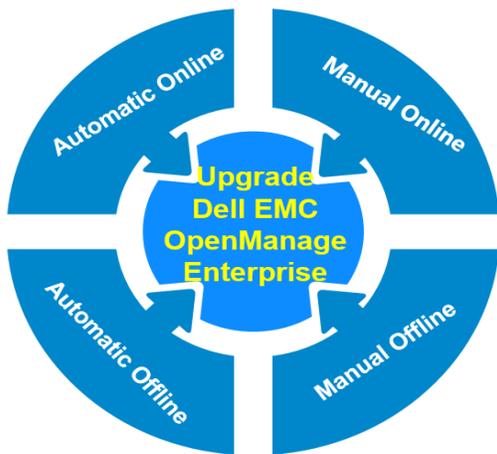


# Upgrade the Dell EMC OpenManage Enterprise version



## Abstract

This technical white paper provides step-by-step procedure to upgrade the OpenManage Enterprise appliance version using the online and offline repositories.

August 2019

## Revisions

Date	Description
August 2019	Initial release

## Acknowledgements

This paper was produced by the following members of the Dell EMC Enterprise Server Solutions team:

Author: Anil Kumar VKR

Support: Sheshadri PR Rao and Raghu (InfoDev)

Other: N/A

The information in this publication is provided "as is." Dell Inc. makes no representations or warranties of any kind with respect to the information in this publication, and specifically disclaims implied warranties of merchantability or fitness for a particular purpose.

Use, copying, and distribution of any software described in this publication requires an applicable software license.

Copyright © 2019 Dell Inc. or its subsidiaries. All Rights Reserved. Dell, EMC, Dell EMC and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

# Contents

Revisions.....	2
Acknowledgements.....	2
Contents.....	3
1 Executive Summary .....	4
2 Check for the availability of OpenManage Enterprise upgrades.....	5
3 Checklist—before initiating an upgrade to OpenManage Enterprise .....	6
4 Options available to upgrade OpenManage Enterprise .....	7
5 Upgrade OpenManage Enterprise using the Automatic Offline option .....	8
5.1 Download the Update packages to a shared Network File Share (NFS) .....	8
5.2 Permissible folder structure to upgrade OpenManage Enterprise offline on Windows and Linux .....	9
5.3 Create NFS share to perform offline upgrade of Dell EMC OpenManage Enterprise on Windows.....	10
5.4 Create NFS share to perform offline upgrade of Dell EMC OpenManage Enterprise on Linux.....	11
5.5 Configure MIME types of HTTP and HTTPS for upgrading OpenManage Enterprise .....	12
6 Upgrade OpenManage Enterprise using the Automatic-Online option .....	13
7 Conclusion.....	18
A Technical support and resources .....	19

# 1 Executive Summary

Keeping your business-critical operations and IT infrastructure up-to-date is key to providing seamless services. Updating your appliance to the latest available version enables you in this aspect.

This technical white paper provides step-by-step procedure on the different online and offline methods of upgrading OpenManage Enterprise.

## 2 Check for the availability of OpenManage Enterprise upgrades

- When your OpenManage Enterprise is due for an upgrade, a notification band is displayed on the home page at the time of login.
- On the Console and Extensions page (**Application Settings > Console and Extensions**), an active **Update Available** button in the OpenManage Enterprise-section is displayed, if an update is available.

