

Dell EMC Repository Manager Version 3.3.2

Troubleshooting 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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Overview

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

- Create repositories of customized component(s) and updates.
- Create groups of related updates for systems running the Microsoft Windows and Linux operating system.
- Generate comparison reports. Update baselines of custom repositories and generate deployment tools.

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 provided to update specific software and firmware components. You can arrange these components to group the related updates together. Every repository has a **catalog.xml** file and it specifies the content of the repository. DRM also has **catalog.xml.gz** and **catalog.gz** files. You can import the repository content in two formats, however, you can export the repository content in **catalog.xml** format only. The file downloaded from **downloads.dell.com/catalog** is digitally signed to ensure system security.

 **NOTE:** In order to provide better security, the `ftp.dell.com` site has been removed, and will be redirected to `http://downloads.dell.com`. However, the most secure option we recommend is to use `https://downloads.dell.com`.

Topics:

- [What's new in this release](#)
- [Enhancements](#)
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What's new in this release

- Support for windows server 2022.
- Support for Virtual storage area network(vSAN) catalog.

Enhancements

This section describes the enhancements made in this release to DRM.

- Enhanced the security aspects.
- Enhanced the proxy connections.

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.

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*

DUP Dependencies

This feature articulates the relationship between two different DUPs. SUU enables certain rules and submissions to determine if a set of conditions or requirements are met. These conditions or requirements are called dependencies. Dependency exists when a DUP of a particular kind has a dependency on additional DUP for further execution. This helps the users to determine, which DUP to install first and which one to follow. There are two types of dependencies:

- Hard Dependency — Dependency that must be applied in order to be able to apply the update.
- Soft Dependency — Dependency that needs to be applied in order to use certain new features coming with the update.

 **NOTE:** In certain scenarios, for a complete update or upgrade, you must install two and more DUPs. It is possible that for individual DUPs, you must restart the system, to realize the impact of other installed DUPs.

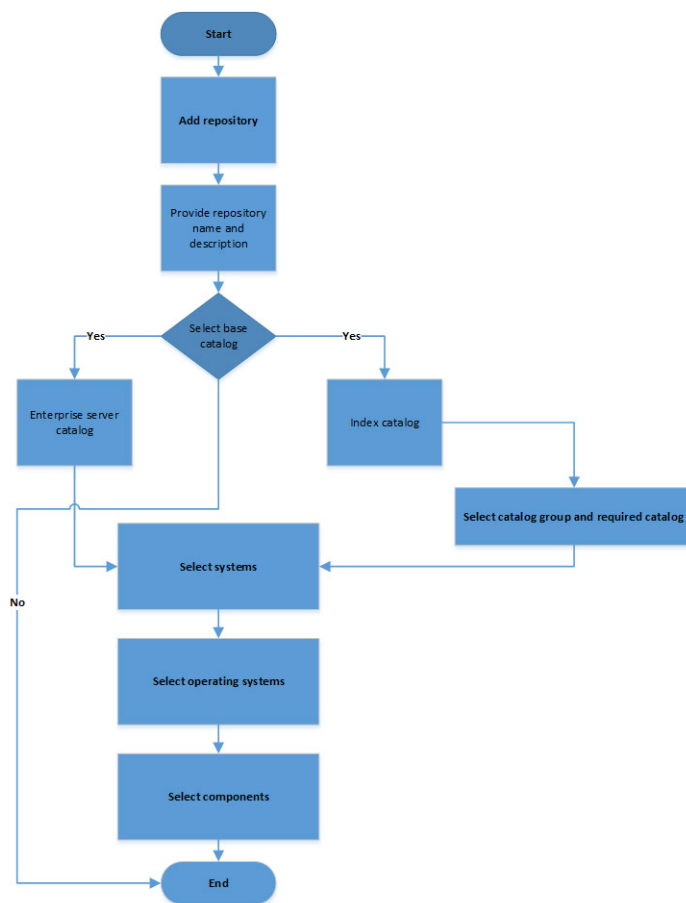
Creating repository

DRM enables you to create a repository of components that allows you to deploy multiple updates in one instance.

The user scenarios in this chapter describes the process of creating repositories.

