

# Dell EMC License Manager Version 1.5 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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# About Dell EMC License Manager

Dell EMC License Manager is a one-to-many license deployment and reporting tool for integrated Dell Remote Access Controller (iDRAC) and Chassis Management Controller (CMC) licenses.

By using License Manager, you can download, bind, deploy, and back up:

- iDRAC licenses on all the PowerEdge servers (denoted as yx2x and yx3x) that have either iDRAC9, iDRAC8, or iDRAC7 pre-installed from the factory
  - ✎ **NOTE: For the server name format yxxx; y denotes alphabets, for example, M (modular), R (rack), or T (tower) and x denotes numbers. For example, a PowerEdge R720 is a 12th Generation rack mount 700 series server.**
- CMC licenses on PowerEdge VRTX and PowerEdge FX or FX2s chassis
- OpenManage Enterprise Advanced licenses
- PowerEdge storage sled licenses

You can also inventory licensable systems to report the licensing status and features of the currently enabled management controller.

Use the iDRAC licenses to enable server management capabilities such as the virtual media and remote console support currently available in the Enterprise iDRAC feature set.

Use CMC licenses to enable chassis management capabilities such as console integration, remote access, mutli-chassis management, and server cloning.

You can download licenses from the Dell Online Licensing Portal at [dell.com/support/retail/lkm](https://dell.com/support/retail/lkm). You can purchase licenses when you purchase a server or a chassis.

## New in this release

Changing the 'root' user password of 14<sup>th</sup> generation PowerEdge servers by using the encrypted data from the Dell EMC OpenManage Mobile (OMM) application.

# Installing License Manager

## Minimum system requirements

**Table 1. Minimum system requirements**

Particulars	Requirement
Hard Disk Drive (HDD)	200 MB (minimum)
RAM	2 GB (minimum)
Operating systems	Microsoft Windows 10 Microsoft Windows 8.1 Microsoft Windows Server 2016 Microsoft Windows Server 2012 R2 Microsoft Windows Server 2012 Microsoft Windows Server 2008 R2 Both 64-bit and 32-bit versions are supported.
Network	100 Mbps or higher
Screen Resolution	1024 X 768
Microsoft .NET	4.5
Remote Management	Windows Remote Management (WinRM) 2.0 This functionality is included in Windows 7, Windows Server 2008 R2, and later versions. The WinRM prerequisite is available by using Microsoft Windows Update.

## Limitations

License Manager supports up to 3500 licensable systems and an inventory of up to a class B IP address range (65,536 addresses).

## Installing License Manager

1. Download License Manager from **dell.com/support**.
2. Double-click the **License Manager** Windows installer package.
3. Select a language for the installation, and click **OK**.
4. In the **Welcome** screen, click **Next**.
5. In **License Agreement**, select the **I accept the terms in the license agreement** check box, and then click **Next**.
6. In **Setup Type**, perform one of the following:
  - To accept the default installation path, select **Typical**, and then click **Next**.
  - To enable specific program features and to change the installation path, select **Custom**, and then click **Next**. In **Custom Setup**, select the License Manager features that you require, verify the available drive space, and then assign a new location for installing License Manager.
7. In the **Ready to Install the Program** screen, click **Install**.  
The **InstallShield Wizard Completed** page is displayed.

8. If you want to start License Manager, select the **Launch Dell EMC License Manager** check box, and then click **Finish**.

# Getting started with License Manager

You can access License Manager from the Windows desktop in one of the following methods:

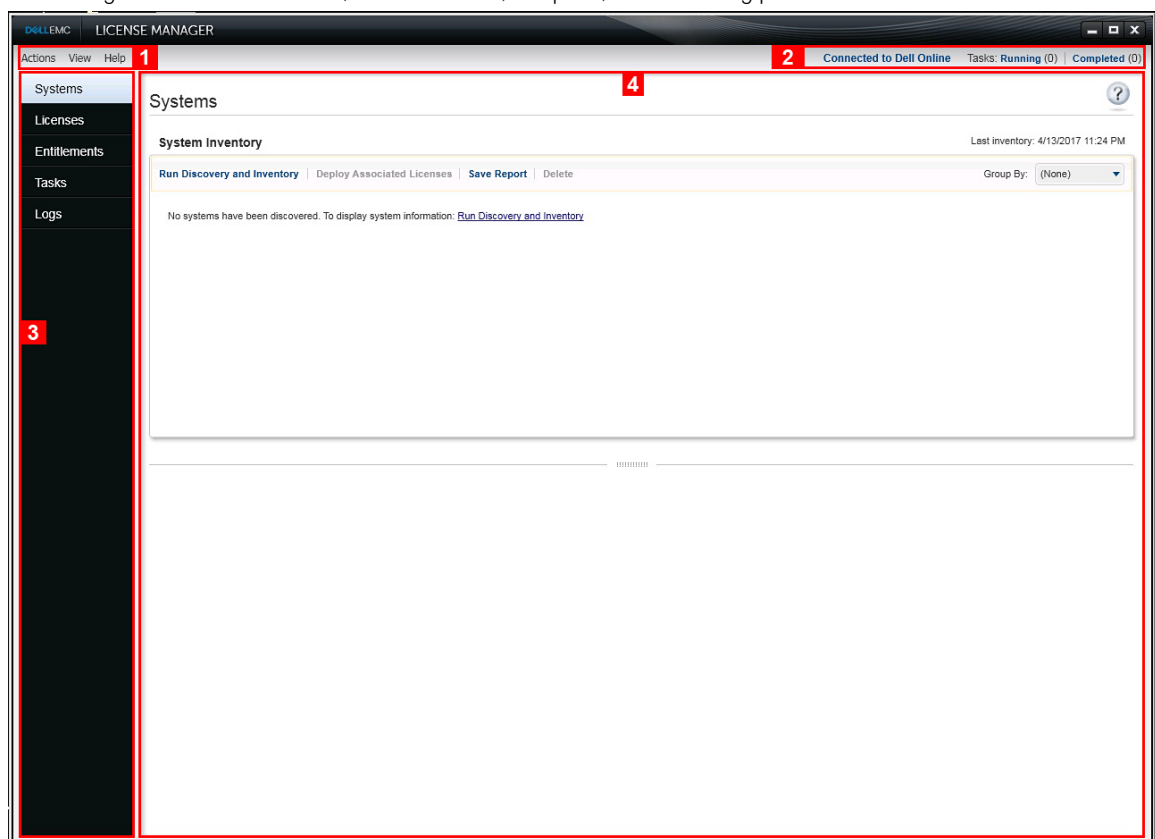
- Windows 8, Windows Server 2012, or later operating systems — Click the **Start** symbol, and then click **License Manager**.
- Windows 7, Windows Server 2008, or earlier operating systems — Click **Start** → **All Programs** → **Dell OpenManage Applications** → **License Manager** → **License Manager**.
- Double-click the License Manager icon.

 **NOTE: Local administrator privileges are required to run License Manager.**

The **Getting Started with Dell EMC License Manager** screen is displayed with information about getting started with license deployment.

## License Manager graphical user interface

The License Manager contains a menu bar, task status bar, left pane, and a working pane.



**Figure 1. License Manager graphical user interface**

1. Menu bar
2. Task status bar
3. Left pane


#### 4. Working pane

## Menu Bar

The menu bar consists of the Actions, View, and Help menus.