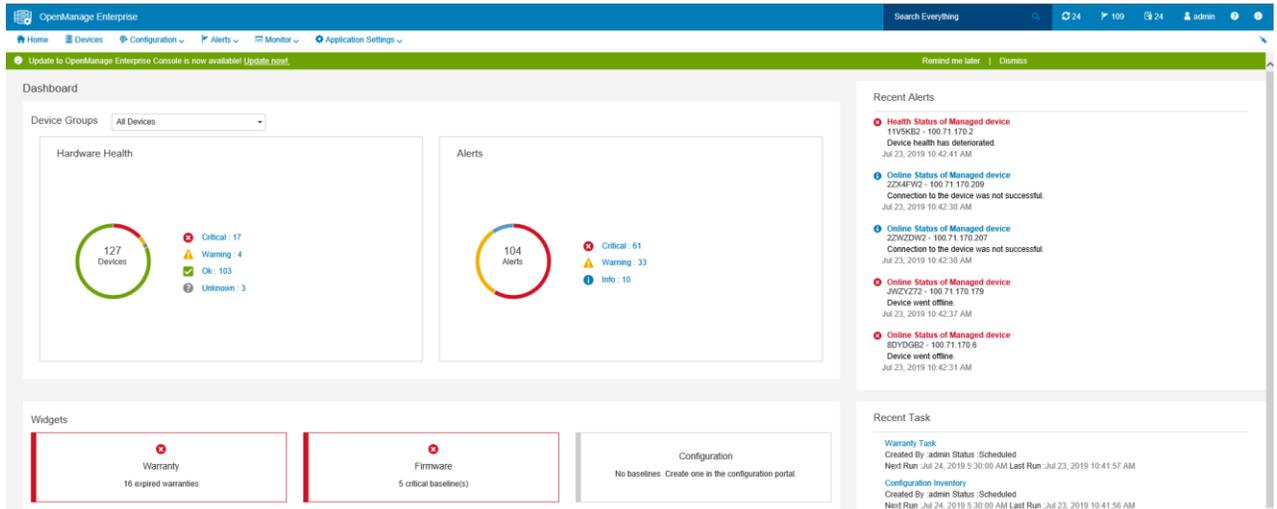


Figure 1—Upgrade notification band at the time of login

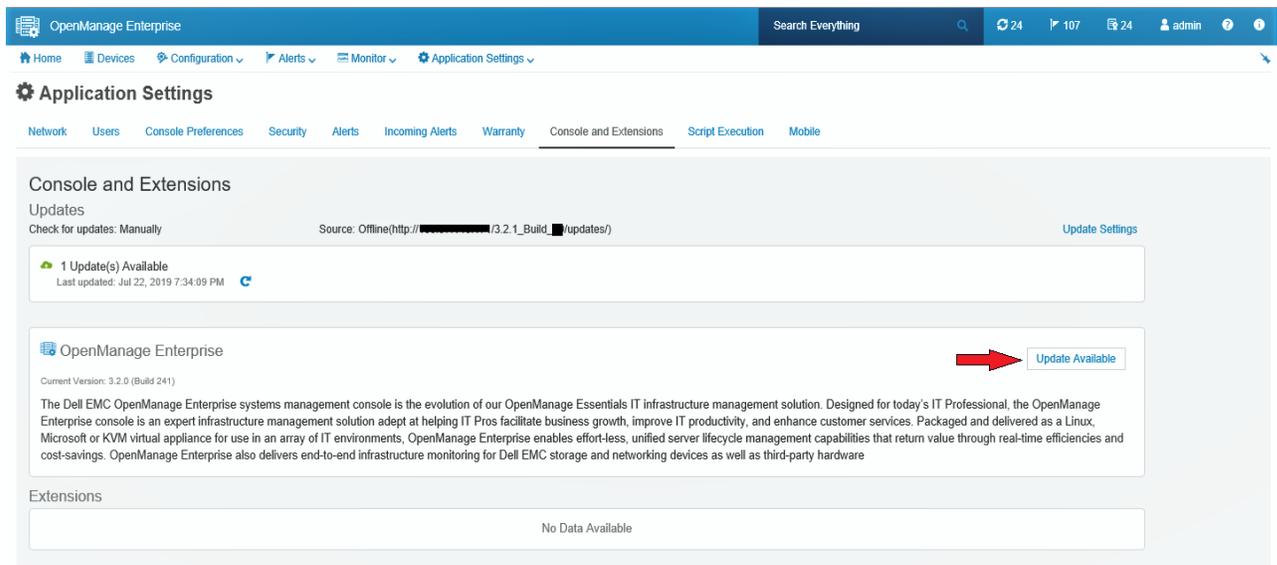


Figure 2—Console and Extensions page – An update is available

### 3 Checklist—before initiating an upgrade to OpenManage Enterprise

To ensure a smooth upgrade to the new version of the appliance, ensure that the following are available:

- Take a backup or a [VM snapshot](#) of the console, in case something unexpected occurs.
- When upgrading from version 3.0 or version 3.1 by using the Online method, ensure that the proxy settings are disabled.
- Allocate at least an hour for the upgrade process. Allocate additional time if the upgrade must be downloaded by using a slower network connection.
- Make sure no device configuration tasks or deployment tasks are running or are scheduled to run during the planned downtime as any active jobs would automatically be cancelled during upgrade.
- To upgrade to OpenManage Enterprise 3.2.1, you must have a minimum of version 3.0. When upgrading from a version below 3.0, you must first upgrade to either version 3.0 or version 3.1 by using the Update Packages available at [https://downloads.dell.com/openmanage\\_enterprise](https://downloads.dell.com/openmanage_enterprise).

## 4 Options available to upgrade OpenManage Enterprise

There are different methods in which you can choose to upgrade your appliance on the Console and Extensions page (**Application Settings > Console and Extensions > Update Settings**).

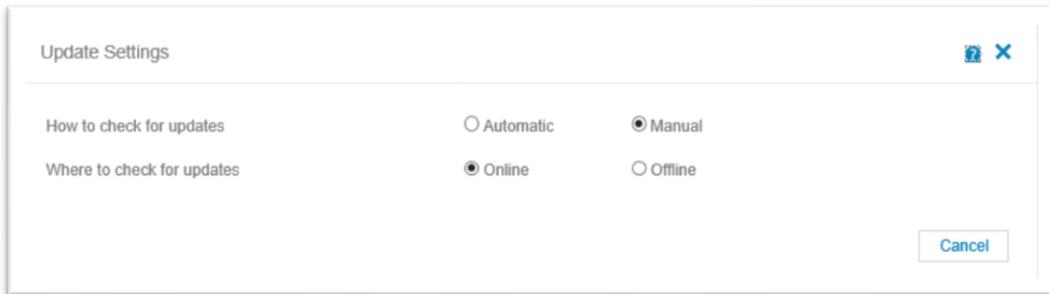
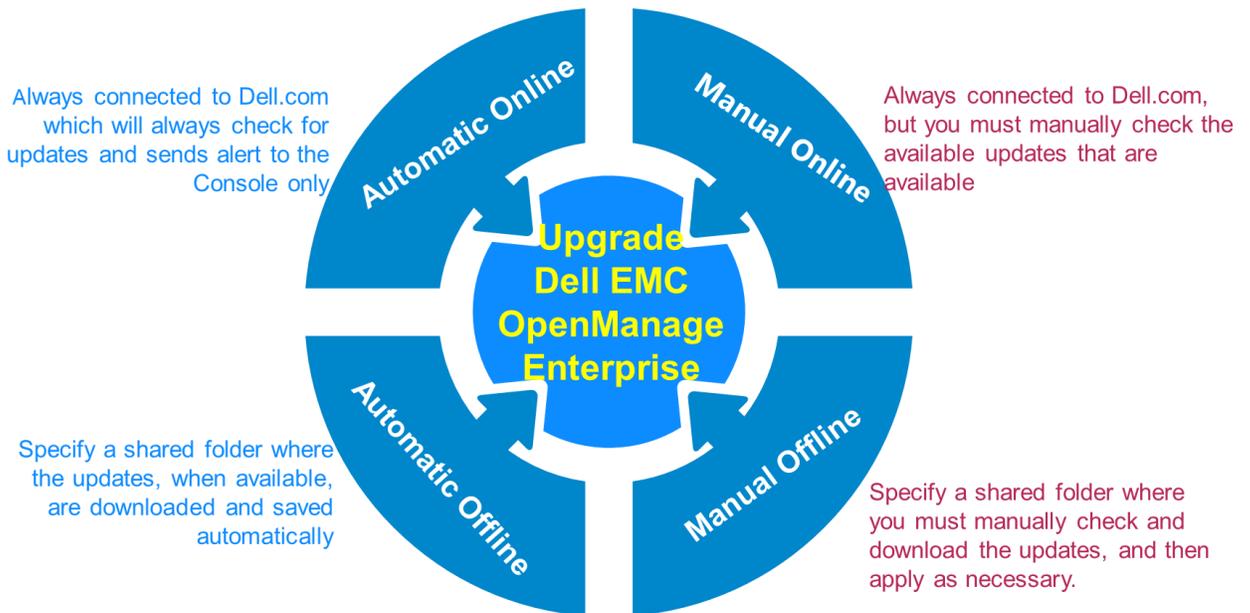