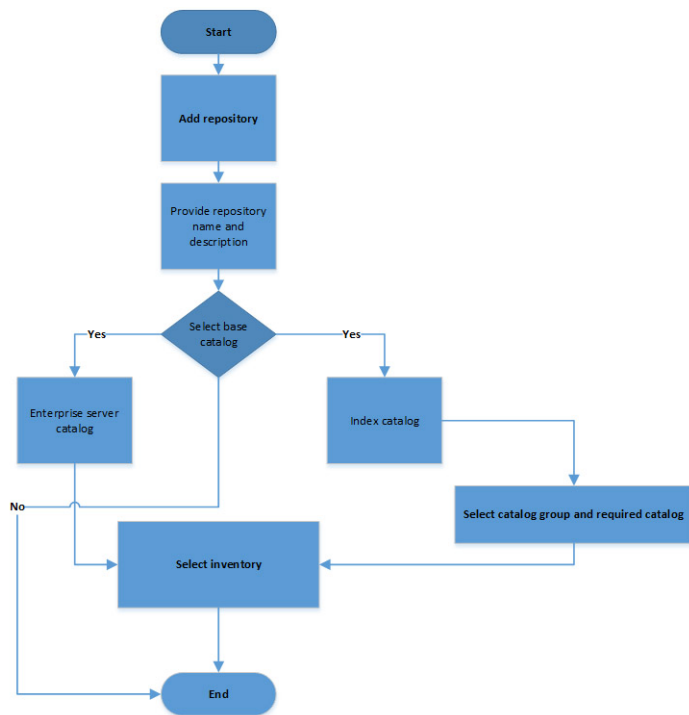
Creating manual repository

This flowchart describes the process to create a manual repository in DRM.



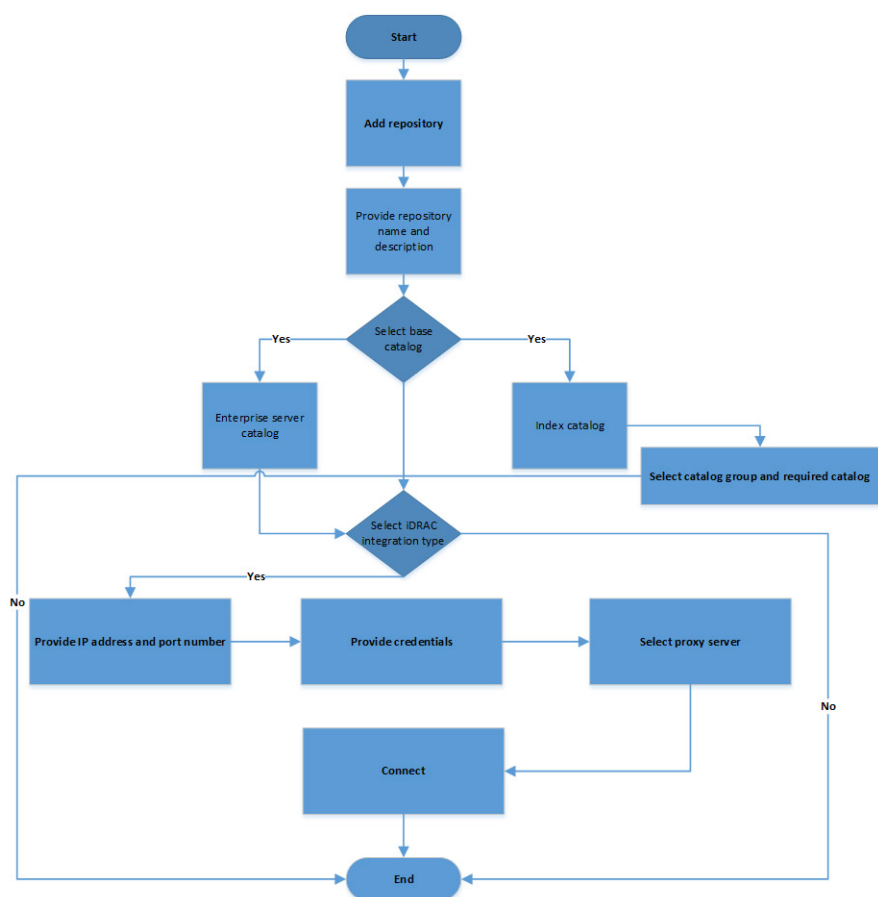
Creating repository with inventory

This flowchart describes the process to create a repository with inventory in DRM.



