Auto-Deploy Provisioning on Servers or Chassis Using DellEMC OpenManage Enterprise 3.2

Abstract

This DellEMC technical white paper describes the process of auto deploying configurations on not-yet discovered server or chassis using OpenManage Enterprise.

July 2019

Revisions

Date	Description
July 2019	Initial release

Acknowledgements

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Executive summary

OpenManage Enterprise supports the creation of auto-deploy configuration for not-yet discovered servers or chassis. When the discovery and onboarding of the device is completed, these Auto-Deploy configurations are automatically applied on target device/s.

All the Service Tags/node IDs that are entered/imported are listed in the Auto Deployment configuration.

When the auto deployment of configuration on the devices is completed, the devices move to the respective group and the auto deployment configuration will be displayed as completed. The tasks created for the Service Tag entries can be found in the jobs portal. Task execution history entries can be viewed in the Task Execution History section by clicking on view details option.

- **Note**—Auto-deploy is only for devices that have not been discovered by OpenManage Enterprise.

1   Auto-Deploy Requirements

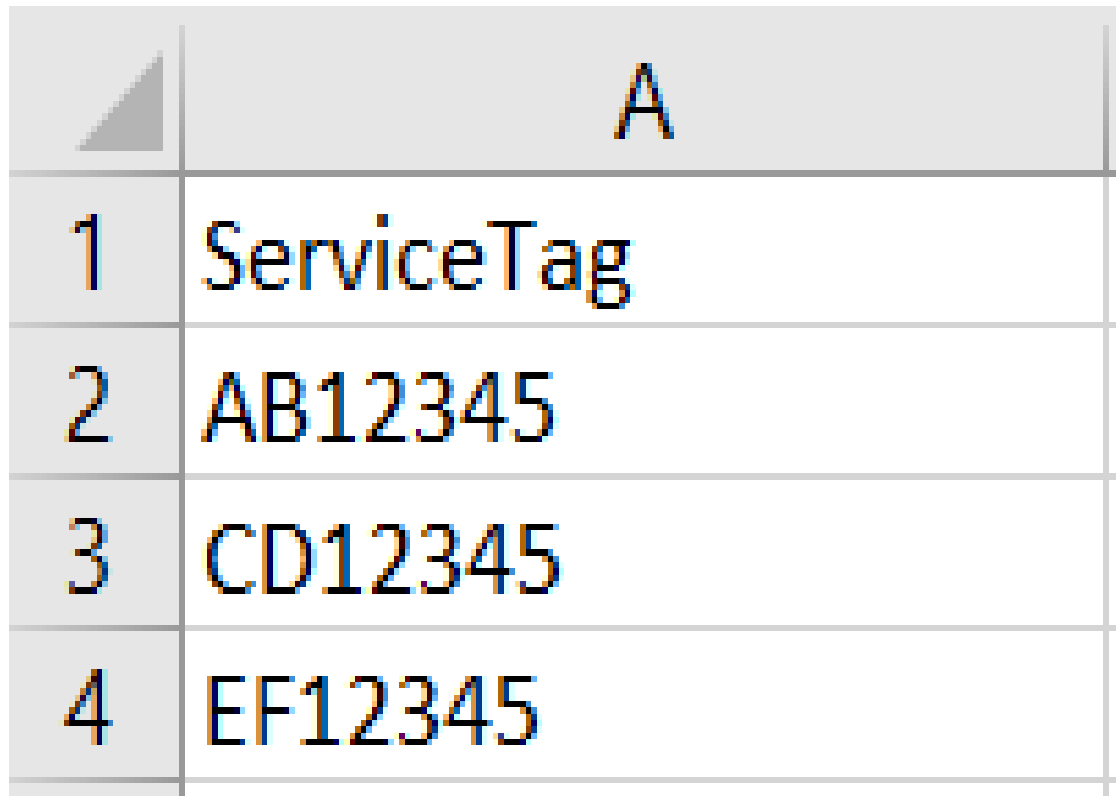| To add auto-deployment entries, the following requirements must be met: |
| --- |
| • Must have a template to deploy. |
| • Must meet all device configuration target device requirements. |
| • Target Service Tags cannot match a Service Tag of a discovered device. |
| • Optionally a CSV file with the Service Tags. |

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2 Set up Auto-Deploy Configuration

This section covers the creation Auto-Deploy configuration using a template and device service tags. It also describes how to create and format the auto deployment CSV file, exporting of auto-deploy configurations in different formats, and deletion of the auto-deploy configuration.