Figure 3—OpenManage Enterprise – Upgrade options

The following infographic can provide a better understanding of the different update options:



## 5 Upgrade OpenManage Enterprise using the Automatic Offline option

To update the appliance automatically by using an Offline shared folder, you must select the following options in the update settings dialog box (**Application Settings > Console and Extensions > Update Settings**).

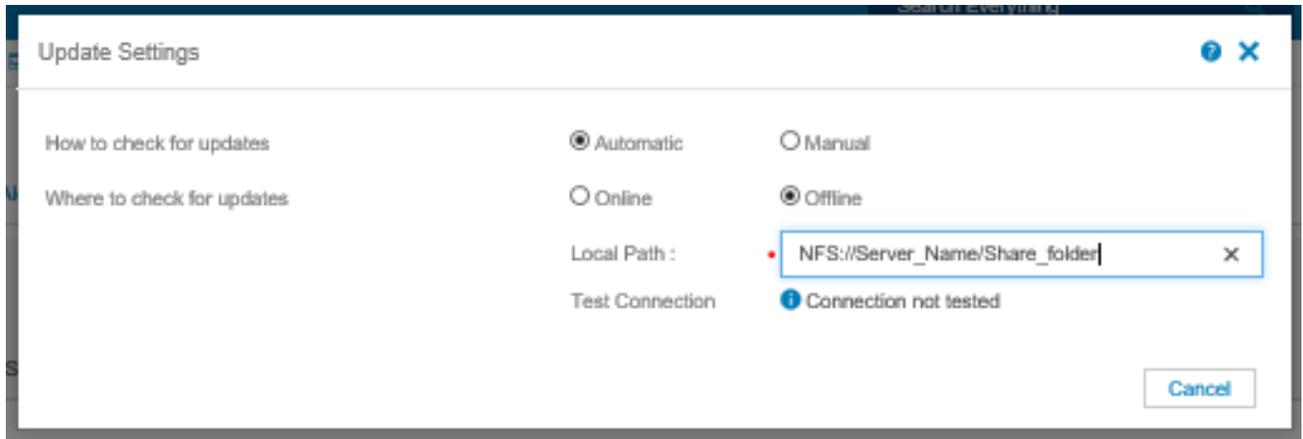


Figure 4—Automatic-Offline selection in Update Settings

### 5.1 Download the Update packages to a shared Network File Share (NFS)

1. When you choose to upgrade the OpenManage Enterprise version offline, download the upgrade files from [https://downloads.dell.com/openmanage\\_enterprise](https://downloads.dell.com/openmanage_enterprise) to the shared folder you have created.

---

#### Note—

- On your local share path (NFS), a specific folder structure must be created for the upgrade process to continue. See [Permissible folder structure for the upgrade files](#).  
To create an NFS folder on:
  - A Windows server—See [Create NFS share to perform offline upgrade of Dell EMC OpenManage Enterprise on Windows](#).
  - A Linux server—See [Create NFS share to perform offline upgrade of Dell EMC OpenManage Enterprise on Linux](#).

2. Ensure that you download the `omenterprise_3.2.1.tar.gz` file from [https://downloads.dell.com/openmanage\\_enterprise](https://downloads.dell.com/openmanage_enterprise).
3. Create a folder structure as mentioned below and copy the downloaded files
4. Provide the NFS path as “NFS://<Server Name>/NFSfolder/Upgrade” and save the settings.
5. The console automatically checks for the latest updates in the shared location every Monday. If a latest upgrade is available, an **Update Now** band is displayed.  
Else, you can click **Check Now** on the **Application Settings > Console and Extensions** page to manually check for updates.
6. When prompted, take a snapshot of the VM before upgrading.  
A message is displayed to indicate that the currently logged-in users will be logged off and all the running jobs will be automatically cancelled.
7. Click **OK**. The update files are downloaded from NFS, the upgrade is initiated.

