Dell EMC OpenManage Ansible Modules

Version 2.0.3 User's Guide



Notes, cautions, and warnings

(i) NOTE: A NOTE indicates important information that helps you make better use of your product.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

Dell EMC OpenManage Ansible Modules

Version 2.0.3

© Copyright 2018 - 2019 Dell Inc.

GNU General Public License v3.0+ (see COPYING or https://www.gnu.org/licenses/gpl-3.0.txt)

All rights reserved. Dell, EMC, and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

Contents

1 Overview	5
Key Features	5
What's new?	5
2 Getting Started	7
How OpenManage Ansible Modules works	
Running your first Playbook	
3 Modules for iDRAC	8
How OpenManage Ansible Modules for iDRAC works	8
Running your first iDRAC Playbook	8
Updating Firmware	9
View firmware inventory	9
Install firmware	10
Configuring PowerEdge Servers	15
View LC status	15
Server Configuration Profile	15
Configuring iDRAC	23
Configure BIOS	31
Configure RAID	34
Configure Collect System Inventory on Restart	40
Configure syslog	41
Deploying operating system	42
Boot to a network ISO image	42
Server Inventory	44
View the system inventory	44
Server administration tasks	45
Configure the power state on the PowerEdge servers	45
Reset iDRAC	
View LC job status	
Export LC logs	47
Delete LC job	48
Delete LC job queue	49
Configure System Lockdown Mode	49
4 Modules for OpenManage Enterprise (OME)	51
How OpenManage Ansible Modules for OME works	51
Running your first OME Playbook	51
View device inventory	52
Manage device configuration templates	54
View templates	54
Create, modify or deploy a template	57
Manage the device firmware	61
Update device firmware	62

6 Accessing documents from the Dell EMC support site	73
5 Troubleshooting	72
Configure user accounts	69
View user account details	
Manage users	
Manage power state operations	65
View job details	63
Manage jobs	63

Overview

Dell EMC OpenManage Ansible Modules allows data center and IT administrators to use RedHat Ansible to automate and orchestrate the configuration, deployment, and update of Dell EMC PowerEdge Servers (12th generation of PowerEdge servers and later) and modular infrastructure by leveraging the management automation capabilities in-built into the Integrated Dell Remote Access Controller (iDRAC) and OpenManage Enterprise (OME) respectively.

With the latest release of Dell EMC OpenManage Ansible Modules, the capabilities have improved with support for OpenManage Enterprise. OpenManage Ansible Modules simplifies and automates provisioning, deployment, and updates of PowerEdge servers and modular infrastructure. It allows system administrators and software developers to introduce the physical infrastructure provisioning into their software provisioning stack, integrate with existing DevOps pipelines and manage their infrastructure using version-controlled playbooks, server configuration profiles, and templates in line with the **Infrastructure-as-Code** (IaC) principles.

This user guide provides information about using **Dell EMC OpenManage Ansible Modules** and its different use cases.

The latest stable version of OpenManage Ansible Modules is available at dell.com/support. In addition to dell.com/support, you can download Ansible modules from https://github.com/dell/dellemc-openmanage-ansible-modules. Dell EMC supports modules that are downloaded from this GitHub location only.

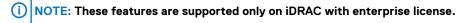
Topics:

- Key Features
- · What's new?

Key Features

The key features in OpenManage Ansible Modules are:

- · Support for creating, modifying or deleting a user account.
- · Perform the supported power state management operations on devices managed by OME.
- · Support for creating, modifying or deploying a template.
- · Get the list and details of all user accounts or of a specific account.
- · Get the list and details of templates or of a specific template.
- · Support for firmware update of PowerEdge devices and all its components.
- · Support for retrieving job details for a given job ID or the entire job queue.
- Support for retrieving the list of all devices with the exhaustive inventory of each device.
- Export a server configuration profile (SCP) containing either the entire server configuration or component level configuration (iDRAC, BIOS, RAID, NIC) to a local file path on Ansible controller or a remote network share.
- · Import an SCP from a local file path on Ansible controller or a remote network share.
- Support for configuration of BIOS, Integrated Dell Remote Access Controller (iDRAC), NIC, and RAID.
- · Support for firmware update using a Firmware Repository hosted on a remote network share.
- · Support for viewing firmware inventory details.
- · Support for Windows, Linux, and ESXi operating system deployments.
- Support for configuring power controls, resetting iDRAC, viewing Lifecycle Controller (LC) job status, deleting LC job, deleting LC job queue, exporting LC logs, and configuring system lockdown mode.
- · Retrieve the system inventory details.



What's new?

- 1. The following enhancements have been made to the ${\tt idrac_firmware}$ module:
 - · Support for installing firmware from HTTP/HTTPS/FTP based repository.
 - · Support for viewing individual component update job ids.
 - · The apply update option is added, which specifies if the packages from the Catalog XML are queued for update.

- $\cdot \quad \text{The ignore_cert_warning option is added, which specifies if certificate warnings must be ignored.} \\$
- 2. The following enhancements have been made to the installation script:

 - · Modules will be installed to the custom path, if it is set by the environment variable ANSIBLE LIBRARY.
 - $\cdot \quad \text{The default python interpreter is now located using $\#!/usr/bin/env python instead of $\#!/usr/bin/python instead of $\#!/usr/bin/python instead of $\#!/usr/bin/env python instead of $\#!/usr/bin/python instead of $\#!/usr/bin/env python instead of $\#!/usr/bin/env python instead of $\#!/usr/bin/python instead of $\#!/usr/bin/env python instead of $\#!/usr/bin/python instead of $\#!/usr/bin/env python instead of $\#!/usr/bin/python instead of $\#!/usr/bin/$

Getting Started

How OpenManage Ansible Modules works

- · How OpenManage Ansible Modules for iDRAC works
- How OpenManage Ansible Modules for OME works

Running your first Playbook

Playbooks are essentially sets of instructions (plays) that you send to run on a single target or groups of targets (hosts).

To see how to run your first iDRAC and OME playbooks, see the following:

- · Running your first iDRAC Playbook
- · Running your first OME Playbook

Modules for iDRAC

How OpenManage Ansible Modules for iDRAC works

OpenManage Ansible modules uses iDRAC REST APIs based on Redfish standards and Server Configuration Profiles (SCP) for automated configuration, deployment and update of PowerEdge servers. An SCP contains all BIOS, iDRAC, Network and Storage settings of a PowerEdge server. You can apply them to multiple servers, enabling rapid, reliable, and reproducible configuration.

You can perform an SCP operation using any of the following methods:

- Export to or import from a remote network share via CIFS, NFS. Ensure that the remote network share is mounted on the Ansible controller with read-write privileges for user running the Ansible playbooks.
- Export or import via local file streaming (for iDRAC firmware 2.60.60.60 and above).

Setting up a local mount point for a remote network share

Mount the remote network share (CIFS or NFS) locally on the Ansible controller where you want to run the playbook or modules. Local mount point should have read-write privileges in order for OpenManage Ansible modules to write an SCP file to remote network share that will be imported by iDRAC.

i NOTE: Refer to Linux man pages for mounting an NFS or CIFS network share on Ansible control machine.

Running your first iDRAC Playbook

Before you run a playbook to manage your iDRACs, you need to have a valid inventory of target PowerEdge servers. For more information on inventory, see Ansible documentation.

- 1. Install OpenManage Ansible Modules either from the dell.com/support or the https://github.com/dell/dellemc-openmanage-ansible-modules.git repository. For more details, see *Dell EM C OpenManage Ansible Modules Installation Guide*.
- 2. Create an inventory file containing a list of the iDRACs. In the following inventory example, we are using the inventory variables to store the iDRAC IP addresses and the user credentials. For more information on variables, see Ansible documentation.

```
inventory:

[PowerEdge]
R740.example.com
idrac_ip='192.168.10.10'
idrac_user='root'
idrac_password='calvin'
```

3. Define a playbook to fetch the hardware inventory of the servers. Create the playbook in the same directory where you created the inventory. Following is a playbook example:

```
playbook.yml
---
- hosts: PowerEdge
  connection: local
  gather_facts: False

tasks:
- name: Get hardware inventory
  dellemc_get_system_inventory:
    idrac_ip: "{{ idrac_ip }}"
    idrac_user: "{{ idrac_user }}"
    idrac_password: "{{ idrac_password }}"
```

4. Now run the playbook. Run the following command from the directory where you created the inventory and the playbook:

ansible-playbook playbook.yml -i inventory

5. Press Enter.

With OpenManage Ansible Modules, you can construct a playbook with a set of modules resulting in an automation workflow for configuration, deployments, and updates of PowerEdge servers.

To view the list of all available iDRAC modules:

1. Run the following command on the Ansible control machine:

```
ansible-doc -l | grep "idrac"
```

2. Press Enter.

List of the available iDRAC modules is displayed.

To view the documentation of a module:

1. Run the following command on the Ansible control machine:

```
ansible-doc <module name>
```

2. Press Enter.

Updating Firmware

You can maintain up-to-date firmware versions of Dell EMC server components to get better efficiency, security protection and enhanced features. Create update sources to do the firmware update.

Following are the tasks for the firmware update activities:

- View firmware inventory
- · Install firmware

View firmware inventory

Command: dellemc_get_firmware_inventory

Synopsis

You can view the firmware inventory of a server using this module. This module displays components of a server and the corresponding firmware versions.

Check_mode support: No

Options

Table 1. dellemc_get_firmware_inventory

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_username	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port

Table 2. Return Values

Name	Description	Returned	Type Sample	
Firmware Inventory	Components of a server and their firmware versions.	Success	String	https://github.com/dell/Dell-EMC-Ansible- Modules-for-iDRAC/blob/master/samples/ dellemc_get_firmware_inventory.md

Name	Description	Returned	Туре	Sample
	List of dictionaries, 1 dictionary per firmware.			

Examples

```
-name: Get Installed Firmware Inventory
dellemc_get_firmware_inventory:
   idrac_ip: "xx.xx.xx"
   idrac_user: "xxxx"
   idrac_password: "xxxxxxx"
```

Install firmware

Module: idrac_firmware

Synopsis: You can install the firmware from a repository on a network share (CIFS, NFS, HTTP, HTTPS, FTP) to keep the system updated. To install the firmware, connect to a network share that contains a valid repository of Dell Update Packages (DUPs), and a catalog file describing the DUPs.

Check_mode support: No

Options

Table 3. idrac_firmware

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
job_wait	Yes	True	NA	Waits to terminate the module based on the wait time of the job. If set to C(False), module is terminated immediately.
catalog_file_name	No	Catalog.xml	NA	Catalog file name relative to the I (share_name).
reboot	No	False	NA	The option to reboot iDRAC after firmware update.
share_name	Yes	NA	NA	Path of the directory where the configuration file is located. It is required for CIFS, NFS, HTTP, HTTPS, FTP and FQDN based shares.
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\\user' if user is part of a domain else 'user'. This option is mandatory for CIFS Network share.
share_password/ share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network share.
share_mnt	Yes	NA	NA	This is now optional and only applicable for CIFS share.

Parameter/aliases	Required	Default	Choices	Comments
ignore_cert_warning	No	True	NA	Specifies if certificate warnings are ignored when HTTPS share is used. If C(True) option is set, then the certificate warnings are ignored.
apply_update	No	True	NA	If I(apply_update) is set to C(True), then the packages from the Catalog XML are queued for update. If it is set to C(False), no updates are applied.

