

Managing Dell EMC PowerEdge Server Software Licenses by using Digital Licensing

This Dell EMC technical white paper provides an overview of Dell enterprise software that utilizes digital licensing.

Dell Engineering July 2017

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Revisions

| Version | Date | Description |
|---------|--------------|-----------------|
| 1.0 | July/11/2017 | Initial release |

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Executive summary

This technical white paper provides an overview of Dell enterprise software that utilizes digital licensing. Several key enterprise products have taken advantage of the ease of use and simplicity to upgrade that digital licensing provides. Products such as the Dell integrated Remote Access Controller 8 (iDRAC8), iDRAC7, OpenManage Essentials Server Configuration Management, and the Enterprise versions of Chassis Management Controller (CMC) for VRTX. Dell License Management portal controls all these licenses. This technical white paper uses the iDRAC licenses as an example.

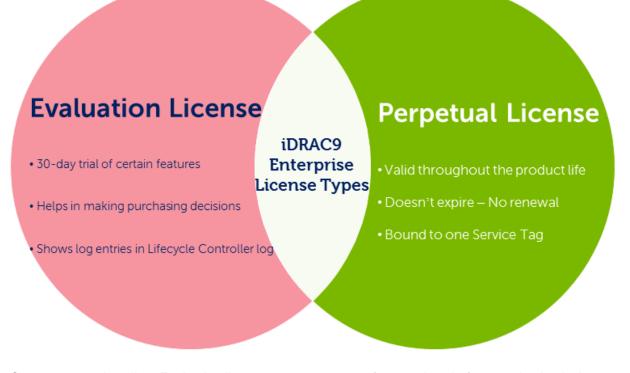
Purchasing PowerEdge servers with installed licenses

1

For the 12th and 13th generation of PowerEdge servers, you can purchase license upgrades from Dell EMC, and the licenses are applied directly in the factory. There is no license to download and install when purchased at the point of sale. To ensure that a key is never lost, Dell EMC also stores a copy of the key and makes it available in an online License Management portal (<u>www.dell.com/support/licensing</u>). The only other thing you must do after deploying your new server into production is to set up your account and authorize users who can access the digital license on the License Management Portal of Dell EMC, in case your license gets lost at some point in the future. The online portal is the best way to review all your iDRAC license keys.

Comparing an Enterprise Perpetual license against Evaluation License

2



Customers can install an Evaluation license to test out a new feature class before purchasing it. An Evaluation license is good for 30 days. A status icon in the iDRAC GUI will change from green to yellow when the license has 5 days remaining. There will also be log entries in the Lifecycle Controller log. To purchase a Perpetual license or obtain Evaluation licenses, customers may contact their Dell EMC service provider. The server Service Tag is required for a Perpetual license and Dell EMC generates a license that may be downloaded and imported into the iDRAC.

Installing an Evaluation License by using the iDRAC GUI, RACADM, or WS-Man

Base and Point of Sale (POS) upgrade licenses are installed in the factory by Dell EMC prior to platform shipment. The base functionality for the particular server model is enabled at POS and does not require an additional file.

After Point of Sale (APOS) licenses must be installed electronically by using iDRAC 7 iDRAC8 interfaces such as the web interface, RACADM, or WS-Man.

To install the Point Of Sale licenses:

- 1. Log in to the License Management portal.
- 2. Locate the upgraded license and select the license file from email or downloaded file from your local system.
- 3. After the license file is available, import the license file to your server from a network share or external storage device by using iDRAC 7, RACADM, or WS-Man.

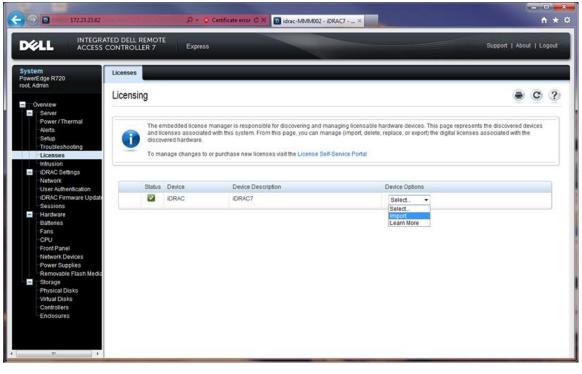
3.1 iDRAC GUI

3

7

To install a license using the iDRAC GUI for either iDRAC7 or iDRAC8:

- 1. Navigate to the Licenses tab, and then select Import from the Device Options.
- Browse to the license file, and click **Apply**.
 The license file can be located on the local file system of your management station, or on a share that is accessible.



3.2 RACADM

To install a license by using RACADM:

The basic command for RACADM is racadm license import. This has many possibilities based on whether you are using local, remote, or firmware RACADM and where the license file is located.

[SH7757 ~]\$ racadm license help import

License import -- Import licenses to various devices on the server.

Usage

racadm license import -u <username> -p <password> -f <license file name> l <NFS
or CIFS share> -c <FQDD>

Valid Options

| -c | FQDD name of the device to where the license file has to be imported. |
|----|---|
| -1 | Network share location (see the Usage Examples section for NFS or CIFS) |
| | from where the license file must be imported. |
| -f | License file name |
| -u | Username of the remote share from where the file will be imported |
| -р | Password for the remote share from where the file will be imported |
| -0 | Option to override the EULA warning and import the license |

Usage Examples

- Import a license from a CIFS to a device. In this case, Embedded iDRAC.
 racadm license import -u admin -p passwd -f License.xml -1 //192.168.2.140/licshare -c idrac.embedded.1
- Import a license from NFS to a device. In this case, Embedded iDRAC. racadm license import -f Licen.xml -l 192.168.2.14:/share -c idrac.embedded.1
- Import a license by overriding the EULA warning: racadm license import -u admin -p passwd -f License.xml -l //192.168.2.140/licshare -c idrac.embedded.1 -o
- Import a license from the local filesystem by using local RACADM: racadm license import -f License.xml -c idrac.embedded.1
- Import a license from the local filesystem using remote RACADM: racadm license import -f C:\Mylicdir\License.xml -c idrac.embedded.1

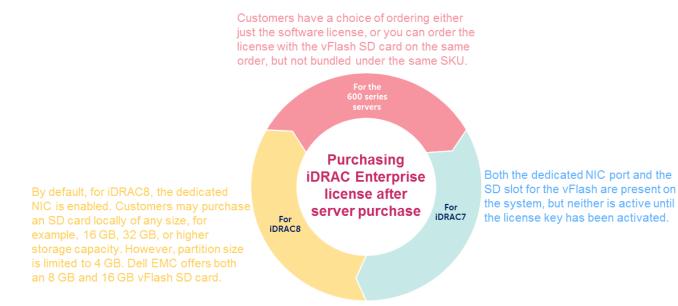
3.3 WS-Man

To install a license by using WS-Man:

winrm i ImportLicenseFromNetworkShare
"cimv2/root/dcim/DCIM_LicenseManagementService?SystemCreationClassName=DCIM_SPCo
mputerSystem+CreationClassName=DCIM_LicenseManagementService+SystemName=systemmc
+Name=DCIM:LicenseManagementService:1" -u:%s -p:%s -r:https://%s/wsman SkipCNcheck -SkipCAcheck -encoding:utf-8 -a:basic file:d:\xml_files\license_management_import_license_From_Cifs_Network_Share_idra
c.xml

Purchasing iDRAC Enterprise license after server purchase

Moving iDRAC licensing to digital form has eliminated the necessity to purchase and install hardware in your server to upgrade the iDRAC functionality. What used to require server downtime and physical hardware to be shipped, can now be done with no impact to the production workload that is running on your PowerEdge server (zero downtime). The digital license can be purchased by using online sales portal of Dell EMC, or through a Dell Sales representative.