### Actions Menu

The Actions menu consists of:

- **Discover and Inventory Systems** — Opens the Discovery/Inventory Wizard. See [Inventorying Licensable Systems](#).
- **Change Server Password** — Select to normalize the unique password of the servers. See [Changing the iDRAC unique password](#).
- **Launch Dell Online License Portal** — Select to access the Dell Online Licensing Portal at [dell.com/support/retail/lkm](http://dell.com/support/retail/lkm). Before you access the portal, make sure that your system has internet connection. From the online portal, you can download the licenses.
- **Import Licenses** — Opens the **Import Wizard**. See [Importing archived licenses from the Dell Online Licensing Portal](#).
- **Automatically Deploy Licenses** — Selects all undeployed licenses bound to systems in inventory for deployment, and then opens the License Management Wizard. See [Deploying Licenses](#).
- **Connect to Dell Online** — Select to connect to the Dell Online Portal and gather information of all the available licenses for the purchased devices. See [Obtaining licenses by connecting to Dell Online Account](#).
- **Disconnect from Dell Online** — Select to disconnect from the Dell Online Portal. See [Disconnecting from Dell Online](#).
- **Login to another Dell account** — Select to log in to a different Dell Online account. See [Logging in to other Dell Online Account](#).
- **Bind Licenses** — Select to bind all the unbound licenses to the related devices, that can then be deployed. See [Binding licenses](#).
- **Export License Archive** — Saves an archive copy containing all licenses in inventory in the compressed file format. See [Managing Licenses](#).
- **Save Report** — Saves a CSV, HTML, or XML informational report from system, license, or log view. See the section about the respective view for more information.
- **Clear Log** — Removes all entries from the activity log.
  -  **NOTE: This option does not remove information about tasks from task view. See [Managing Tasks and Logs](#).**
- **Exit** — Exits the License Manager application. This option ends all current tasks.

### View Menu

The View menu consists of:

- **Systems** — Navigates to the Systems view.
- **Licenses** — Navigates to the Licenses view.
- **Entitlements** — Navigates to the Entitlements view.
- **Tasks** — Navigates to the Tasks view.
- **Logs** — Navigates to the Logs view.
- **Getting Started** — Displays the Getting Started with Dell EMC License Manager screen.

### Help Menu

The Help menu consists of:

- **License Manager Help** — Access the License Manager help by clicking the help icon in each view.
- **Online Support** — Access the Dell Technical Support at [dell.com/support](http://dell.com/support).
- **Generate Support Log Archive** — Generate an archive of activity logs which Dell Technical Support can use to troubleshoot problems.
- **About** — View the License Manager version and copyright information.

## Task Status Bar

The Task Status bar shows the status (when License Manager is connected to a Dell Online account), number of running and completed tasks. Clicking the Task Status bar activates the Task view.

## Help Icon

Click  to access the context-sensitive online help.

## License Manager views

License Manager supports the following primary views:

- Systems view
- Licenses view
- Entitlements view
- Tasks view
- Logs view

### Systems view

The Systems view is accessible through the **Systems** link in the navigation pane. From the Systems View, you can:

- Discover and inventory the licensable systems
- Deploy licenses
- View system licensing status
- Remove licenses from the system

For more information about Systems View, see [Working With Licensable Systems](#).

### Licenses view

The Licenses view is accessible through the **Licenses** link in the navigation pane. From the Licenses View, you can:

- Import downloaded licenses to License Manager
- View information about available licenses
- Deploy licenses
- Export archived licenses

For more information about Licenses View, see [Managing Licenses](#).

### Entitlements view

The Entitlements view is accessible through the **Entitlements** link in the navigation pane. Using the Entitlements View, you can:

- View information about available entitlements
- Download bound licenses
- Save entitlement reports

### Tasks view

The Tasks view is accessible through the **Tasks** link in the navigation pane. From the Tasks View, you can:

- View archived task results
- Save reports
- Generate support log archives

For more information about Tasks View, see [Managing Tasks and Logs](#).

## Logs view

The Logs view is accessible through the **Logs** link in the navigation pane. From the Logs View, you can:

- View archived task results
- Save reports
- Generate support log archives

For more information about Logs View, see [Managing Tasks and Logs](#).

## Working with views

The systems, licenses, tasks, and logs data view grids allow sorting, grouping, and filtering. You may also select which columns to display in the data grid.

- Sorting — To sort data based on a column, click the column title.
- Grouping — To group items together, select the column on which to group from the Group By menu in the grid header.
- Filtering — To filter data rows, select the column on which to filter and click the filter icon. Select the filter operation and then enter the filter string. To clear the filter, select the filter icon and click **Clear Filter**.
- Selecting columns — To specify the columns that must be displayed, click **Show/Hide Columns**.

## Understanding licenses

Dell licenses contain the following properties:

- Entitlement identifiers — Each license has an Entitlement ID that uniquely identifies a license.
- License descriptions — Specifies the level of features enabled in the license. For more information, see [License Descriptions](#).

### License descriptions

The license description indicates the level of features enabled in the license. For more information about the iDRAC functionality supported by each feature level, access the online licensing portal at [dell.com/support/retail/lkm](http://dell.com/support/retail/lkm). The following licenses are available:

- Perpetual license
- Evaluation license
- Bound license
- Upgrade license

#### Perpetual license

A standard license that enables iDRAC features, but does not expire.

#### Evaluation license

A license which allows a 30-day trial of specific iDRAC features, with an available 30-day extension.

 **NOTE: You cannot deploy or archive evaluation licenses in License Manager.**

#### Bound license

A Perpetual license is bound to a particular system Service Tag and you can deploy the license only on those systems.

#### Upgrade license


An upgrade license includes an Upgrade ID referencing the Entitlement ID of the upgraded license.

#### License features

Each license includes a specific set of iDRAC features that are enabled by the license. The license description summarizes the level of features included in the license.

# Filtering data

To filter data in the **Systems, Licenses, Entitlements, Tasks, and Logs** views:

1. Click .
2. After selecting a filter option from the drop-down, enter the alphanumeric characters in the field and click the **aA** button to make the filter search case-independent.
3. After you set the filter logic, click **Filter** to run the logic.

 **NOTE: To remove an existing filter, click Clear Filter.**

## Filter options

Table 2. Filter options

Filter Option	Description
<b>Is equal to</b>	To create the <i>same as</i> logic
<b>Is not equal to</b>	To create the <i>different from</i> logic
<b>Starts with</b>	To filter search based on the initial alphanumeric character in a text chunk. Type the starting alphanumeric character in the field.
<b>Ends with</b>	To filter search based on the final alphanumeric character in a text chunk. Type the ending alphanumeric character in the field.
<b>Contains</b>	To filter search based on alphanumeric characters present in a text chunk. Type the alphanumeric character in the field.
<b>Does not contain</b>	To include the <i>not present</i> logic in search, based on the alphanumeric characters present in a text string
<b>Is contained in</b>	To include the <i>is present</i> logic in an alphanumeric character string
<b>Is not contained in</b>	To include the <i>not present</i> logic in an alphanumeric character string
<b>Is empty</b>	To include the <i>is blank</i> logic
<b>Is not empty</b>	To include the <i>is filled</i> logic
<b>Is less than</b>	To create the <i>lesser than</i> logic
<b>Is less than or equal to</b>	To create the <i>lesser than or same as</i> logic
<b>Is greater than</b>	To create the <i>greater than</i> logic
<b>Is greater than or equal to</b>	To create the <i>greater than or same as</i> logic
<b>Is null</b>	To include the <i>is void</i> logic
<b>Is not null</b>	To include the <i>is not void</i> logic

# Changing the iDRAC unique password

License Manager supports the feature to securely change the unique user iDRAC password to the user specified password.

 **NOTE: This feature is supported only on iDRAC9 and later versions.**

To change the unique root account password:

1. Click **Actions** → **Change Server Password**.

The **Change Server Password** window is displayed.

