folder from the mounted SUU to any local path.
- If the SUU ISO file is copied to a local path, extract the repository folder to a local path.

About this task

This section describes the process to configure DRM to use SUU as a content source.

Steps

1. In DRM, click **Manage**, and then select **Application Preferences**.
The **Preferences** wizard is displayed.
2. Click **Store**.
3. Click **Browse** and select the repository folder path.
4. Click **Open** and then click **Apply**.
A new store path is set for the repository
 **NOTE:** Ensure the new store path has sufficient storage space.
5. To use the SUU ISO file as a repository, create a manual repository by clicking on **Add repository**. Click on the **Base Catalog** drop-down menu and select the catalog.xml file from the extracted repository folder
6. Select the repository created from the SUU catalog and run any download or export operation.


Creating repository

DRM enables you to create a repository that contains multiple system bundles and allows you to manage baselines or create deployment tools.

Creating manual repository

About this task

This section describes the process to create a repository manually.

-  **NOTE:** Servers that have reached end of support life are not available in the latest catalogs. If you require updates for such servers, create a repository by selecting the **Base Catalog** as **Index catalog**, and select **Catalog Group** as **Update Catalog (GZ format) for Enterprise Servers** and chose a December 2019 catalog or an older catalog.

Steps

1. On the home page, click **Add New Repository**.
Add Repository window is displayed.
2. Enter the **Repository Name** and **Description**.
3. Select a catalog to be used as a base catalog for the repository. If you want to add a custom base catalog, click **Choose File** option from the **Base Catalog** drop-down list and select the required file. By default, the **Enterprise Sever Catalog** option is selected. The other available options are **Index Catalog**, and **None**. The catalogs that are loaded earlier are also listed along with **Choose File** option.
 - Update catalog for Enterprise Servers—Access to older catalogs
 - Catalogs for specific solutions
 - ESXi Catalog—Recommended firmware/BIOS versions for ESXi
 - Validated MX Stack Catalog—Recommended firmware /BIOS versions for MX platform devices
 - Lifecycle Controller Catalog—Updates in Microsoft Windows DUP format
 - Dell EMC Solutions for Microsoft Azure Stack HCI—Recommended firmware/BIOS versions for Microsoft Azure.
4. From the **Catalog Location** drop-down menu, select the latest available catalog or click on **Choose File** to select the catalog file that is saved in local folder or a common shared location.

5. On the **Manual** tab, select systems to apply the updates in the repository:
 - Select **All systems in base catalog** to apply updates to all the systems.
 - Select **Custom** and then click **Choose Systems** to choose systems individually to apply the update. The **Systems** window is displayed. From the **Line of Business** (LOB) check-boxes, select the LOBs and systems whose updates are to be included in the repository. The search box enables you to search and select for specific server models, whereas **Select All** selects all listed server models. Click **Save**.
6. Select **All operating systems in base catalog** to apply updates to all the operating systems or select **Custom** and then click **Choose Operating Systems** to choose the operating systems whose updates are to be included in the repository. The search box enables you to search and select for specific operating systems, whereas **Select All** selects all displayed operating systems. Click **Save**.
7. Select **All components types and devices in base catalog** check-box to apply updates to all the devices or select **Custom** and then select **Choose Components** to choose the components to be included in the repository. The search box enables you to search and select for specific components, whereas **Select All** selects all displayed components. Click **Save**.
8. Select **Add** to create the repository.
The repository is displayed in the repository dashboard available on the home page.

Creating repository with integration

About this task

This section describes the process to create a repository with integration.

Steps

1. On the **Home** page, click **Add New Repository**.
Add Repository window is displayed.
2. On the **Integration** tab, enter the **Repository Name** and **Description**.
3. From the **DUP Format** check-boxes, select the formats that you want to include in the repository.

NOTE: All the Dell EMC consoles such as iDRAC, OpenManage Enterprise, OpenManage Integration for VMware vCenter and OpenManage Integration for Microsoft System Center deploy firmware using DUPs in Windows format (.exe).
4. From the **Integration Type** drop-down menu, select the product with which you want to integrate. Based on the product selected the following options are displayed. The available options are:
 - Dell OpenManage Enterprise—host name or IP address and port number, Username, Password, and proxy server
The supported format is `IP-Address or hostname`
 - Dell OpenManage Integration for Microsoft Systems Center (OMIMSSC)—host name or IP address and port number, Username, Password, and Proxy Server
The supported format is `IP-Address or hostname`
 - iDRAC—Hostname or IP, Port Number, Username, Password, and proxy server
 - Dell OpenManage Essentials—Hostname or IP, Port Number, Username, Password, and Proxy Server
 - Dell OpenManage integration for VMware vCenter—Virtual Appliance IP, vCenter Server IP, Username, Password, and proxy server
 - Dell Console Integration—URL, Username, Password, and proxy server

NOTE: Dell Console Integration is applicable for consoles that have incorporated the web services such as OpenManage Integration for Microsoft System Center and OpenManage Enterprise v3.0 or greater.
5. After selecting the required option click **Connect**.
The available system and model will be displayed in the **Integration Type** section.
6. Select **Add** to create the repository.
The repository is displayed in the repository dashboard available on the home page.

NOTE: Repository creation may fail when there are no applicable updates for Operating System-Independent format for iDRAC integration.

Creating repository with inventory

About this task

This section describes the process to create a repository with inventory. For information about collecting the inventory, see *Dell Chassis Management Controller for PowerEdge M1000e User's Guide*.

Steps

1. On the home page, click **Add New Repository**.
Add Repository window is displayed.
2. On the **Add Repository** tab, enter the **Repository Name** and **Description**.
3. Select a catalog to be used as a base catalog for the repository. If you want to select a customized catalog, click **Choose File**, go to, and select the required catalog.
4. From the **DUP Format** check-boxes, select the operating system formats that you want to include in the repository and select the required DUP format.
The available options are; **Linux**, **Windows-32**, **Windows-64**, and **OS-Independent**.
5. On the **Inventory** tab, select an inventory, click **Browse** and go to the location where the inventory is saved and select the required inventory file.
6. Select **Add** to create the repository.
The repository is displayed in the repository dashboard available on the home page.

Creating empty repository

About this task

This section describes the process to create an empty repository.

Steps

1. On the Home page, click **Add Repository**.
Add Repository window is displayed.
2. Enter the **Repository Name** and **Description**.
3. Select **None** from the **Base Catalog** drop-down menu.
4. Click **Add** to create the repository.
The repository is displayed in the repository dashboard available on the home page.

Working with repositories

About this task

The home page of Dell EMC Repository Manager displays the list of available repositories. You can control and perform various tasks such as creating, deleting, and refreshing repositories. Also, you can add, clone, and delete bundles. Filter the repositories based on criticality, category, and types of components you want to update. During the installation, Repository Manager creates a database in the system.

Viewing repository

You can view the created repositories on the **Home** page. You can also click on the **Dell EMC Repository Manager** drop-down menu and in the **View** section, click **Repositories**.

Editing repository properties

About this task

This section describes the process to edit the repository properties.

Steps


1. On the DRM home page, select a repository to edit.
The **Property** window is displayed.
2. Click **Edit** to edit the selected repository.
The **Edit** window is displayed.
3. Update the required fields, such as **Name**, **Label**, or **Description**.
4. Click **Save** to update the preferences.

Comparing repository


About this task

This section describes the process to compare repository based on components or platforms with selected repositories and online repositories.