Return Values

```
msg:
            type: str
            description: Over all firmware update status.
            returned: always
            sample: "Successfully updated the firmware."
update status:
            type: dict
            description: Firmware Update job and progress details from the iDRAC.
            returned: success
            sample:
                   'InstanceID': 'JID XXXXXXXXXXX',
                   'JobState': 'Completed',
'Message': 'Job completed successfully.',
                   'MessageId': 'REDXXX',
                   'Name': 'Repository Update',
                    'JobStartTime': 'NA',
                    'Status': 'Success',
```

Example

```
- name: Update firmware from repository on a NFS Share
  idrac_firmware:
       idrac user: "user_name"
       idrac_password: "user_password"
       share name: "192.168.0.0:/share"
       reboot: True
       job_wait: True
       apply_update: True
       catalog_file_name: "Catalog.xml"
- name: Update firmware from repository on a CIFS Share
  idrac firmware:
       idrac ip: "192.168.0.1"
       idrac_user: "user_name"
       idrac_password: "user_password"
share_name: "\\\192.168.0.0\\cifs"
share_user: "share_user"
       share_password: "share_password"
share_mnt: "/mnt_path"
       reboot: True
       job_wait: True
       apply_update: True
       catalog_file_name: "Catalog.xml"
- name: Update firmware from repository on a HTTP
  idrac_firmware:
    idrac_ip: "192.168.0.1"
       idrac_user: "user_name"
       idrac_password: "user_password"
       share_name: "http://downloads.dell.com"
       reboot: True
```

```
job_wait: True
       apply_update: True
- name: Update firmware from repository on a HTTPS
  idrac_firmware:
    idrac_ip: "192.168.0.1"
       idrac user: "user name"
       idrac_password: "user_password"
       share name: "https://downloads.dell.com"
       reboot: True
       job_wait: True
       apply_update: True
- name: Update firmware from repository on a FTP
  idrac_firmware:
       idrac_ip: "192.168.0.1"
       idrac user: "user name"
       idrac_password: "user_password"
       share_name: "ftp://ftp.dell.com"
       reboot: True
       job wait: True
       apply_update: True
```

Module: dellemc_idrac_firmware

Synopsis: You can install the firmware from a repository on a network share (CIFS, NFS) to keep the system updated.

To install the firmware:

- Ensure that the network share contains a valid repository of Dell Update Packages (DUPs) and a catalog file that consists the latest DUPs.
- · All applicable updates that are contained in the repository are applied to the system.

Check_mode support: No

NOTE: This module is deprecated and replaced with idrac_firmware.

Table 4. dellemc_idrac_firmware

Parameter	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
job_wait	Yes	True	NA	Whether to wait for job completion or not.
catalog_file_name	No	Catalog.xml	NA	Catalog file name relative to the I (share_name).
reboot	No	False	NA	Whether to reboot after applying the updates or not.
share_name	Yes	NA	NA	CIFS or NFS Network share
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain \\user' if user is part of a domain else 'user'. This option is mandatory for CIFS Network share.

Parameter	Required	Default	Choices	Comments
share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network share.
share_mnt	Yes	NA	NA	Local mount path of the network share with read/write permission for ansible user This option is mandatory for Network share.

Return Values

```
msg:
           type: str
           description: Over all firmware update status.
           returned: always
           sample: "Successfully updated the firmware."
update status:
           type: dict
           description: Firmware Update job and progress details from the iDRAC.
           returned: success
           sample:
                  'InstanceID': 'JID XXXXXXXXXXX',
                  'JobState': 'Completed',
                   'Message': 'Job completed successfully.',
                  'MessageId': 'REDXXX',
                  'Name': 'Repository Update',
                   'JobStartTime': 'NA',
                   'Status': 'Success',
```

Example

```
- name: Update firmware from repository on a Network Share
    dellemc_idrac_firmware:
     idrac ip:
                         "192.168.0.1"
      idrac_user:
                         "user_name"
                     "user_pwd"
"192.168.0.0:/share"
      idrac pwd:
     share name:
                         "share_user_name"
      share_user:
      share_pwd:
                         "share_user_pwd"
"/mnt/share"
      share mnt:
      reboot:
                          True
      job wait:
                           True
      catalog_file_name: "Catalog.xml"
```

Module: dellemc_install_firmware

Synopsis

You can install the firmware from a repository on a network share (CIFS, NFS) to keep the system updated.

- For 12th and 13th generation of PowerEdge servers, firmware update from a network repository is performed using WS-Man APIs.
- For 14th generation of PowerEdge servers, firmware update from a network repository is performed using the SCP.

To install the firmware:

- Ensure that the network share contains a valid repository of Dell Update Packages (DUPs) and a catalog file that consists the latest DUPs.
- · All applicable updates that are contained in the repository are applied to the system.

Check_mode support: No

i NOTE: This module is deprecated and replaced with idrac_firmware.

Table 5. dellemc_install_firmware

Parameter	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
job_wait	Yes	True	NA	Whether to wait for job completion or not.
catalog_file_name	No	Catalog.xml	NA	Catalog file name relative to the I (share_name).
reboot	No	False	NA	Whether to reboot after applying the updates or not.
share_name	Yes	NA	NA	CIFS or NFS Network share
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain \user' if user is part of a domain else 'user'. This option is mandatory for CIFS Network share.
share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network share.
share_mnt	Yes	NA	NA	Local mount path of the network share with read/write permission for ansible user. This option is mandatory for Network share.

Table 6. Return Values

Name	Description	Returned	Туре	Sample
Firmware	Updates firmware from a repository on a network share (CIFS, NFS).	Success		https://github.com/dell/Dell-EMC-Ansible- Modules-for-iDRAC/blob/master/samples/ dellemc_install_firmware.md

Example

Configuring PowerEdge Servers

Integrated Dell Remote Access Controller (iDRAC) with LC provide the ability to generate a human-readable representation of server configuration using Server Configuration Profile (SCP) feature. This file contains BIOS, iDRAC, LC, network, and RAID configuration settings. You can modify this file as per your need and apply to other servers.

The SCP feature is used in the Ansible module to automate the configuration activity of PowerEdge servers and their components.

Following are the tasks:

- View LC status
- Server Configuration Profile
- Configuring iDRAC
- · Configure BIOS
- · Configure RAID
- · Configure Collect System Inventory on Restart
- Configure syslog

View LC status

Module: dellemc_get_lcstatus

Synopsis

You can view the LC status on a PowerEdge server using this module. You must check the readiness of the LC before carrying out any configuration or update. This module returns the LC readiness as True or False and its status.

Check_mode support: No

Options

Table 7. dellemc_get_lcstatus

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port

Table 8. Return Values

Name	Description	Returned	Туре	Sample
LC status	Displays the LC status on a PowerEdge server	Success	String	https://github.com/dell/Dell-EMC- Ansible-Modules-for-iDRAC/blob/ master/samples/ dellemc_get_lcstatus.md

Example

```
-name: Get LC Status
dellemc_get_lcstatus:
   idrac_ip: "xx.xx.xx."
   idrac_user: "xxxx"
   idrac_password: "xxxxxxxxx"
```

Server Configuration Profile

Export or Import Server Configuration Profile

Module: idrac_server_config_profile

Synopsis

This module exports the Server Configuration Profile (SCP) from iDRAC. It can also import from a network share or from a local file.

Table 9. idrac_server_config_profile

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
command	No	export	· import · export	 If C(import), will perform SCP import operations. If C(export), will perform SCP export operations.
job_wait	Yes	NA	NA	Whether to wait for job completion or not.
share_name	Yes	NA	NA	CIFS or NFS Network Share or a local path.
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\\user' if user is a part of a domain, else 'user'. This option is mandatory for CIFS Network Share.
share_password/ share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network Share.
scp_file	No	NA	NA	Server Configuration Profile file name. This option is mandatory for C(import) state.
scp_components	No	ALL	· ALL · IDRAC · BIOS · NIC · RAID	 If C(ALL), the module imports all components configurations from SCP file. If C(iDRAC), the module imports iDRAC configuration from SCP file. If C(BIOS), the module imports BIOS configuration from SCP file. If C(NIC), the module imports NIC configuration from SCP file. If C(RAID), the module imports RAID configuration from SCP file.
shutdown_type	No	Graceful	GracefulForcedNoReboot	This option is applicable for C(import) state. If C(Graceful), it gracefully shuts down the server If C(Forced), it forcefully shuts down the system If C(NoReboot), it does not reboot the server
end_host_power_state	No	On	· On · Off	This option is applicable for C(import) state. If C(On), End host power state is on If C(Off), End host power state is off
export_format	No	XML	· JSON · XML	Specify the output file format. This option is applicable for C(export) state.

Parameter/aliases	Required	Default	Choices	Comments
export_use	No	Default	· Clone	Specify the type of Sever Configuration Profile (SCP) to be exported. This option is applicable for C(export) state.

Return Values

```
msq:
  type: str
  description: status of the import or export SCP job.
  returned: always
  sample: "Successfully imported the Server Configuration Profile"
scp status:
  type: dict
  description: SCP operation job and progress details from the iDRAC.
  returned: success
  sample:
    {
      "Id": "JID XXXXXXXXX",
      "JobState": "Completed",
      "JobType": "ImportConfiguration",
      "Message": "Successfully imported and applied Server Configuration Profile.",
      "MessageArgs": [],
      "MessageId": "XXX123",
      "Name": "Import Configuration",
      "PercentComplete": 100,
      "StartTime": "TIME NOW",
      "Status": "Success",
      "TargetSettingsURI": null,
      "retval": true
```

Examples

```
- name: Import Server Configuration Profile from a network share
  dellemc_idrac_server_config_profile:
                   "192.168.0.1
    idrac ip:
    idrac_ip: "192.168.0.
idrac_user: "user_name"
    idrac_password:"user_password"
                    "import"
    command:
                     "192.168.0.2:/share"
    share_name:
                    "share_user_name"
    share_user:
    share password: "share user password"
    scp_file:
                    "scp_filename.xml"
    scp_components:"ALL"
job_wait: True
                      True
- name: Import Server Configuration Profile from a local path
  dellemc_idrac_server_config_profile:
                     "19\overline{2}.168.0.1"
    idrac_ip:
                 "user_name"
    idrac user:
    idrac password: "user password"
                     "import"
    command:
                     "/scp_folder"
    share name:
                    "share_user_name"
    share_user:
    scp_tile: "scp_filename.xml" scp_components:"ALL" job_wait:
    share_password:"share_user_password"
- name: Export Server Configuration Profile to a network share
  dellemc_idrac_server_config_profile:
    idrac_ip:
idrac user:
                     "1\overline{9}2.168.\overline{0}.1"
                     "user_name"
    idrac_password: "user_password"
                      "192.168.0.2:/share"
    share_name:
                      "share_user_name"
    share user:
    share password: "share user password"
```

```
job_wait: False

- name: Export Server Configuration Profile to a local path dellemc_idrac_server_config_profile:
    idrac_ip: "192.168.0.1"
    idrac_user: "user_name"
    idrac_password: "user_password"
    share_name: "/scp_folder"
    share_user: "share_user_name"
    share_password: "share_user_password"
    job_wait: False
```

Module: dellemc_idrac_server_config_profile

Synopsis

This module exports Server Configuration profile (SCP) to a given network share or imports SCP from a network share or a local file.

NOTE: This module is deprecated and replaced with idrac_server_config_profile.