2.1 Create a CSV file using service tags

To create a CSV file containing the target service tags on which the templates would be automatically deployed:

- Must have a column named Service Tag.
- Each Service Tag must match the DellEMC standards of service tags.
- Service tags should not match the service tag of an already discovered device in OpenManage Enterprise.

	A
1	ServiceTag
2	AB12345
3	CD12345
4	EF12345

Figure 1   Format for CSV File.

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2.2 Set up an Auto-Deploy configuration using a template and device service tags:

Below are the steps to create auto-deployment configuration using the Auto Deploy wizard:

1. Go to the Auto Deploy page by clicking Configuration → Auto deploy.

2. Click **Create** to start the Auto Deploy Template wizard.

3. Select the Template Type from either server or chassis.

4. Select a template from the drop-down list (only templates captured in the Deploy portal will be listed).

Note:
- Templates seen in the drop-down list depend on your Template Type selection. If the template type is selected as server, only server templates will be displayed and if the selection was chassis then only chassis templates will be displayed.
- If the template captured has identity attributes, a warning message is displayed to associate the identity pool. (Optionally, if the identity pool is associated, then the virtual network addresses will be deployed else virtual network address will not be deployed on target.)
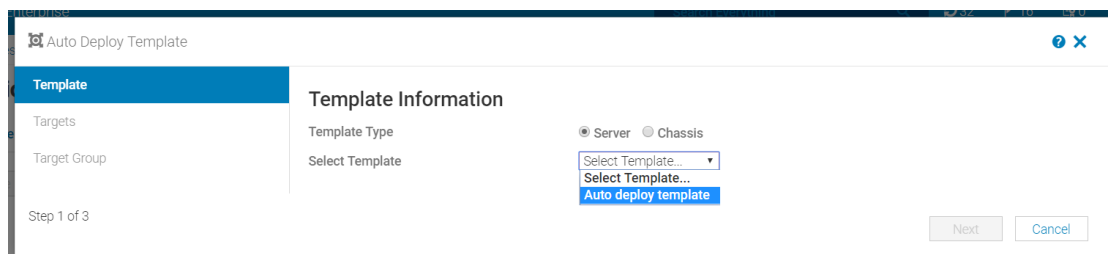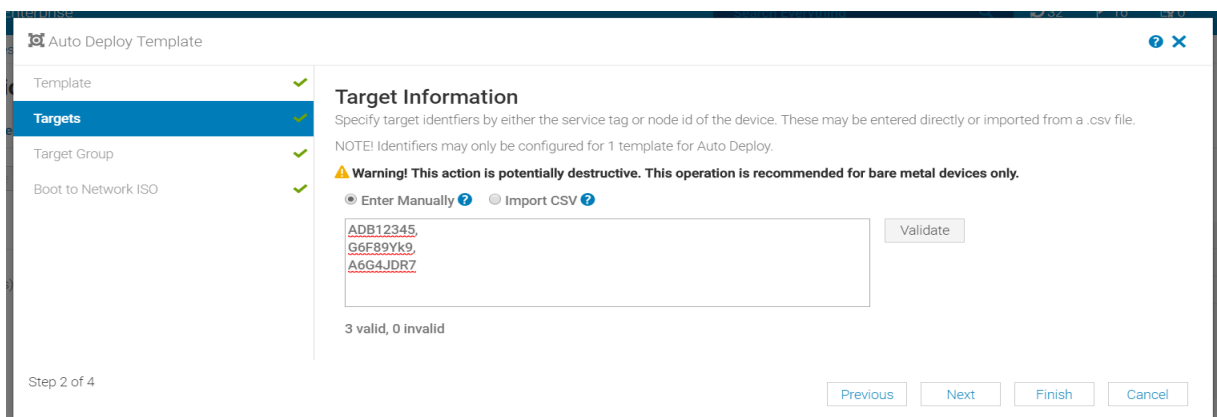