4.1 Receiving a notification that a license is available to download

After purchasing a license, a customer will receive an email indicating that a license is ready to download. The email contains information the customer needs to retrieve their license such as:

- order number
- order date

4

- entitlement ID
- item description
- URL to access the Dell Digital Locker

The email contains the electronic download instructions and a link to the online portal. An example screen shot is here.



Dell Digital Locker Order

Thank you for your purchase

We are happy to inform you that your product is available in your Dell Digital Locker (DDL).

Below you will find details on your purchase as well as helpful information on how to utilize the DDL to access and manage your Dell Licenses.

We appreciate your partnership and look forward to helping you with future technology needs.

Use the information below to access your Dell product.

How to access your Dell Digital Locker:

1. Go to your <u>Dell Digital Locker</u>. Click on the My Account sign-in button.

2. Sign in to your Dell My Account using your email address that was used at the time of purchase or that was used to assign you to your software licenses. For questions about creating or updating a My Account login, please see the <u>My Account FAQs</u>.

3. If you are having trouble finding your order or logging in to the Locker, contact your sales team or complete the missing license form

Order information:

| Date: | 18-Apr-2017 |
|--------------------|-------------|
| Dell Order Number: | 209043511 |
| Purchase Order: | |

| Item Description | Primary ID | Quantity | 5 |
|-------------------|------------------|----------|---|
| iDRAC9 Enterprise | DE00000193472759 | 1 | |

Need help?

If you need assistance with a missing license in your account, reach out to <u>Dell Customer Support</u>. For general licensing help regarding 'how-to', visit the FAQs <u>page</u>. If you have a technical question, you can contact <u>Dell Technical Support</u>.

Important Information to know:

Once you download the software, you may not return it. Read the <u>Return Policy</u>. We recommend that you copy software purchased from Dell to an external hard drive or DVD and regularly back up your system.

Your order is subject to Dell's Terms and Conditions of Sale. Please note that Dell cannot be responsible for pricing or other errors and reserves the right to cancel any orders arising from such errors. Your order is subject to <u>Dell's Terms and Conditions of Sale</u>, which include a binding arbitration provision. The amount of tax and shipping added to your order depends on where you have asked for the product to be shipped as well as on which products and/or services you've chosen to purchase.

4.2 Using License Management Portal of Dell EMC

Customers can use the external self-help License Management portal to view their digital licenses, obtain a replacement license, or in some cases reassign licenses to different hardware. For more information about using the Dell Digital Locker, click <u>https://www.dell.com/support/software/us/en/19/Default/QuickStartGuide.</u>

5 Backing up and restoring iDRAC license keys

Dell EMC iDRAC license keys can be individually backed up and restored using the Lifecycle Controller, iDRAC GUI, RACADM, or WS-Man interfaces, or Dell EMC License Manager can back up and restore licenses on a one-to-many basis. For more information about using DLM to backup and restore licenses, see <u>Using the Dell EMC OpenManage License Manager</u> in this technical white paper.

Enterprise-level backup and restore is part of the Lifecycle Controller. The backup and restore process backs up and restores all types of licenses.

5.1 Backing up a license File

To initiate a license key backup:

- 1. Restart your system.
- 2. Press F10 during POST to enter the Unified Server Configurator.
- 3. Select **Platform Restore**, and then select **Export Server Profile**. Ensure that a vFlash SD card must be present or these options will be greyed out.

Note: This procedure is a full system backup. There is no support for incremental backups from USC.

6 Exporting a license file

Using a system backup, a license key can be exported to the local file system or to a share from the iDRAC GUI, RACADM or WS-Man.

6.1 iDRAC GUI

To export a license by using the iDRAC GUI:

- 1. In the left pane, click Licenses.
- 2. In the working pane, select **Export** from the **License Options** drop-down menu, or, click the plus (+) sign to view a specific license and select **Export** from the **License Options** drop-down menu.

| DELL INTEGRATED D ACCESS CONT | | Support About Logout |
|---|--|--------------------------|
| PowerEdge R720 | enses censing | • C ? |
| Cveniew Server Power / Thermal Alerts Setup Troubleshooting Licenses Intrusion | The embedded license manager is responsible for discovering and managing licensable hardware devices. This p and licenses associated with this system. From this page, you can manage (import, delete, replace, or export) the or discovered hardware. To manage changes to or purchase new licenses visit the License Self-Service Portal | |
| IDRAC Settings Network User Authentication IDRAC Firmware Update Sessions Hardware Batteries Fans CPU Front Panel Network Devices | Status Device Description Device Options | |
| Power Supplies Removable Flash Media Storage Physical Disks Virtual Disks Controllers Enclosures | GKP4eiyP2zaCdFISG5NWDYuh OK Description: iDRAC7 Enterprise Evaluation License Entitlement ID License Type Evaluation Evaluation CKP4eiyP2zaCdFISG5NWDYuh Evaluation CKP4eiyP2zaCdFISG5NWDYuh CKP4eiyP2zaCdFISG5NWDY CKP4eiyP2zaCdFISG5NWD CKP4eiyP2Z CKP4EiyP2Z CKP4EiyP2Z CKP4EiyP2Z CKP4EiyP2Z CKP4EiyP2Z CKP4 | 2011-11-05T15:00:00 |
| | License Options: Select. Select. Replace Expont Delete Learn More " | |

A message is displayed asking you want to open, save, or cancel.

3. Click **Save** if you want the file to go to the default downloads folder or click **Save**, if you want to select the exact location you prefer.

| | D DELL REMOTE NTROLLER 7 Express | Support About Logout |
|--|--|--------------------------|
| PowerEdge R720 root, Admin | icenses | |
| Overview Server Power / Thermal Alerts Setup Troubleshooting Intrusion DRAC Settings | The embedded license manager is responsible for discovering and managing licensable hardware devices. This pa devices and licenses associated with this system. From this page, you can manage (import, delete, replace, or expo associated with the discovered hardware. To manage changes to or purchase new licenses visit the License Self-Service Portal | |
| Network User Authentication URAC Firmware Update Sessions Hardware Batteries Fans CPU Front Panel Network Devices Power Supplies Removable Flash Media | Status Device Device Description Device Options | |
| Pernovatie Frlash Media Storage Physical Disks Virtual Disks Controllers Enclosures | OK Description: IDRAC7 Enterprise Evaluation License Entitlement ID GKP4elyP2zaCdFISG5NWDYuh License Type Evaluation License Options: Select | 2011-11-05T15:00:00 |
| Do you want to open | o or save AMMM002_GKP4eiyP2zaCdFISG5NWDYuh.xml (7.61 KB) from 172.23.23.62? Open Save | Cancel × |

6.2 RACADM

To export a license by using RACADM:

[SH7757 ~]\$ racadm license help export

License export - Exports licenses from various devices on the server.