Steps

1. On the DRM home page, select a repository that you want to compare.
2. Click **Compare**.
3. From the **View** section, select if you want to view the **Component View** or **Platform View**.
 **NOTE:** You have the option to update catalogs on the **Compare** window. Click **Update** to update to the latest version of the catalog.
4. From the **Filter** section, select the preferences from **Type of Change** drop-down list. Available options are **Upgraded**, **Downgraded**, and **No Change**.
5. From the **Criticality** drop-down list, select an option. The available options are **Urgent**, **Recommended**, and **Optional**.
6. Click **Update**.
If there are any updates between the previous and the latest version of the catalog, the changes are displayed.

Next steps


-  **NOTE:** The **Update** button is not visible, if there are no updates.

Refreshing repository

About this task

This section describes the process to refresh a repository.

Refresh operation updates the components in the repository with the latest version available in **Enterprise Server Catalog**.

-  **NOTE:** A repository can be linked to only one refresh job.

i NOTE: If there are servers and components in the repository which are not available in the **Enterprise Catalog** , then those servers or components will not be refreshed. All servers and components that are represented in the latest **Enterprise Catalog** will be refreshed.

Steps

1. On the DRM home page, select the repositories that you want to refresh.
2. Click **Refresh**.
The **Refresh** window is displayed, and the selected repositories is displayed.
3. Select the frequency to refresh the repository. The available options are **Now**, **Daily**, **Weekly**, and **Monthly**.
4. Select the **Start Time** and **Date** to refresh the repository.
5. Select the **Send email notification on refresh completion** option to notify users through mail.
6. Click **Save**.

Viewing properties of repository

About this task

This section describes the process to view the properties of repositories.

i NOTE: If dependant DUPs are available for a DUP, it is displayed in the **Properties** section as prerequisites. The dependant DUPs are exported or downloaded automatically with the selected DUPs.

Steps

1. On the home page, select the repository for which you want to view the properties.
 2. The properties of the selected repository are displayed in the **Property** section on the home page. Information such as, **Name**, **Version**, **Type**, **Number of Bundles**, **Number of Components**, **Date**, **Size**, and **Available Versions** are displayed.
- i NOTE:** To refresh the inventory of integration type of repositories, click **REFRESH INVENTORY**.

Adding bundles

About this task

This section describes the process to add bundles.

i NOTE: Adding bundles results in an increment of the repository version.


Steps

1. On the Home page, click **Add Bundles**.
Add Bundles window is displayed.
2. Select **Manually add the bundles** option.
The **Select Systems** option is displayed.
3. Click **Choose Systems**.
Select Systems window is displayed.
4. From the **Line of Business** drop-down menu, select the system. Click **Save**.
5. Click **Choose Operating Systems**.
6. From the **Operating Systems** drop-down menu, select the operating system. Click **Save**.
The **Operating Systems** window is displayed.
7. Click **Choose Components**.
The **Components** window is displayed.
8. From the **Component Type** drop-down menu, select the component. Click **Save**.
9. Click **Add** to create the bundle.

Adding empty bundles


About this task

This section describes the process to add empty bundles.

 **NOTE:** Adding empty bundles results in an increment of the repository version.

Steps


1. On the home page, click **Add Bundles**.
Add Bundles window is displayed.
2. Select **Add an empty bundle** option.
3. Enter the bundle name in **Bundle Name** text field.
4. Select the DUP format from the **DUP format** drop-down list. The available options are: **Linux**, **Windows-32**, **Windows-64**, and **OS-Independent**.
5. Select the systems from **Systems** drop-down list.
6. Click **Add** to create the bundle.

 **NOTE:** The name of the empty bundle is not unique. However, the DUP name and platform must match for the bundle to be displayed. Combination of the DUP format and the platform/system determines the bundle type.

Copying bundles

About this task

This section describes the process to copy bundles from selected repositories to the target repository.

 **NOTE:** Copying bundles result in an increment of the repository version.


Steps

1. On the home page, select a repository, and then click **Add Bundles**.
Add Bundles window is displayed.
2. Select **Copy bundles from another repository** option.
3. Select the repository from the **Select Repository** drop-down list, and select the bundle.
4. Click **Add** to copy the bundle.

Cloning bundles

About this task

This section describes the process to clone the selected bundles.

 **NOTE:** Cloning a bundle results in an increment of the repository version.

Steps

1. On the DRM home page, select the repository.
2. Expand the repository list to view the bundles associated with that repository.
3. Select a bundle and click **Clone** to clone the bundle.
Clone Bundles window is displayed.
4. Select the repository from **Select Repository** drop-down list to clone the bundle.
5. Click **Clone**.

Deleting bundles


About this task

This section describes the process to delete the selected bundles.

Steps

1. On the DRM home page, select a repository.
2. Expand the repository list to view the bundles associated with that repository.
3. Select a bundle and click **Delete**.
A warning is displayed to confirm the deletion.
4. Click **Delete**.

Next steps

 **NOTE:** Deleting bundles or components results in an increment of the repository version.

Deleting components from bundle


About this task

This section describes the process to delete the components from bundles.

Steps

1. On the DRM home page, select a repository.
2. Expand the repository list to view the bundles associated with that repository.
3. Select a bundle and expand the tree to view the components associated with the bundle.
4. Select a component to delete.
A warning is displayed to confirm the deletion.
5. Click **Delete**.

Next steps

 **NOTE:** You can also delete a component from multiple bundles in the repository.

Working with components

All the DUPs and non-DUPs (such as .exe, .msi, .bin, or any other file formats) files are called as components. They are used for updating the Basic Input/Output System (BIOS), firmware, drivers on specific platforms or any other application.

DUP conventions for DRM

DUPs are update packages from Dell EMC, which help you to keep your system up to date. DUPs are application that are available in various formats; Windows 32-bit, Windows 64-bit, and Linux (64-bit). For yx1x PowerEdge systems, Dell recommends you to select 32-bit DUPs, and for yx2x PowerEdge systems or later select 64-bit operating systems. For more information about this format, see [Identifying the generation of your Dell EMC PowerEdge server](#).

If you are using a Windows Server OS that does not support *WoW64* (Windows 32-bit on Windows 64-bit) then you must select 64-bit DUPs.

Component properties

This section describes the process to view the properties of components.

1. On the DRM home page, select the repository that you want to view.
2. Expand the repository list to view the bundles associated with that repository.
3. Select a bundle and click to expand the list of components associated with that bundle.

The properties of the component is displayed in the **Property** section.


Downloading components

About this task

This section describes the process to download components associated with a bundle.

Steps

1. On the DRM home page, select the repositories that has the components that you want to download.
2. Expand the repository list to view the bundles associated with that repository.
3. Select a bundle and click to expand the list of components associated with that bundle.
4. Select the component and click **Download**.
The **Download Components** window is displayed.
5. Navigate to the location to download the component and click **Download**.

 **NOTE:** To download the component to a shared location, enter the IP address of the network share in the address bar of the **Browse** window. Login with the relevant credentials and select the location to download the components.

Copying components

About this task

This section describes the process to copy components associated with a bundle to the target repository.

Steps


1. On the DRM home page, select the repositories that you want to filter.
2. Expand the repository list to view the bundles associated with that repository.
3. Select a bundle and click to expand the list of components associated with that bundle.
4. Select the component and click **Copy**.
The **Copy Components** window is listed.
5. Select the repository and then select the bundle you want to copy.
The **Selected Bundles** section has the bundle that you selected earlier.
6. Click **Add** to copy the selected bundle.