## 5.2 Permissible folder structure to upgrade OpenManage Enterprise offline on Windows and Linux

- Ensure that the downloaded files are stored in a folder structure as shown below.
- Two subfolders named “full” and “minimal” must be created inside the **3.2.1** folder as shown here.
- The downloaded files must be placed in the subfolder named “Full” or “minimal” based on the version you are currently upgrading from. If you have versions earlier than 3.2, copy the file to the “Full” subfolder.

```
C:/NFSFolder.
```

```
|
|
\---Upgrade
    |   LexingtonUpdates.xml
    |   LexingtonUpdates.xml.asc
    |   warranty.zip
    |   warranty.zip.asc
    |
    \---3.2.1
        +---full
            |           omenterprise_3.2.1.tar.gz
            |
            \---minimal
                |           omenterprise_3.2.1.tar.gz|
```

## 5.3 Create NFS share to perform offline upgrade of Dell EMC OpenManage Enterprise on Windows

1. Download the `omenterprise_3.2.1.tar.gz` files from [https://downloads.dell.com/openmanage\\_enterprise/](https://downloads.dell.com/openmanage_enterprise/).
2. Create the same NFS folder structure as described in [Permissible folder structure to update OpenManage Enterprise offline on Windows and Linux](#).
3. Set the authentication options.

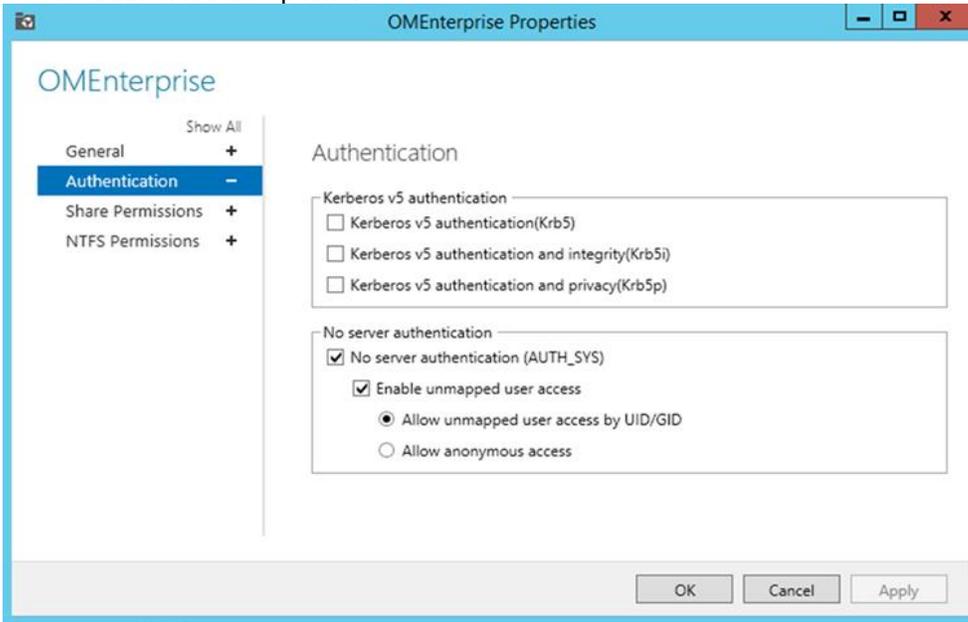


Figure 5—Set the server authentication properties

4. Set the NFS permissions.
5. Add the host, enter IP address of the OM Enterprise appliance, and then provide the read-only access.

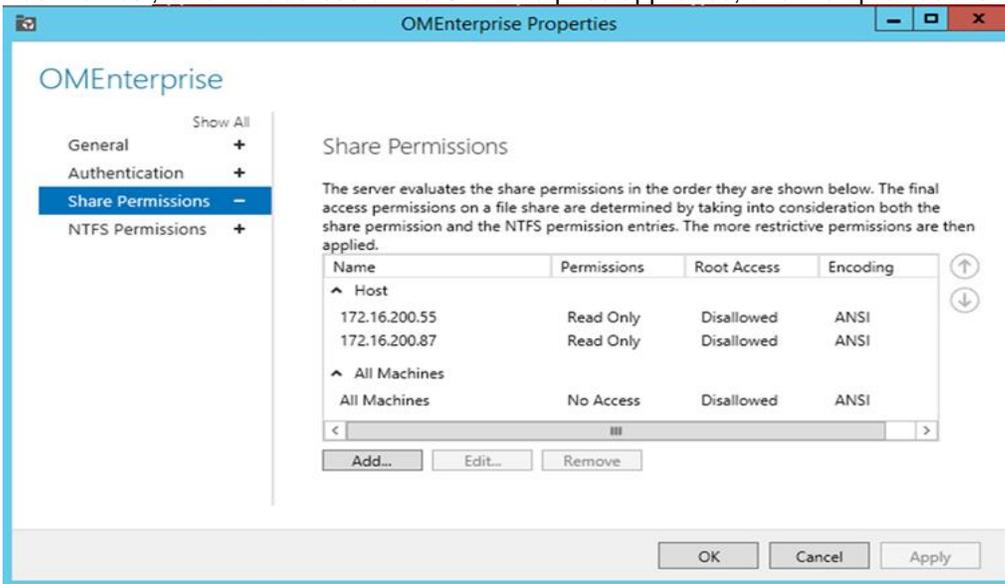


Figure 6—Set the NFS permissions

6. Follow the steps as mentioned in [Download the Upgrade packages to a shared Network File Share \(NFS\)](#).

## 5.4 Create NFS share to perform offline upgrade of Dell EMC OpenManage Enterprise on Linux

1. Before you start installing NFS package, ensure that the NFS package is not already installed on the server. Run the following command at the Command Line Interface (CLI):

```
# rpm -qa nfs
```

If there is no output, you can proceed to step 2.