Table 10. dellemc_idrac_server_config_profile

Parameter	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
command	No	export	· import · export	 If C(import), will perform SCP import operations. If C(export), will perform SCP export operations.
job_wait	Yes	NA	NA	Whether to wait for job completion or not.
share_name	Yes	NA	NA	CIFS or NFS Network Share or a local path.
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\\user' if user is a part of a domain, else 'user'. This option is mandatory for CIFS Network Share.
share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network Share.
scp_file	No	NA	NA	Server Configuration Profile file name. This option is mandatory for C(import) state.
scp_components	No	ALL	· ALL · IDRAC · BIOS · NIC · RAID	 If C(ALL), the module imports all components configurations from SCP file. If C(iDRAC), the module imports iDRAC configuration from SCP file. If C(BIOS), the module imports BIOS configuration from SCP file. If C(NIC), the module imports NIC configuration from SCP file. If C(RAID), the module imports RAID configuration from SCP file.
shutdown_type	No	Graceful	GracefulForcedNoReboot	This option is applicable for C(import) state. If C(Graceful), it gracefully shuts down the server

Parameter	Required	Default	Choices	Comments
				 If C(Forced), it forcefully shuts down the system If C(NoReboot), it does not reboot the server
end_host_power_state	No	On	· On · Off	This option is applicable for C(import) state. If C(On), End host power state is on If C(Off), End host power state is off
export_format	No	XML	· JSON · XML	Specify the output file format. This option is applicable for C(export) state.
export_use	No	Default	DefaultCloneReplace	Specify the type of Sever Configuration Profile (SCP) to be exported. This option is applicable for C(export) state.

Return Values

```
msa:
  description: status of the import or export SCP job.
  returned: always
  sample: "Successfully imported the Server Configuration Profile"
scp status:
  type: dict
  description: SCP operation job and progress details from the iDRAC.
  returned: success
  sample:
      "Id": "JID_XXXXXXXXX",
      "JobState": "Completed",
"JobType": "ImportConfiguration",
      "Message": "Successfully imported and applied Server Configuration Profile.",
      "MessageArgs": [],
      "MessageId": "XXX123",
      "Name": "Import Configuration",
      "PercentComplete": 100,
      "StartTime": "TIME NOW",
      "Status": "Success\overline{}",
      "TargetSettingsURI": null,
      "retval": true
    }
```

Examples

```
- name: Import Server Configuration Profile from a network share

dellemc_idrac_server_config_profile:
    idrac_ip: "192.168.0.1"
    idrac_user: "user_name"
    idrac_pwd: "user_pwd"
    command: "import"
    share name: "192.168.0.2:/share"
    share_user: "share_user_name"
    share_user: "share_user_pwd"
    scp_file: "scp_filename.xml"
    scp_components: "ALL"
    job_wait: True

- name: Import Server Configuration Profile from a local path
    dellemc_idrac_server_config_profile:
    idrac_ip: "192.168.0.1"
    idrac_user: "user_name"
    idrac_pwd: "user_pwd"
    command: "import"
    share name: "/scp folder"
```

```
share user: "share user name"
    share_pwd: "share_user_pwd"
scp_file: "scp_filename.xml"
scp_components: "ALL"
    job wait: True
- name: Export Server Configuration Profile to a network share
  dellemc idrac server config profile:
    idrac_ip: "192.168.0.1"
    idrac_user: "user_name"
    idrac_pwd: "user_pwd"
share_name: "192.168.0.2:/share"
    share user: "share user name"
    share_pwd: "share_user_pwd"
    job_wait: False
- name: Export Server Configuration Profile to a local path
  dellemc idrac_server_config_profile:
    idrac_ip: "192.168.0.1"
    idrac_user: "user_name"
    idrac_password: "user_password"
    share name: "/scp folder"
    share_user: "share_user_name" share_pwd: "share_user_pwd"
    job wait: False
```

Module: dellemc_import_server_config_profile

Synopsis

You can import an SCP file (in an XML or JSON format) exported from a golden PowerEdge server configuration to one or more servers, thus achieving an effortless, consistent, and automated deployment. Importing an SCP file is useful in restoring the configuration of the server to the state stored in the profile.

You can import SCP from a local or a remote share to iDRAC. For a remote share, make sure that a network share path and the file name are available. If there are component configurations (such as BIOS, RAID, NIC, iDRAC, and so on) present in the SCP file that require a server restart, you can use the **I(shutdown_type)** argument to specify whether a **Graceful** or **Forced** shutdown of the server is required.

Check_mode support: No

NOTE: This module is deprecated and replaced with idrac_server_config_profile.

Table 11. dellemc_import_server_config_profile

Parameter	Required	Default	Choices	Comments
end_host_power_state	No	On	· On · Off	If On, End host power is onIf Off, End host power is off
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
job_wait	Yes	NA	· True · False	 If the value is True, it waits for the SCP import job to finish and returns the job completion status If the value is False, it returns immediately with a JOB ID after queuing the SCP import job in LC job queue
scp_components	No	ALL	· ALL	If ALL, the module imports all components configurations from SCP file

Parameter	Required	Default	Choices	Comments
			IDRAC BIOS RIC RAID	If iDRAC, the module imports iDRAC configuration from SCP file If BIOS, the module imports BIOS configuration from SCP file If NIC, the module imports NIC configuration from SCP file If RAID, the module imports RAID configuration from SCP file
scp_file	Yes	NA	NA	Server Configuration Profile file name
share_name	Yes	NA	NA	Network share or a local path
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\user' if user is part of a domain else 'user'. This option is mandatory for CIFS Network share.
share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network share.
shutdown_type	No	Graceful	GracefulForcedNoReboot	 If Graceful, it gracefully shuts down the server If Forced, it forcefully shuts down the system If NoReboot, it does not reboot the server

Table 12. Return Values

Name	Description	Returned	Туре	Sample
Import SCP	Imports SCP from a network share or from a local file	Success	String	https://github.com/dell/Dell-EMC-Ansible- Modules-for-iDRAC/blob/master/samples/ dellemc_import_server_config_profile.md

Example

```
-name: Import Server Configuration Profile
dellemc_import_server_config_profile
idrac_ip: "xx.xx.xx.xx"
idrac_user: "xxxx"
idrac_pwd: "xxxxxxxxx"
share_name: "xx.xx.xx.xx:/share"
share_user: "xxxx"
share_pwd: "xxxxxxxxx"
scp_file: "scp_file.xml"
scp_components: "ALL"
job_wait: "True"
```

Module: dellemc_export_server_config_profile

Synopsis

You can export **Server Configuration Profile (SCP)** with various components such as iDRAC, BIOS, NIC, RAID together or with one of these components. You can export SCP from iDRAC to a local or a network shared location. For shared location, make sure that a network share path is established.

Check_mode support: No

i NOTE: This module is deprecated and replaced with idrac_server_config_profile.

Table 13. dellemc_export_server_config_profile

Parameter	Required	Default	Choices	Comments
export_format	No	XML	· JSON · XML	The output file format
export_use	No	Default	Default Clone Replace	 If C(Default), will export the SCP using the Default method If C(Clone), will export the SCP using the Clone method If C(Replace), will export the SCP using the Replace method
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
job_wait	Yes	NA	· True · False	If the value is True, it waits for the SCP export job to finish and returns the job completion status If the value is False, it returns immediately with a JOB ID after queuing the SCP export job in LC job queue
share_name	Yes	NA	NA	CIFS or NFS network share or a local path
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\user' if user is part of a domain else 'user'. This option is mandatory for CIFS Network share.
share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network share.
scp_components	No	ALL	· ALL · IDRAC · BIOS · NIC · RAID	Specify the hardware components configuration to be exported If ALL, the module exports all components configurations in SCP file If IDRAC, the module exports iDRAC configuration in SCP file If BIOS, the module exports BIOS configuration in SCP file If NIC, the module exports NIC configuration in SCP file If RAID, the module exports RAID configuration in SCP file

Table 14. Return Values

Name	Description	Returned	Туре	Sample
Export SCP	Exports the SCP to the provided network share or to the local path	Success	String	https://github.com/dell/Dell-EMC-Ansible- Modules-for-iDRAC/blob/master/samples/ dellemc_export_server_config_profile.md

Example

idrac_pwd: "xxxxxxxx"
share_name: "xx.xx.xx.xx:/share"
share_user: "xxxx"
share_pwd: "xxxxxxxxx" export_format: "XML"
export_use: "Default"
job_wait: "True"

Configuring iDRAC

Following are the modules responsible for configuring specific iDRAC attributes.

- Configure iDRAC users
- · Configure iDRAC timezone
- · Configure iDRAC eventing
- Configure iDRAC services
- Configure iDRAC network

Configure iDRAC users

Module: dellemc_configure_idrac_users

Synopsis

This module creates, modifies or deletes an iDRAC local user.

Check_mode support: Yes

Options

Table 15. dellemc_configure_idrac_users

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
share_name	Yes	NA	NA	CIFS or NFS Network share or a local path
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\user' if user is part of a domain else 'user'. This option is mandatory for CIFS Network share.
share_password/ share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network share.
share_mnt	No	NA	NA	Local mount path of the network share with read-write permission for Ansible user. This option is mandatory for CIFS or NFS Network share.
action	No	create	createdeletemodify	This value decides whether to create or delete or modify iDRAC user
user_name	No	NA	NA	Provide the username to be created or deleted or modified
user_password	No	NA	NA	Provide the password for the user to be created or modified
privilege_users	No	NA	· NoAccess	Privilege user access is configurable

Parameter/aliases	Required	Default	Choices	Comments
			ReadonlyOperatorAdministrator	
ipmilanprivilege_users	No	NA	No_AccessAdministratorOperatorUser	IPMI Lan Privilege user access is configurable
ipmiserialprivilege_users	No	NA	No_AccessAdministratorOperatorUser	IPMI Serial Privilege user access is configurable NOTE: This parameter is not supported by PowerEdge Modular servers.
enable_users	No	NA	EnabledDisabled	Enabling or Disabling the new iDRAC user
solenable_users	No	NA	EnabledDisabled	Enabling or Disabling SOL for iDRAC user
protocolenable_users	No	NA	EnabledDisabled	Enabling or Disabling protocol for iDRAC user
authenticationprotocol_u sers	No	NA	T_None SHA MD5	Configuring authentication protocol for iDRAC user
privacyprotocol_users	No	NA	T_NoneDESAES	Configuring privacy protocol for iDRAC user

Table 16. Return Values

Name	Description	Returned	Туре	Sample
iDRAC users	Configures the iDRAC users attributes	Success	String	https://github.com/dell/Dell-EMC-Ansible-Modules-for-iDRAC/blob/master/samples/dellemc_configure_idrac_users.md

Example

```
-name: Configure the iDRAC users attributes
   dellemc_configure_idrac_users:

"xx.xx.xx"
      idrac_ip:
idrac_user:
                                                 "xxxx"
      idrac_password:
share_name:
share_password:
share_user:
                                                  "xxxxxxxx"
                                                "xx.xx.xx.xx:/share"
"xxxxxxxxx"
                                                "xxxx"
      share_mnt:
                                                  "/mnt/share"
                                                "create"
      action:
                                               "username"
      user_name:
                                                 "xxxxxxxx"
      user_password:
      user_password: "xxxxxxxx"
privilege_users: "Administrator"
ipmilanprivilege_users: "Administrator"
ipmiserialprivilege_users: "Administrator"
"Thebled"
      enable_users:
solenable_users:
                                                  "Enabled"
                                                  "Enabled"
      protocolenable_users: "Enabled"
      authenticationprotocol_users: "SHA" privacyprotocol_users: "AES"
```

Configure iDRAC timezone

Module: dellemc_configure_idrac_timezone

Synopsis

This module configures the iDRAC timezone related attributes.