Figure 2: Auto deploy template wizard

5. Click Next. Target Information page is displayed.

6. A service tag or node id can be directly entered in following format:

- A) Manually – you can choose to enter the service tags or node ids manually.

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ADB12345,

G6F89Yk9,

A6G4JDR7

Figure 3   Auto deploy direct entry target information wizard

- B) Import CSV – You can import the CSV file as described in Create a CSV file using service tags
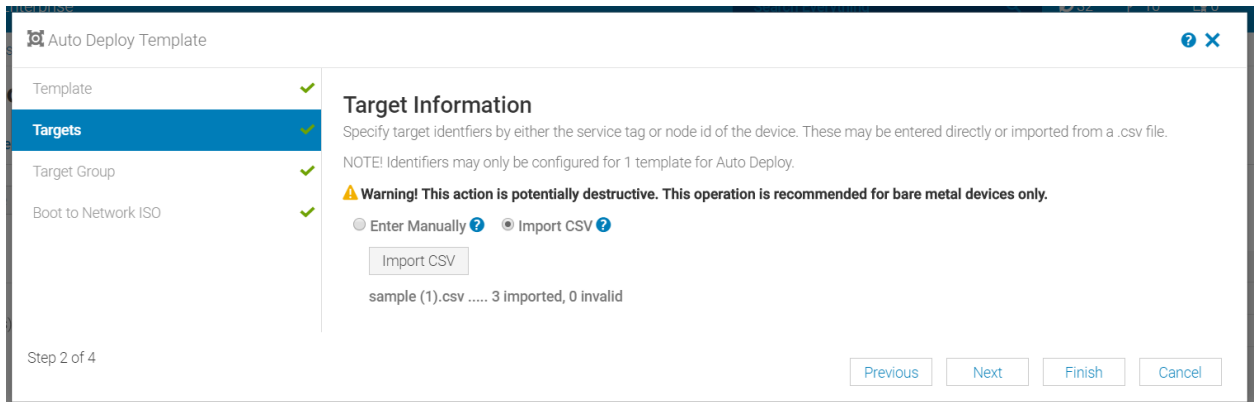
Figure 4   Auto deploy Import CSV target information wizard

7. Click on the Validate button to check if the service tags entered are valid or invalid.

- **Note**: If CSV file is imported, console will automatically calculate and display the valid and invalid service tags.

8. Click Next for the Target Group Information page.

- **Note**:
- Target group should be selected as Static group.
- Static Groups should be created initially in the device tree for it to be displayed in the drop-down list.

9. Select the target group. Once Auto-Deploy task is completed, targets will be moved to selected group.
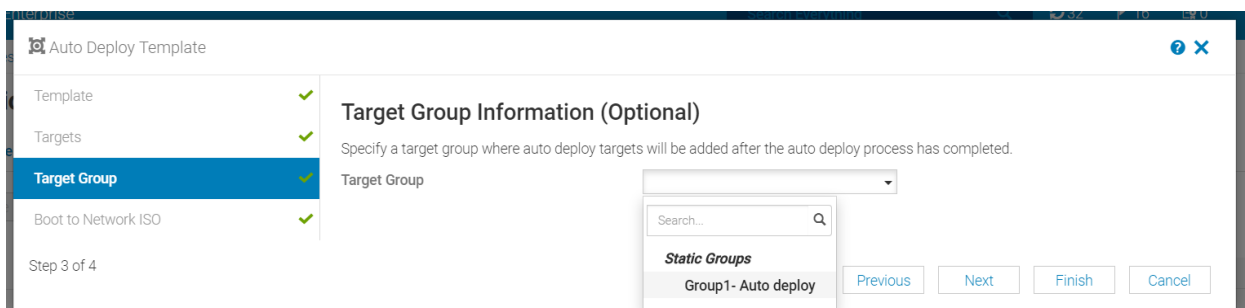
Figure 5: Target Group Information page of the Auto Deploy Template wizard