Usage Examples

racadm license export -u <username> -p <password> -f <license file name> -l
<NFS/CIFS share> -t <transaction ID>

racadm license export -u <username> -p <password> -f <license file name> -l
<NFS/CIFS share> -e <entitlement ID>

racadm license export -u <username> -p <password> -f <license file name> -l
<NFS/CIFS share> -c <FQDD>

racadm license export -u <username> -p <password> -f <license file name> -l
<NFS/CIFS share> -c <FQDD> -e <entitlement ID> -t <transaction ID>

Valid Options

| -c | FQDD name of the device from where the license file has to be exported. |
|----|--|
| -e | Entitlement ID of the license to be exported. |
| -t | Transaction ID of the license to be exported. |
| | Note : To locate the transaction ID, Type RACADM on the License page. The ID is displayed. It can also be located by expanding the plus sign (+) next to the license in the GUI. |
| -1 | Network share location (see "Usage Examples" for NFS or CIFS) or local file system to which the license file must be exported. |
| -f | Destination license file name. If a filename is not entered, the license file is |
| | assigned <service tag="">_<entitlement id="">.xml</entitlement></service> |
| -u | Username of the system where the file will be exported. |
| -р | Password of the user on the system where the file will be exported. |

Usage Examples

- Export license to a NFS using transaction ID. In this case, transaction 27: racadm license export -f License.xml -l 192.168.2.140:/licshare -t 27
- Export license to a CIFS specifying the entitlement ID. In this case, abcdxyz: racadm license export -u admin -p passwd -f License.xml

-1 //192.168.2.140/licshare -e abcdxyz

Export license to a CIFS specifying the FQDD. While using the -c option and exporting license(s) from a device, more than one license file may be exported. Therefore, if a file name is given, an index will be appended to the end of the file name such as LicenseFile0.xml, and LicenseFile1.xml. In this case, the device is Embedded iDRAC:

- racadm license export -u root -p calvin -f LicenseFile.xml
-1 //192.168.2.140/licshare -c idrac.embedded.1

6.3 WS-Man

To export a license by using WS-Man:

```
winrm i ExportLicense
```

```
"cimv2/root/dcim/DCIM_LicenseManagementService?SystemCreationClassName=DCIM_SPCo
mputerSystem+CreationClassName=DCIM_LicenseManagementService+SystemName=systemmc
+Name=DCIM:LicenseManagementService:1" -u:root -p:calvin -
r:https://172.27.99.61/wsman -SkipCNcheck -SkipCAcheck -encoding:utf-8 -a:basic
-file:c:\xml_files\license_management_export_license_idrac.xml
# ExportLicenseToNetworkShare Method (NFS / Linux Share)
winrm i ExportLicenseToNetworkShare
"cimv2/root/dcim/DCIM_LicenseManagementService?SystemCreationClassName=DCIM_SPCo
mputerSystem+CreationClassName=DCIM LicenseManagementService+SystemName=systemmc
```

```
+Name=DCIM:LicenseManagementService:1" -u:root -p:calvin -
r:https://172.27.99.61/wsman -SkipCNcheck -SkipCAcheck -encoding:utf-8 -a:basic
file:c:\xml files\license management export license to network share idrac nfs.x
ml
# ExportLicenseToNetworkShare Method (CIFS / Windows Share)
winrm i ExportLicenseToNetworkShare
"cimv2/root/dcim/DCIM LicenseManagementService?SystemCreationClassName=DCIM SPCo
mputerSystem+CreationClassName=DCIM LicenseManagementService+SystemName=systemmc
+Name=DCIM:LicenseManagementService:1" -u:root -p:calvin -
r:https://172.27.99.61/wsman -SkipCNcheck -SkipCAcheck -encoding:utf-8 -a:basic
file:c:\xml files\license management export license to network share idrac cifs.
xml
# DeleteLicense Method (IDRAC.Embedded.1)
winrm i DeleteLicense
"cimv2/root/dcim/DCIM LicenseManagementService?SystemCreationClassName=DCIM SPCo
mputerSystem+CreationClassName=DCIM LicenseManagementService+SystemName=systemmc
+Name=DCIM:LicenseManagementService:1" -u:root -p:calvin -
r:https://172.27.99.61/wsman -SkipCNcheck -SkipCAcheck -encoding:utf-8 -a:basic
-file:c:\xml files\license management delete license idrac.xml
```

7 Restoring a license

To restore a one-one license, the license key that was exported can be imported from the iDRAC GUI, RACADM or WS-Man.

7.1 Validating End User License Agreement (EULA) compliance

To validate license compliance and verify licenses that are installed for all your iDRAC, Dell EMC provides several tools:

- For the one-one small business customers:
 - o iDRAC GUI
 - RACADM command line
 - o WS-Man

Use one of the above interfaces to view the installed license(s).

- For the one-to-many larger business customers:
 - Dell License Manager (DLM)
 - o Dell OpenManage Essentials (OME) or DLM

To check your system's compliance by using DLM, see Viewing license status and compliance information.

To prevent systems from being out of compliance, Dell EMC recommends binding the Service Tag to the entitlement. See <u>Binding or deploying from Dell Online</u>.

8 Using the Dell EMC OpenManage License Manager

Dell EMC License Manager is a one-many license deployment and reporting tool for iDRAC and other licenses. DLM can deploy and back up licenses, and report about licensing status, including the currently enabled iDRAC feature level. The new features in DLM are managing licenses for volume binding and distribution by connecting to Dell Online and normalizing a unique password for the 'root' user on the multiple iDRAC9 servers.

8.1 Obtaining and installing DLM

To download the latest version of DLM, go to: <u>http://www.dell.com/learnmore/iDRAClicenses</u>.

DLM is compatible with Microsoft Windows 10, Windows 8, Windows 7, Windows Vista, Windows Server 2016, Windows Server 2012 R2, Windows Server 2012, and Windows Server 2008 R2. The .NET 4.5 Client Profile and Windows Remote Management (WinRM) 2.0 or later are required.

To install DLM, start the downloaded installer and complete the on-screen instruction.

8.2 Inventorying licensable systems

To use DLM, you must discover and inventory your licensable 14th, 13th, or 12th generation iDRACs. To discover your systems' iDRACs:

- 1. Start License Manager.
- 2. In the left pane, click **Systems**.
- 3. In the working pane, click **Run Discovery and Inventory**.

| ew Help | | | | | | Tasks: R | tunning (0) | Completed |
|---------|--|------------------------------------|--|---------------------------------------|-------------------|---|-----------------|----------------|
| | Systems | | | | | | | ? |
| | Systems | | | | | | | |
| ents | System Invento | System Inventory Last inventory: N | | | entory: N/A | | | |
| | Run Discovery and | Inventory | Deploy Associated Licenses | Save Report De | elete | Group | By: (None) | • |
| | System Name | Y | Management Controller | System Model | Upgrade Available | Service Tag <table-cell> 🍸</table-cell> | Evaluation Ins | talled |
| | 5QQ56Z1 | | idrac-5QQ56Z1 (100.96.27.14) | PowerEdge R320 | | 5QQ56Z1 | | En |
| | 65L7F02 | | idrac-65L7F02 (100.96.26.118) | PowerEdge R420 | | 65L7F02 | | En |
| | 74NLNW1 | | idrac-74NLNW1 (100.96.24.210) | PowerEdge M420 | | 74NLNW1 | | En |
| | vahaline | | idrae (100 96 27 101) | DowerEdge D730 | | 4730042 | | En |
| | | | | | | | | |
| | Management Cor | ntroller | CMC-12D508 CMC-12D508 | 2 Discover | ry Address | E | interprise Perp | etual |
| | System Name Management Cor Model | ntroller | CMC-12D508 CMC-12D508 PowerEdge FX | 2 Discover 2 Purchas 2s Current | | E | interprise Perp | etual |
| | System Name Management Cor Model Service Tag | ntroller | CMC-12D508 CMC-12D508 | 2 Discover 2 Purchas 2s Current | ed License | E | interprise Perp | etual |
| | System Name Management Cor Model Service Tag Installed License | ntroller | CMC-12D508 CMC-12D508 PowerEdge FX | 2 Discover 2 Purchas 2s Current | ed License | E | interprise Perp | etual |
| | System Name Management Cor Model Service Tag | ntroller | CMC-12D500 CMC-12D500 PowerEdge FX 12D500 | 2 Discover 2 Purchas 2s Current | ed License | E | interprise Perp | etual prise |

4. In the **Discovery / Inventory** dialog box, click **Add Range or IP** and type the IP address or range name along with the iDRAC IP address range or individual iDRAC address.