Check_mode support: Yes

Options

Table 17. dellemc_configure_idrac_timezone

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
share_name	Yes	NA	NA	CIFS or NFS Network share or a local path
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\user' if user is part of a domain else 'user'. This option is mandatory for CIFS Network share.
share_password/ share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network share.
share_mnt	No	NA	NA	Local mount path of the network share with read-write permission for Ansible user. This option is mandatory for CIFS or NFS Network share.
setup_idrac_timezone	No	NA	NA	Configuring the timezone for iDRAC
enable_ntp	No	NA	NA	Whether to Enable or Disable NTP for iDRAC
ntp_server_1	No	NA	NA	NTP configuration for iDRAC
ntp_server_2	No	NA	NA	NTP configuration for iDRAC
ntp_server_3	No	NA	NA	NTP configuration for iDRAC

Table 18. Return Values

Name	Description	Returned	Туре	Sample
iDRAC Timezone	Configures the iDRAC timezone attributes	Success	String	https://github.com/dell/Dell-EMC-Ansible- Modules-for-iDRAC/blob/master/samples/ dellemc_configure_idrac_timezone.md

Example

Configure iDRAC eventing

Module: dellemc_configure_idrac_eventing

Synopsis

This module configures iDRAC eventing related attributes.

Check_mode support: Yes

Options

Table 19. dellemc_configure_idrac_eventing

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
share_name	Yes	NA	NA	CIFS or NFS Network share or a local path
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\user' if user is part of a domain else 'user'. This option is mandatory for CIFS Network share.
share_password/ share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network share.
share_mnt	No	NA	NA	Local mount path of the network share with read-write permission for Ansible user. This option is mandatory for CIFS or NFS Network share.
destination_number	No	None	NA	Destination number for SNMP Trap
destination	No	None	NA	Destination for SNMP Trap
snmp_v3_username	No	NA	NA	SNMP v3 username for SNMP Trap
snmp_trap_state	No	NA	EnabledDisabled	Whether to Enable or Disable SNMP alert
email_alert_state	No	NA	EnabledDisabled	Whether to Enable or Disable Email alert
alert_number	No	None	NA	Alert number for Email configuration
address	No	NA	NA	Email address for SNMP Trap
custom_message	No	NA	NA	Custom message for SNMP Trap reference
enable_alerts	No	NA	EnabledDisabled	Whether to Enable or Disable iDRAC alerts
authentication	No	NA	EnabledDisabled	Simple Mail Transfer Protocol Authentication

Parameter/aliases	Required	Default	Choices	Comments
smtp_ip_address	No	NA	NA	SMTP IP address for communication
smtp_port	No	None	NA	SMTP Port number for access
username	No	None	NA	Username for SMTP authentication
password	No	None	NA	Password for SMTP authentication

Table 20. Return Values

Name	Description	Returned	Туре	Sample
iDRAC eventing	Configures the iDRAC eventing attributes	Success		https://github.com/dell/Dell-EMC-Ansible- Modules-for-iDRAC/blob/master/samples/ dellemc_configure_idrac_eventing.md

Example

Configure iDRAC services

Module: dellemc_configure_idrac_services

Synopsis

This module configures the iDRAC services related attributes.

Check_mode support: Yes

Options

Table 21. dellemc_configure_idrac_services

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
share_name	Yes	NA	NA	CIFS or NFS Network share or a local path

Parameter/aliases	Required	Default	Choices	Comments
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\user' if user is part of a domain else 'user'. This option is mandatory for CIFS Network share.
share_password/ share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network share.
share_mnt	No	NA	NA	Local mount path of the network share with read-write permission for Ansible user. This option is mandatory for CIFS or NFS Network share.
enable_web_server	No	NA	EnabledDisabled	Whether to Enable or Disable web server configuration for iDRAC
ssl_encryption	No	NA	Auto_NegotiateT_128_Bit_or_higherT_168_Bit_or_higherT_256_Bit_or_higher	Secure Socket Layer encryption for web server
tls_protocol	No	NA	TLS_1_0_and_HigherTLS_1_1_and_HigherTLS_1_2_Only	Transport Layer Security for web server
https_port	No	NA	NA	HTTPS access port
http_port	No	NA	NA	HTTP access port
timeout	No	NA	NA	Timeout value
snmp_enable	No	NA	Enabled Disabled	Whether to Enable or Disable SNMP protocol for iDRAC
snmp_protocol	No	NA	· All · SNMPv3	Type of the SNMP protocol
community_name	No	test	NA	SNMP community name for iDRAC
alert_port	No	None	NA	SNMP alert port for iDRAC
discovery_port	No	162	NA	SNMP discovery port for iDRAC
trap_format	No	None	NA	SNMP trap format for iDRAC

Table 22. Return Values

Name	Description	Returned	Туре	Sample
iDRAC services	Configures the iDRAC services attributes	Success	String	https://github.com/dell/Dell-EMC-Ansible- Modules-for-iDRAC/blob/master/samples/ dellemc_configure_idrac_services.md

Example

enable_web_server: "Enabled"
http_port: "80"
https_port: "443"
ssl_encryption: "Auto_Negotiate"
tls_protocol: "TLS_1_2_Only"
timeout: "1800"
snmp_enable: "Enabled"
snmp_protocol: "SNMPv3"
community_name: "test"
alert_port: "None"
discovery_port: "162"
trap_format: "None"

Configure iDRAC network

Module: dellemc_configure_idrac_network

Synopsis

This module configures the iDRAC networking attributes.

Check_mode support: Yes

Options

Table 23. dellemc_configure_idrac_network

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
share_name	Yes	NA	NA	CIFS or NFS Network share or a local path
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\user' if user is part of a domain else 'user'. This option is mandatory for CIFS Network share.
share_password/ share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network share.
share_mnt	No	NA	NA	Local mount path of the network share with read-write permission for Ansible user. This option is mandatory for CIFS or NFS Network share.
setup_idrac_nic_vlan	No	NA	NA	Configuring the VLAN-related setting for iDRAC
register_idrac_on_dns	No	NA	EnabledDisabled	Registering Domain Name System for iDRAC
dns_idrac_name	No	NA	NA	DNS Name for iDRAC
auto_config	No	NA	EnabledDisabled	Automatically creates the records for DNS
static_dns	No	NA	NA	Static configuration for DNS
vlan_id	No	None	NA	Configuring the VLAN ID for iDRAC
vlan_priority	No	None	NA	Configuring the VLAN priority for iDRAC
enable_nic	No	NA	· Enabled	Whether to Enable or Disable Network Interface Controller for iDRAC

Parameter/aliases	Required	Default	Choices	Comments
			· Disabled	
nic_selection	No	NA	DedicatedLOM1LOM2LOM3LOM4	Selecting Network Interface Controller types for iDRAC
failover_network	No	NA	ALLLOM1LOM2LOM3LOM4T_None	Failover Network Interface Controller types for iDRAC
auto_detect	No	NA	EnabledDisabled	Auto detect Network Interface Controller types for iDRAC
auto_negotiation	No	NA	EnabledDisabled	Auto negotiation of Network Interface Controller for iDRAC
network_speed	No	NA	T_10 T_100 T_1000	Network speed for Network Interface Controller types for iDRAC
duplex_mode	No	NA	· Full · Half	Transmission of data Network Interface Controller types for iDRAC
nic_mtu	No	None	NA	NIC Maximum Transmission Unit
ip_address	No	NA	NA	IP Address needs to be defined
enable_dhcp	No	NA	NA	Whether to Enable or Disable DHCP Protocol for iDRAC
dns_from_dhcp	No	NA	EnabledDisabled	Specifying Domain Name System from Dynamic Host Configuration Protocol
enable_ipv4	No	NA	EnabledDisabled	Whether to Enable or Disable IPv4 configuration
static_dns_1	No	NA	NA	Specify Domain Name System Configuration
static_dns_2	No	NA	NA	Specify Domain Name System Configuration
static_gateway	No	None	NA	Interfacing the network with another protocol
static_net_mask	No	None	NA	Determine whether IP address belongs to host

Table 24. Return Values

Name	Description	Returned	Туре	Sample
iDRAC network	Configures the iDRAC network attributes	Success	String	https://github.com/dell/Dell-EMC-Ansible-Modules-for-iDRAC/blob/master/samples/dellemc_configure_idrac_network.md

Example

idrac_password: "xxxxxxxx"
share_name: "xx.xx.xx.xx:/share"
share_password: "xxxxxxxxx"
share_user: "xxxxxxxx"
share_mnt: "/mnt/share"
register_idrac_on_dns: dns_idrac_name: "None"
auto_config: "None"
static_dns: "None"
setup_idrac_nic_vlan: "Enabled"
vlan_id: "0"
vlan_priority: "1"
enable_nic: "Enabled"
nic_selection: "Dedicated"
failover_network: "T None"
auto_detect: "Disabled"
auto_negotiation: "Enabled"
network_speed: "T_1000"
duplex_mode: "Full"
nic_mtu: "1500"
ip_address: "x.x.x.x"
enable_dhcp: "Enabled"
dns_from_dhcp: "Enabled"
static_dns_1: "x.x.x.x"
static_dns_1: "x.x.x.x"
static_gateway: "None"
static_net_mask: "None"
static_net_mask: "None"

Configure BIOS

Module: dellemc_configure_bios

Synopsis

This module configures the BIOS attributes for PowerEdge servers.

Check_mode support: Yes

Table 25. dellemc_configure_bios

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
share_name	No	NA	NA	CIFS or NFS network share or a local path
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\user' if user is part of a domain else 'user'. This option is mandatory for CIFS Network share.
share_password/ share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network share.
share_mnt	No	NA	NA	Local mount path of the network share with read-write permission for Ansible user. This option is mandatory for CIFS or NFS Network share.
boot_mode	No	NA	· Bios	(deprecated) Configures the boot mode to BIOS or UEFI.

Parameter/aliases	Required	Default	Choices	Comments
			· Uefi	NOTE: This option has been deprecated, and will be removed in the later version. Please use the I(attributes) for BIOS attributes configuration instead. NOTE: I(boot_mode) is mutually exclusive with I(boot_sources).
				(deprecated) Boot devices' FQDDs in the sequential order for BIOS or UEFI Boot Sequence. Provide the I (boot_mode) option to
boot_sequence	No	NA	NA	determine the appropriate boot sequence to be applied. NOTE: This option has been deprecated, and will be removed in the later version. Please use the I(attributes) or I(boot_sources) for Boot Sequence modification instead.
				NOTE: I(boot_sequence) is mutually exclusive with I(boot_sources).
nvme_mode	No	NA	NonRaidRaid	(deprecated) Configures the NVME mode in the 14 th generation of PowerEdge servers. NOTE: This option has been deprecated, and will be removed in the later version. Please use the I(attributes) for BIOS attributes configuration instead. NOTE: I(nvme_mode) is mutually exclusive with I(boot_sources).
secure_boot_mode	No	NA	AuditMode,DeployedModeSetupModeUserMode	(deprecated) Configures how the BIOS uses the Secure Boot Policy Objects in the 14 th generation of PowerEdge servers. NOTE: This option has been deprecated, and will be removed in the later version. Please use the I(attributes) for BIOS attributes configuration instead. NOTE: I(secure_boot_mode) is mutually exclusive with I(boot_sources).
onetime_boot_mode	No	NA	 Disabled OneTimeBootSeq OneTimeCustomBootSeqSt r OneTimeCustomHddSeqStr OneTimeCustomUefiBootS eqStr OneTimeHddSeq 	(deprecated) Configures the one time boot mode setting. NOTE: This option has been deprecated, and will be removed in the later version. Please use the I(attributes) for BIOS attributes configuration instead.