2. To **Add Devices**, perform one of the following:

- Manually change the credentials by typing Service Tag and unique password, and then click **Add**.
- Import details by generating a CSV template:

 **NOTE: To use this feature, you must type the Service Tag and unique password information in the .csv file.**

 **NOTE: The .csv file that is uploaded to the License Manager must be unencrypted.**

1. Click **Generate CSV Template** under **System Details**, and then click **Save** to save the .csv file to the required location.
2. In the **Report Saved Successfully** window, click **OK**.
3. Manually enter the service tag and unique password information in the exported .csv file, and then click **Import**.
4. In the **Open** dialog box, browse the file system to select the .csv file, and then click **Open**.

 **NOTE: The imported unique passwords are hidden from the user.**

 **NOTE: The Service Tag and unique password information contained in the .csv file is not stored in the License Manager.**

 **NOTE: The user must delete the .csv file after uploading it to the License Manager.**

- Importing details from Dell EMC OpenManage Mobile (OMM) application:

1. Click **Import using OMM**.
2. In the **Open** dialog box, browse the file system to select the .ompi or .xml file, and then click **Open**.
3. In the **Import Password Inventory** dialog box, enter the decryption password, and then click **Parse**.

 **NOTE: Ensure that the .ompi or .xml file is not modified before importing it to the License Manager.**

The Service Tag and unique password are displayed under **System Details**.

3. To delete a device, select the corresponding Service Tag and click **Delete**.

4. In the **Removing System Details** window, click **Yes**.

The selected device is deleted from the imported list and the unique password of that device remains unchanged.

5. Click **Next**.

6. In the **Provide IP Address/Range** window, perform one of the following:

- To use an IPv4 range, type the start address, end address, and subnet mask.
- To use an individual IP address, select **Individual Address (IPv4)**, and type the IP address.
- To use a text file, select **Text file with IP addresses**, click **Load**, browse, and select the text file.

 **NOTE: You must select a text file that includes the IP address or host name.**

7. Click **Next**.

8. In the **Enter New Passwords** window, enter the new password, and confirm the new password for the root user.

 **NOTE: The new password is not stored in the License Manager.**

9. If the new passwords do not match, a message is displayed indicating the mismatch. Retype the correct password, and then click **OK**.

Retry by entering the new password and confirming the new password.

10. Click **Next**.

The **Summary** window displays the Service Tag List and the IP range/address.

11. Click **Run** to change the unique iDRAC password of the selected devices in the IP range/address to the new password.

The password change progress is displayed in the **Tasks** view. The **Results** table displays the status of the operation, and the task result. More information is provided in the **Execution Log** table. If the password change feature is failing for the devices, the entries in **Results** and **Execution Logs** can be referred to, to identify any issues.

After the unique password is changed, you can log in to the devices by using the new password.

# Working with licensable systems


Using License Manager, you can discover and inventory systems, deploy licenses, and save reports. The Systems view provides a summary of inventoried systems and the non-evaluation licenses are retrieved during inventory for archival purposes.


## Inventorying licensable systems


Performing discovery and inventory of licensable systems enables you to view the licensing status for those systems. Perform a system's inventory before deploying licenses on the system. The inventory process automatically retrieves the installed non-evaluation licenses for archival purposes.


To inventory systems:

1. Click **Systems**.
2. In **Systems**, click **Run Discovery and Inventory**.
3. On the **Select IP Address** page of **Discovery / Inventory Wizard**, click **Add Range or IP**.
4. In **Edit Inventory Range** window, type a name for the IP range or address, and do one of the following:
  - To use an IPv4 range for inventorying systems, type the start address, end address, and subnet mask.
  - To use an individual IP address for inventorying systems, select the **Individual Address (IPv4, IPv6, or hostname)** check box, and then type the IP address or host name.
  - To use a text file for inventorying systems, select the **Text file with IP addresses** check box, and then click **Load**.
  - Browse the file system and select the text file.


 **NOTE: You must select a text file that includes an IP address or host name on each line.**

 **NOTE: To inventory the PowerEdge storage sleds, provide the IP address of only the chassis. License Manager automatically inventories the PowerEdge storage sleds while inventorying the chassis.**

 **NOTE: For PowerEdge storage sleds, License Manager displays the license level of the host CMC as the current license.**
5. Click **OK**.  
 The IP address or range that you provided is added to the **IP Addresses and Ranges** table.  
 If you selected a text file, the IP addresses and host names in the text file are verified, and the invalid IP addresses or host names are displayed in the **Validation Report**.
 

 **NOTE:**

  - After the IP addresses are added from a text file, they are displayed as individual IP addresses.
  - If there are duplicate IP addresses in the text file or if the IP addresses already exist in the **IP Addresses and Range** table, they are ignored.
  - The text file cannot be edited by using License Manager.
6. On the **Select IP Address** page of **Discovery / Inventory Wizard**, click **Next**.
7. On the **IP Scan Settings** page of **Discovery / Inventory Wizard**, provide the user credentials and configure the Internet Control Message Protocol (ICMP) and WS-Man options, and then click **Next**.
 


 **NOTE: For information about the certificate settings, see [Communication Settings](#).**
8. On the **Confirm Settings** page of the **Discovery / Inventory Wizard**:
  - Review the discovery settings you provided. Click **Back** to edit the settings.
  - If you do not want to view the inventory task progress in the task pane, clear the **Show task pane after launch** check box.
9. Click **Run Discovery / Inventory**.  
 The **Tasks** view is displayed. You can go to the **Systems** view to see the inventoried systems.

 **NOTE:** If you have cleared the Show task pane after launch check box in step 8, the Systems view is displayed.

## Editing an inventory range

Specify the management controller IP addresses in the appropriate discovery or inventory tables. License Manager cannot inventory the license information from the operating systems or hypervisors on which it is installed.

To edit a range:

 **NOTE:** To remove a range from License Manager, select the entry in the table and click Remove Selected.

1. Click **Run Discovery and Inventory**.
2. Select the entry in the table and click **Edit**.  
The **Edit Inventory Range** window is displayed.
3. Edit the IP range or address name, IPv4 range, or individual address (IPv4, IPv6, or hostname) based on your preference.
4. Click **OK**.

## Viewing inventoried systems

To view inventoried systems, select **Systems**. Inventoried systems are listed in the **Systems** view. The System Inventory table provides a summary of the inventoried systems and the System Details pane provides more information about a selected system.

 **NOTE:** For PowerEdge storage sleds, License Manager displays the license level of the host CMC as the current license.

## Removing system information

1. In **Systems**, select the systems you want to remove and click **Delete**.
2. When prompted, click **Yes** to confirm.

## Saving reports

You can save system information into reports in the CSV, XML, or HTML formats.

1. From **Systems**, click **Save Report**.
2. Specify the folder location and file name.
3. In **Save as type**, select the report format, and then click **Save**.
4. Click **OK**.

# Managing licenses

You can deploy licenses to licensable systems by using the License Manager. License Manager also supports the export of license archives for backup. The status of available licenses can be viewed from the Licenses view, and the entitlement details of the licenses is available in the Entitlements view. The entitlement details of the licenses are obtained by connecting to the Dell Online account.

 **NOTE: The factory-installed licenses are not retrieved during the discovery and inventory of iDRAC 9 systems. Therefore, the iDRAC 9 licenses are not listed in the Licenses view.**

Before you deploy licenses:

1. Inventory the licensable systems. See [Inventorying Licensable Systems](#).
2. Obtain and import licenses by doing one of the following:
  - Connecting to Dell Online to automatically import the unbound licenses from the Dell Online account.
  - Downloading the license archives from Dell Online Licensing Portal and importing the licenses into License Manager.
3. Bind the licenses.
4. Deploy the licenses.

 **NOTE: To work with licenses, from the License Manager, click Licenses.**

## Obtaining licenses by connecting to Dell Online Account

The License Manager can be connected to Dell Online to gather information about all the available bound and unbound licenses. To connect to Dell Online, the License Manager requires a One Time Passcode (OTP). You can disconnect from Dell Online at anytime.