5. Type IPs of all iDRAC IPs, and click **Next**.

| | covery / Inventory Wi | | | | × |
|---|-----------------------|--------------------------------|---------------|-----------------|---------------|
| | ep 1 01 5. Select in | Addresses | | | |
| Add and select the IP addresses to perform discovery/inventory of the Management controllers. | | | | | k. |
| IP Addresses and Ranges | | | | | |
| Ac | id Range or IP Edit | Remove Selected | | | |
| | Range / Address Name | Y Start / Individual Address Y | End Address | Subnet Mask 🛛 🌱 | Description ¥ |
| | DellLab | 100.96.23.0 | 100.96.28.255 | | |
| | | | | | |
| | | | | | Next Cancel |

| | ellLab | | |
|--|------------------------|-----------------------------|------------------|
| Start Address: End Address: Subnet Mask: 100.96.23.0 100.96.28.255 Individual Address (IPv4, IPv6, or hostname) Text file with IP addresses Browse | | ndividual Address, or a Lis | st of Addresses: |
| Individual Address (IPv4, IPv6, or hostname) Text file with IP addresses Browse | | End Address: | Subnet Mask: |
| Text file with IP addresses | 100.96.23.0 | 100.96.28.255 | |
| | p test me mutti agai | | Browse |
| | escription (optional): | | |
| | escription (optional): | | |
| | escription (optional): | | |

6. Type your iDRAC credentials, verify your communication settings, and then click **Next**.

| Discover / Invent | ory Wizard 🛛 🗶 | | | | |
|---------------------------------------|--|--|--|--|--|
| Step 2 of 3: IF | P Scan Settings | | | | |
| Enter your iDRA stored after the o | Enter your iDRAC credentials and confirm Discovery/ Inventory communication settings. Passwords will not be stored after the discovery/inventory operation is complete. | | | | |
| Credentials | | | | | |
| iDRAC Username: | root | | | | |
| iDRAC Password: | •••••• | | | | |
| Retries: 3 | CMP) sful ping before attempting inventory | | | | |
| Timeout: 5 | js | | | | |
| Retries: 1 | Validate Certificate Name | | | | |
| Timeout: 30 | Validate Certificate Authority | | | | |
| Port: 443 | | | | | |
| | | | | | |
| | <u>Back</u> <u>Next</u> <u>Cancel</u> | | | | |

7. Confirm your settings and click Run Discovery / Inventory.

| Discover / Inventory Wizard | | < |
|---|--|---|
| Step 3 of 3: Confirm Settings | 3 | |
| Confirm your discovery/inventory settings. | | |
| Discovery / Inventory IP Ranges | | |
| DellLab: 10.36.0.1 - 10.36.0.254 | | |
| Discovery / Inventory Individual IPs | | |
| None selected. | | |
| iDRAC Credentials | | |
| Username: root | | |
| Ping Settings | | |
| Require successful ping before attempting inventory: On | | |
| Ping retries: 3 Ping timeout: 5 seconds | | |
| WS-Man Settings | | |
| WS-Man retries: 1 | Validate certificate name: Off | |
| WS-Man timeout: 30 seconds WS-Man Port: 443 | Validate certificate authority: Off Validate certificate revocation list: Off | |
| | | |
| Show task pane after launch | Back Bun Discovery / Inventory Cancel | 5 |

The status of Discovery/Inventory progress is displayed on the **Tasks** page. You may view the inventoried systems or iDRACs on the **Systems** page when complete.

Note: The factory-installed licenses are not retrieved during the discovery and inventory of iDRAC 9 systems. Therefore, the iDRAC9 licenses are not listed on the **Licenses** page.

9 Managing licenses for volume binding

This feature enables the user to bulk-bind the unbound license entitlements to the discovered systems and then deploying the licenses on those systems by using their Dell Online account information in very quick and simple manner.

Managing the licenses for volume-binding is a two-step process.

- 1. Type the OTP that you can get from the Dell Online.
- 2. Click **Action**→**Bind Licenses** for binding and deploy the licenses on the servers. The user can also select to only bind the license and deploy them later.

9.1 Connecting to Dell Online

1. Click Action→Connect to Dell Online.

| Connect to Dell Online | x |
|--|-------------------|
| Enter Connection Credentials | ? |
| In order to connect to Dell Online from License Manager, you will need an OTP token (one time pass). Yo one here: <u>Dell Online</u> | ou can obtain |
| Then enter the OTP token below. This token is valid for only 30 minutes. | |
| If you select to "Save Connection Credentials", License Manager can continue to use those connection of they expire. When they do, you will be prompted for an OTP token again. | credentials until |
| If you select to 'Automatically connect on start up', License Manager will not keep the connection creden will be prompted for an OTP token when License Manager starts. | tials and you |
| Credentials | |
| OTP (One Time Password): | |
| Options | |
| Save Connection Credentials | |
| ☑ Automatically connect on start up | |
| Enable Proxy Settings | |
| Next | Cancel |

Click **Dell Online** to go to the login page and type the username and password to receive the OTP.
 Click **Dell Online** to go to the login page and type the username and password to receive the OTP.

| 🖉 😑 Login Dell US | × (+ | | | |
|-------------------------------|---|---|-------------------|-------|
| (Del Inc (US) https:// | www.dell.com/ldentity/global/Login/588746a6-ed4 | tc-4730-976d-26faea86ee25?pn=Login&feir=1 | C Q Search | h 👌 🗐 |
| 📓 Most Visited 🧶 Getting Star | ted | | | |
| | <u>oeu</u> | | | |
| | | | | |
| | Sign In | | Create an Account | |
| | | Show password | Create Account | |
| | Sign In Forgot your password? |) | | |
| | Or, Sign In With: | | | |
| | f 8 in 🔽 | | | |
| | | | | |

3. Click Sign in. An OTP is sent to the registered mobile phone.



Please find the generated OTP, valid only for 30 minutes.

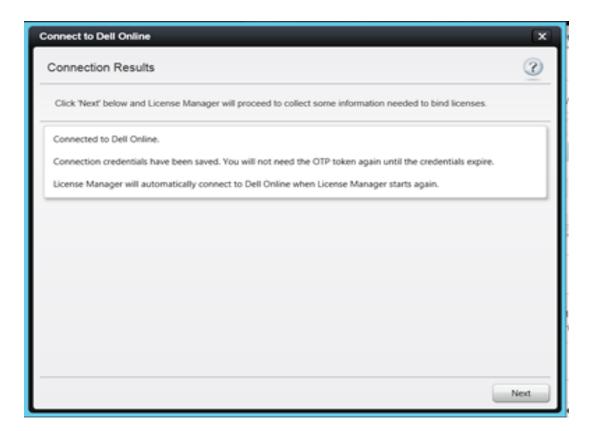
4. Type the OTP. Click Enable Proxy, if required.

5. To save the credentials, click **Save Connection Credentials**. It is sufficient to type OTP only once.

| Connect to Dell Online | | | × |
|---|---------------------------|----------------------------|------------------------------|
| Enter Connection Credentials | | | ? |
| In order to connect to Dell Online from Licer one here: <u>Dell Online</u> | nse Manager, you will i | need an OTP token (one t | time pass). You can obtain |
| Then enter the OTP token below. This token | n is valid for only 30 mi | nutes. | |
| If you select to "Save Connection Credentia they expire. When they do, you will be prom | | | connection credentials until |
| If you select to 'Automatically connect on st will be prompted for an OTP token when Lic | | er will not keep the conne | ection credentials and you |
| Credentials | | | |
| OTP (One Time Password): | | | |
| Options | | | |
| Save Connection Credentials | Proxy IP: | | Port: 80 |
| Automatically connect on start up | User Name: | | 1 |
| Enable Proxy Settings | Password: | ••••• |] |
| | | | Next Cancel |
| | | | |

6. To view the connection status, click **Next**.

Review the message on the wizard to know the status of connection result. If the connection is successful, click **Next** to see all the unbounded entitlements.



| Connect to Dell O | inline | x |
|-------------------|--|--|
| Loading Comp | 3 | |
| Summary of the p | purchased licenses that are unbound. | |
| Entitlement ID Y | License Type 🛛 🐨 | Description |
| FD0000000002265 | IDRAC7 Blades | 12G IDRAC7 Enterprise for Blades |
| DE00000021486404 | Stomp | DF License CMC FX2 |
| FD0000003962656 | Server Configuration for OpenManage Essentials | OpenManage Essentials, Server Configuration Management |
| DE00000116108357 | VRTX CMC | PowerEdge VRTX Enterprise Management License Upgrade |
| FD0000006587404 | IDRAC8 | IORAC8 Enterprise |
| DE00000191404221 | IDRAC9 | IDRAC9 Enterprise |
| DE00000193449702 | IDRAC9 | IDRAC9 Enterprise |
| DE00000193472759 | IDRAC9 | IDRAC9 Enterprise |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | Close |

7. If the Entitlements are already bound to a Service Tag, you can download that entitlement from the **Entitlement** page.