Parameter/aliases	Required	Default	Choices	Comments
			· OneTimeUefiBootSeq	NOTE: I(onetime_boot_mode) is mutually exclusive with I(boot_sources).
attributes No NA NA		NA	Dictionary of BIOS attributes and value pair. Attributes should be part of the Redfish Dell BIOS Attribute Registry. Redfish URI to view BIOS attributes: (https://l(idrac_ip)/redfish/v1/Systems/System.Embedded.1/Bios). If deprecated options are given and the	
				same are repeated in I(attributes) then values in I(attributes) will take precedence. NOTE: I(attributes) is mutually exclusive with I(boot_sources).
				List of boot devices to set the boot sources settings. Boot devices are dictionary. While applying boot sequence, Index of at least one boot device should be 0. NOTE: I(boot_sources) is mutually exclusive with I(attributes), I(boot_sequence), I(onetime_boot_mode), I(secure_boot_mode), I(nvme_mode), and I(boot_mode).
boot_sources	No	NA	NA	NOTE: When user does not provide Index or Enabled value in boot_sources option, dellemc_configure_bios module uses the current Index or Enabled value from the target server for the specified boot source while applying boot sources.
				NOTE: In case the selected Index or Enabled value from the target server conflicts with any of the boot_sources option values to be applied, dellemc_configure_bios module may fail to apply with appropriate error message.

Table 26. Return Values

Name	Description	Returned	Туре	Sample
BIOS	Configures the BIOS configuration attributes	Success		https://github.com/dell/Dell-EMC- Ansible-Modules-for-iDRAC/blob/master/ samples/dellemc_configure_bios.md

Examples

-name: Configure BIOS Generic attributes
dellemc_configure_bios:
 idrac_ip: "xx.xx.xx."
 idrac_user: "xxxx"
 idrac_password: "xxxxxxxx"
 attributes:

```
BootMode : "Bios"
       OneTimeBootMode: "Enabled"
BootSeqRetry: "Enabled"
       BootSeqRetry:
- name: Configure PXE Generic Attributes
   idrac_ip:
idrac_user:
                            "xxxx"
                            "xxxxxxxx"
     idrac_password:
     attributes:
        PxeDev1EnDis: "Enabled"
PxeDev1Protocol: "IPV4"
PxeDev1VlanE-E'
        PxeDev1VlanEnDis: "Enabled"
        PxeDev1VlanId:
        PxeDev1Interface: "NIC.Embedded.x-x-x"
        PxeDev1VlanPriority: x
- name: Configure Boot Sources
   dellemc_configure_bios:
                                "xx.xx.xx"
     idrac ip:
                               "xxxx"
      idrac_user:
      idrac_password: "xxxxxxxx"
     boot_sources:
    - Name : "NIC.Integrated.x-x-x"
          Enabled : True
          Index :
- name: Configure Boot Sources
  dellemc_configure_bios:
    idrac_ip: "xx.xx.xx.xx"
idrac_user: "xxxx"
    idrac_password: "xxxxxxxx"
     boot sources:
       - Name : "NIC.Integrated.x-x-x"
        Enabled : True
       Index : 0
- Name : "NIC.Integrated.x-x-x"
        Enabled : true
       Index : 1
- Name : "NIC.Integrated.x-x-x"
        Enabled : true
         Index : 2
- name: Configure Boot Sources - Enabled
   dellemc configure bios:
      idrac_ip:
                                        "xx.xx.xx"
      idrac_user:
                                        "xxxx"
      idrac_password: "xxxxxxxx"
     Enabled : True
- name: Configure Boot Sources - Index
   dellemc configure bios:
     idrac_ip:
idrac_user:
                                       "xx.xx.xx"
                                       "xxxx"
      idrac_password: "xxxxxxxx"
     boot_sources:
        - Name : "NIC.Integrated.x-x-x" Index : 0
```

Configure RAID

Module: dellemc_configure_raid

Synopsis

This module hosts the RAID configuration related attributes.



Table 27. dellemc_configure_raid

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
share_name	Yes	NA	NA	CIFS or NFS Network share or a local path
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\user' if user is part of a domain else 'user'. This option is mandatory for CIFS Network share.
share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network share.
share_mnt	No	NA	NA	Local mount path of the network share with read-write permission for Ansible user. This option is mandatory for Network share.
vd_name	No	NA	NA	Virtual disk name Optional, if we perform create operations Mandatory, if we perform remove operations
span_depth	No	1	NA	Span Depth
span_length	No	2	NA	Span Length
number_dedicated_hot_spare	No	0	NA	Number of Dedicated Hot Spare
number_global_hot_spare	No	0	NA	Number of Global Hot Spare
raid_level	No	RAID 0	 RAID 0 RAID 1 RAID 5 RAID 6 RAID 10 RAID 50 RAID 60 	Provide the required RAID level
disk_cache_policy	No	Default	DefaultEnabledDisabled	Disk Cache Policy
write_cache_policy	No	WriteThrough	WriteThroughWriteBackWriteBackForce	Write cache policy
read_cache_policy	No	NoReadAhead	· NoReadAhead	Read cache policy

Parameter/aliases	Required	Default	Choices	Comments
			ReadAheadAdaptive	
stripe_size	No	65536	NA	Provide stripe size value in multiples of 64 * 1024
controller_fqdd	Yes	NA	NA	Fully Qualified Device Descriptor (FQDD) of the storage controller, for e.g. RAID.Integrated.1-1
media_type	No	HDD	· HDD · SSD	Media type
bus_protocol	No	SATA	· SAS · SATA	Bus protocol
state	Yes	NA	presentabsent	If the value is 'present', the module will perform 'create' operations If the value is 'absent', the module will perform 'remove' operations

Table 28. Return Values

Name	Description	Returned	Туре	Sample
RAID configuration	Configures the RAID configuration attributes	Success		https://github.com/dell/Dell-EMC-Ansible- Modules-for-iDRAC/blob/master/samples/ dellemc_configure_raid.md

Example

Configure storage volume

Module: dellemc_idrac_storage_volume

Synopsis

This module hosts the RAID configuration related attributes.

Check_mode support: Yes

Options

Table 29. dellemc_idrac_storage_volume

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username

Parameter/aliases	Required	Default	Choices	Comments
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
span_depth	No	1	NA	Span Depth
span_length	No	1	NA	Span Length
number_dedicated_hot_ spare	No	0	NA	Number of Dedicated Hot Spare
volume_type	No	RAID 0	 RAID 0 RAID 1 RAID 5 RAID 6 RAID 10 RAID 50 RAID 60 	Provide the required RAID level
disk_cache_policy	No	Default	DefaultEnabledDisabled	Disk Cache Policy
write_cache_policy	No	WriteThrough	WriteThroughWriteBackWriteBackForce	Write Cache Policy
read_cache_policy	No	NoReadAhead	NoReadAheadReadAheadAdaptiveReadAhead	Read Cache Policy
stripe_size	No	65536	NA	Provide stripe size value in multiples of 64 * 1024
controller_id	No	NA	NA	Fully Qualified Device Descriptor (FQDD) of the storage controller, for example: RAID.Integrated.1-1 NOTE: Controller FQDD is required for C(create) RAID configuration.
volume_id	No	NA	NA	Fully Qualified Device Descriptor (FQDD) of the virtual disk, for example: Disk.virtual.0:RAID.Slot.1-1 NOTE: This option is used to get the virtual disk information.
media_type	No	None	· HDD · SDD	Media type
protocol	No	None	· SAS · SATA	Bus protocol
state	Yes	view	createdeleteview	 C(create) performs create volume operations. C(delete) performs remove volume operations. C(view) returns the storage view.

Parameter/aliases	Required	Default	Choices	Comments
volumes	No	NA	NA	A list of virtual disk-specific iDRAC attributes. This is applicable for C(create) and C(delete) operations.
				 For C(create) operation, name and drives are applicable options, other volume options can also be specified. NOTE: The drives is a required option for C(create) operation and accepts either location (list of drive slot) or id (list of drive fqdd). For C(delete) operation, only name option is applicable.
capacity	No	NA	NA	Virtual disk size in GB
raid_reset_config	No	NA	NA	This option represents whether a Reset Config operation needs to be performed on the RAID controller. Reset Config operation deletes all the virtual disks present on the RAID controller.
raid_init_operation	No	None	· None · Fast	This option represents Initialization Configuration operation to be performed on the virtual disk.

```
msg:
  type: str
  description: Overall status of the storage configuration operation.
  returned: always
  sample: "Successfully completed the view storage volume operation"
storage_status:
  type: dict
  description: Storage configuration job and progress details from the iDRAC.
  returned: success
  sample:
      "Id": "JID_XXXXXXXXX",
      "JobState": "Completed",
"JobType": "ImportConfiguration",
"Message": "Successfully imported and applied Server Configuration Profile.",
       "MessageId": "XXX123",
       "Name": "Import Configuration",
       "PercentComplete": 100,
       "StartTime": "TIME NOW",
       "Status": "Success",
       "TargetSettingsURI": null,
       "retval": true
    }
```

```
-name: Create single volume

dellemc_idrac_storage_volume:
    idrac_ip: "192.168.0.1"
    idrac_user: "username"
    idrac_password: "password"
    controller_id: "RAID.Slot.1-1"
    state: "create"
    volumes:
    - drives:
```

```
location: [5]
-name: Create multiple volume
  idrac_user:
idrac_password:
                               "username"
                               "password"
                               "True"
    raid_reset_config:
    state:
                                "create"
                                "RAID.Slot.1-1"
    controller id:
    volume type:
                                 "RAID 1"
    span_depth:
    span length:
                                  2
    number_dedicated_hot_spare: 1
                                 "Enabled"
    disk_cache_policy:
                                 "WriteBackForce"
    write cache policy:
    read cache policy:
                                "ReadAhead"
    stripe size:
                                 65536
    capacity:
                                  100
                                 "Fast"
    raid_init_operation:
    volumes:
       - name:
                                 "volume 1"
        drives:
            id:
                                 ["Disk.Bay.1:Enclosure.Internal.0-1:RAID.Slot.1-1",
                                  "Disk.Bay.2:Enclosure.Internal.0-1:RAID.Slot.1-1"]
                                 "volume_2"
      - name:
        volume_type:
                                 "RAID 5"
         span_length:
                                 3
         span depth:
                                  1
        drives:
            location:
                                 [7,3,5]
                                 "Disabled"
        disk_cache_policy:
         write_cache_policy:
                                 "WriteBack"
        read cache_policy:
                                 "NoReadAhead"
                                 131072
         stripe size:
                                  200
         capacity:
                                 "None"
         raid_init_operation:
-name: View all volume details
  dellemc_idrac_storage_volume:
                                     "192.168.0.1"
    idrac ip:
    idrac user:
                                     "username"
    idrac_password: "password"
                                     "view"
-name: View specific volume details
  dellemc_idrac_storage_volume:
    idrac_ip: "192.168.0 idrac_user: "username"
                      "192.168.0.1"
    idrac_password: "password"
                     "view"
    state:
                    "RAID.Slot.1-1"
    controller_id:
                     "Disk.Virtual.0:RAID.Slot.1-1"
    volume_id:
-name: Delete single volume
  dellemc_idrac_storage_volume:
   idrac_ip: "192.168.0.1"
    idrac user:
                             "username"
    idrac_password: "password"
                              "delete"
    state:
    volumes:
      - name: "volume_1"
-name: Delete multiple volume
  dellemc idrac storage volume:
    idrac ip:
                              "192.168.0.1"
                              "username"
    idrac_user:
    idrac password: "password"
```

```
state: "delete"
volumes:
    - name: "volume_1"
    - name: "volume_2"
```

Configure Collect System Inventory on Restart

Module: dellemc_idrac_lc_attributes

Synopsis

This module is responsible for enabling or disabling of **Collect System Inventory on Restart (CSIOR)** property for all iDRAC or LC jobs. When you enable the **CSIOR** property, hardware inventory and part configuration information are discovered and compared with previous system inventory information on every system restart.