Else, skip step 2 and move to step 3.

2. To install NFS packages on an NFS server, run the following command:

```
# yum install nfs-utils libnfsidmap -y
```

3. After you install NFS:

- a. Enable the NFS service by running the following command:

```
# systemctl enable rpcbind
```

```
# systemctl enable nfs-server
```

- b. Start the NFS service by running the following command in the order specified here:

```
# systemctl start rpcbind
```

```
# systemctl start nfs-server
```

```
# systemctl start rpc-statd
```

```
# systemctl start nfs-idmapd
```

NFS Service - parameters	Function description
Rpcbind	The rpcbind server converts RPC program numbers into universal addresses.
nfs-server	It enables the clients to access NFS shares.
nfs-lock / rpc-statd	NFS file locking. Implement file lock recovery when an NFS server crashes and reboots.
nfs-idmap	It translates user and group IDs into names and vice versa.

- c. Create NFS under the / partition by running the command:

```
# mkdir /NFSSHARE
```

- d. Allow the client to read and write the data in the NFS you created by running the command:

```
# chmod 777 /NFSSHARE
```

4. Follow the steps as mentioned in [Download the Upgrade packages to a shared Network File Share \(NFS\)](#).

## 5.5 Configure MIME types of HTTP and HTTPS for upgrading OpenManage Enterprise

1. Start the IIS application.
2. Edit the MIME (Multipurpose Internet Mail Extensions) type from `.xml` to `application/octet-stream` in a Web server.
3. On the web server, add a new MIME type `.xml.asc` on the IIS by doing the following:
  - Start the CLI.
  - Enter `cd \Windows\System32\inetsrv.`
  - Enter `appcmd set config /section:staticContent /+[fileExtension='.xml.asc',mimeType='application/octet-stream'].`

## 6 Upgrade OpenManage Enterprise using the Automatic-Online option

When set in the Automatic-Online mode, OpenManage Enterprise automatically checks for the available upgrades at [https://downloads.dell.com/openmanage\\_enterprise](https://downloads.dell.com/openmanage_enterprise) on every Monday. Alternatively, you can click the **Check Now** button or update the settings by clicking **Application Settings** → **Console and Extensions** page to manually check for updates by selecting the **Manual** and **Online** options in **Update Settings**.

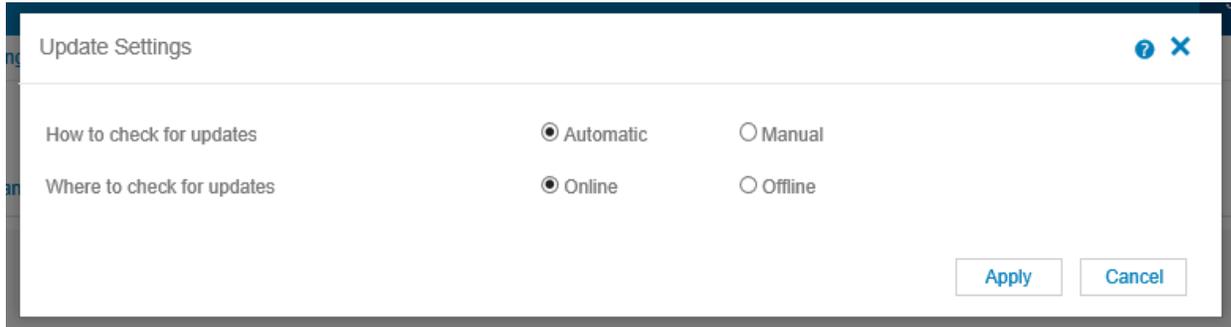


Figure 7—Automatic-Online option in Update Settings

---

**Note**— If the proxy settings are enabled, you cannot upgrade the OpenManage Enterprise appliance version from version 3.0 or version 3.1.

**Workaround**—Either disable proxy settings and try console upgrade or upgrade by using the Offline method. See [Procedure to upgrade using the Automatic Offline option](#)