If an entitlement is not bound, click **Action** \rightarrow **Bind Licenses** to bind the licenses to a Service Tag. Go to <u>Binding or deploying from Dell Online</u> to explore this feature.

You can download the licenses of bounded entitlement from **Entitlement** page and deploy them. Entitlement page contains all the entitlements which are associated with that Dell Account. For downloading the license, go to the **Entitlement** page and select those bounded entitlements that you want to download. Click **Download** and click **OK**.

LLEMC LICENSE MANAGER - 🗆 X Actions View Help Connected to Dell Online Tasks: Running (0) Completed (1) Systems Entitlements Licenses Entitlement Inventory Entitlements Save Report | Download Bound Licenses Tasks Entitlement ID Y License Type V Description -Logs FD0000000002265 IDRAC7 Blades 12G IDRAC7 Enterprise for Blades E FD0000000188698 IDRAC7 IDRAC7 Enterprise IDRAC7 Enterprise E FD0000000188728 IDRAC7 E FD0000000188726 IDRAC7 **IDRAC7** Enterprise FD0000000188730 IDRAC7 IDRAC7 Enterprise FD0000000262809 IDRAC7 **IDRAC7** Enterprise DE0000004208837 IDRAC7 IDRAC7 Enterprise DE0000004208857 IDRAC7 **IDRAC7** Enterprise DE0000004211883 IDRAC7 **IDRAC7** Enterprise PowerEdge VRTX Enterprise Management License Upgrade, with FlexAddress for CMC FD0000000852633 VRTX CMC FD0000001592277 IDRAC7 **IDRAC7** Enterprise DE00000013759886 IDRAC7 **IDRAC7** Enterprise FD0000001777756 iDRAC7 **IDRAC7** Enterprise DE00000016215551 Stomp DF License CMC FX2 FD0000001777727 IDRAC7 **IDRAC7** Enterprise DE00000021486404 Stomp DF License CMC FX2 E FD0000001661931 Stomp DF License CMC FX2 C DE0000034990908 IDRAC8 IDRAC8 Enterprise

Note: You cannot download the unbounded license from the Entitlement page.

| | | | | | | | | Conne | cted to Dell | Online | Tasks: Runn | ing (0) | Complet |
|--------|---------------------|---------------------------|----------------------|---------------|-------------------|--|---------------------|--------------|--------------|---------|----------------|---------|---------|
| Tasl | s | | | | | | | | | | | | (|
| Tasi | Stat | JS | | | | | | | | | | | |
| Clea | Comp | leted | Tasks | Cancel S | elected Task | 6 | | | | | Group By | (Non | e) - |
| Status | ID | r Ta | isk | | Y | Summary | Y | Progress | Start Time | Y | End Time | Y | |
| | 6 | | | | | | | | | | | | |
| | 0 | Do | ownload I | licenses of 3 | 3 Entitlements | Download Entitler | ment Task completed | Complete | 5/19/2017 11 | 1:40 AM | 5/19/2017 11:4 | 1 AM | |
| Task | | | | | | Download Entitler | Lunimen | Complete | 5/19/2017 11 | 1:40 AM | 5/19/2017 11:4 | 1 AM | |
| | Resu | lts: I | | ask: Dow | | | Lunimen | Complete | 5/19/2017 11 | E40 AM | 5/19/2017 11:4 | 1 AM | |
| Resu | Resu | Its: I Execut | ID: 6 Ti tion Log | ask: Dow | rnload lice ¥ | nses of 3 Entit | lements | | Y | E40 AM | 5/19/2017 11:4 | 1 AM | |
| Resu | Resu Its Down | lts: I Execut ation | ID: 6 Ta tion Log | ask: Dow | vnload lice ** | nses of 3 Entit Result Download entitlem | Lunimen | '28 successf | A. | 1:40 AM | 5/19/2017 11:4 | 1 AM | |

The licenses are displayed under the **License** tab. See <u>Deploying licenses</u> to know more about deploying these licenses on the system.

9.2 Binding or deploying from Dell Online

After connecting to Dell online, click **Action→Bind Licenses** page.

The **Bind Licenses** page displays the license type that is associated with your Dell Account and not bounded to any Service Tag.

1. Select the license type and click Next.

The list of systems on which you can deploy that licenses is displayed. All those systems where users can install the he license and system has either no licenses or lower licenses than selected Licenses will show up on the next page.

For example, if you select iDRAC8 Enterprise, next page will provide all the iDRAC8 devices (monolithic/modular) which do not have a license or Express license, or Evaluation licenses installed on their system pear.

| Select the License Type Select the license type from the list below. License Manager will get any unbound entitlements of that type and find the systems that can be bound to the entitlement. The next page will give you the options to select the systems to bound with selected type of entitlement. Select type: License Description Y License Count Y 12G IDRAC7 Enterprise for Blades 1 DF License CMC FX2 1 | 0 |
|---|-----|
| the systems that can be bound to the entitlement. The next page will give you the options to select the systems to be bound with selected type of entitlement. Select type: License Description Y License Count Y 12G IDRAC7 Enterprise for Blades 1 | ?) |
| License Description Y License Count 12G IDRAC7 Enterprise for Blades 1 | |
| 12G IDRAC7 Enterprise for Blades 1 | |
| | |
| DF License CMC FX2 1 | |
| | |
| DRAC8 Enterprise 1 | |
| DRAC9 Enterprise 3 | |
| OpenManage Essentials, Server Configuration Management 1 | |
| PowerEdge VRTX Enterprise Management License Upgrade, with FlexAddress for CMC 1 | |
| | - 1 |
| | - 1 |
| | - 1 |
| | - 1 |
| | - 1 |
| | - 1 |
| | - 1 |
| | - 1 |
| | - 1 |
| | = |
| Next Cano | el |

- 2. If you do not want to deploy the licenses on the servers after binding, you must clear the **Deploy Licenses after binding** check box. These licenses appear in the Licenses section so that you can deploy them in future. For more information, see **Deploying licenses**.
- 3. When prompted, type the iDRAC credentials.
- 4. On the **Summary** page, click Run to bind or deploy the licenses to the system.

| Change Server Passwo | ord | | | X |
|---|---|---|---|---------------------------|
| Change Gerrer Passin | | | | |
| Step 3 of 4: Enter 1 | New Password | | | ? |
| Enter the new passwor devices will be changed is changed. | d and confirm the new passw d to the new password. Licer | word for the "root" user. Ise Manager will not str | The unique password of all one the passwords after the | the added server password |
| Password | | | | |
| Enter New Password | ••••• | | | |
| Confirm Password: | ••••• | | | |
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| | | | | |
| | | | | |
| | | | Back Next | Cancel |

| Bind Licenses | | | | | | × |
|------------------|-----------------|-----------------|----------------|--------------|--------|--------|
| Summary of B | inding Assignr | ? | | | | |
| | | Sta | tistics | | | |
| | Systems | | | Entitle | ments | |
| | Total 4 | | | Total | 1 | |
| , | Assigned 1 | | | Assigned | 1 | |
| Not./ | Assigned 3 | | N | lot Assigned | 0 | |
| Entitlement ID Y | System Name Y | Service Tag 🛛 🍸 | System Model Y | | | |
| FD0000006587404 | WIN-109FKGQMCQE | CMXJ862 | PowerEdge R430 | | | |
| | | | | | | |
| Save Report | | | | Back | Finish | Cancel |