Check_mode support: Yes

Options

Table 30. dellemc_idrac_lc_attributes

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
share_name	Yes	NA	NA	CIFS or NFS network share or a local path
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\user' if user is part of a domain else 'user'. This option is mandatory for CIFS Network share.
share_password/ share_pwd	No	NA	NA Network share user password. This option mandatory for CIFS Network share.	
share_mnt	No	NA	NA	Local mount path of the network share with read-write permission for Ansible user. This option is mandatory for CIFS or NFS Network share.
csior	Yes	NA	 Enabled Disabled Whether to Enable or Disable Collect Syllowentory on Restart (CSIOR) property iDRAC or LC jobs 	

Table 31. Return Values

Name	Description	Returned	Туре	Sample
iDRAC CSIOR	Configures CSIOR property for all iDRAC or LC jobs	Success	String	https://github.com/dell/Dell-EMC-Ansible- Modules-for-iDRAC/blob/master/samples/ dellemc_idrac_lc_attributes.md

```
-name: Set up iDRAC LC Attributes

dellemc_idrac_lc_attributes:
    idrac_ip: "xx.xx.xx.xx"
    idrac_user: "xxxxx"
    idrac_password: "xxxxxxxxx"
    share_name: "xx.xx.xx.xx./share"
    share_user: "xxxxxxxxx"
    share_password: "xxxxxxxxxx"
```

Configure syslog

Module: dellemc_setup_idrac_syslog

Synopsis

This module enables or disables syslog parameters for iDRAC.

Check_mode support: Yes

Options

Table 32. dellemc_setup_idrac_syslog

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
share_name	Yes	NA	NA	CIFS or NFS Network share or a local path
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\user' if user is part of a domain else 'user'. This option is mandatory for CIFS Network share.
share_password/ share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network share.
share_mnt	No	NA	NA	Local mount path of the network share with read-write permission for Ansible user. This option is mandatory for CIFS or NFS Network share.
syslog	Yes	NA	EnabledDisabled	Whether to Enable or Disable iDRAC syslog

Table 33. Return Values

Nam	Description	Returned	Туре	Sample
iDRAC Syslog	Configures iDRAC Syslog parameters	Success		https://github.com/dell/Dell-EMC-Ansible- Modules-for-iDRAC/blob/master/samples/ dellemc_setup_idrac_syslog.md

Deploying operating system

To provision a bare metal server, it is essential to deploy the required operating system in the device before you start using it. This section describes the process of deploying the operating system on the PowerEdge servers using Ansible.

To automate the process of operating system deployment in an unattended manner using Ansible, the iDRAC's capability is utilized to transfer the customized ISO to iDRAC for boot.

To perform OS deployment, ensure:

- · Operating system image is injected with required Dell drivers, and unattended response file.
- · iDRAC is enabled, configured, and reachable.
- · RAID is configured.

Boot to a network ISO image

Module: idrac_os_deployment

Synopsis

This module facilitates the operating system deployment. You can run this module to boot the target system to a bootable ISO image on a CIFS or NFS share. This module looks for the customized ISO in the configured share location and transfers the image to iDRAC to load it. On the system reboot, the operating system deployment begins.

Check_mode support: No

Options

Table 34. idrac_os_deployment

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC password
idrac_port	No	443	NA	iDRAC port
iso_image	Yes	NA	NA	Network ISO name
share_name	Yes	NA	NA	CIFS or NFS Network share
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\user' if user is part of a domain else 'user'. This option is mandatory for CIFS Network share.
share_password/ share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network share.
expose_duration	No	1080	NA	It is the time taken in minutes for the ISO image file to be exposed as a local CD-ROM device to the host server. When time expires, the ISO image gets automatically detached.

Table 35. Return Values

Name	Description	Returned	Туре	Sample
Boot to Network ISO	Boots to a network ISO Image	Success	String	https://github.com/dell/Dell-EMC- Ansible-Modules-for-iDRAC/blob/

Name	Description	Returned	Туре	Sample
				master/samples/ dellemc_boot_to_network_iso.md

Example

```
-name: Boot to Network ISO

idrac_os_deployment:
idrac_ip: "192.168.0.1"
idrac_user: "user_name"
idrac_password: "user_password"
share_name: "192.168.0.0:/nfsfileshare"
share_user: "share_user_name"
share_password: "share_user_pwd"
iso_image: "unattended_os_image.iso"
expose_duration: 180
```

Return

```
description: details of the boot to network ISO image operation.
returned: always
type: dict
sample: {
    "DeleteOnCompletion": "false",
    "InstanceID": "DCIM_OSDConcreteJob:1",
    "JobName": "BootToNetworkISO",
    "JobStatus": "Success",
    "Message": "The command was successful.",
    "MessageID": "OSD1",
    "Name": "BootToNetworkISO",
    "Status": "Success",
    "file": "192.168.0.0:/nfsfileshare/unattended_os_image.iso",
    "retval": true
}
```

Module: dellemc_boot_to_network_iso

Synopsis

This module facilitates the operating system deployment. You can run this module to boot the target system to a bootable ISO image on a CIFS or NFS share. This module looks for the customized ISO in the configured share location and transfers the image to iDRAC to load it. On the system reboot, the OS deployment begins.

Check_mode support: No

NOTE: This module is deprecated and replaced with idrac_os_deployment.

Options

Table 36. dellemc_boot_to_network_iso

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC password
idrac_port	No	443	NA	iDRAC port
iso_image	Yes	NA	NA	Network ISO name
share_name	Yes	NA	NA	CIFS or NFS Network share
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\user' if user is part

Parameter/aliases	Required	Default	Choices	Comments
				of a domain else 'user'. This option is mandatory for CIFS Network share.
share_password/ share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network share.

Table 37. Return Values

Name	Description	Returned	Туре	Sample
Boot to Network ISO	Boots to a network ISO Image	Success	String	https://github.com/dell/Dell-EMC- Ansible-Modules-for-iDRAC/blob/ master/samples/ dellemc_boot_to_network_iso.md

Example

Server Inventory

This section describes the process of retrieving the server inventory of the PowerEdge Servers using Ansible Modules.

View the system inventory

Module: dellemc_get_system_inventory

Synopsis

System inventory provides basic and component level detailed inventory information. You can run this module when you want to verify the asset, configured state, inventory, and health-related information for the system and its component.

Check_mode support: No

Options

Table 38. dellemc_get_system_inventory

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port

Table 39. Return Values

Name	Description	Returned	Туре	Sample
System Inventory	Displays the PowerEdge Server System Inventory	Success		https://github.com/dell/Dell-EMC-Ansible-Modules-for-iDRAC/blob/master/samples/dellemc_get_system_inventory.md

Example

```
-name: Get System Inventory
dellemc_get_system_inventory:
   idrac_ip: "xx.xx.xx.xx"
   idrac_user: "xxxxx"
   idrac_password:"xxxxxxxxx"
```

Server administration tasks

This section describes the tasks that you can run using OpenManage Ansible Modules. Following are the tasks:

- · Configure the power state on the PowerEdge servers
- Reset iDRAC
- · View LC job status
- Export LC logs
- · Delete LC job
- · Delete LC job queue
- Configure System Lockdown Mode

Configure the power state on the PowerEdge servers

Module: dellemc_change_power_state

Synopsis

This module configures the power control options on a PowerEdge server. You can run this module:

- To turn on the server.
- · To turn off the server.
- · To reboot the server.
- · For hard reset of the server.

Check_mode support: Yes

Options

Table 40. dellemc_change_power_state

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
change_power	Yes	NA	On ForceOff GracefulRestart GracefulShutdown PushPowerButton Nmi	Desired power state

Table 41. Return Values

Name	Description	Returned	Туре	Sample
Power state of a server	Configures the power control options on a PowerEdge server	Success	String	https://github.com/dell/Dell-EMC-Ansible- Modules-for-iDRAC/blob/master/samples/ dellemc_change_power_state.md

Example

Reset iDRAC

Module: dellemc_idrac_reset

Synopsis

You can reset the iDRAC using this module.

Check_mode support: Yes

Options

Table 42. dellemc_idrac_reset

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port

Table 43. Return Values

Name	Description	Returned	Туре	Sample
Reset iDRAC	Resets the iDRAC	Success	"	https://github.com/dell/Dell-EMC-Ansible-Modules-for-iDRAC/blob/master/samples/dellemc_idrac_reset.md

Example

View LC job status

Module: dellemc_get_lc_job_status

Synopsis

You can view the iDRAC or LC job status using this module. To view information about a job status, a job id is required. After a job is initiated, the system stages the job request information and sends a job id back to the system. You can query the progress and status of the job by using the job id.

Check_mode support: No

Options

Table 44. dellemc_get_lc_job_status

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address

Parameter/aliases	Required	Default	Choices	Comments
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
job_id	Yes	NA	NA	JOB ID in the format "JID_123456789012"

Table 45. Return Values

Name	Description	Returned	Туре	Sample
LC Job Status	Displays the status of an LC job	Success	String	https://github.com/dell/Dell-EMC-Ansible-Modules-for-iDRAC/blob/master/samples/dellemc_get_lc_job_status.md

Example

```
-name: Get LC Job Status
dellemc_get_lc_job_status
idrac_ip: "xx.xx.xx.xx"
idrac_user: "xxxx"
idrac_password: "xxxxxxxxx"
job_id: "JID_1234567890"
```

Export LC logs

Module: dellemc_export_lc_logs

Synopsis

LC logs provide records of past activities on a managed system. These log files are useful for the server administrators since they provide detailed information about recommended actions and some other technical information that is useful for troubleshooting purposes.

The various types of information available in LC logs are alerts-related, configuration changes on the system hardware components, firmware changes due to an upgrade or downgrade, replaced parts, temperature warnings, detailed timestamps of when the activity has started, severity of the activity, and so on.

Check_mode support: No

Options

Table 46. dellemc_export_lc_logs

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
share_name	Yes	NA	NA	CIFS or NFS Network share
share_user	No	NA	NA	Network share user in the format 'user@domain' or 'domain\user' if user is part of a domain else 'user'. This option is mandatory for CIFS Network share.
share_password/ share_pwd	No	NA	NA	Network share user password. This option is mandatory for CIFS Network share.
job_wait	Yes	NA	True False	If the value is True, it waits for the job to complete and returns the job completion status

Parameter/aliases	Required	Default	Choices	Comments
				If the value is False, it returns immediately with a JOB ID after queuing the job in LC job queue

Table 47. Return Values

Name	Description	Returned	Туре	Sample
LC logs	Exports the LC logs to the given network share	Success		https://github.com/dell/Dell-EMC-Ansible- Modules-for-iDRAC/blob/master/samples/ dellemc_export_lc_logs.md

Example

Delete LC job

Module: dellemc_delete_lc_job

Synopsis

This module deletes an LC job for a given valid JOB ID from the job queue.

You can delete an LC job:

- · after the job is completed.
- · if you do not want to perform the job or if it is taking long to execute.

Check_mode support: Yes

Options

Table 48. dellemc_delete_lc_job

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
job_id	Yes	NA	NA	JOB ID in the format "JID_XXXXXXXXX"

Table 49. Return Values

Name	Description	Returned	Туре	Sample
Delete LC job	Deletes an LC job for a given a JOB ID	Success	String	https://github.com/dell/Dell-EMC-Ansible-Modules-for-iDRAC/blob/master/samples/dellemc_delete_lc_job.md

Examples

Delete LC job queue

Module: dellemc_delete_lc_job_queue

Synopsis

You can delete all the jobs in the LC job queue using this module. All the jobs in the job queue are terminated when you delete a job queue. Check_mode support: No

Options

Table 50. dellemc_delete_lc_job_queue

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port

Table 51. Return Values

Name	Description	Returned	Туре	Sample
LC Job Queue	Deletes the LC job queue	Success	I String	https://github.com/dell/Dell-EMC-Ansible-Modules-for-iDRAC/blob/master/samples/dellemc_delete_lc_job_queue.md

Example

Configure System Lockdown Mode

Module: dellemc_system_lockdown_mode

Synopsis

System Lockdown Mode provides a mechanism to protect configuration from any unintentional or accidental changes after the system is provisioned to a certain level.