 **NOTE: Ensure that you have a Dell account before connecting to Dell Online.**

To connect to Dell Online from the License Manager:

1. In the License Manager, click **Actions** → **Connect to Dell Online**.

 **NOTE: To connect to Dell Online from the License Manager, you require a One Time Passcode (OTP).**

2. In the **Connect to Dell Online** window, click the **Dell Online** link to request for an OTP.
3. In the **Dell Online** portal, enter the credentials, and then click **Sign In**.  
The OTP is generated and displayed.
4. Copy the generated OTP from the Dell Online Portal.

 **NOTE: The OTP is valid for 30 minutes. If the OTP is not used within 30 minutes, it has to be requested again by connecting to Dell Online.**

5. In the **Connect to Dell Online** window of License Manager, enter the OTP that was copied from the Dell Online Portal.
  - a. Select the **Save Connection credentials** check box to save the connection credentials to reconnect to Dell Online. If the **Save connection credentials** option is not selected or login account is changed, the saved credentials become invalid. You must request a new OTP by connecting to Dell Online.
  - b. Select the **Automatically connect on start up** check box to automatically reconnect the License Manager to the Dell Online account when the License Manager starts.
  - c. Select the **Enable Proxy Settings** check box to enter the proxy settings, if your network requires proxy settings to connect.

 **NOTE: The proxy settings are not saved with the user credentials and must be entered when prompted.**

6. Click **Next**.
7. In the **Connection Results** window, you can see if the connection to Dell Online is successful. If the connection is successful, click **Next**.

8. If the License Manager is not able to connect to Dell Online because of an invalid OTP or incorrect proxy settings, click **Close**.  
To reconnect to Dell Online, obtain a new OTP or ensure the correct proxy settings are entered. After the download of the license information is complete, a summary of the purchased licenses that are unbound is displayed.
9. Click **Close**.  
The **Task Status** window is displayed.




The summary of the downloaded entitlements can be viewed in the **Entitlements** navigation pane. To bind licenses to the discovered and inventoried devices, see [Binding licenses](#).

 **NOTE:** To disconnect from Dell Online, see [Disconnecting from Dell Online](#).

## Logging in to other Dell Online Account

The License Manager supports the feature to connect to Dell Online by using a different account. The systems can be discovered by using more than one account and not a single account. By logging in to different accounts, the account-specific licenses can be downloaded and bound to the discovered systems. The entitlements of the current account will not be displayed when you log in to a different account.

To log in to another Dell Online account:

1. In License Manager, click **Actions** → **Login to another Dell account**.
  -  **NOTE:** Logging in by using another Dell Online account will disconnect you from the current Dell Online account.
2. In **Disconnect from Dell Online** window, click **Yes**.
3. In the **Connect to Dell Online** window, click the **Dell Online** link to request the OTP.
4. In the **Dell Online** portal, enter the credentials, and then click **Sign In**.  
The OTP is generated and displayed.
5. Copy the generated OTP from the Dell Online Portal.
  -  **NOTE:** The OTP is valid for 30 minutes. If the OTP is not used within 30 minutes, it has to be requested again by connecting to Dell EMC Online.
6. In the **Connect to Dell Online** window, enter the OTP that was copied from the Dell Online Portal.
  - a. Select **Save Connection credentials** option to save the connection credentials to reconnect to Dell Online. If the Save connection credentials option is not selected or login account is changed, then the saved credentials become invalid. You must request a new OTP by connecting to Dell Online.
  - b. Select **Automatically connect on start up** option to automatically reconnect the License Manager to the Dell Online account when the License Manager starts.
  - c. Select the **Enable Proxy Settings** option to enter the proxy settings, if your network requires proxy settings to connect.
    -  **NOTE:** The proxy settings are not saved with the user credentials and should be entered when prompted.
7. Click **Next**.
8. In the **Connection Results** window, you can see if the connection to Dell Online is successful. If the connection is successful, click **Next**.
9. If the License Manager is not able to connect to Dell Online because of an invalid OTP or incorrect proxy settings, click **Close**.  
To reconnect to Dell Online, obtain a new OTP or ensure the correct proxy settings are entered. After the download of the license information is complete, a summary of the purchased licenses that are unbound is displayed.
10. Click **Close**.  
The **Task Status** window is displayed.

The summary of the downloaded entitlements can be viewed in the **Entitlements** navigation pane. To bind the licenses to the discovered and inventoried devices, see [Binding licenses](#).

 **NOTE:** To disconnect from Dell Online, see [Disconnecting from Dell Online](#).

# Disconnecting from Dell Online

After disconnecting from Dell Online, the archived license files have to be imported from the Dell Online Licensing Portal. See [Importing archived licenses from the Dell Online Licensing Portal](#).

To disconnect from Dell Online:

1. In the License Manager, click **Actions**, and then click **Disconnect from Dell Online**.

 **NOTE: Disconnecting from Dell Online and the logging in by using another Dell Online account options are disabled if any license binding tasks are active in the License Manager application.**

2. In the **Disconnect from Dell Online** window, click **Yes**.

 **NOTE: A new OTP must be requested for reconnecting to the Dell Online account.**

 **NOTE: Logging in by using another Dell Online account will disconnect you from the current Dell Online account, and the Entitlements of the current account will not be displayed in the Entitlements navigation pane.**

# Importing archived licenses from the Dell Online Licensing Portal

You can download licenses from the Dell Online Licensing Portal at [dell.com/support/retail/lkm](https://dell.com/support/retail/lkm). You can purchase licenses when you purchase a server or chassis. The licenses are installed from the factory. The downloaded license package contains a license archive in a compressed file format (.zip format). The license archive contains license files in .xml format. You can import archived licenses. However, you cannot import expired or evaluation licenses.

1. In License Manager, click **Actions** → **Launch Dell Online Licensing Portal**.
2. From the Dell licensing portal, download the required licenses to a file system.
3. From **Licenses**, select **Import Licenses**.
4. In **Select Licenses**, browse to the location where the license files are downloaded, select the license package, and then click **Open**.

 **NOTE: If a system has a license with the same Entitlement ID, the duplicate license is flagged for potential licensing issues.**

5. In **Import Licenses**:
  - a. If you want to filter the list of validated licenses based on the matching inventoried systems, select the **Import only those licenses which match inventoried systems** check box.
  - b. Select valid licenses.
  - c. Click **Import**.

# Binding licenses

You can bind all the unbound licenses to the inventoried systems by using the License Manager. Before you bind the licenses:

- Discover and inventory the licensable systems.
- Obtain and import licenses by doing one of the following:
  - Connecting to Dell Online to automatically import the unbound licenses from the Dell Online account.
  - Downloading the license archives from Dell Online Licensing Portal and importing the licenses into License Manager.

1. In the License Manager, click **Actions** → **Bind Licenses**.


The **Bind Licenses** window is displayed.

2. Select the license type and click **Next**.

The License Manager binds the unbound licenses of the selected type to the respective systems. A single system can be selected to bind the license.

3. Select the system name to be bound for the license type.

The Service Tag and model of the system is displayed.

4. Select the **Deploy licenses after binding** check box to deploy the licenses after they are bound to a system, and then click **Next**.  
 **NOTE: If the Deploy licenses after binding option is not selected, the licenses will be bound to the system but not deployed. These licenses can be deployed later as required.**
5. If the **Deploy licenses after binding** option is selected, the Management Controller credentials window is displayed. Enter the Management Controller credentials, confirm the WS-Man protocol communication settings. Click **Next**.
6. Summary of the binding assignments for the selected license type is displayed. Click **Save Report** to save the binding report as a .csv, .html or .xml file, and then click **Finish** to complete the binding and deployment of the selected license types.