5. Go to **Tasks** page to track the progress of the binding or deployment. The user can track the progress in the task status section. If the task is completed you can view the system licenses.

| DOLLEMC LICER | ISE MANAGER | | | - • × |
|-------------------|---|--|-------------------------|---------------|
| Actions View Help | | Connected to Dell Onl | line Tasks: Running (0) | Completed (1) |
| Systems | Tasks | | | 3 |
| Entitiements | Task Status | | | |
| Tasks | Clear Completed Tasks Cancel Selected Task | | Group By: (None | |
| Logs | Status ID Y Task Y 2 Binding and Deployment of WIN-I09FKGQMCQE systems | | Progress Start Time | Y Er III* |
| | Task Results: ID: 2 Task: Binding and Deployment of W Results Execution Log 5/18/2017 10:57:33 AM 13017 Binding/Deployment started. 5/18/2017 10:57:40 AM 13017 Bind operation was successful 5/18/2017 10:57:40 AM 1302 Institumentinfo updated for Institem | • | | |
| | 5/18/2017 10:57:40 AM 11302 License of Entilementation opposite for entitlement 5/18/2017 10:57:40 AM 11302 License initialities of Entitiementation 5/18/2017 10:57:44 AM 11300 License initialities of the second 5/18/2017 10:57:45 AM V3010 WS-Management communication e 5/18/2017 10:57:56 AM V3013 System information retrieved on: 10 | 587404 imported successfully. 00006587404 on 100.96.26.88 stablished with system: 100.96.26.88 | | |

10 Importing licenses

After getting your licenses from the License Management Portal, you may import them into DLM for deployment. To import licenses:

1. On the Licenses page, click Import Licenses.

| LIGENOL | MANAGER | | | | | | | |
|---------|------------------|-------------------------------|--------------|---------------------|-------------------------------|-----------------|--------------|-----------------|
| Help | | | | | | Ta | sks: Running | g (0) Completed |
| | censes | | | | | | | ? |
| 기브 | censes | | | | | | | |
| ιL | icense Inven | tory | | | | | | |
| | mport Licenses | Export Archive Deplo | y Licenses 🔻 | Save Report De | lete | | Group By: | (None) 🔹 |
| | Description | Y | Term 🍸 | Bound Service Tag 🍸 | Deployed Y | Matching System | Y Origin | Date Purct |
| F | IDRAC7 Enterp | xise License | Perpetual | GG4ZWX1 | Yes | Yes | Retrieved | 6/24/2015 3:57 |
| | DRAC7 Enterp | vrise License | Perpetual | 4LBKNW1 | Yes | Yes | Retrieved | 4/4/2013 12:38 |
| | iDRAC7 Enterp | xrise License | Perpetual | J9B1XX1 | Yes | Yes | Retrieved | 3/19/2015 6:16 |
| E | | | | | | | | |
| L | Entitlement ID - | s: VaX2i6jS8y1RZJbL7 VaX2i | 6jS8y1RZJbl | .7UoDRUxg Li | cense Feature License Mana | | | |

2. Select the license archives (compressed file) or license files (XML) you want to import and click **Open**. Multiple files must be selected at a time.

| Organize 👻 New folder | | | | #≣ - | | |
|--|-------------------------------------|--------------------|---------------|--------------|-------|---|
| 🔆 Favorites | Name | Date modified | Туре | Size | | |
| E Desktop | Q Dell_License_Archive_20111019.zip | 10/19/2011 5:26 PM | WinZip File | | 25 KB | |
| 😹 Downloads | MIAuK2bOYdYk9WfApKndcVGb.xml | 8/11/2011 10:24 PM | XML Document | | 8 KB | |
| Secent Places | R2VODI1TTJqYNbv3qsISCsaS.xml | 9/11/2011 8:25 PM | XML Document | | 8 KB | |
| | TeHxPNTTTDOG1ZQzQk8J7pVC.xml | 5/23/2011 11:58 AM | XML Document | | 8 KB | |
| 词 Libraries | uHMRbkYelqpbtF68AaYhm2OD.xml | 5/26/2011 3:42 PM | XML Document | | 8 KB | |
| Documents Music Fictures Fictures Fields EPGVMDMW07 (C:) Fields | ■ WD4qCKcof6m9ls6NHvLL8Z1S.xml | 6/10/2011 1:54 PM | XML Document | | 8 KB | |
| File na | me | | License Files | (*.zip, *.xm | 0 | - |

3. Review the license validation results and click **Import**.

| Imp | ort Licenses | | | × | | | | |
|--|---|------------------------------|---------------------------|-------------------|--|--|--|--|
| 3 Lic | enses Validated Successfully, 0 E | rrors, 0 Warnings, 0 Notices | | | | | | |
| | Validation Results | File Name | Description | Entitlement ID | | | | |
| | V Successfully validated license. TeHxPNTTTDOG1ZQzQk8J7pVC iDRAC7 Enterprise License TeHxPNTTTDOG1ZQ: | | | | | | | |
| | Successfully validated license. uHMRbkYelqpbtF68AaYhm2OD iDRAC7 Enterprise Upgrade uHMRbkYelqpbtF68A | | | | | | | |
| | Successfully validated license. | WD4qCKcof6m9ls6NHvLL8Z1S | iDRAC7 Enterprise License | WD4qCKcof6m9ls6NF | | | | |
| | | | | | | | | |
| TeHxPNTTTDOG1ZQzQk8J7pVC Image: Colspan="2">OK Successfully validated license. Entitlement ID — TeHxPNTTTDOG1ZQzQk8J7pVC Description | | | | | | | | |
| | | • 050 | firmware update | rt <u>C</u> ancel | | | | |

The imported licenses are displayed.

11 Deploying licenses

After an inventory of licensable systems is complete and licenses are imported, they can be deployed. To deploy licenses:

1. On the Licenses page, from the Deploy Licenses drop-down menu, select Automatically Deploy Licenses.

All the licenses (not already installed) are deployed to systems in the inventory based on their service tag. Alternatively, you can select individual licenses to deploy from the **License** page and select **Deploy Selected Licenses** or select systems from the **System** page and click **Deploy Associated Licenses**.