Importing components

Import option allows you to import offline components to the selected repository.


Prerequisites:

- Ensure that you add the plug-in and signature files in the same location where the repository is present.
- Ensure that the plug-in and sign files have the same name.
- Add the signature file in the same location of the repository for files of the following formats:
 - tar.gz
 - .cab
 - .bin


 **NOTE:** For windows DUPs (.exe) the signature file is embedded.


To import components to a repository:


1. On the DRM home page, select the repository and bundle where you want to import components. Click **Import** tab.
2. Browse the location of the repository that you intend to import the components and click **Import**.

 **NOTE:** To import components from a network shared location, you must log in to the shared location with provide appropriate credentials and select the components to import.

Component is successfully imported to the specified repository.

 **NOTE:** You also have the option to verify the signature of the DUPs, if not done before importing.

 **NOTE:** Importing components results in an increment of the repository version.

 **NOTE:** You can import only one DUP through Graphical User Interface (GUI). And, you can import multiple DUPs through the Command Line Interface (CLI).

Working with jobs

About this task

This section describes the process to work with scheduled jobs in DRM.

Steps

1. Click on the **Dell EMC Repository Manager** drop-down menu.
2. On the **View** section, click **Jobs**.
The **Jobs** page is displayed.


Next steps

You can **Edit** and **Delete** the jobs that you create.

Editing jobs

About this task

This section describes the process of editing the jobs on the jobs page.

 **NOTE:** Edit jobs are applicable only for Refresh jobs.

Steps

1. Click the **Dell EMC Repository Manager** drop-down list and click **Jobs**.
The **Jobs** screen is displayed. The created or scheduled jobs are displayed.
2. Select the job that you want to edit. Click **Edit**.
3. Edit the preferences, and click **Save**.

Deleting jobs

About this task

This section describes the process of deleting the jobs on the jobs page.


Steps

1. Click on the **Dell EMC Repository Manager** drop-down list and click **Jobs**.
The **Jobs** window is displayed. The created or scheduled jobs are displayed.
2. Select the job you want to delete and click **Delete**.
A warning message is displayed to confirm the deletion.
3. Click **Delete** to delete the job.

Jobs queue details

The details such as, **Job Name**, **Status**, **Next Execution Date/Time**, **Last Execution Date/Time**, **Affected Repositories**, and **Log** are displayed. The **Show Log** option is displayed for certain jobs. This option provides more details about the job.

For specific details about any failure in the job, go to service logs. For more information, see `/var/dell/drm/log/drm-service-0.log` file in Linux operating system and `/programdata/dell/drm/log/drm-service-0.log` file in Microsoft Windows operating system.

 **NOTE:** A progress bar displays the status of a job that is executing.

Creating deployment tools


About this task


This section describes about creating customized deployment tools.


Steps

1. On the DRM home page, select the repositories or bundles for which you want to create the deployment tools. Dell EMC System Update (DSU) is used in orchestrating the deployment.
2. Click **Export**.
The **Export Deployment Tools** window is displayed.
3. The repositories that you select is displayed in the **Selected Repositories** section. Select the required **Deployment Tool Type** and click **Create**. The available options are:
 - Smart Bootable ISO- Support Linux bundles only. You have the option to force an update by selecting **Enable Force Update** option. If you want custom scripts, select the **Replace Default Script** checkbox.
 - SUU ISO- Supports SUU as an ISO image file. You also have the option to save the SUU to Directory.
 - Smart Deployment Script- You can choose the **Script Type** for Microsoft Windows or Linux operating systems. You can also specify the script to execute before or after the deployment script is executed by selecting **Pre-Script** or **Post-Script** or select a custom script. You also have the option to force an update by selecting **Enable Force Update**.
If you want to use custom scripts, select the **Replace Default script** checkbox.
 - Share- Local storage or network share. You also have the option to export only the catalog by selecting **Export only catalog**.
4. Select the required preference and click **Export**.

Next steps

 **NOTE:** DSU v1.6 or later is required to use the **Enable Force Update** option.


 **NOTE:** When you select a lower version of a repository, you have an option to delete all the higher versions of the repository on the **Export Deployment Tools** window.

 **NOTE:** If a plug-in update is available, a message is displayed. You can configure and set the plug-in preferences. For more information on configuring plug-in preferences, see [Configuring plug-in preferences](#).




Creating smart bootable ISO

About this task


This section describes the process to export the repository to a smart bootable ISO.

 **NOTE:** Ensure that you do not use Secure Boot as it is not supported with smart Bootable ISO.

Steps

1. On the home page, select the repositories or bundles for which you want to create the deployment tools.
If you do not select any repository, a warning message is displayed.
2. Click **Export**.
The **Export Deployment Tools** window is displayed.
3. The repositories that you select are displayed in the **Selected Repositories** section. Select **Smart Bootable ISO** option.
4. If you want to use a custom script instead of a default script, and then select the **Replaced Default Script** option, and click **Select**.
 -  **NOTE:** While deploying the Bootable ISO, the selected custom script is replaced with the default script. Ensure that the custom script file is not named as `apply_bundles.sh`
 -  **NOTE:** Running custom script requires the relevant libraries to be included and other dependencies to be met on the target systems.
 -  **NOTE:** Save the script file name using alphabets and numbers only.
5. Click **Browse** to select the location to download the ISO.
6. Only if the bootable ISO plug-in is greater than 902.2 version, select the **Bootable ISO Plugin 902.2 or greater is required to use Enable Force update** option.
7. Click **Export**.

Results

 **NOTE:** DSU is used in orchestrating the deployment of the update packages.

 **NOTE:** If the exported repository contains higher version of DSU DUP, applying the updates upgrade the DSU version to the latest available version.

Example

The following is a sample script which allows to reboot the host operating system, if any updates require reboot after mounting the ISO file.

```
#!/bin/bash
shopt -s expand_aliases
alias 'rpm=rpm --ignoresize'
mkdir -p /var/cache/yum
mount -ttmpfs tmpfs /var/cache/yum
rpm -ivh --nodeps /opt/dell/toolkit/systems/RPMs/rhel7/yumrpms/*
echo "diskspacecheck=0" >> /etc/yum.conf
echo "Installing dell-system-update ..."
if rpm -U --force /opt/dell/toolkit/systems/RPMs/dell-system-update*.rpm
then
    echo "DSU installation successful ..."
    export LANG=en_US.UTF-8
else
    echo "DSU installation failed."
    exit 1
fi
mkdir -p /usr/libexec/dell_dup/

version=$(dsu -v | cut -d ' ' -f 5)
version=$(echo $version | cut -d ' ' -f 1)
installed_version=$(dsu -v | cut -d ' ' -f 5)
installed_version=$(echo $installed_version | cut -d ' ' -f 1)
if [[ $installed_version < 1.7.0 ]]
```

```

then
echo "Trying to Upgrade DSU"
/opt/dell/toolkit/systems/drm_files/repository/FOLDER05605556M/1/Systems-
Management_Application_DVHNP_LN64_1.7.0_A00.BIN -f -q
if [[ $? -eq 0 ]]
then
echo DSU update Succesful
version=$(dsu -v | cut -d ' ' -f 5)
version=$(echo $version | cut -d' ' -f 1)
else
echo DSU Update Failed
fi
fi

echo "Starting dsu"
if [[ $version > 1.6.0 ]]
then
dsu --non-interactive --source-location=/opt/dell/toolkit/systems/drm_files/
repository --source-type=REPOSITORY --ic-location=/opt/dell/toolkit/systems/
drm_files/repository/FOLDER05897955M/1/invcol_FJ2R1_LN64_19_12_200_744_A00 --config=/opt/
dell/toolkit/systems/drm_files/dsuconfig.xml --import-public-key --reboot

elif [[ $version > 1.5.3 ]]
then
dsu --non-interactive --source-location=/opt/dell/toolkit/systems/drm_files/
repository --source-type=REPOSITORY --ic-location=/opt/dell/toolkit/systems/
drm_files/repository/FOLDER05897955M/1/invcol_FJ2R1_LN64_19_12_200_744_A00 --config=/opt/
dell/toolkit/systems/drm_files/dsuconfig.xml

elif [[ $version > 1.5.2 ]]
then
dsu --non-interactive --source-location=/opt/dell/toolkit/systems/drm_files/
repository --source-type=REPOSITORY --ic-location=/opt/dell/toolkit/systems/
drm_files/repository/FOLDER05897955M/1/invcol_FJ2R1_LN64_19_12_200_744_A00 --config=/opt/
dell/toolkit/systems/drm_files/dsuconfig.xml

else
dsu --non-interactive --source-location=/opt/dell/toolkit/systems/drm_files/
repository --source-type=REPOSITORY --ic-location=/opt/dell/toolkit/systems/
drm_files/repository/FOLDER05897955M/1/invcol_FJ2R1_LN64_19_12_200_744_A00
exit "$STATUS"
fi