10. Click Next. Boot to Network ISO page will be displayed

11. If you need to map an ISO file to the target, then enable the **Boot to Network ISO** option and specify the path

Figure 6   Auto Deploy Template - Boot to Network ISO page – CIFS

Examples of ISO path:

| Examples of ISO path and the associated fields	
CIFS share	• **ISO path**: sharename\path\filename.iso Under Share Information • **Share IP address:** Enter the share IP address • **Username:** domain\username • **Password:** Enter the password of the specified user
NFS share	• **ISO Path**: /NFSsharefoldername/path/filename.iso Under Share Information • **Share IP address:** Enter the share IP address • **Username:** domain\username • **Password:** Enter the password of the specified user

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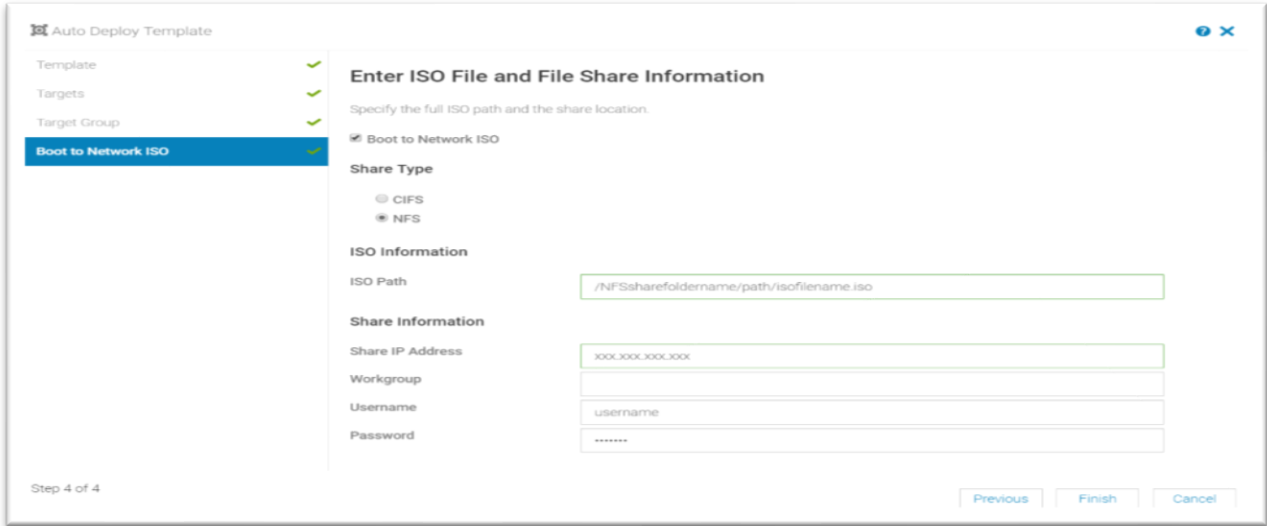
Figure 7　　Auto deploy boot to network ISO -NFS page