| | ENSE MANAGER | | | | - • × |
|-------------------------------------|--|---|---|--|----------------------------|
| Actions View Help | | | | Tasks: R | unning (0) Completed (1) |
| Systems Licenses Entitlements | Licenses License Inventory | | | | 3 |
| Tasks | Import Licenses Export Archive | | Delete | Group | By: (None) 🔻 |
| Logs | Description | Deploy Selected Licenses Automatically Deploy Licenses | ag Y Deployed Y | Matching System Y Or | igin 🍸 Date Purct 🏢 🗸 |
| | iDRAC7 Enterprise License | Perpetual GG4ZWX1 | Yes | Yes Re | etrieved 6/24/2015 3:57 |
| | DRAC7 Enterprise License | Perpetual 4LBKNW1 | Yes | Yes Re | trieved 4/4/2013 12:38 |
| | iDRAC7 Enterprise License | nterprise License Perpetual J9B1XX1 | | Yes Re | trieved 3/19/2015 6:16 |
| | | | v | <u>.</u> | |
| | License Details: VaX2i6jS8y1R2 | LJbL7UoDRUxg | | | |
| | Entitlement ID Description Term Bound Service Tag Upgrade ID Expiration Date Purchased | iDRAC7 Enterprise License Perpetual GG4ZWX1 N/A N/A | License Feature License Mani RACADM CL WSMAN Prot SNMP GET/h Auto-Discove USC firmware Inband firmware | gger interface ocol Stack IIB and Alerts ry e update | |

| | Man | age Licenses | | | | × |
|---|-----|-----------------------------|---------------------------|---------------------------|-----------------|------------|
| I | Cho | oose the licenses to deploy | to the specified systems. | | | |
| I | | Operation Status | Entitlement ID | License Description | System | Service Ta |
| I | V | Ready for deployment. | TeHxPNTTTDOG1ZQzQk8J7pVC | iDRAC7 Enterprise License | Marklar | 005H52N |
| L | | Ready for deployment. | OoB1TF1p4e9rCZhc3zhwZUQp | iDRAC7 Enterprise License | WIN-V4FOD81VFK9 | ABC1234 |
| L | V | Ready for deployment. | PZRIk22YYtfrBls6Co4dr6r4 | iDRAC7 Enterprise License | Murphy | M323456 |
| | | | | | | |
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| | | | | | | |
| | _ | | | | Next | Cancel |
| | | | | | Next | Cancel |

3. Type your credentials and verify your communication settings. Click Next.

| Manage I | icense | 5 | x |
|----------|----------|--|----|
| Manag | e Licer | nses | ? |
| | | C credentials and confirm communication settings. Passwords will not be stored after the license omplete. | |
| Credent | ials | | |
| IDRAC Us | ername: | root | |
| IDRAC Pa | issword: | ••••• | |
| WS-Mar | Setting | gs | |
| Retries: | 1 | Validate Certificate Name | |
| Timeout: | 30 | Validate Certificate Authority | |
| Port: | 443 | Validate Certificate Revocation List | |
| Task Se | ttings | | |
| | - | e after launch | |
| _ | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | <u>Back</u> <u>Next</u> <u>Canc</u> | el |

4. After deployment starts, you can monitor the progress on the **Tasks** page. Detailed logs of license operations are retained and displayed on the **Logs** page.

12 Backing up licenses

Dell EMC License Manager retains licenses imported from the file system and will automatically retrieve perpetual licenses during the Discovery or Inventory process.

Also, DLM has the ability to save a complete license archive to the file system. The archive is in compressed file format, containing XML license files named by Entitlement ID. The license archive may be directly imported into any instance of DLM for redeployment, or the individual licenses can be extracted and redeployed individually. To export an archive:

| 1. | On the | Licenses | page, | click | Export A | Archiv | e. |
|----|--------|----------|-------|-------|----------|--------|----|
| | | | | | | | |

| | NSE MANAGER | | | | | | | |
|---------------|-----------------------------|---------------------|------------------------|---|---|-------------|-------------------|--|
| ons View Help | | | | | Та | sks: Runnin | g (0) Completed | |
| Systems | Licenses | | | | | | ? | |
| icenses | Licenses | | | | | | | |
| ntitlements | License Inventory | | | | | | | |
| asks | Import Licenses Export Arch | ive Deploy Licenses | - Save Report Del | ete | | Group By: | (None) 🔹 | |
| ogs | Description | Y Term Y | Bound Service Tag Y | Deployed Y | Matching System | Y Origin | T Date Purct | |
| .30 | ☑ IDRAC7 Enterprise License | Perpetual | GG4ZWX1 | Yes | Yes | Retrieved | d 6/24/2015 3:57 | |
| | DRAC7 Enterprise License | Perpetual | 4LBKNW1 | Yes | Yes | Retrieved | d 4/4/2013 12:38 | |
| | DRAC7 Enterprise License | Perpetual | J9B1XX1 | Yes | Yes | Retrieved | d 3/19/2015 6:16 | |
| | | | anu mana | | | | | |
| | License Details: VaX2i6jS8 | y1RZJbL7UoDRUx | 9 | | | | | |
| | | | | | | | | |
| | Entitlement ID | | Li o o bitto xg | cense Feature | | | | |
| | Description | iDRAC7 Enter | prise License • | cense Feature License Mana RACADM CLI | | | ſ | |
| | | iDRAC7 Enter | - Perpetual GG4ZWX1 | License Mana RACADM CLI WSMAN Proto | ger interface col Stack | | - | |
| | Description | iDRAC7 Enter | GG4ZWX1 | License Mana RACADM CLI | ger interface col Stack IB and Alerts | | | |

2. Confirm the export file location and name and click **Save**.

| Specify Archive File | ers > Public > Public Documents > | | - 4 Search | Course of | - × |
|---|-----------------------------------|--|------------|-----------|------------|
| | w folder | casper • incenses • Export | • + Search | EI • | |
| Favorites Desktop Downloads Recent Places Libraries Documents Music Pictures Videos Videos EPGVMDMW0 Network | Name 7 (C:) | Date modified No items match your searc | Type h. | Size | |
| File <u>n</u> ame: | Dell_License_Archive_20111209.zip | | | | - |
| Save as type: | License Archives (*.zip) | | | | 2 |
| Hide Folders | | | Sav | e Cance | el 🛛 |

13 **Restoring licenses**

Restore the licenses by using the

in Deploying Licenses.

Reinventory the iDRACs 1 Import License Archives Restoring iDRAC9 license on process for deploying licenses specified 14G PowerEdge 3 servers 2 **Restore Licenses**

Reinventory the iDRACs on which the licenses must be restored, as specified in the subsection Inventorying Licensable Systems. This will ensure DLM does not consider the licenses to be already deployed.

If the licenses to restore are not already present in DLM (visible in License view), import the license archives or license files as specified in Importing Licenses. Licenses from a backup archive are processed identically to those obtained from the licensing portal.

14 Viewing license status and compliance information

Dell EMC License Manager allows you to view a variety of information on licensable systems on the **Systems** page.

| ems | | | | | | | | | | | 0 |
|-------------|---|----------------------------|--------------------|-------------|-------------------------------------|---|------------|----------------------|----------------------|------------------------|--|
| nses | Systems | | | | | | | | | | - |
| STRUCTURE . | System Inventory | | | | | | | | | Last inventory: 5/1 | 1/2017 12:39 P |
| lements | Run Discovery and Inventory | Deploy Associated Licenses | Save Report Delete | | | | | | | Group By: (| None) |
| s | | | | | | | | | | | |
| | System Name | Y Management Controller | | | | Evaluation Installed | | Purchased License Y | | Additional Information | |
| | MohanT630 | idrac (100.96.24.35) | PowerEdge T630 | | 27DHH32 | | Enterprise | Enterprise Perpetual | 2 Licenses Installed | | 5/11/2017 12: |
| | CMSA13GDEV | idrac (100.96.23.10) | PowerEdge R730 | | FQ68R42 | | Enterprise | Enterprise Perpetual | 2 Licenses Installed | | 5/11/2017 12: |
| | ubuntu | idrac (100.96.26.165) | PowerEdge R430 | | CP39562 | | Enterprise | Enterprise Perpetual | 2 Licenses Installed | | 5/11/2017 12: |
| | WIN-02GODDHDJTC | IDRAC (100.96.24.45) | PowerEdge M640 | | NA | License is expired. | Enterprise | None | | | 5/11/2017 12: |
| | WIN-02GOODHDUTC | IDRAC (100.96.27.116) | PowerEdge FC640 | | FC640PT | | Express | Enterprise Perpetual | 5491PX_rajshekar_p | | 5/11/2017 12: |
| | WIN-13V6A7QIG32 | idrac (100.96.26.167) | PowerEdge R730xd | | CNLM862 | | Enterprise | Enterprise Perpetual | 2 Licenses Installed | | 5/11/2017 12.3 |
| | WN-1C89A2F38k0 | idrac (100.96.26.174) | PowerEdge R430 | | CMXLH62 | | Enterprise | Enterprise Perpetual | 2 Licenses installed | | 5/11/2017 12: |
| | WIN-2CP5QKK70TR | idrac (100.96.26.164) | PowerEdge R430 | | CP2LH62 | | Enterprise | Enterprise Perpetual | 2 Licenses Installed | | 5/11/2017 12: |
| | WIN-A52068NR6GM | idrac (100.96.26.137) | PowerEdge R630 | | 56DHH32 | | Enterprise | Enterprise Perpetual | 2 Licenses Installed | | 5/11/2017 12: |
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The information can be sorted, filtered, and grouped as required.