This module is responsible for enabling or disabling the lockdown mode of a system. When System Lockdown Mode is enabled, the system's configuration is locked and system cannot be configured or updated until the lockdown mode is disabled.

Check_mode support: No

Options

Table 52. dellemc_system_lockdown_mode

Parameter/aliases	Required	Default	Choices	Comments
idrac_ip	Yes	NA	NA	iDRAC IP Address
idrac_user	Yes	NA	NA	iDRAC username
idrac_password/ idrac_pwd	Yes	NA	NA	iDRAC user password
idrac_port	No	443	NA	iDRAC port
share_name	Yes	NA	NA	CIFS or NFS network share or a local path
share_user	No	NA	NA	Network share user in the format 'user@domain' or user\domain if user is part of a domain else 'user'. This field is mandatory for CIFS Network Share.
share_password/ share_pwd	No	NA	NA	Network share user password. This field is mandatory for CIFS Network Share.
share_mnt	No	NA	NA	Local mount path of the network share with readwrite permission for Ansible user. This option is mandatory for CIFS or NFS Network share.
lockdown_mode	Yes	NA	EnabledDisabled	Whether to Enable or Disable system lockdown mode

Table 53. Return Values

Name	Description	Returned	Туре	Sample
System Lockdown Mode	Configures lockdown mode of the system	Success	String	https://github.com/dell/Dell-EMC-Ansible-Modules-for-iDRAC/blob/master/samples/dellemc_system_lockdown_mode.md

Modules for OpenManage Enterprise (OME)

How OpenManage Ansible Modules for OME works

OpenManage Enterprise (OME) is a system management and monitoring application that provides rich sets of features to manage the Dell EMC servers, chassis, storage, and network switches in an enterprise data center or IT environment. Using the comprehensive set of REST APIs provided by OME, system administrators and software developers can discover, configure, provision, update, and manage their entire Dell EMC infrastructure.

OpenManage Ansible modules for OME simplifies and automates the PowerEdge server and modular infrastructure provisioning, deployment, and updates supported by OME. Leveraging the repeatable template configuration and deployment feature provided by OME, administrators can automatically deploy the changes, ensure consistency and thereby significantly improve productivity by reducing manual interactions and errors.

Running your first OME Playbook

Before you run a playbook to manage your iDRACs using OME, you need to have an inventory file that contains the target OME server details. For more information on inventory, see Ansible documentation

- 1. Install OpenManage Ansible Modules either from the dell.com/support or the https://github.com/dell/dellemc-openmanage-ansible-modules.git repository. For more details, see Dell EM C OpenManage Ansible Modules Installation Guide.
- 2. Create an inventory file containing a list of the OMEs. In the following inventory example, we are using the inventory variables to store the OME IP addresses and the user credentials. For more information on variables, see Ansible documentation.

```
inventory:

[PowerEdge]
ome.example.com
ome_ipaddress= '192.168.1.1'
ome_username='root'
ome_password='calvin'
```

3. Define a playbook to fetch the server inventory managed by the OME. Create the playbook in the same directory where you created the inventory. Following is a playbook example:

```
playbook.yml
---
- hosts: PowerEdge
  connection: local
  gather_facts: False

tasks:
- name: Get server inventory
  dellemc_ome_device_facts:
    hostname: "{{ ome_ipaddress }}"
    username: "{{ ome_username }}"
    password: "{{ ome_password }}"
    system_query_options:
    filter: "Type eq 1000"
```

4. Now run the playbook. Run the following command from the directory where you created the inventory and the playbook:

```
ansible-playbook playbook.yml -i inventory
```

5. Press Enter.

With OpenManage Ansible Modules, you can construct a playbook with a set of modules resulting in an automation workflow for configuration, deployments, and updates of PowerEdge and modular servers.

To view the list of all available OME modules:

1. Run the following command on the Ansible control machine:

```
ansible-doc -1 | grep "ome"
```

2. Press Enter.

List of the available OME modules is displayed.

To view the documentation of a module:

1. Run the following command on the Ansible control machine:

```
ansible-doc <module name>
```

2. Press Enter.

View device inventory

Module: dellemc_ome_device_facts

Synopsis

This module retrieves the list of all devices with the exhaustive inventory of each device discovered using OpenManage Enterprise.

Options

Table 54. dellemc_ome_device_facts

Parameter	Required	Default	Choices	Comments
hostname	Yes	NA	NA	Target IP Address or hostname
username	Yes	NA	NA	Target username
password	Yes	NA	NA	Target user password
port	No	443	NA	Target device HTTPS port
fact_subset	No	basic_inventory	basic_inventorydetailed_inventorysubsystem_health	 C(basic_inventory) returns the list of the devices. C(detailed_inventory) returns the inventory details of specified devices. C(subsystem_health) returns the health status of specified devices.
system_query_options	No	NA	 device_id: A list of unique identifier is applicable for C(detailed_inventory) and C(subsystem_health). device_service_tag: A list of service tags is applicable for C(detailed_inventory) and C(subsystem_health). inventory_type: For C(detailed_inventory), it returns details of the specified inventory type. filter: For C(basic_inventory), it filters the collection of devices. I(filter) query format should be aligned with OData standards. 	I(system_query_options) is applicable for the choices of the fact_subset. Either I(device_id) or I(device_service_tag) is mandatory for C(detailed_inventory) and C(subsystem_health) or both can be applicable.

Return Values

msg:

type: str

```
description: Over all device_facts status.
  returned: on error
  sample: "Failed to fetch the device facts"
ansible_facts:
  type: dict
  description: Device inventory details.
 returned: success
 sample: {
    "value": [
            {
                 "Actions": null,
                 "AssetTag": null,
                 "ChassisServiceTag": null,
                 "ConnectionState": true,
                 "DeviceManagement": [
                         "DnsName": "dnsname.host.com",
                         "InstrumentationName": "MX-12345",
                         "MacAddress": "11:10:11:10:11:10"
                         "ManagementId": 12345,
                         "ManagementProfile": [
                             {
                                  "HasCreds": 0,
                                  "ManagementId": 12345,
                                  "ManagementProfileId": 12345,
                                  "ManagementURL": "https://192.168.0.1:443",
                                  "Status": 1000,
                                  "StatusDateTime": "2019-01-21 06:30:08.501"
                              }
                         ],
                        "ManagementType": 2,
                        "NetworkAddress": "192.168.0.1"
                 "DeviceName": "MX-00031",
                 "DeviceServiceTag": "MXL1234",
                 "DeviceSubscription": null,
"LastInventoryTime": "2019-01-21 06:30:08.501",
                 "LastStatusTime": "2019-01-21 06:30:02.492",
                 "ManagedState": 3000,
                 "Model": "PowerEdge MX7000",
                 "PowerState": 17,
                 "SlotConfiguration": {},
                 "Status": 4000,
                 "SystemId": 2031,
                 "Type": 2000
            }
       ]
```

```
- name: Retrieve basic inventory of all devices.
dellemc_ome_device_facts:
   hostname: "192.168.0.1"
   username: "username"
   password: "password"

- name: Retrieve basic inventory for devices identified by IDs 33333 or 11111 using filtering.
dellemc_ome_device_facts:
   hostname: "192.168.0.1"
   username: "username"
   password: "password"
   fact_subset: "basic_inventory"
   system_query_options:
        filter: "Id eq 33333 or Id eq 11111"

- name: Retrieve inventory details of specified devices identified by IDs 11111 and 22222.
dellemc_ome_device_facts:
   hostname: "192.168.0.1"
   username: "username"
```

```
password: "password"
     fact subset: "detailed inventory"
     system_query_options:
       device id:
         -111\overline{1}1
         - 22222
- name: Retrieve inventory details of specified devices identified by service tags MXL1234
and MXL4567.
  dellemc_ome_device_facts:
    hostname: "192.168.0.1" username: "username"
    password: "password"
    fact_subset: "detailed_inventory"
    system_query_options:
      device service_tag:
         - MXT.1234
         - MXL4567
- name: Retrieve details of specified inventory type of specified devices identified by ID
and service tags.
  dellemc ome device facts:
    hostname: "192.168.0.1" username: "username"
    password: "password"
    fact subset: "detailed inventory"
    system query options:
      device id:
         -11\overline{1}11
      device service tag:
        - MXT.1234
         - MXL4567
      inventory_type: "serverDeviceCards"
- name: Retrieve subsystem health of specified devices identified by service tags.
  dellemc ome device facts:
    hostname: "192.168.0.1"
    username: "username" password: "password"
    fact subset: "subsystem health"
    system query options:
      device_service_tag:
         - MXL1234
```

Manage device configuration templates

This section describes the specifications for viewing, creating, modifying, and deploying templates on devices managed by OME for hardware configuration and deployment operations.

Following are the tasks for managing device configuration templates:

- 1. View templates
- 2. Create, modify or deploy a template

View templates

Module: ome_template_info

Synopsis

This module retrieves the list and details of all templates or details of a specific template.

Options

Table 55. ome_template_info

Parameter	Required	Default	Choices	Comments
hostname	Yes	NA	NA	Target IP Address or hostname
username	Yes	NA	NA	Target username
password	Yes	NA	NA	Target user password
port	No	443	NA	Target device HTTPS port
template_id	No	NA	NA	Unique ID of the template
system_query_options	No	NA	filter: Filter records by the supported values. I(filter) query format should be aligned with OData standards.	Options for pagination of the output.

```
msg:
  type: str
  description: Over all template facts status.
  returned: on error
  sample: "Failed to fetch the template facts"
ansible_facts:
  type: dict
  description: Details of the templates.
  returned: success
  sample: {
         "192.168.0.1": {
             "CreatedBy": "system",
             "CreationTime": "1970-01-31 00:00:56.372144",
"Description": "Tune workload for Performance Optimized Virtualization",
             "HasIdentityAttributes": false,
             "Id": 1,
             "IdentityPoolId": 0,
             "IsBuiltIn": true,
             "IsPersistencePolicyValid": false,
             "IsStatelessAvailable": false,
             "LastUpdatedBy": null,
             "LastUpdatedTime": "1970-01-31 00:00:56.372144",
             "Name": "iDRAC 14G Enable Performance Profile for Virtualization",
             "SourceDeviceId": 0,
             "Status": 0,
             "TaskId": 0,
             "TypeId": 2,
             "ViewTypeId": 4
        }
```

```
- name: Retrieve basic details of all templates.
   ome_template_info:
   hostname: "192.168.0.1"
   username" "password: "password"

- name: Retrieve details of a specific template identified by its template ID.
   ome_template_info
   hostname: "192.168.0.1"
   username: "username"
   password: "password"
   template_id: 1

- name: Get filtered template info based on name.
   ome_template_info:
   hostname: "192.168.0.1"
   username: "192.168.0.1"
   username: "username"
   password: "password"
```

```
system_query_options:
filter: "Name eq 'new template'"
```

Module: dellemc_ome_template_facts

Synopsis

This module retrieves the list and details of all templates or details of a specific template.

NOTE: This module is deprecated and replaced with ome_template_info.