```


Creating SUU ISO

About this task


This section describes the process to export the repository to a Dell Server Update Utility (SUU) ISO.

Steps

1. On the DRM home page, select the repositories or bundles for which you want to create the deployment tools.
A warning message is displayed if you do not select any repository.
2. Click **Export**.
The **Export Deployment Tools** window is displayed.
3. The repositories that you select is displayed in the **Selected Repositories** section. Select **SUU ISO** option.
4. Click **Browse** to select the location to download the ISO.
5. Click **Export**.

 **NOTE:** Deployment will ignore all Windows 32-bit DUPs and any repository containing only Windows 32-bit DUPs.

Results





 **NOTE:** If you export or save ISO image in the expanded format, SUU is saved in non-ISO format.

Creating Smart Deployment Script

About this task

This section describes the process to export the repository to a smart deployment script.

Steps

1. On the DRM home page, select the repositories or bundles for which you want to create the deployment tools.
A warning message is displayed if you do not select any repository.
2. Click **Export**.
The **Export Deployment Tools** window is displayed.
3. The repositories that you select is displayed in the **Selected Repositories** section. Select **Smart Deployment Script** option.
4. Select the type of script from the **Script Type** drop-down list. The available options are **Windows** and **Linux**.
5. If you want to use a custom script instead of a default script, then select the **Replaced Default Script** option, and click **Select**.
 -  **NOTE:** While deploying the **Smart Deployment Script**, the selected custom script will be invoked from the default script.
 -  **NOTE:** Save the script file name using alphabets and numbers only.
 -  **NOTE:** Executing custom scripts will require the relevant libraries to be present and dependencies to be meet in the target systems.
6. Specify if the script is to be executed before or after the deployment script. The available options are **Pre-script** and **Post-script**.
7. Click **Select** to choose the script file.
8. Click **Browse** to select the location to download the ISO.
9. To force an update, select the **Enable Force Update (DSU Plug-in 1.6 or greater)** option.
10. Click **Export**.
 -  **NOTE:** Deployment will ignore all Windows 32-bit DUPs and any repository containing only Windows 32-bit DUPs.

Next steps

After creating the script, manually download the plug-in and sign files.

Exporting repository as share

About this task

This section describes the process to export the repository to a network shared location.

Steps

1. On the DRM home page, select the repositories or bundles for which you want to create the deployment tools.
A warning message is displayed if you do not select any repository.
2. Click **Export**.
The **Export Deployment Tools** window is displayed.
3. The repositories that you select is displayed in the **Selected Repositories** section. Select **Share** option.
4. Click **Browse** to select the location to download the DUPs and catalogs.
5. Click **Export**.

Example

 **NOTE:** Select **Export only catalog** to export only the catalog.


Working with filters

About this task

This section describes the process to work with options to filter the repositories based on conditions.

Steps

1. On the DRM home page, select the repositories that you want to filter.


2. Click  logo available on the top right corner of the interface.
3. Set the preferences to filter the repositories. The available conditions are **Criticality**, **Category**, and **Type**. You also have the option to search a particular component or a bundle through the search field.
4. In the **Criticality** section, select the required preference. The available options are, **Urgent**, **Optional**, and **Recommended**.
5. In the **Category** drop-down menu, select the required category. For example, **Application**, **Audio**, **BIOS**, or other available categories.
6. In the **Type** section, select the required components.
7. After the preferences are set, click **Apply**.
The components are displayed based on the preferences set. The filter logo is changed to




. After successfully applying the filters, the image of the filter changes to an animation image after successfully applying the filters.

The arrow present next to the filter image will point down when the filter is hidden.

The arrow present next to the filter image will point down when the filter is expanded.


 **NOTE:** After you apply a filter, the result pertaining to the selected filter preference is displayed. Click **Reset** to revert to the default view of the repository.

Next steps

 **NOTE:** If you delete, copy, or download the components after applying filters, only the filtered data is available and the entire repository is not displayed. After deleting the filtered content, an empty repository is displayed. Click **Reset** to view

the other components in the repository. The filter logo is changed to



 **NOTE:** You can also search and select the components by entering the keywords of the components. For example, type **Fibre** in the search bar and click **Apply** to search all the instances with the keyword **Fibre** in all the repositories. To revert to default preferences, click **Reset**.

Launching support site

This section describes the process of launching the DRM page on support site.

To view the DRM manuals:

1. Browse to dell.com/support/manuals
2. Click **View Products** to view the Dell EMC portfolio.
3. Click **Software and Security**.
4. Click **Enterprise Systems Management**.
5. Click **Repository Manager**.

6. Select the relevant release and click **Manuals & documents**.

Save and mail logs

About this task

This section describes the process of saving and mailing the logs.

Steps

1. Click **Dell EMC Repository Manager** drop-down list.
2. On the **Help and Support** section, click **Save and Mail logs**.
The **Save/Mail Logs** window is displayed.
3. Enter the recipients email address to send logs to recipients through email by configuring the email settings. You also have the option of downloading the logs to a local location or a network shared location.

Identifying the series of your Dell EMC PowerEdge servers

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

The letter Y denotes the character in the server model number. The character denotes the form factor of the server. The form factors are listed below:

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

The letter X denotes the numbers in the server model number. The number denotes multiple characteristics about the server. They are listed as follows:

- The first digit (X) denotes the value stream or class of the server.
 - 1-5—iDRAC basic
 - 6-9—iDRAC Express
- The second digit denotes the series of the server. It is retained in the server naming convention and does not replace the letter X.
 - 0—series 10
 - 1—series 11
 - 2—series 12
 - 3—series 13
 - 4—series 14
 - 5—series 15
- The last digit (X) always denotes the make of the processor as described below:
 - 0-Intel
 - 5-AMD

NOTE: For servers that use an AMD processor, the model number is made up of four digits instead of three. The third digit (X) denotes the number of processor sockets that the series of server supports.