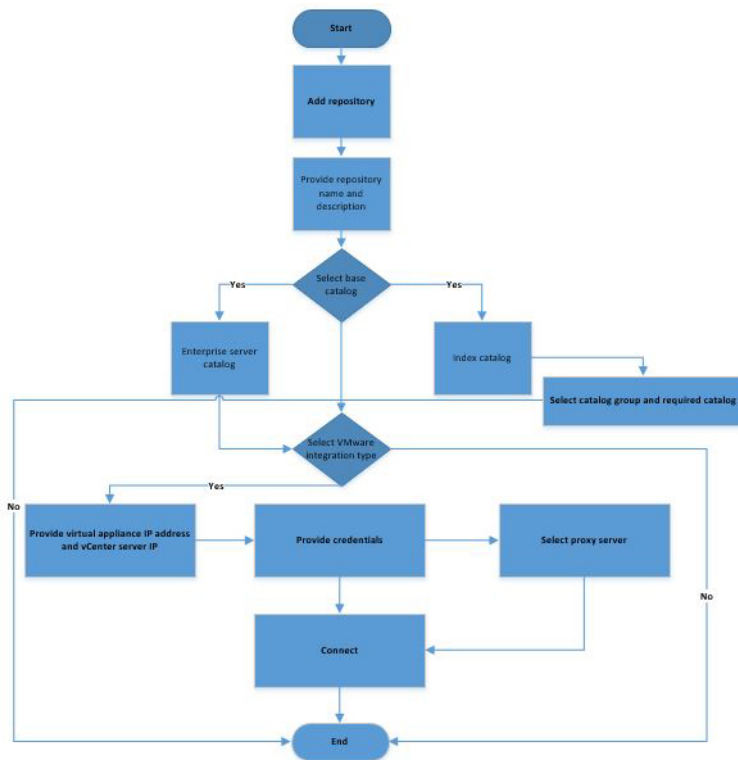
Creating repository with iDRAC and OME integration

This flowchart describes the process to create a repository with iDRAC, OpenManage Enterprise, OpenManage Essentials, and OpenManage Integration with Microsoft System Center for SCCM and SCVMM integrations.



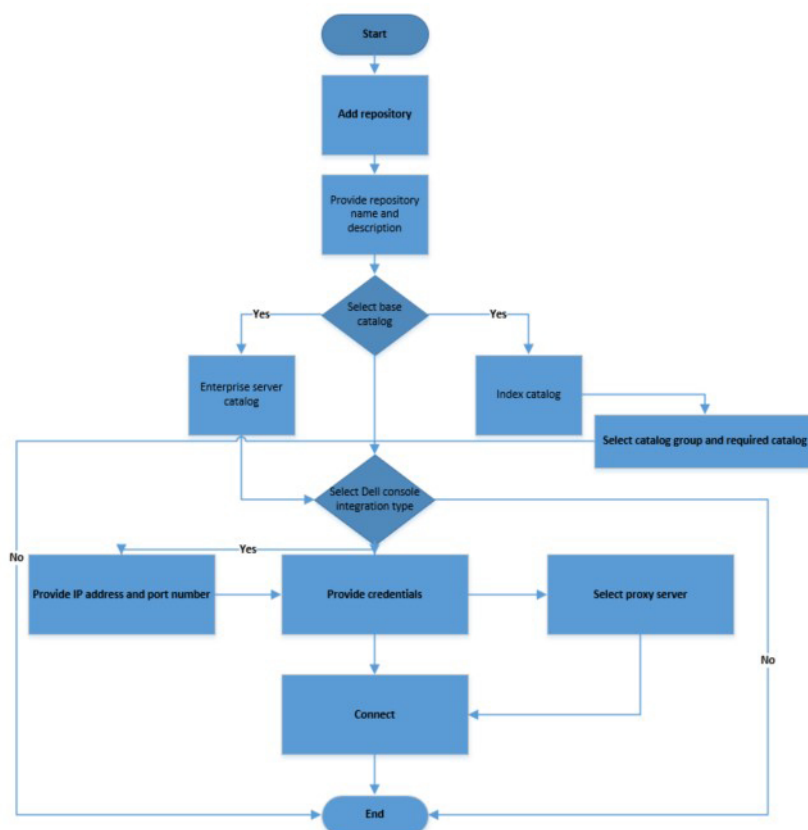
Creating repository with VMware integration

This flowchart describes the process to create a repository with VMware integration in DRM.