---

1. To upgrade, click **Update Now**.
2. When prompted, take a VM snapshot of the console as a backup.

---

**Note**—It is highly recommended that you proceed only after taking a snapshot of the current VM configuration.

---

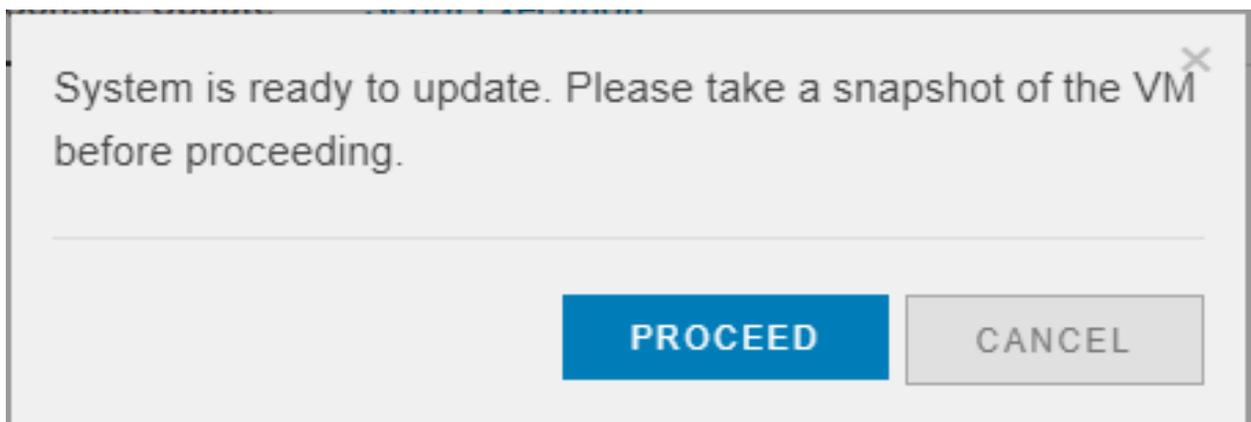
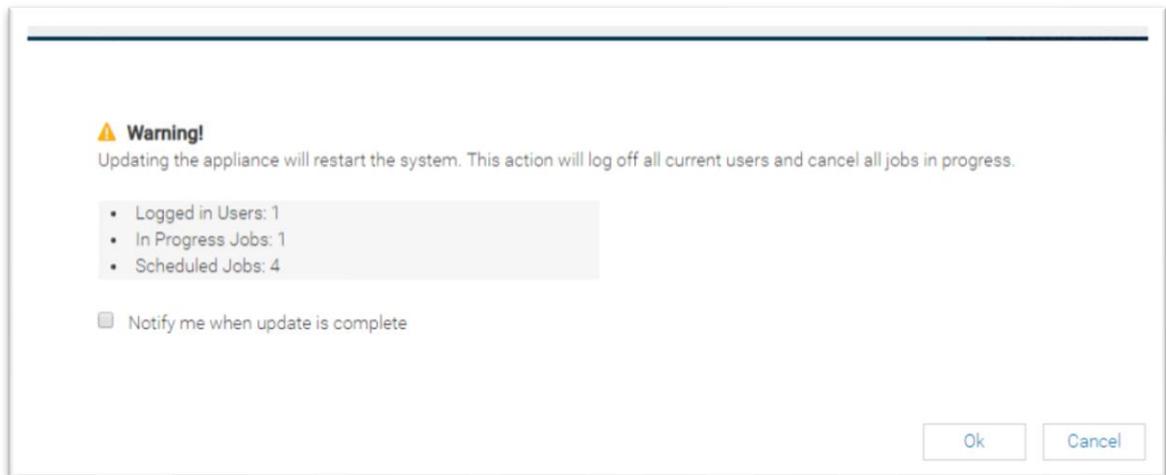


Figure 9—Take a snapshot of the VM before updating OpenManage Enterprise

A message indicating that updating the OpenManage Enterprise will logoff current users is displayed.

3. Click **OK**.



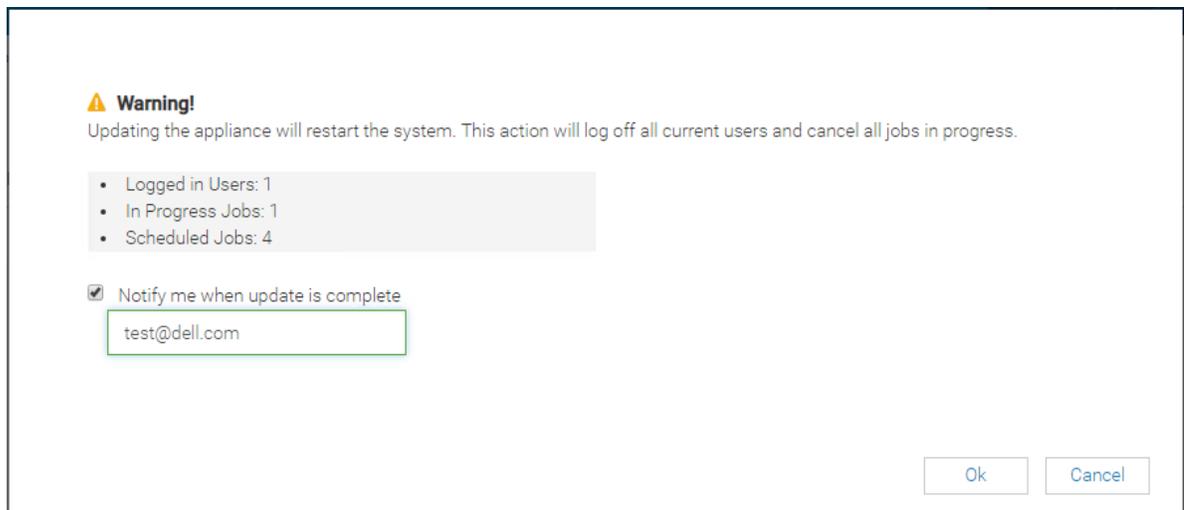
To get a notification after the upgrade is completed, select the **Notify me when update is complete** check box.

---

**Note**—If not configured, configure the SMTP server by doing the following:

---

1. Expand **Email Configuration**.
2. Enter the SMTP server network address that sends email messages.
3. To authenticate the SMTP server, select the **Enable Authentication** check box, and then enter the username and password.
4. By default, the SMTP port number to be accessed is 25. Edit if necessary.
5. Select the **Use SSL** check box to secure your SMTP transaction.
6. Click **Apply**.
7. To reset the settings to default attributes, click **Discard**.