## Deploying licenses

License Manager can automatically deploy all available licenses to discovered systems. Alternatively, you can select specific licenses or systems for deployment. Before you deploy licenses:


- Inventory systems on which you want to deploy licenses.
- Ensure that the:
  - Inventoried systems are licensable
  - Licenses are downloaded from Dell Online Licensing Portal
  - Required licenses are imported into License Manager

 **NOTE: If more systems have licenses with the same Entitlement ID, the duplicate licenses are flagged for potential licensing issues.**


To automatically deploy licenses:

1. Select **Licenses** → **Deploy Licenses** → **Automatically Deploy Licenses**.
2. In **Operation Selection**, click **Next**.
3. In **Communication Settings**, type the management controller credentials, verify the communication settings, and then click **Next**.
4. If no matching system is found for a license, the following message is displayed: **No matching licenses/systems are available**.  
 **NOTE: You can monitor the deployment in task view. As systems are updated, corresponding information in Systems view and Licenses view are updated.**

## Selecting licenses for deployment

1. Click **Licenses** → **Deploy Licenses** → **Deploy Selected Licenses**.
2. In the **Operation Selection** page, verify licenses you want to deploy and click **Next**.
3. In **Communication Settings**, type the management controller credentials, verify communication settings, and then click **Next**.  
 **NOTE: You can monitor the deployment in task view. As systems are updated, corresponding information in Systems view and Licenses view are updated.**

## Selecting systems for license deployment

1. In **Systems**, select the systems on which you want to deploy licenses.
2. Click **Deploy Associated Licenses**.
3. Select the licenses to deploy on the systems and click **Next**.
4. In communication settings, provide the management controller credentials, verify communication settings, and then click **Next**.  
 **NOTE: You can monitor the deployment in task view. As systems are updated, corresponding information in system view and license view are updated.**

## Exporting license archives

You can export an archive of all licenses available in the system. Use the archived data as a backup when a system is repaired and the Licensing Portal is not accessible (because of a security restricted network). Use the archived licenses for transfer among the License Manager installations. License Manager retrieves factory-installed licenses during discovery and inventory of systems. When you archive licenses, a package containing a compressed file of .xml license files, similar to the license package downloaded from the Dell Online Licensing Portal, is created.

 **NOTE: The factory-installed licenses are not retrieved during the discovery and inventory of iDRAC 9 systems.**

1. From **Licenses**, select the licenses and click **Export Archive**.
2. Specify the folder location to save the archived file, and then click **Save**.  
The licenses are archived in the compressed file format (.zip format.)

## Saving reports

You can save system information into reports in the CSV, XML, or HTML formats.

1. From **Systems**, click **Save Report**.
2. Specify the folder location and file name.
3. In **Save as type**, select the report format, and then click **Save**.
4. Click **OK**.

## Removing licenses from the Inventory

To remove licenses from the License Manager inventory:


1. From **Licenses**, select the license you want to delete, and then click **Delete**.
2. In **Confirm License Removal**, click **Yes**.

## Removing licenses from a system

The **Remove License** option allows you to either remove a specific license or all licenses from a system.

1. Click **Systems**.  
The **System Details** pane displays the licenses installed on the system.
2. Under **Installed Licenses**, select the licenses you want to remove.
3. Click **Remove License**.  
The **Remove License** window is displayed.
4. Type the management controller credentials, confirm the communication settings, and then click **Finish**.

## Downloading bound licenses

1. Click **Entitlements**.  
The **Entitlements Inventory** window displays the entitlement details of the licenses imported by connecting to the Dell Online account.
2. Select the bound licenses you want to download and click **Download Bound Licenses**.  
 **NOTE: The Is Bound column in the Entitlement Inventory table specifies whether or not the entitlements are bound to the licensable systems.**
3. In the **Entitlements** window, click **OK** to start downloading the bound licenses.  
The **Task Status** window is displayed.

The downloaded licenses are displayed under the **Licenses** view. To deploy the downloaded licenses, see [Deploying licenses](#).

# Managing tasks and logs

From the Tasks view, you can monitor the progress of long-running tasks. The Task Status table includes a summary of executing and recently completed tasks. The **Results** tab includes a summary of operation results, and the Execution Logs tab includes the detailed log of the currently selected task or operation.

## Canceling tasks

Canceled tasks do not end until the operations that are already in progress are ended. Therefore, it may take several minutes for a canceled task to end. In some circumstances, tasks may complete before cancellation can take effect.

1. From **Tasks**, select the task that you want to cancel.
2. Click **Cancel Selected Task**.
3. In **Cancel Task**, click **Yes**.

## Log entries

If a task result is selected, the Execution Log tab displays detailed information about the selected task log. The log is filtered to entries related to that specific result. The log entries consist of the date and time of the entry, a log code, and a detailed log message.

## Clearing completed tasks

If the License Manager application is closed while tasks are running, those tasks are terminated. You cannot clear tasks that are in progress.

To clear completed tasks:

1. From **Tasks**, click **Clear Completed Tasks**.
2. In **Clear Completed Tasks**, click **Yes**.

## Viewing License Manager logs

The saved results are available in the Logs view. The Result Logs table displays a summary of License Manager activities including discovery and inventory, license import, and license deployment or removal operations. The Log Entries pane displays detailed results of the currently selected activity. License Manager logs summary-based information. The logged information includes status, date and time, unique identifier, and a list of logged events.

To view the logs, click **Logs**.

## Generating support log archives

When directed by technical support, click **Generate Support Log Archive**. Select the folder where you want to save the archive, and then click **Save**. This option generates a zip archive containing the text of each result log. Provide the archived data file to technical support as directed.

# Troubleshooting

## Importing license

### Cannot import trial licenses

**Message:** Trial licenses are not supported by the license manager.

**Resolution:** Apply a trial license through the iDRAC or CMC GUI or RACADM CLI. For more information, see the iDRAC or CMC documentation.

### License or archive is corrupt or unreadable

**Messages:**

- Unable to read archive file.
- The archive does not contain any license files.
- Unable to parse license.
- The digital signature is invalid.

**Resolution:** Download license archive again from the Dell Online Licensing Portal at [dell.com/support/retail/lkm](https://dell.com/support/retail/lkm).

## License inventory or discovery, and license deployment

When resolving discovery or inventory errors, ensure that the remote address corresponds to an iDRAC7 or later versions, by accessing the iDRAC or CMC GUI. To access the iDRAC or CMC GUI, connect to the system IP/hostname by using a web browser. If the system does not contain iDRAC7, ignore the message.

### Invalid credentials

**Message:** Unable to establish communications - Access is denied.

**Resolution:** Enter correct credentials. If iDRACs do not share common credentials, you must run multiple discovery or inventory tasks by using different credentials.

### Certificate error

**Messages:**

- Unable to establish communications - The SSL certificate contains a common name (CN) that does not match the hostname.
- Unable to establish communications - The SSL certificate is signed by an unknown certificate authority.
- Unable to establish communications - The SSL certificate could not be checked for revocation. The server used to check for revocation might be unreachable.
- Unable to establish communications - The SSL certificate is expired.

**Resolution:** If the certificate name does not match the hostname, install a certificate that matches the address on which the management controller is inventoried. Alternatively, disable the certificate name validation feature in your discovery or inventory settings. For more information, see [Communication Settings](#).

If the certificate authority is not recognized, add the certificate authority to the list of Windows Trusted Root Certification Authorities on the management console. Alternatively, disable the certificate authority validation feature in the discovery or inventory settings. For more information, see [Communication Settings](#).

If you cannot check the certificate for revocation, make sure that the certificate revocation list server is available to the management console. Alternatively, disable the certificate revocation list checking in the discovery or inventory settings. For more information, see [Communication Settings](#).

If the certificate has expired, generate and install a new certificate. Dell License Manager cannot connect to iDRACs by using an expired certificate.