- 1—one socket server
- 2—two socket server

Table 3. PowerEdge servers naming convention and examples

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

Command-line interface syntax

The following chapter describes the syntax for the commands that you can use in command-line interface (CLI) mode:

Consider the following points for using DRM through CLI:

- (For Linux users only) Ensure that you have **Read** and **Write** access to the `drmuser` account in the particular directory including all sub level directories when you want to export, import, or download a repository, add a catalog, update a plugin or configure the storage location in **Application Preferences**.
- When performing any operations on a repository, if the repository version is not specified, the operations are performed on the latest version of the repository.
- To update, delete, or import a specific repository use the repository name with version in the following format:
`<repository name>:<repository version>`
- For running any DRM operations, ensure that you provide the recurring read and write access to local share folders in Linux operating system.

For example, the create repository and import and export operations require the read and write access for the local share folders.

- Run all the commands on Windows operating system using `/` or `-` character.
- To use a network path, provide the authentication attribute in the following format: `--authentication="domain\username:password"` For OMIVV console, provide `username@domain:password`
- All the CLI operations are limited to a single repository.
- Selection of bundles is not supported in CLI.
- **Nowait** attribute can be used with export, scheduled refresh, and plug-in update.
- If source and catalog attributes are not used for repository creation, then the latest Enterprise catalog is considered as base catalog.
- If you have defined the port number for integration type, ensure that you specify the port number while creating a repository.

Table 4. Commands

Description	Command	Full form	Example
Launching DRM			
Open DRM in a Graphical User Interface (GUI) mode.	<code>drm</code>	NA	<code>drm</code>
Commands to display details in DRM			
Display the current version of DRM.	<code>drm -v</code>	<code>drm --version</code>	<code>drm --version</code>
Display help menu.	<code>drm -h</code>	<code>drm --help</code>	<code>drm --help</code>
Display the list of all repository names, latest version, size, and the latest date when it was modified.	<code>drm -li=rep</code>	<code>drm --list=rep</code>	<code>drm --list=rep</code>
Display all console integration types.	<code>drm -li=integration-type</code>	<code>drm --list=integration-type</code>	<code>drm --list=integration-type</code>
Displays all available categories	<code>drm -li=category</code>	<code>drm --list=category</code>	<code>drm -li=category</code>
Displays all the categories for a specific repository version	<code>drm -li=category -r=<repository name>:<version></code>	<code>drm --list=category --repository=<repository name>:<version></code>	<code>drm -li=category -r=repo1:1.01</code>
Displays all available catalogs	<code>drm -li=catalogs</code>	<code>drm --list=catalogs</code>	<code>drm -li=catalogs</code>

Table 4. Commands (continued)


Description	Command	Full form	Example
Displays all available component types	<code>drm -li=component-types</code>	<code>drm --list=component-types</code>	<code>drm --list=component-types</code>
Displays all the component types for a specific repository	<code>drm -li=component-type -r=<repository name></code>	<code>drm --list=component-type --repository=<repository name></code>	<code>drm -li=component-type -r=repo1</code>
Display bundles and component details of a specific version of repository.	<code>drm --details -r=<repository name>:<version></code>	<code>drm --details --repository=<repository name>:<version></code>	<code>drm --details -r=repo1:1.01</code>
Compare a version of the repository with the base catalog in database.	<code>drm --compare -r=<repository name>:<version></code>	<code>drm --compare --repository=<repository name>:<version></code>	<code>drm --compare --repository=repo1:1.1</code>
Display the list of all plug-in names, current-version, and the latest available version.	<code>drm -li=plugin</code>	<code>drm --list=plugin</code>	<code>drm -li=plugin</code>
Display all the versions associated with the repository such as version, size, and created date.	<code>drm -r=<repository name> --details</code>	<code>drm --repository=<repository name> --details</code>	<code>drm -r=repo1 --details</code>
Display the list of all job names, status, type, and creation date.	<code>drm -li=job</code>	<code>drm --list=job</code>	<code>drm --list=job</code>
Display details of a specific job.	<code>drm -j=<job name> --details</code>	<code>drm --job=<job name> --details</code>	<code>drm -j=samplejob --details</code>
Preferences			
To set proxy details.	With authentication <code>drm --set -p=http://username:password@proxy-server:port</code>	With authentication <code>drm --set --proxy=http://username:password@proxy-server:port</code>	<code>drm --set -p=http://root:calvin@100.10.20.16:8080</code>
	Without authentication <code>drm --set -p=http://proxy-server:port</code>	Without authentication <code>drm --set --proxy=http://proxy-server:port</code>	<code>drm --set -p=http://100.10.20.16:8080</code>
Set a custom store path for downloading files.  NOTE: Ensure that you change the store path location when no jobs are running.	<code>drm --set -sp=<path></code>	<code>drm --set --storepath=<path></code>	<code>drm --set -sp="C:\Users\DRM\downloads"</code>
To set the plug-in update to auto-update.	<code>drm --set -pu=autoupdate</code>	<code>drm --set --pluginupdate=autoupdate</code>	<code>drm --set -pu=autoupdate</code>
To set the plug-in update to alert	<code>drm --set -pu=alert</code>	<code>drm --set --pluginupdate=alert></code>	<code>drm --set -pu=alert</code>
Update a plug-in or all plug-ins.	<code>drm --update --plugin=<plug-in name all></code>	<code>drm --update --plugin=<plug-in name all></code>	<code>drm --update --plugin="Dell</code>

Table 4. Commands (continued)

Description	Command	Full form	Example
			EMC System Update (BIN) "
Update a catalog or all catalogs.	<code>drm --update -- catalog=<catalog id all></code>	<code>drm --update -- catalog=<catalog id all></code>	<code>drm --update -- catalog=637e0d3f-f41e-4799-b595-3f182f3d9cae</code>
Clean up the store path.	<code>drm --cleanup</code>	<code>drm --cleanup</code>	<code>drm --cleanup</code>
Creating repositories			
Create an empty repository.	<code>drm -cr -r=<repository name> --empty</code>	<code>drm --create -- repository=<repository name> --empty</code>	<code>drm -cr -r=repo1 --empty</code>
Create a repository with inventory. NOTE: Source and authentication attributes are optional.	<code>drm -cr -r=<repository name> -i=<inventory file location> -- source=<catalogFileLocation> -- authentication=<domain\username:password></code>	<code>drm --create -- repository=<repository name> -- inventory=<inventory file location> -- source=<catalogFileLocation> -- authentication=<domain\username:password></code>	<code>drm -cr -r=repo1 -i="C:\Users\DRM\sample.xml" -- source="//100.100.10.11/DRM/source.xml" -- authentication="root:calvin"</code>
Create a repository from default base catalog by connecting to an iDRAC console.	<code>drm -cr -r=<repository name> -ih=<ip address hostname FQDN> -it=idrac -- authentication=<domain\username>:<password></code>	<code>drm --create -- repository=<repository name> -- integration-host=<ip address hostname FQDN> --integration-type=idrac -- authentication=<domain\username>:<password></code>	<code>drm --create -- repository=repo1 -- integration-host=100.10.10.15 -- integration-type=idrac -- authentication="mydomain\root:calvin"</code>
Create a repository from default base catalog by connecting to an OpenManage Enterprise console.	<code>drm -cr -r=<repository name> -ih=<ip address hostname FQDN> -it=oment -- authentication=<domain\username>:<password></code>	<code>drm --create -- repository=<repository name> -- integration-host=<ip address hostname FQDN> --integration-type=oment -- authentication=<domain\username>:<password></code>	<code>drm --create -- repository=repo1 -- integration-host=100.10.10.15 -- integration-type=oment -- authentication=</code>
Create a repository from default base catalog by connecting to an OpenManage Essentials console.	<code>drm -cr -r=<repository name> -ih=<ip address hostname FQDN> -it=omess -- authentication=<domain\username>:<password></code>	<code>drm --create -- repository=<repository name> -- integration-host=<ip address hostname FQDN> --integration-</code>	<code>drm --create -- repository=repo1 -- integration-</code>