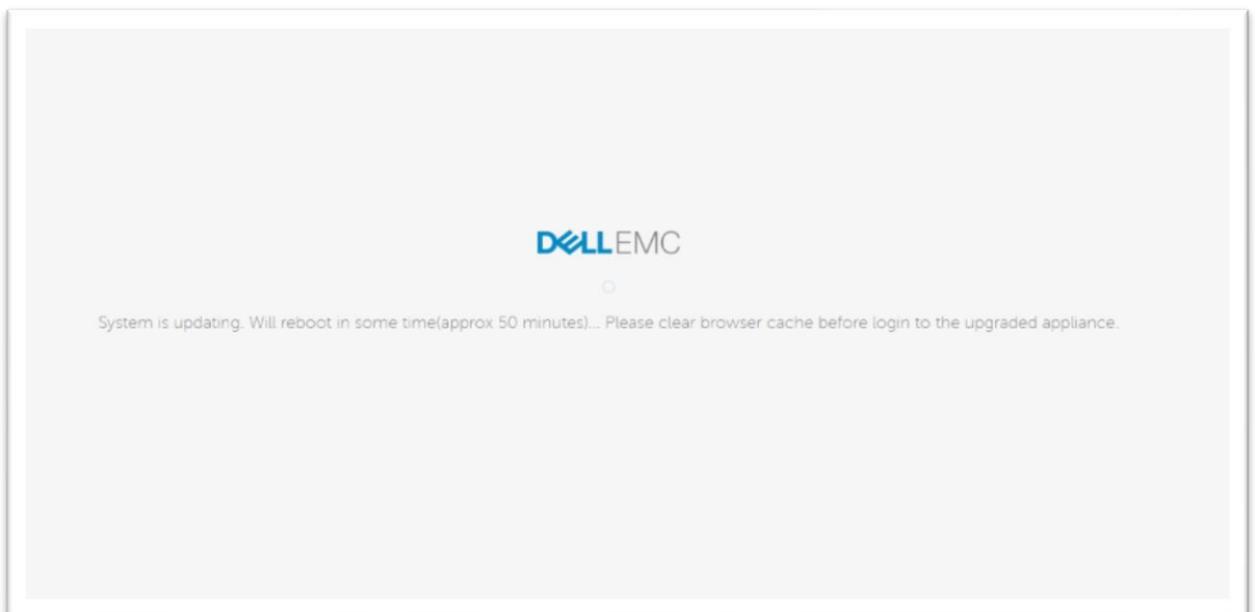


4. Click **Ok**.

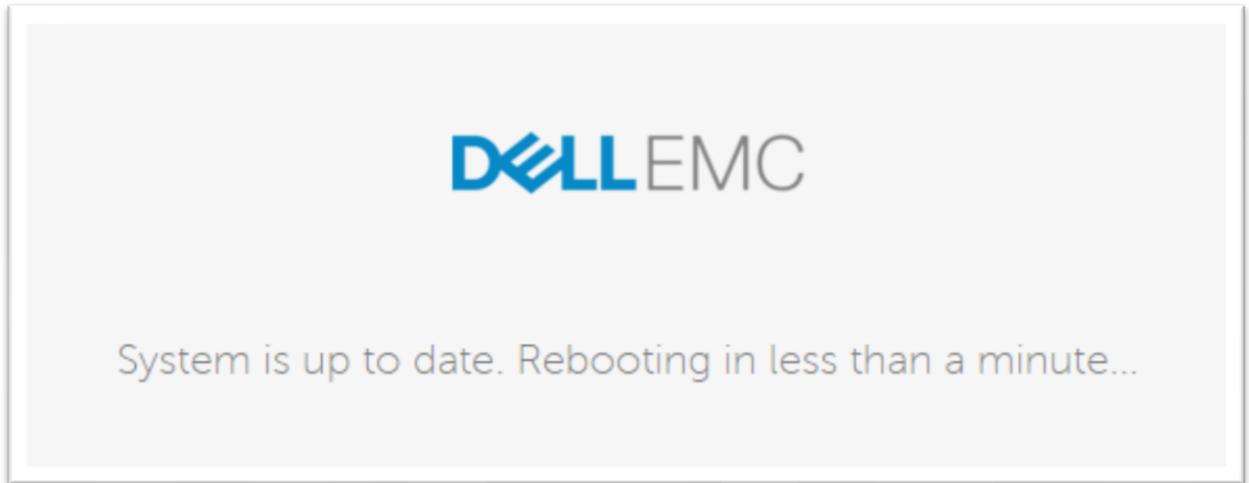
The available update packages are downloaded from the Dell EMC online repository at **downloads.Dell.com**. The download time may vary based on the internet speed.