12. Click on finish button to complete the auto-deploy configuration task.

13. Configuration will be created in the Auto Deploy portal with the following details: Identifier (Service Tag), Template Name, Template type, Status, Boot to Network ISO (If boot to network ISO is enabled then "**Yes**" will be displayed)
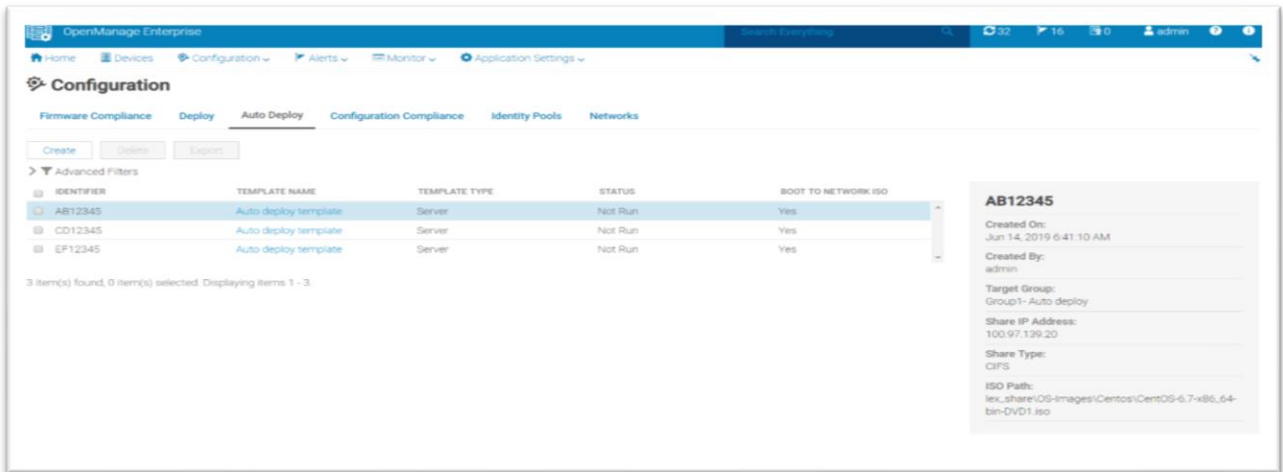

Figure 8　　Auto deploy page – Details of the newly-created Auto-Deployment template are displayed.

- Note: For each service tag, different rows are displayed

The Auto-deploy configuration remains in a "Not-Run" state until the service tags, which were entered, are discovered and the Onboarding task is completed.

Once the Onboarding task is completed, the Deploy task is triggered and a job is created. The details of the job are displayed in the Jobs page (Monitor > Jobs).

After the completion of the Deploy task, the devices will be listed in both the static group as well as the default device group if static group was selected initially at the time of the auto-deploy template creation. Otherwise, if static group was not assigned, then the devices are listed in the default device group.

If Boot to Network ISO is enabled, target will boot to ISO file.

After the auto-deployment task is completed on the targets, the status of auto-deploy configuration will be displayed as completed.

- **Note:** If a device is discovered again in console, the auto-deployment task will not be triggered again as the status of the configuration is completed.

- **Note:** If the deployment of the auto-deploy configurations with multiple service tags fails on any one device, the overall status of the task in Jobs portal will be displayed as "completed with errors" and in the Auto-Deploy page the status of each service tag configuration will be displayed as "completed with error". The status of each configuration rolls up on the overall status of the auto deployment task.

- **Note:** If the Onboarding task fails, then auto-deploy task will be triggered and fail with "Device not onboarded" message. The status of auto deploy configuration will display as failed, and the device will be listed in static group and default device group. If the configuration is not associated to static group, then the device will be listed under default device group.

2.3   Export Auto-Deploy configuration

To export the Auto-Deploy configuration in different formats:

- Select the configuration you want to export on the Configuration > Auto Deploy page and click on Export.
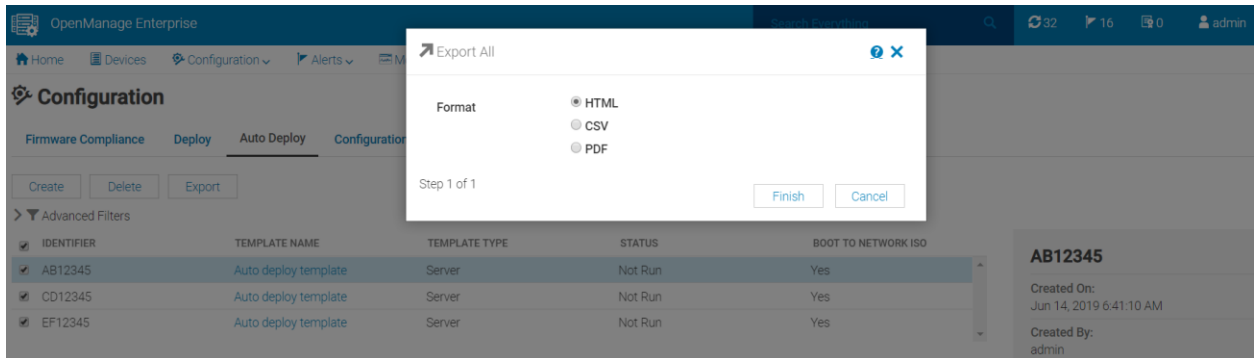- Choose from the following 3 different formats that are displayed: **HTML, CSV,** or **PDF**

Figure 9   Auto deploy Export wizard

- Select the format and click Finish. The file will be downloaded in the format selected on the local share.

The file will be formatted as shown in the figure below:

Identifier	Template Name	Template Type	Status	Boot to Network ISO
AB12345	Auto deploy template	Server	Not Run	Yes
CD12345	Auto deploy template	Server	Not Run	Yes
EF12345	Auto deploy template	Server	Not Run	Yes

- **Note**: This Export Auto-Deploy feature helps to keep track of the service tag/Node ID on which template was deployed, to check if the OS is mapped to the device or not, and also to track the identifiers on which the task was completed, failed, or not run.

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2.4   Delete Auto-Deploy configurations

To delete the auto-deploy configuration/s:

- On the Auto Deploy page (Configuration > Auto Deploy), select the configuration/s by clicking on the check box beside identifier.
- Click Delete. An Alert, **"Are you sure you want to delete all the selected items"** will be displayed- click on YES to delete or NO to retain the configuration/s.
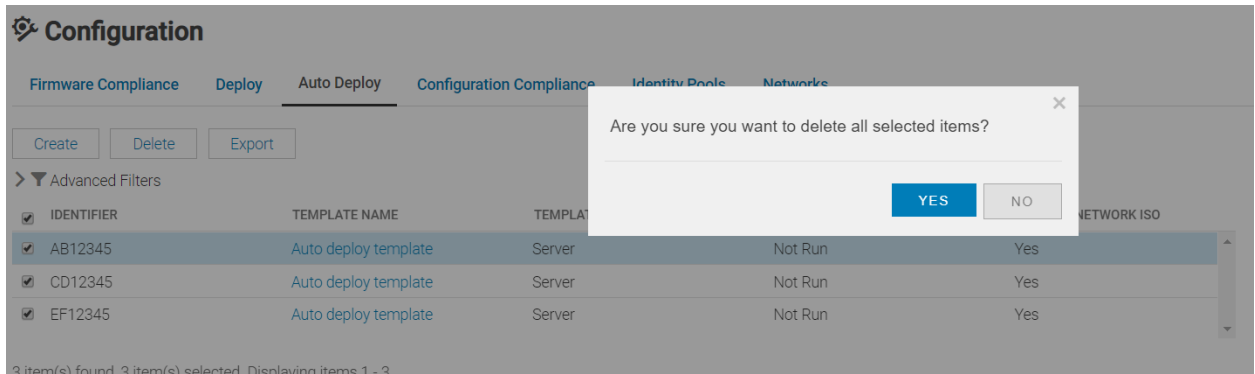

Figure 10:   Auto deploy delete wizard

- **Note:** If an Auto-deploy configuration is deleted before discovering the device, then the auto deployment task will not be triggered when the device is discovered.

A Technical support and resources

- Dell.com/support is focused on meeting customer needs with proven services and support.
- For OpenManage Enterprise documentation on the Dell support site, see OpenManage Enterprise documents

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