Table 4. Commands (continued)

Description	Command	Full form	Example
		type=omess -- authentication=<domain\username>:<password>	0.15 -- integration- type=omess -- authentication="mydomain\r oot:calvin"
Create a repository from default base catalog by connecting to an OpenManage Integration for VMware VCenter (OMIVV) console.	drm -cr -r=<repository name> -ih=<appliance ip address>;<vCenter ip address> -it=vcenter -- authentication=<username@domain:password>	drm --create -- repository=<repository name> -- integration- host=<appliance ip address>;<vCenter ip address> -- integration- type=vcenter -- authentication=username@domain:password	drm -cr -r=repol -ih=100.10.10 .15;100.100.1 5.76 -it=vcenter -- authentication=root@mydomain:calvin
Create a repository from default base catalog by connecting to an OpenManage Integration for Microsoft System Center (OMIMSSC) console.	drm -cr -r=<repository name> -ih=<ip address hostname FQDN> -it=omimssc -- authentication=<domain\username:password>	drm --create -- repository=<repository name> -- integration-host=<ip address hostname FQDN> --integration- type=omimssc -- authentication=<domain\username:password>	drm --create -- repository=repol -- integration- host=100.10.1 0.15:8080 -- integration- type=omimssc -- authentication=root:calvin
Create a repository from default base catalog by connecting to a console.	drm -cr -r=<repository name> -ih=<url> -it=console -- authentication=<domain\username:password>	drm --create -- repository=<repository name> -- integration- host=<url> -- integration- type=console -- authentication=<domain\username:password>	drm --create -- repository=repol -- integration- host=https:// 100.10.10.15: 8080/ genericconsole repository -- integration- type=console -- authentication=root:calvin
Create a repository from custom catalog in local path.	drm -cr -r=<repository name> -ih=<ip:port hostname> -it=<type> -- source=<catalog file location>	drm --create -- repository=<repository name> -- integration- host=<ip:port hostname> -- integration- type=<type> -- source=<catalog file location>	drm --create -- repository=repo -integration- host=100.10.1 5.11 -- integration- type=idrac -- source="C:\Us ers\DRM\sampl e.xml"

Table 4. Commands (continued)

Description	Command	Full form	Example
Create an integration repository using custom catalog from a network path. i NOTE: Ensure that you use the authentication attributes after specifying the integration host and source attributes.	<code>drm -cr -r=<repository name> -ih=<ip> -- authentication=<domain\username:password> -it=<type> -- source=<catalog path> -- authentication=<domain\username:password></code>	<code>drm --create -- repository=<repository name> -- integration-host=<ip> -- integration-type=<type> -- source=<catalog path> -- authentication=<domain\username:password></code>	<code>drm -cr -r=repo1 -ih=100.100.15.76 -- authentication=root:calvin -it=idrac -- source=//100.60.50.55/DRM/catalog.xml -- authentication=root1:calvin</code>
Create a manual repository. Optional attributes: <ul style="list-style-type: none"> inputplatformlist dupformat 	<code>drm -cr -r=<repository name></code> or <code>drm -cr -r=<repository name> -- inputplatformlist=<PlatformA,PlatformB, ...> -- dupformat=<dupformatA,dupformatB, ...> -- source=<source repository path></code>	<code>drm --create -- repository=<repository name> -- inputplatformlist=<PlatformA,PlatformB, ...> -- dupformat=<dupformatA,dupformatB, ...> -- source=<catalogFile Location></code>	<code>drm -cr -r=repo1 -- inputplatformlist=R740 -- dupformat=win64,linux,osind</code>
Create a repository for index catalog using catalog id.	<code>drm -cr -r=<repository name> -ih=<ip> -it=<type> --catalog=<catalog id></code>	<code>drm --create -- repository=<repository name> -integration-host=<ip> -- integration-type=<type> -- catalog=<catalog id></code>	<code>drm --create -- repository=repo -- integration-host=100.10.15.55 -- integration-type=idrac -- catalog=74b69121-2e85-46be-a6d7-7f69728dac23</code>
Create Deployment tools			
Export a repository as Catalog Only.	<code>drm --deployment-type=exportCatalog --location=<path> -r=<repository name></code>	<code>drm --deployment-type= exportCatalog --location=<path> -- repository=<repository name></code>	<code>drm -- deployment-type= exportCatalog -- location="C:\Users\DRM" -- repository=repo</code>
Export full repository with DUPs and catalog.	<code>drm --deployment-type=share -- location=<path> -r=<repository name></code>	<code>drm --deployment-type=share -- location=<path> -- repository=<repository name></code>	<code>drm --deployment-type=share -- location="C:\Users\DRM" -r=repo</code>

Table 4. Commands (continued)

Description	Command	Full form	Example
Export Smart Deployment Scripts to a location. Optional attributes: force-update	<code>drm -r=<repository name> --deployment-type=smartscript --script-type=<OS type> --location=<path> --force-update --nowait</code>	<code>drm --repository=<repository name> --deployment-type=smartscript --script-type=<OS type> --location=<path> --force-update --nowait</code>	<code>drm -r=repol --deployment-type=smartscript --script-type=linux --location="C:\Users\DRM" --force-update --nowait</code>
Export Smart Deployment Scripts using prescript and postscripts to a location. Optional attributes: <ul style="list-style-type: none"> prescript postscript <p>NOTE: Ensure that prescript and postscript are in the same network location.</p>	<code>drm -r=<repository name> --deployment-type=smartscript --script-type=<OS type> --prescript=<script path> --script-authentication=<username:password> --postscript=<script path> --script-authentication=<username:password> --location=<path> --nowait</code>	<code>drm --repository=<repository name> --deployment-type=smartscript --script-type=<OS type> --prescript=<script path> --script-authentication=<username:password> --postscript=<script path> --script-authentication=<username:password> --location=<path> --nowait</code>	<code>drm -r=repol --deployment-type=smartscript --script-type=linux --prescript=//100.18.6.22/DRM/prescript.sh --script-authentication=root:calvin --postscript=//100.18.6.22/DRM/postscript.sh --location=//100.88.33.34/DRM --authentication=root:calvin --nowait</code>
Export Smart Deployment Script using custom script to a location. NOTE: If you are using the update-script attribute, you cannot use the prescript, postscript, or force-update attributes.	<code>drm -r=<repository name> --deployment-type=smartscript --script-type=<OS type> --update-script=<custom script path> --location=<path> --nowait</code>	<code>drm --repository=<repository name> --deployment-type=smartscript --script-type=<OS type> --update-script=<custom script path> --location=<path> --nowait</code>	<code>drm -r=repol --deployment-type=smartscript --script-type=windows --update-script="C:\Users\DRM\customscript.bat" --location="C:\Users\DRM" --nowait</code>
Export Smart Bootable ISO with Force Update option to a local path.	<code>drm -r=<repository name> --deployment-type=smartbootiso --location=<path> --force-update --nowait</code>	<code>drm --repository=<repository name> --deployment-type=smartbootiso --location=<path> --force-update --nowait</code>	<code>drm -r=repol --deployment-type=smartbootiso --location="C:\Users\DRM" --force-update --nowait</code>
Export Smart Bootable ISO using default script.	<code>drm -r=<repository name> --deployment-</code>	<code>drm --repository=<repository name> --</code>	<code>drm -r=repol --deployment-type=smartboo</code>

