

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.

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Revisions

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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.

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.



Figure 1 Format for CSV File.

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 \rightarrow 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.)

🕅 Auto Deploy Template			■ 32 P 10	
Template	Template Information			
Targets	Template Type	Server Chassis		
Target Group	Select Template	Select Template Select Template Auto deploy template		
Step 1 of 3			Next Canc	cel

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.

🗖 Auto Deploy Template			0 ×
Template	~	Target Information	
Targets	~	Specify target identifiers by either the service tag or node id of the device. These may be	entered directly or imported from a .csv file.
Target Group	~	NOTE! Identifiers may only be configured for 1 template for Auto Deploy.	
Boot to Network ISO	~	Warning! This action is potentially destructive. This operation is recommended for The Manually Import CSV ADB12345, G6F89YK9, A664JDR7 3 valid, 0 invalid	bare metal devices only. Validate
Step 2 of 4		Prev	/ious Next Finish Cancel



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

🗖 Auto Deploy Template		0 ×			
Template	Target Information				
Targets Specify target identifiers by either the service tag or node id of the device. These may be entered directly or imported from a .csv file.					
Target Group NOTE! Identifiers may only be configured for 1 template for Auto Deploy.					
Boot to Network ISO	A Warning! This action is potentially destructive. This operation is recommended for bare metal devices only. Enter Manually Import CSV Sample (1).csv 3 imported, 0 invalid				
Step 2 of 4	Previous Next Finish Ca	ncel			

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.

anteronise S Auto Deploy Template			Seaten aver	Violing Q	10	€90 ⊘ ×		
Template Targets	*	Target Group Information (Op	tional)					
e Target Group	~	Specify a target group where auto deploy target Target Group	ecity a target group where auto deploy targets will be added after the auto deploy process has completed. Irget Group					
Boot to Network ISO	~		Search Q					
Step 3 of 4			Static Groups Group1- Auto deploy	Previous Next	Finish	Cancel		

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

emplate	~	Entor ISO File and Fil	a Shara Information				
argets	~	Enter ISO File and Fil	e share information				
farget Group Specify the full ISO path and the share location. Boot to Network ISO Boot to Network ISO							
		ISO Information					
		ISO Path	sharename\path\isofilename.iso				
		Share Information					
		Share IP Address	300000000000				
		Username	doamin\username				
		Password					

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 							

nplate gets get Group ot to Network ISO	 Enter ISO File and Specify the full ISO path and Boot to Network ISO Share Type CIFS 	d File Share Information d the share location.
	NFS ISO Information ISO Path	/NFSsharefoldername/path/isofilename.iso
	Share Information Share IP Address Workgroup Username	300L300L300L300K
o 4 of 4	Password	

Figure 7 Auto deploy boot to network ISO -NFS page

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

Home E Devices & Con Configuration	fguration 🗸 🌾 Alerts 🗸 👎	P Monitor - Application Se stion Compliance Identity Po	rtings – ols Networks		
Create Deline Dapo	1				
4R12345	Auto denino termilate	Server	Not Dun	Ves	AB12345
CD12345	Auto deploy template	Server	Not Run	Yes	Created On: Jun 14 2019 6 41 10 AM
1 EF12345	Auto deploy template	Server	Not Run	Yes	- Created By: admin
tem(s) found, 0 item(s) selected. Or	splaying items 1 - 3.				Target Group: Group1- Auto deploy
					Share IP Address: 100.97.139.20
					Share Type: CIFS
					ISO Path:

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

OpenManage Enterprise				Search Everything	Q	🞜 32 🔰 16 🛛 💀 0 🔹 admin
Home Devices 🕸 Config	uration 🧹 🔰 Alerts 🗸 📼 M	Report All		<u>@</u> ×		
P Configuration		Format	HTML			
Firmware Compliance Deploy	Auto Deploy Configuration		CSV PDF			
Create Delete Export		Step 1 of 1		Finish Cancel		
> T Advanced Filters						
IDENTIFIER	TEMPLATE NAME	TEMPLATE TYPE	STATUS	BOOT TO NETWORK ISO		AD10045
✓ AB12345		Server	Not Run	Yes		AB12345
CD12345	Auto deploy template	Server	Not Run	Yes		Created On: Jun 14, 2019 6:41:10 AM
EF12345	Auto deploy template	Server	Not Run	Yes	×	Created By: admin

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.

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 displayedclick on YES to delete or NO to retain the configuration/s.

父 Configuration								
Firmware Compliance	Deploy	Auto Deploy	Configuration Com	pliance Identity Pools	Networks		2	
Create Delete	Export			Are you sure you	want to delete all se	lected items?		
> T Advanced Filters								
JUENTIFIER		TEMPLATE NAME	TE	EMPLAT		YES NO	VETWORK ISO	
✓ AB12345		Auto deploy temp	late Se	erver	Not Run	Yes		•
CD12345		Auto deploy temp	late Se	erver	Not Run	Yes		
✓ EF12345		Auto deploy temp	late Se	erver	Not Run	Yes		
3 item(s) found 3 item(s) sel	ected Displa	aving items 1 - 3						

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.

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A Technical support and resources

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