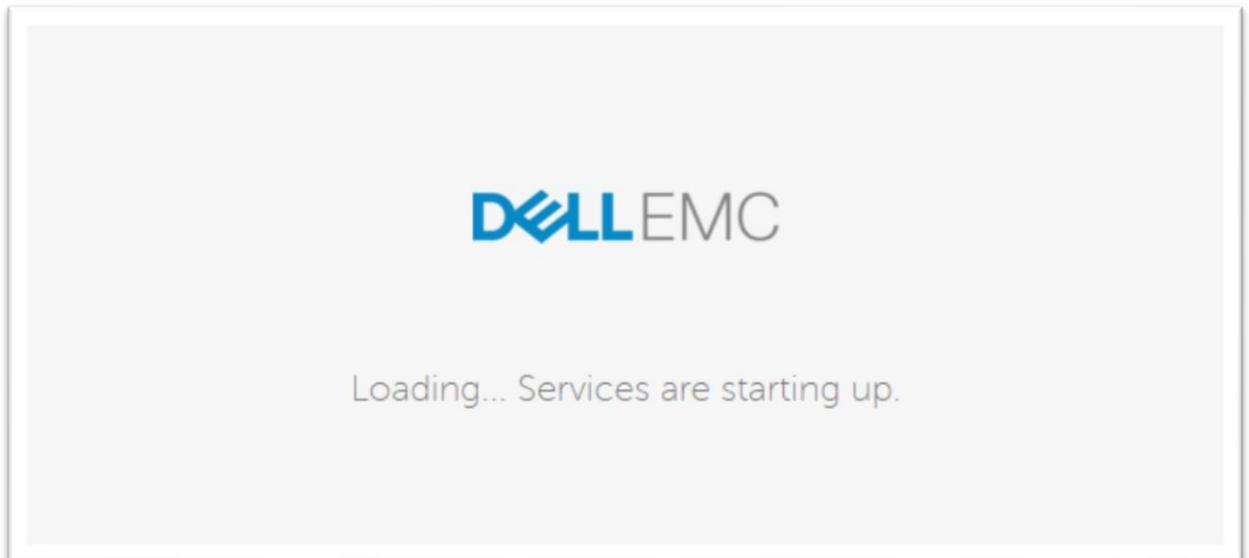
After downloading is complete, OpenManage Enterprise starts updating and this process may take several minutes to complete.



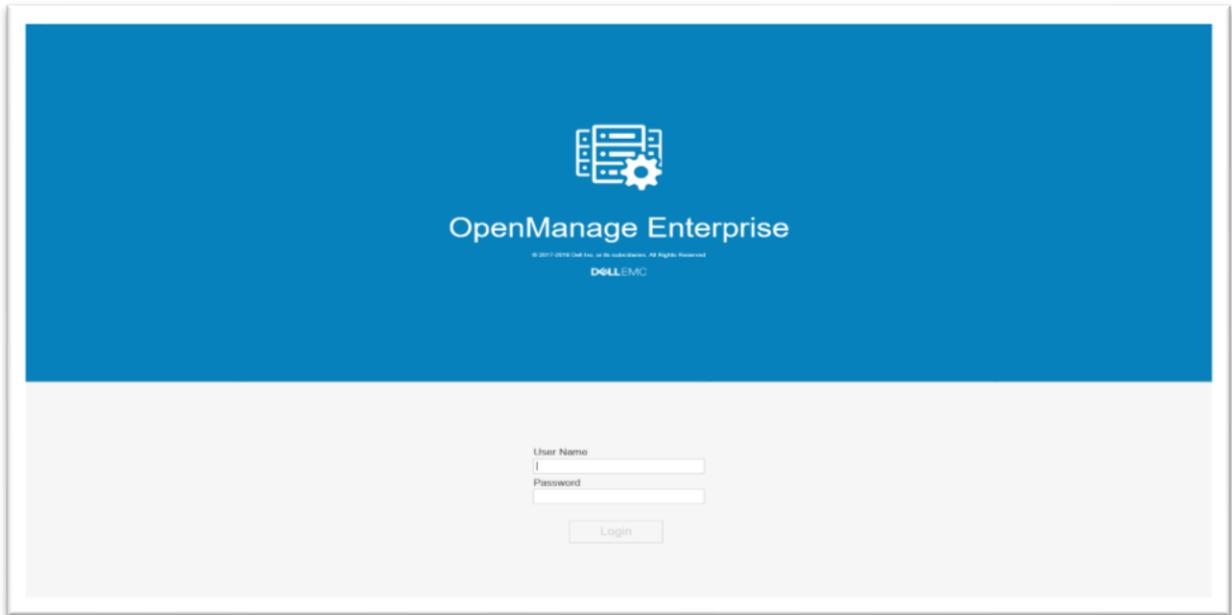
After the upgrade process is completed, the system is automatically restarted.



After the system is restarted, the services are also automatically started.



After the services are restarted, OpenManage Enterprise starts and the login page is displayed.



---

**Note**—Before you log in to the upgraded appliance, ensure to clear the browser cache to avoid failing of the new jobs/tasks on the upgraded appliance. If OpenManage Enterprise had been configured to use AD or LDAP prior to upgrade, for best results, ensure that the groups are re-imported into the appliance after upgrade.

---

## 7

# Conclusion

OpenManage Enterprise is the next-generation application to monitor and manage your business-critical IT infrastructure in a seamless manner. To effectively use your datacenter, you must keep the OpenManage Enterprise appliance upgraded. Options are available to plan your bandwidth by either automatically or manually updating the console version.

More information about field definitions and procedures can be viewed by clicking the ? symbol in the upper-right corner of the GUI element you are. You can also read the *OpenManage Enterprise User's Guide* available on the support site. Procedures to manage these features by using REST API are provided in the API documentation available on the support site.



You can also view the following videos to get more information about using the unmatched features of Dell EMC OpenManage Enterprise Graphical User Interface (GUI):

- [Dell EMC OpenManage Enterprise Systems Management Console](#) (02:02 m)
  - [Dell EMC OpenManage Enterprise](#) (01:44 m)
-

## A Technical support and resources

- To access the User's Guide, Release Notes, Support Matrix, and white papers of the present and previous versions of OpenManage Enterprise, click [OpenManage Enterprise documentation](#).
- Click [Dell.com/support](http://Dell.com/support) for support on all products.