- To sort a column, click the column header.
- To apply a filter, pause the pointer over the column header, click the filter icon when it appears, and enter the filter criteria.
- To group based on a column, select the column name in the Group By box.
- The **Upgrade Available** column indicates that a license is ready for deployment. These licenses can be deployed using the steps in <u>Deploying licenses</u>.
- The **Evaluation Installed** column indicates if an evaluation license is active or has expired. Systems with an evaluation license installed will require a perpetual license to retain the functionality being evaluated after the evaluation license expires.
- The Current License column indicates the currently active license level on the system. For example, you can use this grouping to locate which systems are at the Express-license level and could benefit from an upgrade.
- The **Purchased License** column specifies the highest perpetual license class bound to a system. Both installed licenses and licenses available for deployment are included in this calculation.

If DLM detects that a Perpetual license is installed on more than one system, a compliance warning is displayed in the **Additional Information** column on the **Systems** page. The systems can be sorted by

installed Entitlement ID in order to determine which systems may be out of compliance with a particular license.

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Dell EMC License Manager allows you to view a variety of information on licensable systems on the **Systems** page.

The information can be sorted, filtered, and grouped as required.

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| 15 | Frequently Asked Quest | ions (FAQ) |
|----|---|--|
| | How do I transfer the iDRAC license to a | 1. Log in to the License Management Portal. |
| | new machine? | 2. Click the Manage Licenses tab. |
| | | 3. In the Search box, type the Service Tag of the system the license is currently installed on. |
| | | The license is displayed in the data grid. |
| | | Click Unassign to notify Dell EMC that the license will no longer be used on the old system. |
| | | Click the Activate License tab. The license that you just unassigned should be visible. |
| | | 6. Click Assign . |
| | | Type the Service Tag of the new system where you want to install the license. |
| | | Click Download or Send Email to get the new license key. |
| | | On the old system, remove the old license key by using the iDRAC GUI or command line tools. |
| | | 10. On the new system, install the newly downloaded license using the iDRAC GUI or command line (link to iDRAC usage section). |
| | Why is the license bound to a service tag? | Licenses are bound to a Service Tag to help identify which servers have what feature levels, which can aid in auditing and accounting. |
| | What do I do if I have a motherboard failure? | If you have an iDRAC7 upgrade, your license key will need to be restored after a motherboard replacement. |
| | | You will need to back up and then restore your license key after a motherboard is replaced. See <u>Backing up</u> and restoring iDRAC license keys |
| | | Your license file is unique to your Service Tag. The Dell EMC authorized Service Provider will set the new motherboard Service Tag to the original one to ensure full iDRAC functionality after the motherboard replacement. |

| I just logged in to the online portal and can't find my license key? | 3. See <u>Using License Management Portal of Dell EMC</u> if you do not have an upgraded license backup available in order to download it again or have it emailed to you. If you have an iDRAC8 upgrade, the iDRAC license is automatically backed up and stored, and will be automatically replaced after a motherboard exchange. It may be that you have an iDRAC that does not have a physical license key and it is not necessary to download or import the key. In that case, you would not see a license in the license key portal. |
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| I just purchased a used PowerEdge server. How do I access the online License Management portal and iDRAC license keys for my server? | See <u>Using License Management Portal of Dell EMC</u> |
| The person who purchased all our servers just left my company. How do I remove his/her online access to my company's iDRAC licenses? | See <u>Removing User Access</u> . |
| What does digital licensing mean to me when I order a new PowerEdge Server? | Starting with 12 th Generation of PowerEdge servers, both iDRAC7 and iDRAC8 have the capability to enable features simply by entering a digital license. This option is not available with previous versions of iDRAC, since upgrades required opening the server and installing a hardware component. |
| My customer purchased a PowerEdge Server Express option. How do I obtain an evaluation license to try the Enterprise features? | Go to: <u>http://www.dell.com/us/enterprise/p/servers?redirect=1</u> Type iDRAC in the search field at the top of the page. |
| | 3. Locate and select the license you prefer. A link to the license will be sent to you via email. The evaluation license is good for 30 days. An email will be sent containing your entitlement and a link to www.dell.com/support/retail/lkm |
| | You will need your server service tag and Dell EMC generates a license that may be downloaded and imported into the iDRAC. This license is good for 30 days from the time it is imported into the iDRAC. |

| | Contact your Dell EMC sales representative to request an Evaluation license extension. |
|--|---|
| I lost my Enterprise license. How do I get it replaced? | If you have misplaced your original copy and need another license downloaded or emailed to you, see <u>Using License</u> <u>Management Portal of Dell EMC.</u> |
| How do I determine who has access to my company's licenses? | Use Online License Management Portal of Dell EMC to verify access. See <u>Using License Management Portal of Dell</u> <u>EMC</u> |
| How do I determine if a license was removed or installed on my iDRAC? | Import and delete actions are logged in the LC Log, which can be viewed in the iDRAC GUI or with the RACADM or WSMAN command-line tools. |
| I purchased my Dell server from a Value Added Reseller or other 3 rd party, who do I contact for support? | Please contact the VAR or other 3 rd party for support. |
| If I return a system to Dell that has a digital license key, what happens to the license? | The Letter of destruction will be read and agreed to by the customer: "You are requesting the return of certain software licenses to Dell for a refund, pursuant to the terms and conditions of sale and the return policy between you and Dell. You agree that you are relinquishing all rights to use or upgrade the software whose licenses you are returning and you agree that you have removed or destroyed all copies of such software and/or the license keys, as applicable. You understand that you will not be entitled to any support for software whose licenses you have returned. You are responsible for any claims arising from or related to your unauthorized use of the returned licenses. If you are returning on behalf of an organization, you confirm that you have appropriate authority to agree to these terms on behalf of the organization." |
| Does my PowerEdge server have an iDRAC license installed on it? | The initial offering of 12 th generation servers will be shipped with the "Express" or "Express for Blades" feature set enabled. Note that this feature set is enabled automatically, and no xml license file is actually present. You can see the word "Express or "Express for Blades" at the top of the login screen and also at the top of the iDRAC GUI. If you see "Express" "Express or "Express for Blades", then no Enterprise license has been installed. If you see "Enterprise", then you have either an Enterprise Evaluation or an Enterprise Perpetual License. |

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| PowerEdge R720 | Licenses Licensing The embedded license manager is responsible for discovering and managing licensable hardware devices. This page repres and licenses associated with this system. From this page, you can manage (import, delete, replace, or export) the digital licens discovered hardware. To manage changes to or purchase new licenses visit the License Self-Service Portal Status Device Device Description Device Options | | | |
| User Authentication IDRAC Firmware Update Sessions Batteries Fans CPU Front Panel Network Devices Power Supplies Removable Flash Media | Device IDRAC GKP4eiyP2zaCdFISG5NWDYuh | AMMM002 | | |
| Storage Physical Disks Virtual Disks Controllers Enclosures | OK Description: IDRAC7 Enterprise Evaluation License Entitlement ID GKP4elyP2zaCdFISG5NWDYuh Expiration License Type Evaluation License Options: Select | - 2011-11-05T15:00 | :00 | |
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