Creating repository with console integration

This flowchart describes the process to create a repository with console integration in DRM. You can use this method for OpenManage Integration for Microsoft System Center Configuration Manager, Microsoft System Center Virtual Machine Manager (OMIMSSC), and OpenManage Enterprise.



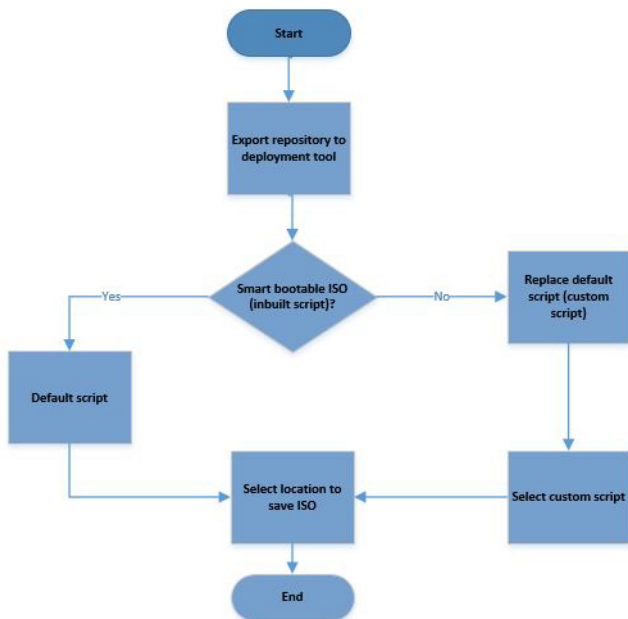
Creating deployment tools

This chapter describes the process to export the repository as deployment tool type.

Creating deployment tool_Smart bootable ISO

This section describes the process to export a repository as Smart Bootable ISO.

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



Best practice for creating bootable CD or USB keys for updates

You can create bootable USB keys for updates, using any third party or free tool. You can start your managed system by the bootable CD or USB storage. After the system starts, it automatically runs the selected updates. After the update is complete, you can remove the CD or USB storage, and reboot the system to your host operating system.

NOTE: Rufus and UNetBootin are third-party software. Install and use these software at your own risk. Dell EMC shares only the best practices for using Rufus and UNetBootin.

Creating bootable USB keys using UNetBootin

To create bootable USB keys, using the tool UNetBootin:

1. Download the UNetBootin for Windows or Linux available at <https://unetbootin.github.io/>.
2. Run the Dell Repository Manager and generate the bootable ISO.
3. Start UNetBootin and select the **Diskimage** option.
4. Click [...] adjacent to the ISO drop-down menu and navigate to the ISO created by Dell Repository Manager.
5. Ensure that the type setting is equal to USB drive and the location where you want to download the USB key displays in the drive drop-down menu.
6. Click **OK** to start the USB writing.
7. After the USB key writing is complete, insert the USB key into a USB port on the system you want to upgrade.
8. Press **<F11>**.
The boot menu is displayed.
9. Select option 1 in the UNetBootin boot menu to proceed with the component updates.

To create bootable USB keys, using non-graphical user interface, provide the following command line:

```
>unetbootin method=diskimage isofile="/home/user/LinuxISO.iso" installtype=USB
targetdrive=/dev/sdc1
```