## Unable to connect

### Messages:

- Unable to ping system - Timed Out
- Unable to establish communications - Connection to host timed out

**Resolution:** Verify that the management controller is connected to the network and assigned the specified address. Verify that the firewall settings allow you to access the system from the management console.

From the iDRAC or CMC GUI, verify that the address corresponds to a system that contains iDRAC7 or a later version. To access the GUI, connect to the system IP or hostname from a web browser. If the system does not contain iDRAC7, ignore the message.

## License status warnings

### Individual bound license deployed to multiple systems

**Message:** One or more licenses with the same Entitlement ID are bound to other Service Tags and are currently deployed.

**Resolution:** Install each individual bound license, distinguished by a unique Entitlement ID, on a single system specified by its service tag. By using the Dell Online Licensing Portal at [dell.com/support/retail/lkm](http://dell.com/support/retail/lkm), ensure that a license is properly associated with the system. Remove license instances deployed on systems other than those specified in the portal.

You may determine to which systems an Entitlement is deployed by sorting or filtering the Entitlement ID column within the System Inventory table. Improperly deployed licenses can be removed by using the management controller GUI. If multiple perpetual licenses are installed on the same system, their Entitlement IDs are not displayed in the table. You must inspect such systems individually and review the installed licenses listed in the System Details pane.

### Original license missing during upgrade

**Message:** The license is designated as an upgrade. However, the original license is not currently installed.

**Resolution:** Make sure that the original license is not reassigned to another system. If the original license is not present because of the service performed on the system, ignore the message.

# Systems

From Systems, you can discover and inventory systems, deploy licenses, and save reports.


**Table 3. Systems**

Field	Description
<b>Run Discovery and Inventory</b>	Select to discover and inventory the supported management controllers
<b>Deploy Associated Licenses</b>	Select to deploy licenses
<b>Save Report</b>	Select to save license reports
<b>Delete</b>	Select to remove systems from the License Manager inventory

## System Inventory Table

The system inventory table contains a summary of licensable systems. You can sort or resize each column. Select a system to view more information, or perform tasks on that system. You can also select multiple systems deployment tasks or removal.

**Table 4. System Inventory Table**

Field	Description
Check box	To select the systems
<b>System Name</b>	The host name of the installed operating system, if available
<b>Management Controller</b>	The host name of the management controller. Clicking the link opens the management controller GUI by using Microsoft Internet Explorer. The discovery address is shown in parenthesis.
<b>System Model</b>	The system model name
<b>Upgrade Available</b>	If a license upgrade is available for deployment, a message is displayed
<b>Service Tag</b>	The factory-assigned system Service Tag that uniquely identifies each system. Each license is bound to a particular Service Tag indicating the system on which it is deployed.
<b>Evaluation Installed</b>	If applicable, the status of installed evaluation licenses is shown
<b>Current License</b>	<p>The level of functionality currently supported by the management controller. Supported levels include:</p> <ul style="list-style-type: none"> <li>• Enterprise</li> <li>• Express</li> <li>• Express for Blades</li> <li>• Basic Management</li> </ul> <p>For more information about the management controller functionality supported by each feature level, access the online licensing portal at <a href="http://dell.com/support/retail/lkm">dell.com/support/retail/lkm</a>.</p> <p> <b>NOTE: Not all hardware supports all management features. For more information, see the hardware documentation.</b></p>

Field	Description
<b>Purchased License</b>	The highest license class of any perpetual license bound to the system is shown. Both installed licenses and licenses in inventory awaiting deployment are included when calculating the purchased license class.
<b>Entitlement ID</b>	The unique license identifier
<b>Additional Information</b>	Indicates one or more potential EULA violations.
<b>Last Inventory</b>	The date and time the system was last inventoried. The systems will automatically re-inventory when a license operation is conducted on the system.
<b>Modular System</b>	The name of the modular system (chassis) in which the server or sled is installed.
<b>Node ID</b>	The unique identifier of the server or sled installed in a modular system (chassis). Typically, the Service Tag of a server or the server node identifier of a sled.
<b>Slot</b>	The slot occupied by the server or sled in the modular system (chassis)

## Systems Detail Pane

The system details pane shows information about a licensable system, including the installed licenses and licensable components of that system. The system details contain component details and license details.

**Table 5. Systems Detail Pane**

Field	Description
<b>System Name</b>	The host name of the installed operating system, if available.
<b>Management Controller</b>	The host name of the management controller.
<b>Model</b>	The system model
<b>Service Tag</b>	The Service Tag of the system.
<b>Discovery Address</b>	The IP address or hostname at which the management controller was discovered.
<b>Purchased License</b>	The highest license class of any perpetual license bound to the system is shown. Both installed licenses and licenses in inventory awaiting deployment are included when calculating the purchased license class.
<b>Current License</b>	The current license on the system.
<b>Installed Licenses</b>	The list of licenses that are installed on the system.
<b>Remove License</b>	Select a license in the <b>Installed License</b> grid, and select <b>Remove license</b> to remove a license installed on the system.
<b>Selected</b>	Select the check box to select the license.
<b>Status</b>	The license status: <ul style="list-style-type: none"> <li>• Green — The license is ok</li> <li>• Yellow — The license has a potential issue</li> <li>• Red — The license is not functional</li> </ul>
<b>Description</b>	The license description
<b>Entitlement ID</b>	The unique license identifier
<b>Expiration</b>	Date on which the license expires (if applicable)

Field	Description
<b>Term</b>	The license term. For more information, see <a href="#">Understanding Licenses</a> .
<b>Date Purchased</b>	The date the license was purchased
<b>Date Imported</b>	The date the license was imported

## Discovery/Inventory Wizard

Type these values to set IP range and host information.

**Table 6. Discovery/Inventory Wizard**

Field	Description
<b>Add Range or IP</b>	Select to open the <b>Edit Inventory Range</b> window for adding a new discovery range
<b>Edit</b>	Select an existing range and click to open the <b>Edit Inventory Range</b> window
<b>Remove Selected</b>	Select to remove the selected range
<b>Inventory</b>	Select the check box to select the IP address
<b>Range / Address Name</b>	The unique name describing the range
<b>Start / Individual Address</b>	The beginning range of the IPv4 address or the individual IP address
<b>End Address</b>	The ending range of the IPv4 address
<b>Subnet Mask</b> (Optional)	Use subnet mask to exclude network and broadcast addresses from inventory attempts. If omitted, each address is treated as a host
<b>Description</b> (Optional)	Type a description. Each inventory range can include at most a Class B network (65,536 addresses)

## Edit Inventory Range

**Table 7. Edit Inventory Range**


Field	Description
<b>IP Range or Address Name</b>	The unique name describing the range.
<b>Enter an IP Range, an Individual Address, or a List of Addresses</b>	
<b>IPv4 Range</b>	Select to provide an IPv4 address range.
<b>Start Address</b>	The beginning range of the IPv4 address or the individual IP address.
<b>End Address</b>	The ending range of the IPv4 address or the individual IP address.
<b>Subnet Mask</b>	The subnet mask for the provided IPv4 address.
<b>Individual IP Address (IPv4, IPv6, or hostname)</b>	Select to provide an individual IP address.
<b>Text file with IP addresses</b>	Select to create an inventory range using a text file that includes an IP address or host name in each line.
<b>Load</b>	Click to browse and select the text file.

Field	Description
Description (Optional)	Type a description.

## Communication settings

Optimal parameter values depend on the characteristics of a network. In communication settings, you can type credentials, Ping (ICMP) Settings, and WS-Man Settings.