Table 4. Commands (continued)

Description	Command	Full form	Example
	<code>type=smartbootiso --location=<folderpath></code>	<code>deployment-type=smartbootiso --location=<folderpath></code>	<code>tiso --location="C:\Users\DRM"</code>
Export Smart Bootable ISO using custom script from a network path.	<code>drm -r=<repository name> --deployment-type=smartbootiso --location=<path> --authentication=<username:password> --update-script=<custom-script-path> --script-authentication=<username:password></code>	<code>drm --repository=<repository name> --deployment-type=smartbootiso --location=<path> --authentication=<username:password> --update-script=<custom-script-path> --script-authentication=<username:password></code>	<code>drm -r=rep01 --deployment-type=smartbootiso --location="//100.10.90.22/DRM" --authentication=root:calvin --update-script="//100.18.90.55/DRM/samplescript.sh" --script-authentication=root:calvin</code>
Export SUU ISO to a location.	<code>drm -r=<repository name> --deployment-type=suuiso --location=<path> --nowait</code>	<code>drm --repository=<reponame> --deployment-type=suuiso --location=<path> --nowait</code>	<code>drm -r=rep01 --deployment-type=suuiso --location="C:\Users\DRM" --nowait</code>
Export SUU in directory form to a location.	<code>drm -r=<repository name> --deployment-type=suuiso --expand-iso --location=<path> --nowait</code>	<code>drm --repository=<repository name> --deployment-type=suuiso --expand-iso --location=<path> --nowait</code>	<code>drm -r=<repository name> --deployment-type=suuiso --expand-iso --location="//100.90.55.23/</code> <code>drm --authentication=root:calvin --nowait</code>

Command-line interface

The following chapter describes the mandatory and optional attributes for the commands that you can use in command-line interface (CLI) mode:

Importing components

Table 5. Commands for importing components

Description	Mandatory	Optional	Format and example
Import specific components to a repository from a source location using wild card characters.	--import	If you are using external network share: --authentication	Format: drm --import -r=<repository name> --update-package=<components> --ignore-sign-verification --source=<dups folder>
	--repository or -r	--ignore-sign-verification	Example: drm --import -r=repol --update-package=BIOS*,*.EX?,*.BIN --source="C:\Users\DRM\DUPS" --ignore-sign-verification
	--repository or -r		
	--update-package		
	--source		
Import all supported components from a source location.	--import	If you are using external network share: --authentication	Format: drm --import -r=<repository name> --source=<network path> --authentication=<username:password>
	--repository or -r	--ignore-sign-verification	Example: drm --import -r=repol --source=//100.100.18.15/test/DUPS --authentication=root:c alvin
	--source		

Updating repositories

Table 6. Commands for updating repositories

Description	Mandatory	Optional	Format and example
Run a refresh job.	--update	--repository:version	Format: drm --update -r=<repository name>:<version>
	--repository or -r		Example: drm --update -r=repo1
Schedule a refresh repository job. The values for Recurrence option are: <ul style="list-style-type: none">• once• daily• weekly• monthly <div><div></div><div>NOTE: Ensure that you enter the time in 24-hour format.</div></div>	--update	--repository:version	Format: drm --update -r=<repository name>:<version> -dt=<mm/dd/yyyy hh:mm> <recurrence> --nowait
	--repository or -r	--nowait	Example: drm --update -r=repo1 -dt="08/21/2019 12:00 Daily" --nowait
	--datetime or -dt		
	Update components in a repository by component type.	--update	--repository:version
--component-type or -co		Example: drm --update -co="BIOS,application " -r="repo:1.00"	
--repository or -r			
Update components in a repository by category.	--update	--repository:version	Format: drm --update -ca=<category1, category2,..... > -r=<repository name>:<version>
	--category		Example:

Table 6. Commands for updating repositories (continued)

Description	Mandatory	Optional	Format and example
	or -ca --repository or -r		<pre>drm --update -ca="BIOS, SAS Drive" -- repository="repo:1.00"</pre>
Update a repository based on type of change.	--repository or -r	--repository:version	Format: <pre>drm -r=<repository name> --update -ct=<type></pre>
	--update		Example: <pre>drm -r=repo1 --update -ct="upgraded"</pre>
	--changetype or -ct		
Update a repository based on criticality of updates.	--repository or -r	--repository:version	Format: <pre>drm -r=<repository name> --update -cc=<criticality type1, criticality type2,.....></pre>
	--update		Example: <pre>drm -r=repo1 -- update -cc="urgent, recommended"</pre>
	--criticality or -cc		

Deleting components and repositories

Table 7. Commands for deleting components and repositories

Description	Mandatory	Optional	Format and example
Delete a repository by repository name.	--delete or -d	--repository:version	Format: <pre>drm -d -r=<repository name></pre>
	--repository or -r		Example: <pre>drm -d -r=repo1</pre>
Delete components in a repository by category.	--delete or -d	--repository:version	Format: <pre>drm -d -r=<repository name> -ca=<category name></pre>
	--repository or -r		

Table 7. Commands for deleting components and repositories (continued)

Description	Mandatory	Optional	Format and example
	--category or -ca		Example: drm -d -r=repo1 -ca="SAS Drive ,SAS Non-RAID, Tape Drives"
Delete components by component type.	--delete or -d	--repository:version	Format: drm -d -r=<repository name> -co=<component type>
	--repository or -r		
	--component-type or -co		Example: drm -d -r=repo1 -co="BIOS, Firmware"
Delete components by criticality.	--delete or -d	--repository:version	Format: drm -d -r=<repository name> -cc=<criticality>
	--repository or -r		
	--criticality or -cc		Example: drm -d -r=repo -cc=urgent, optional
Delete specific components from a repository using wild card characters.	--delete or -d	--repository:version	Format: drm -d -r=<repository name> --update-package=<component name>
	--repository or -r		
	--update-package		Example: drm -d -r=repo1 --update-package="network*.exe ,BIOS_0KT74_LN_2.10.5 .BIN"
Delete components using a combination of attributes.	--delete or -d	--repository:version	Format: drm -d -r=<repository name> -co=<component type> -cc=<criticality> -ca=<category>
	--repository		Example:

Table 7. Commands for deleting components and repositories (continued)

Description	Mandatory	Optional	Format and example
	or -r --component-type or -co --criticality or -cc --category or -ca		drm --delete -r=R740:1.00 -cc=urgent, recommended -co=BIOS, application -ca=BIOS, Diagnostics

Logs

Table 8. Commands for viewing logs

Description	Mandatory	Optional	Format and example
Download log file.	--logfile	NA	Format: drm --logfile=<specify path to download the file> Example: drm --logfile=export/mylog.zip

Frequently asked questions

This section lists some frequently asked questions about DRM.

Why is DRM not recognized?