Creating bootable USB keys using Rufus tool

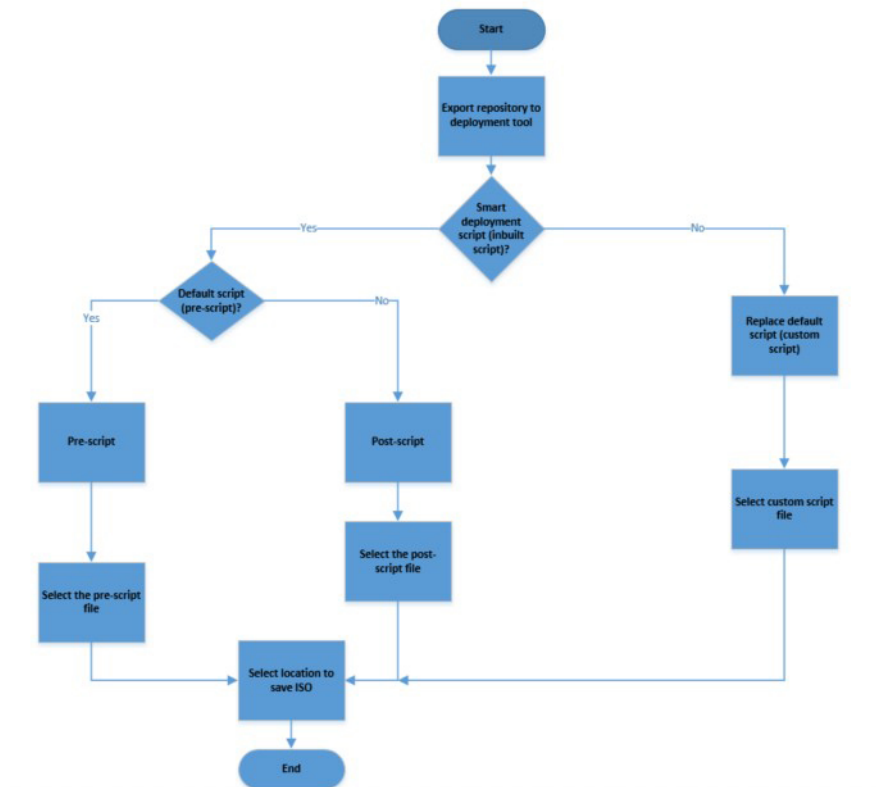
To create bootable USB keys, using Rufus tool.

1. Download the latest version of Rufus for Windows available at https://rufus.ie/en_IE.html

2. Run the Dell Repository Manager and generate the bootable ISO.
3. Start Rufus and select the **Disk** or **ISO image** option.
4. Click **Select adjacent to the Boot Selection** and navigate to the ISO created by Dell Repository Manager.
5. Ensure to choose **MBR Partition Type** and BIOS target system with VFAT file system.
6. Click **OK** to start the USB writing.
7. After the USB key writing is complete, insert the USB key into a USB port on the system you want to upgrade.
8. Press <F11>. The boot menu is displayed.
9. Select the USB key as the boot target.
10. Select option 1 in the Rufus boot menu to proceed with the component updates.

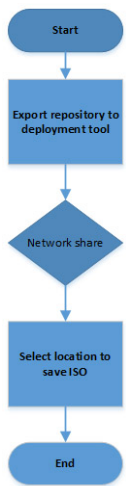
Creating deployment tool_Smart deployment script

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



Creating deployment to shared location

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

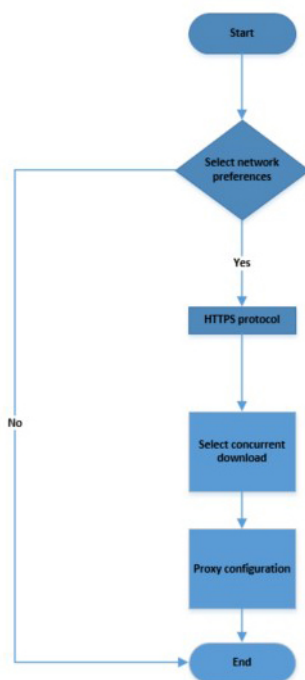


Configuring settings

This section describes the process to configure the settings or application preferences.

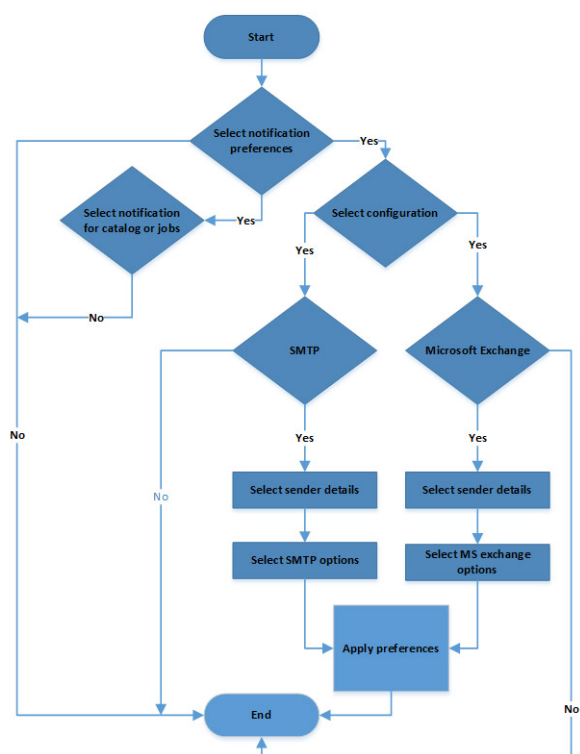
Configuring network settings

This section describes the process to configure network settings in DRM.