**Table 8. Communication settings**

Field	Description
<b>Credentials</b>	You must specify the credentials to conduct discovery inventory. Credential information is not persistent across task executions.
<b>Management Controller Username</b>	Type the management controller user name. If using Active Directory authentication, enter username in the format <code>domain\user name</code> .   <b>NOTE: The management controller login privilege is required to perform system inventory.</b>
<b>Management Controller Password</b>	Type the management controller password.
<b>Ping Settings (ICMP)</b>	
<b>Require successful ping before attempting inventory</b>	When enabled, a ping response is received from an address before attempting WS-Man inventory communications. This can improve the performance of the inventory process. However, disable this option if the network blocks ping requests. This option is enabled by default.
<b>Retries</b>	The number of times to reattempt a ping before excluding the system from inventory. The default is 3 retries, and the total allowed retries is 4.
<b>Timeout</b>	The time within which a ping response is received before the ping attempt fails. The default is 5 seconds.
<b>WS-Man Settings</b>	License Manager uses the management controller WS-Man interface to obtain inventory information.
<b>Validate Certificate Name</b>	If enabled, this ensures that inventory communications are conducted only with systems identifying themselves based on a certificate that matches the address used to communicate with that system. If the iDRAC certificate does not match the discovery address, disable certificate name validation for License Manager to communicate with the iDRAC. However, if the certificate name is not validated, License Manager cannot authenticate the identity of the remote system.
<b>Validate Certificate Authority</b>	If enabled, this ensures that the inventory communications are conducted only with systems identifying themselves based on a certificate issued by a trusted source. If the iDRAC certificate is not issued by a trusted authority, then disable validation for License Manager to communicate with the iDRAC. However, if the certificate authority is not validated, License Manager cannot authenticate the identity of the remote system.  For validation, include a trusted certificate authority as part of the Trusted Root Certification Authorities list in Microsoft Windows. For more information, see the Microsoft Windows documentation.
<b>Validate Certificate Revocation List</b>	If enabled, this ensures that communications are not conducted with a system identifying itself by using a certificate that is revoked. If the management console cannot communicate with a certificate revocation list server, then disable this option for communicating with iDRAC. However, if the certificate revocation list is not validated, License Manager cannot authenticate the identity of the remote system.

<b>Field</b>	<b>Description</b>
<b>Retries</b>	The number of communication retry attempts made, if temporary WS-Man communication errors occur before the inventory attempt fails. The default is one retry, and the maximum allowed attempts is two.
<b>Timeout</b>	The time within which the WS-Man host must begin to return data before the communication attempt fails. The default value is 30 seconds.
<b>Port</b>	The HTTPS communication port configured on the iDRACs. The default port is 443. On this port, ensure that firewall settings allow the HTTPS communication between the management station and the iDRACs.

# Licenses

From Licenses, you can import and deploy matching licenses, archive exported license, and save reports.


**Table 9. Licenses**

Field	Description
<b>Import Licenses</b>	Click to import licenses from a file system.
<b>Export Archive</b>	Select to archive licenses
<b>Deploy Licenses</b>	Select to deploy licenses matched to a licensable system. The options include: <ul style="list-style-type: none"> <li>· Deploy Selected Licenses</li> <li>· Automatically Deploy Licenses</li> </ul>
<b>Save Report</b>	Select to save the license report
<b>Delete</b>	Select to remove licenses from License Manager local database
<b>Selected</b>	Click to select a license.
<b>Description</b>	Details of the type of license; Enterprise License, bound, unbound, or upgraded
<b>Term</b>	The license term. For more information, see <a href="#">Understanding Licenses</a> .
<b>Bound Service Tag</b>	The Service Tag to which the license is bound. You can only deploy this license on the system with the specified tag.
<b>Deployed</b>	The deployment status: <ul style="list-style-type: none"> <li>· Yes — The license is deployed</li> <li>· No — The license is not deployed</li> <li>· Unknown — The corresponding system is not in inventory</li> </ul>
<b>Matching System</b>	The system to which you can assign this license: <ul style="list-style-type: none"> <li>· Yes — Indicates the associated system is in inventory</li> <li>· No — Indicates the system is not in inventory</li> </ul>
<b>Origin</b>	The method in which the license was added: <ul style="list-style-type: none"> <li>· Imported — The license was imported into Dell License Manager</li> <li>· Retrieved — The license was obtained during inventory</li> </ul>
<b>Date Purchased</b>	The date the license was purchased
<b>Date Imported</b>	The date the license was imported
<b>License</b>	The license identification number and the details of the license
<b>Entitlement ID</b>	The unique license identifier
<b>Upgrade ID</b>	In the case of an upgrade license, the ID of the license to which the upgrade applies
<b>Expiration</b>	Date on which the license expires (if applicable)

Field	Description
License Features	The features supported by the selected license

## Connect to Dell Online

Table 10. Connect to Dell Online

Field	Description
<b>Enter Connection Credentials</b>	
Dell Online	Click the link to open the Dell Online Account web page. A new OTP is generated after typing the Dell Online Account credentials.
<b>Credentials</b>	
OTP (One Time Password)	Type the OTP generated by connecting to Dell Online Account
<b>Options</b>	
Save Connection Credentials	Select the check box to enable the License Manager to reconnect to Dell Online Account by saving the connection credentials.   <b>NOTE: A new OTP has to be requested by connecting to Dell Online Account when the credentials expire.</b>
Automatically connect on start up	Select the check box to enable the License Manager to automatically connect to the Dell Online Account when it is launched
Enable Proxy Settings	Select the check box to enable proxy settings if the network requires proxy settings for the connection
Proxy IP	Type the proxy IP address
User Name	Type the username of the proxy user
Password	Type the password of the proxy user
Port	Type the port number to access the proxy server
Connecting Results	Displays the connection status to Dell Online
Loading Complete	Displays the summary of unbound licenses fetched from the Dell Online Account
Entitlement ID	Displays the unique license identifier
License Type	Displays the type of license matched to a licensable system
Description	Displays the description of the purchased licenses
Is Bound	Specifies whether or not the entitlements are bound to the licensable systems

## Bind Licenses



Table 11. Bind Licenses

Field	Description
Check box	Select to view license information of all the licenses
License Description	The description of a license
License Count	The count of unbound licenses

<b>Field</b>	<b>Description</b>
<b>Selected</b>	To select system to bind the license
<b>System Name</b>	The name of the system to which the license is bound to
<b>Service Tag</b>	The Service Tag of the system
<b>System Model</b>	The system model name
<b>Deploy licenses after binding</b>	Select to deploy the licenses after the license is bound to the system
<b>Bind Licenses</b>	
<b>Management Controller Username</b>	Type the management controller user name
<b>Management Controller Password</b>	Type the management controller password
<b>WS-Man Settings</b>	
<b>Validate Certificate Name</b>	If enabled, this ensures that inventory communications are conducted only with systems identifying themselves based on a certificate that matches the address used to communicate with that system. If the iDRAC certificate does not match the discovery address, disable certificate name validation for License Manager to communicate with iDRAC. However, if the certificate name is not validated, License Manager cannot authenticate the identity of the remote system.
<b>Validate Certificate Authority</b>	If enabled, this ensures that communications are conducted only with systems identifying themselves based on a certificate issued by a trusted source. If the iDRAC certificate is not issued by a trusted authority, then disable validation for License Manager to communicate with the management controller. However, if the certificate authority is not validated, License Manager cannot authenticate the identity of the remote system.  For validation, include a trusted certificate authority as part of the Trusted Root Certification Authorities list in Microsoft Windows. For more information, see the Microsoft Windows documentation.
<b>Validate Certificate Revocation List</b>	If enabled, this ensures that communications are not conducted with a system identifying itself using a certificate that is revoked. If the management console cannot communicate with a certificate revocation list server, disable this option to communicate with iDRAC. However, if the certificate revocation list is not validated, License Manager cannot authenticate the identity of the remote system.
<b>Retries</b>	The number of communication retry attempts made if temporary WS-Man communication errors occur before the deployment attempt fails. The default is one retry, and the maximum allowed attempts is two.
<b>Timeout</b>	The time within which the WS-Man host must begin to return data before the communication attempt fails. The default is 30 seconds.
<b>Port</b>	The HTTPS communication port configured on the iDRACs. The default port is 443. On this port, ensure that the firewall settings allow the HTTPS communication between the management station and iDRACs.