After installing DRM on Microsoft Windows operating system, when you try to run any DRM commands, the following error message is displayed: `drm is not recognized as an internal or external command, operable program or batch file.`

Rerun the DRM service file `DRM_Service.bat` as an Administrator from the installer location. Example of an installer location:
`C:\Program Files\Dell\Dell EMC Repository Manager\DRM_Service.bat`

Why I am not able to create repository with inventory file and custom catalogs in different network paths in CLI?

To create a repository using a network share, ensure that the inventory file and custom catalogs are in the same network.

Why am I not able to run a smart script job from CLI?

When you schedule a smart script job with any path set as a network path, an authentication error message is displayed.

When providing the location of the script, ensure that there is no trailing slash (\) at the end of the path.

Why am I unable to delete a component from a repository using DRM commands through CLI?

When you add more than one component in a command separating them with a comma, and if you have provided a space after the comma, the component mentioned after the comma is ignored.

Remove the space before mentioning the component name, and then run the delete operation.

Accessing DRM is taking longer time when too many catalogs imported?


When there are more catalogs that are added to a repository, performance of DRM is impacted.

It is recommended to add a maximum number of 10 catalogs and delete catalogs that are not in use.

How to delete DRM database?

Stop the DRM services, and then delete the following folders:

- For Windows: `C:\ProgramData\Dell\drm\database`
- For Linux: `/var/dell/drm/log/database`

 **NOTE:** If you have administrative privileges, ensure that you unhide all the hidden folders in Microsoft Windows operating system.

Where is the Dell EMC Repository Manager runtime log located?

DRM creates the log file at runtime in the following location:

- Windows: C:\ProgramData\Dell\drm
- Linux: /var/dell/drm/log


You can save or email the logs through **Save and Mail Logs** option in the Dell EMC drop-down menu.

Can DRM be run through a Proxy Server?

Yes, install DRM inside the firewall and connect to a catalog located outside the firewall (downloads.dell.com or a local repository) through a proxy server. You can then use Dell Repository Manager to customize the catalog as per the requirement and store the customized catalog inside the firewall.

For more information about setting proxy, see [Configuring network settings](#).

For more information about setting proxy, see *Configuring network settings* in the DRM User Guide.

 **NOTE:** If proxy server credentials are changed, ensure that you change the proxy credentials in DRM as well.

Why is the proxy password not displayed when refreshing an inventory?

The proxy password field may be empty when refreshing an integration repository that was created using a proxy server. Enter the proxy password, and then click **Refresh**.

Why am I seeing 0-1, 0-2, and so on in hours selection drop-down menu?

In the refresh repository window, if you click the down arrow key when the time is displayed as "00:00", it changes to "0-1". After clicking it again, it turns to "0-2" and so on.

Use the up arrow key to set the hour value.

How do I edit the '.sh' file in Linux deployment script bundle? Is there any recommended tool to edit this file?

Notepad++ editor is recommended for editing the Linux-based file extension on a Microsoft Windows operating system. If you want to edit the extension of the file on a Linux operating system, vi editor is recommended.

I am facing access denied issues in Linux operating system. How do I proceed further?

Ensure that you have **Read** and **Write** access to the `drmuser` account in the particular directory including all sub-level directories and files when you want to export, import, or download a repository, add a catalog, update a plug-in or configure the storage location in **Application Preferences**.

I saved a file in the mapped network location. However, I am not able to access location from DRM. What do I do now?

Ensure that you have privileges to access the location and then login with the appropriate credentials.

I am not able to automatically discover the Microsoft Exchange Web Service URL when trying to configure the email notifications. Is there any other option to discover the URL apart from updating it manually?

From DRM version 3.0 onwards, the autodiscovery of Microsoft Exchange Web Server URL is not supported. Update the URL manually.

I get a message “GLX version 1.2 or higher is required” when I try to open a Linux terminal window. This message is observed in SUSE Linux 11 and 12.

This is a warning message and does not affect the functionality of the product.

I am not able to create an inventory repository using a specific catalog and inventory file through command-line interface. How do I proceed?

Ensure that the catalog and inventory are available in the same network location and then create a repository.

Where can I change the DUP sequence order in DRM 3.x before exporting to a deployment format?

You can no longer customize the sequence to install DUPs. Starting from DRM 3.0, the smart deployment feature now run DSU at install time on a server configuration to determine the proper order to install the DUPs. DRM ensures that iDRAC is the last update to run, and the sequence for rest of the DUPs is taken care by DSU.

I am not able to install DRM in a custom location on Linux operating system. How do I proceed with the installation?


It is recommended to use the default path only for installing DRM. By default, the installer location is set to /opt/dell.

After I delete a bundle, it is not deleted from the bundle list on the GUI. Should I delete it elsewhere so that it is updated on the GUI?

If the size of a bundle or a collection of bundles that are selected to be deleted exceeds 1 GB, several minutes may be required to delete and reflect the progress on the GUI. The workaround is to wait for sometime for the GUI to reflect the change or exit from the DRM console and reopen the DRM application.

I have installed the latest version of DRM on my system, and I am trying to downgrade to one of the previous versions. However, I am not able to proceed further. What do I do now?

Reverting to the previous version of DRM is not supported in the current version of the DRM installer. To install an earlier version of DRM, manually uninstall the latest version and then run the installer of the required version.

 **NOTE:** DRM 2.0 and DRM 3.x.x can co-exist on the same system.

Why import of plugins are failing?

When importing plugins from the exported repository using Smart Deployment Script deployment job, the plugins are not imported because the corresponding sign files are not available.

Manually download the plug-in and sign files from support site and have them in the same location.

Why am I not able to upgrade or reinstall DRM?

When a few files inside the install path: C:\Program Files\Dell\Dell EMC Repository Manager are removed or deleted without following a proper uninstallation process and you try to upgrade DRM, you get the following error message: One or more newer versions of the product are already installed. An upgrade is not applicable.

To upgrade DRM:

- For Windows operating system—Delete the product element that is named Dell EMC Repository Manager present in .com.zerog.registry file in C:\Program Files\Zero G Registry folder and then reinstall DRM.
- For Linux operating system—Delete the product element that is named Dell EMC Repository Manager present in .com.zerog.registry file in /var folder and then reinstall DRM.

To resolve any DRM related issues, it is recommended to use **Repair** option after launching DRM's install window instead of the **Uninstall** option.

 **NOTE:** Ensure that you view all the hidden items because **Zero G Registry** is a hidden folder.

For example, when you search for Dell EMC Repository Manager, the following product element is found:

```
<product name="Dell EMC Repository Manager" id="da88caaa-1f2c-11b2-862b-b8c367dd4f00"
upgrade_id="5addbe2f-1f41-11b2-91ce-954f877e94a0" version="3.3.0.627" copyright="2019"
```

```
info_url="" support_url="" location="C:\Program Files\Dell\Dell EMC Repository Manager"
last_modified="2019-12-27 18:07:23">. Delete the entire product element, and then save the file.
```

Uninstalling or downgrading DRM leaves the DRM database and repository DUP packages present in storage

To reclaim storage space of the operating system boot drive after uninstalling DRM, the following directories and content need to be manually removed:

- Windows: \ProgramData\Dell\DRM
- Linux: /var/dell/drm

If installing a previous DRM version these directories must be removed first as an older DRM version does not support a newer DRM database.

Unable to connect to proxy when proxy password contains special characters

Change the password of the proxy which can contain only the special characters like "_", "@", "#", "\", "-", "!", ".", "\$", "%", "&", "*" and retry setting the proxy.