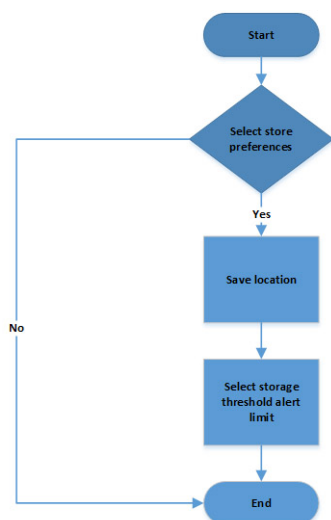
Configuring email configuration

This section describes the process to configure email settings in DRM.



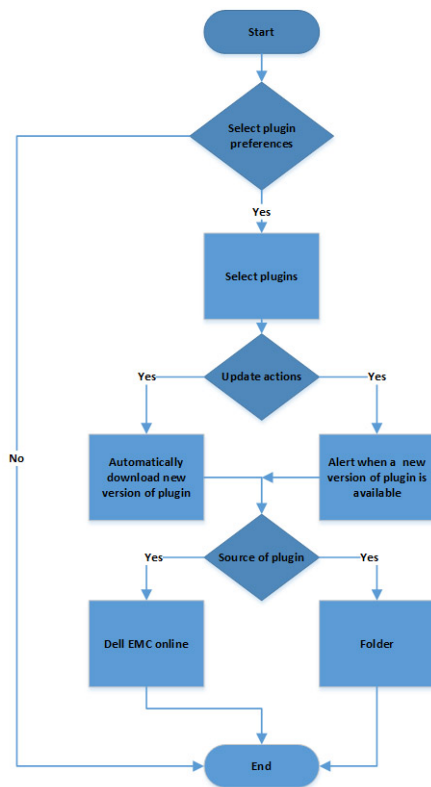
Creating store settings

This section describes the process to configure data store settings in DRM.



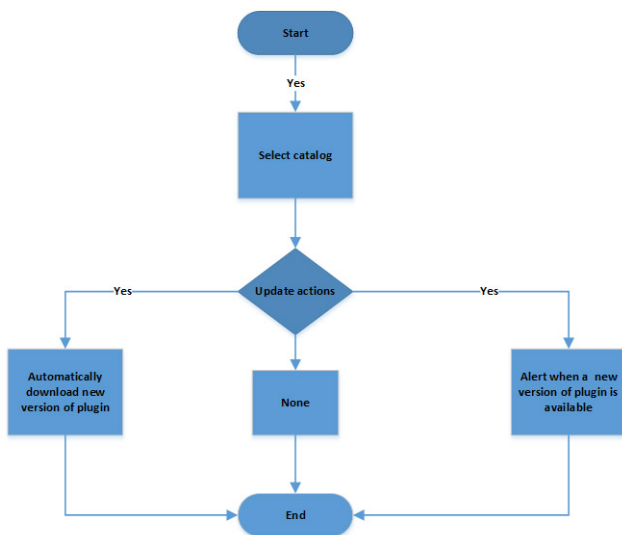
Configuring plugin settings

This section describes the process to configure plugin settings in DRM.



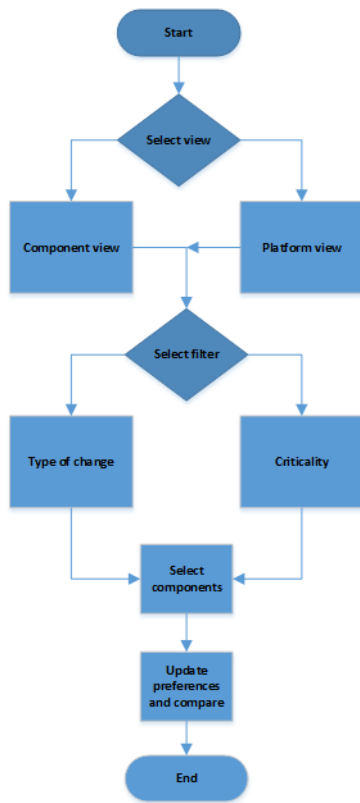
Configuring catalog settings

This section describes the process to configure catalog settings in DRM.



Comparing repository

This section describes the process to compare a repository against latest catalog loaded in DRM.



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* 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.