# Manage Licenses

**Table 12. Manage Licenses**

Field	Description
Check box	To select all the licenses
<b>Operation Status</b>	Details on whether the license is available for deployment
<b>Entitlement ID</b>	The ID of a license
<b>License Description</b>	The description of a license
<b>System</b>	The name of the system on the license is deployed. If available, the host name is used, otherwise the iDRAC name is used.
<b>Service Tag</b>	The factory-assigned system Service Tag, which uniquely identifies each system. Each license is bound to a particular Service Tag indicating the system on which the license is deployed.   <b>NOTE: Licenses already deployed on a system do not appear in the Operation Selection page.</b>
<b>Active License</b>	The class and term of the highest class license installed on the system
<b>Credentials</b>	
<b>Management Controller Username</b>	Type the management controller user name. If you are using Active Directory authentication, enter the user name in the format <code>domain\user name</code> .   <b>NOTE: The management controller login privilege is required to perform system inventory.</b>
<b>Management Controller Password</b>	Type the management controller password
<b>WS-Man Settings</b>	Dell License Manager uses the management controller WS-Man interface to obtain inventory information
<b>Validate Certificate Name</b>	If enabled, this ensures that inventory communications are conducted only with systems identifying themselves based on a certificate that matches the address used to communicate with that system. If the iDRAC certificate does not match the discovery address, then disable certificate name validation for Dell License Manager to communicate with iDRAC. However, if the certificate name is not validated, Dell License Manager cannot authenticate the identity of the remote system.
<b>Validate Certificate Authority</b>	If enabled, this ensures that inventory communications are conducted only with systems identifying themselves based on a certificate issued by a trusted source. If the iDRAC certificate is not issued by a trusted authority, then disable validation for Dell License Manager to communicate with the management controller. However, if the certificate authority is not validated, Dell License Manager cannot authenticate the identity of the remote system.  For validation, include a trusted certificate authority as part of the Trusted Root Certification Authorities list in Microsoft Windows. For more information, see the Microsoft Windows documentation.
<b>Validate Certificate Revocation List</b>	If enabled, this ensures that communications are not conducted with a system identifying itself using a certificate that is revoked. If the management console cannot communicate with a certificate revocation list server, then disable this option to communicate with iDRAC. However, if the certificate revocation list is not validated, Dell License Manager cannot authenticate the identity of the remote system.
<b>Retries</b>	The number of communication retry attempts made if temporary WS-Man communication errors occur before the inventory attempt fails. The default is 1 retry, and the total attempts is 2.
<b>Timeout</b>	The time within which the WS-Man host must begin to return data before the communication attempt fails. The default is 30 seconds.

Field	Description
<b>Port</b>	The HTTPS communication port configured on the iDRACs. The default port is 443. On this port, ensure that the firewall settings allow HTTPS communication between the management station and iDRACs. To save changes and proceed with discovery/inventory, click <b>Next</b> .
<b>Task Settings</b>	
<b>Show task pane after launch</b>	Select to view the task progress under <b>Tasks</b>

# Entitlements

The Entitlement Inventory table contains summary of the Entitlement IDs, type of the licenses, and the binding status of the licenses which are obtained by connecting to Dell Online.

**Table 13. Entitlements**

Field	Description
<b>Save Report</b>	Select to save the entitlements report
<b>Download Bound Licenses</b>	Select to download the bound licenses which are obtained by connecting to the Dell Online account
<b>Entitlement ID</b>	The unique license identifier
<b>License Type</b>	The type of license matched to a licensable system
<b>Product Name</b>	The name of the license associated with the licensable system
<b>Is Bound</b>	Specifies whether or not the entitlements are bound to the licensable systems

## Change Server Password

**Table 14. Change Server Password**


Field	Description
<b>Add Devices</b>	
<b>Service Tag</b>	The Service Tag that uniquely identifies each system
<b>Unique Password</b>	The unique 'root' user password of the system
<b>Add</b>	Click to add the Service Tag and unique password of a system.
<b>System Details</b>	
<b>Generate CSV Template</b>	Click to generate a CSV template to fill the Service Tag and unique password information.
<b>Import</b>	Click to import the CSV template with the Service Tag and unique password information of the systems.
<b>Delete</b>	Click to delete the system.
<b>Import using OMM</b>	Click to import the Service Tag and unique password information from the .ompi or .xml file.
<b>Selected</b>	Click to select all the systems.
<b>Service Tag</b>	Displays the list of service tags which uniquely identifies the systems
<b>Unique Password</b>	Displays the unique passwords of all the systems but are hidden to the users
<b>Provide IP Address/Range</b>	
<b>IPv4 Range</b>	
<b>Start Address</b>	The beginning range of the IPv4 address

<b>Field</b>	<b>Description</b>
<b>End Address</b>	The ending range of the IPv4 address
<b>Subnet Mask</b>	The subnet mask for the provided IPv4 address
<b>Individual Address (IPv4)</b>	Select to provide an individual IP address.
<b>Text file with IP addresses</b>	Select to enter the IP addresses using a text file that includes an IP address or host name in each line.
<b>Load</b>	Click to browse and select the text file.
<b>Enter New Password</b>	
<b>Enter New Password</b>	Type the new password for the selected systems.
<b>Confirm Password</b>	Type the new password again to confirm the password change for the selected systems.

# Tasks

From Tasks, you can view discovery and inventory, and license deployment task information.

**Table 15. Tasks**

Field	Description
<b>Clear Completed Task</b>	Select to purge completed task information
<b>Cancel Selected Task</b>	Select to cancel a listed task
<b>Status</b>	Status type of the task is listed <ul style="list-style-type: none"> <li>• Normal—The task is successfully completed</li> <li>• Failure—The task is not completed</li> </ul>
<b>ID</b>	Unique ID assigned to the task
<b>Task</b>	Description of the task
<b>Summary</b>	Description of the task's status
<b>Progress</b>	Indicator of the task's progress
<b>Start Time</b>	Starting time of the task
<b>End Time</b>	Ending time of the task
<b>Task Results</b>	Provides status, operation, and result information. It includes the following tabs: <ul style="list-style-type: none"> <li>• Results</li> <li>• Execution Log</li> </ul>
<b>Status</b>	<ul style="list-style-type: none"> <li>• Green—The task is successfully completed</li> <li>• Yellow—The task is completed with warnings</li> <li>• Red—The task is completed with errors</li> </ul>
<b>Operation</b>	The description of the operation
<b>Result</b>	The summary of the operation result <p> <b>NOTE: When generating results for a discovery/inventory IP range, result entries are not created for addresses where communication is not established or where a non-licensable system is detected. For result information on such systems, consult the execution log tab.</b></p>
<b>Execution Log</b>	The <b>Execution Log</b> tab provides detailed information from the selected task log

# Logs

From Logs, you can view License Manager activities, clear log results, and save reports.

**Table 16. Logs**

<b>Field</b>	<b>Description</b>
<b>Clear Logs</b>	Select to purge logged information
<b>Generate Support Log Archive</b>	Select to archive logged information
<b>Save Report</b>	Select to save log report
<b>Result</b>	Status type of the listed task: <ul style="list-style-type: none"> <li>• Normal—The task is successfully completed</li> <li>• Failure—The task is not completed</li> </ul>
<b>ID</b>	Unique ID assigned to the task
<b>Summary</b>	Summary description of the logged event
<b>Date</b>	Date and time at which the task completed
<b>Log Entries</b>	Details of the logged information