Options

Table 56. dellemc_ome_template_facts

Parameter	Required	Default	Choices	Comments
hostname	Yes	NA	NA	Target IP Address or hostname
username	Yes	NA	NA	Target username
password	Yes	NA	NA	Target user password
port	No	443	NA	Target device HTTPS port
template_id	No	Na	Na	Unique ID of the template

Return Values

```
msq:
  type: str
  description: Over all template facts status.
  returned: on error
  sample: "Failed to fetch the template facts"
ansible facts:
  type: dict
  description: Details of the templates.
  returned: success
  sample:
        "192.168.0.1": {
            "CreatedBy": "system",
            "CreationTime": "1970-01-31 00:00:56.372144",
            "Description": "Tune workload for Performance Optimized Virtualization",
            "HasIdentityAttributes": false,
            "Id": 1,
            "IdentityPoolId": 0,
            "IsBuiltIn": true,
            "IsPersistencePolicyValid": false,
            "IsStatelessAvailable": false,
            "LastUpdatedBy": null,
            "LastUpdatedTime": "1970-01-31 00:00:56.372144",
            "Name": "iDRAC 14G Enable Performance Profile for Virtualization",
            "SourceDeviceId": 0,
            "Status": 0,
            "TaskId": 0,
            "TypeId": 2,
            "ViewTypeId": 4
    }
```

```
- name: Retrieve basic details of all templates.
  dellemc_ome_template_facts:
    hostname: "192.168.0.1"
    username: "username"
    password: "password"
- name: Retrieve details of a specific template identified by its template ID.
  dellemc_ome_template_facts:
    hostname: "192.168.0.1"
```

username: "username" password: "password" template_id: 1

Create, modify or deploy a template

Module: ome_template

Synopsis

This module creates, modifies or deploys a template.

Options

Table 57. ome_template

Parameter	Require d	Default	Choices	Comments
hostname	Yes	NA	NA	Target IP Address or hostname
username	Yes	NA	NA	Target username
password	Yes	NA	NA	Target user password
port	No	443	NA	Target device HTTPS port
state	No	create	createmodifydeploy	 C(create) creates a new template. C(modify) modifies an existing template. C(deploy) deploys an existing template.
template_id	No	NA	NA	Unique ID of the template to be modified or deployed. This option is mandatory for C(modify) and C(deploy) operations.
template_name	No	NA	NA	Unique Name of the template to be modified or deployed. This option is mandatory for C(modify) and C(deploy) operations.
device_id	No	[]	NA	List of targeted device id(s) for C(deploy) or a single id for C(create) operation. Either I(device_id) or I(device_service_tag) is mandatory or both can be applicable.
device_service_ta	No	[]	NA	List of targeted device service tag(s) for C(deploy) or a single service tag for C(create) operation. Either I(device_id) or I(device_service_tag) is mandatory or both can be applicable.
template_view_ty	No	Deployment	Deployment,ComplianceInventorySampleNone	The features that support template operations. This is applicable only for C(create) operation.
attributes	No	{}	NA	 Name: Name of the template. This is mandatory for C(create) and C(modify) operations. Description: Description of the template. This is applicable for C(create) and C(modify) operations. Fqdds: This provides functionality to copy only certain areas of system configuration from the specified reference server. One or more of the following values may be specified in a commaseparated string: iDRAC, System, BIOS, NIC, LifeCycleController, RAID, EventFilters, All. Default value is 'All'. This is applicable for C(create) operation. Options: Options to control device shutdown or end power state during template deployment. This is applicable for C(deploy) operation.

Parameter	Require d	Default	Choices	Comments
				 Schedule: Options to schedule the deployment task immediately or at a specified time. This is applicable for C(deploy) operation. NetworkBootIsoModel: Payload to specify the ISO deployment details. This is applicable for C(deploy) operation. Attributes: list of dictionaries of attribute values (if any) to be modified in the template to be deployed. This is applicable for C(deploy) operation.
				NOTE: See OpenManage Enterprise API Reference Guide for more details.

```
msq:
  description: Overall status of the template operation.
  returned: always
  type: str
  sample: "Successfully created a Template with id 123"
return_id:
  description: id of the template for C(create) and C(modify) or task created in case of
C(deploy)
  returned: success
  type: int
  sample: 124
template status:
  description: Details of the HTTP Error.
  returned: on HTTP error
  type: dict
  sample: {
    "error": {
      "code": "Base.1.0.GeneralError",
      "message": "A general error has occurred. See ExtendedInfo for more information.",
      "@Message.ExtendedInfo": [
          "MessageId": "GEN1234",
          "RelatedProperties": [],
"Message": "Unable to process the request because an error occurred.",
          "MessageArgs": [],
"Severity": "Critical",
          "Resolution": "Retry the operation. If the issue persists, contact your system
administrator."
      1
   }
  }
```

```
- name: create template:
    dellemc_ome_template:
    hostname: "192.168.0.1"
    username: "username"
    password: "password"
    device_id: 25123
    attributes:
        Name: "New Template"
        Description: "New Template description"

- name: modify template
    dellemc_ome_template:
        hostname: "192.168.0.1"
        username: "username"
        password: "password"
        state: "modify"
        template id: 1234
```

```
attributes:
      Name: "New Custom Template"
      Description: "Custom Template Description"
- name: deploy template.
  dellemc_ome_template:
   hostname: "192.168.0.1" username: "username"
    password: "password"
    state: "deploy"
    template id: 1234
    device i\overline{d}:
      - 12345
- 45678
    device_service_tag: ['SVTG123', 'SVTG456']
    attributes:
      NetworkBootIsoModel:
        BootToNetwork: false
        ShareType: "NFS"
        IsoPath: "bootToIsoPath.iso"
        ShareDetail:
          IpAddress: "192.168.0.2"
          ShareName: "/nfsshare"
          User: null
          Password: null
      Attributes:
        - Id: 1234
          Value: "Test Attribute"
          IsIgnored: false
      Options:
        EndHostPowerState: 1
        ShutdownType: 0
        TimeToWaitBeforeShutdown: 300
      Schedule:
        RunLater: true
        RunNow: false
```

Module: dellemc_ome_template

Synopsis

This module creates, modifies or deploys a template.



Options

Table 58. dellemc_ome_template

Parameter	Require d	Default	Choices	Comments
hostname	Yes	NA	NA	Target IP Address or hostname
username	Yes	NA	NA	Target username
password	Yes	NA	NA	Target user password
port	No	443	NA	Target device HTTPS port
state	No	create	createmodifydeploy	 C(create) creates a new template. C(modify) modifies an existing template. C(deploy) deploys an existing template.
template_id	No	NA	NA	Unique ID of the template to be modified or deployed. This option is mandatory for C(modify) and C(deploy) operations.
device_id	No	[]	NA	List of targeted device id(s) for C(deploy) or a single id for C(create) operation. Either I(device_id) or I(device_service_tag) is mandatory or both can be applicable.

Parameter	Require d	Default	Choices	Comments
device_service_ta	No	[]	NA	List of targeted device service tag(s) for C(deploy) or a single service tag for C(create) operation. Either I(device_id) or I(device_service_tag) is mandatory or both can be applicable.
template_view_ty pe	No	Deployment	Deployment,ComplianceInventorySampleNone	The features that support template operations. This is applicable only for C(create) operation.
attributes	No	{}	NA	 Name: Name of the template. This is mandatory for C(create) and C(modify) operations. Description: Description of the template. This is applicable for C(create) and C(modify) operations. Fqdds: This provides functionality to copy only certain areas of system configuration from the specified reference server. One or more of the following values may be specified in a commaseparated string: iDRAC, System, BIOS, NIC, LifeCycleController, RAID, EventFilters, All. Default value is 'All'. This is applicable for C(create) operation. Options: Options to control device shutdown or end power state during template deployment. This is applicable for C(deploy) operation. Schedule: Options to schedule the deployment task immediately or at a specified time. This is applicable for C(deploy) operation. NetworkBootIsoModel: Payload to specify the ISO deployment details. This is applicable for C(deploy) operation. Attributes: list of dictionaries of attribute values (if any) to be modified in the template to be deployed. This is applicable for C(deploy) operation. NOTE: See OpenManage Enterprise API Reference Guide for more details.

```
msg:
  description: Overall status of the template operation.
  returned: always
  type: str
  sample: "Successfully created a Template with id 123"
return_id:
  description: id of the template for C(create) and C(modify) or task created in case of
C(deploy)
  returned: success
  type: int
  sample: 124
template status:
  description: Details of the HTTP Error.
  returned: on HTTP error
  type: dict
  sample: {
    "error": {
      "code": "Base.1.0.GeneralError",
      "message": "A general error has occurred. See ExtendedInfo for more information.",
      "@Message.ExtendedInfo": [
          "MessageId": "GEN1234",
          "RelatedProperties": [],
"Message": "Unable to process the request because an error occurred.",
          "MessageArgs": [],
          "Severity": "Critical",
          "Resolution": "Retry the operation. If the issue persists, contact your system
```

Examples

```
- name: create template.
  dellemc_ome_template:
    hostname: "192.168.0.1" username: "username"
    password: "password"
    device id: 25123
    attributes:
      Name: "New Template"
      Description: "New Template description"
- name: modify template
  dellemc_ome_template:
  hostname: "192.168.0.1"
    username: "username"
    password: "password"
    state: "modify"
    template id: 1234
    attributes:
      Name: "New Custom Template"
      Description: "Custom Template Description"
- name: deploy template.
 dellemc_ome_template:
hostname: "192.168.0.1"
username: "username"
    password: "password"
    state: "deploy"
    template id: 1234
    device id:
      -12\overline{3}45
      - 45678
    device service tag: ['SVTG123', 'SVTG456']
    attributes:
      NetworkBootIsoModel:
        BootToNetwork: false
        ShareType: "NFS"
IsoPath: "bootToIsoPath.iso"
         ShareDetail:
           IpAddress: "192.168.0.2"
           ShareName: "/nfsshare"
           User: null
           Password: null
      Attributes:
          - Id: 1234
           Value: "Test Attribute"
           IsIgnored: false
      Options:
         EndHostPowerState: 1
         ShutdownType: 0
         TimeToWaitBeforeShutdown: 300
      Schedule:
         RunLater: true
         RunNow: false
```

Manage the device firmware

This section describes the process of updating firmware on the devices managed by OME using OpenManage Ansible Modules.

You can update the device firmware using the following task:

· Update device firmware

Update device firmware

Module: dellemc_ome_firmware

Synopsis

This module updates the device firmware and all its components.

Options

Table 59. dellemc_ome_firmware

Parameter	Required	Default	Choices	Comments
hostname	Yes	NA	NA	Target IP Address or hostname
username	Yes	NA	NA	Target username
password	Yes	NA	NA	Target user password
port	No	443	NA	Target HTTPS port
device_service_tag	No	NA	NA	List of targeted device service tags.
device_id	No	NA	NA	List of targeted device ids.
dup_file	Yes	NA	NA	Executable file to apply on the targets.

Return Values

```
msq:
  type: str
  description: "Overall firmware update status."
  returned: always
  sample: "Successfully updated the firmware."
update_status:
  type: dict
  description: "Firmware Update job and progress details from the OME."
  returned: success
  sample: {
     'LastRun': None,
    'CreatedBy': 'user',
'Schedule': 'startnow',
     'LastRunStatus': {
       'Id': 1111,
       'Name': 'NotRun'
     'Builtin': False,
     'Editable': True,
     'NextRun': None,
     'JobStatus': {
       'Id': 1111,
       'Name': 'New'
     'JobName': 'Firmware Update Task',
     'Visible': True,
'State': 'Enabled',
     'JobDescription': 'dup test',
     'Params': [{
  'Value': 'true',
  'Key': 'signVerify',
       'JobId': 11111}, {
       'Value': 'false',
'Key': 'stagingValue',
       'JobId': 11112}, {
       'Value': 'false',
'Key': 'complianceUpdate',
       'JobId': 11113}, {
       'Value': 'INSTALL_FIRMWARE',
       'Key': 'operation\overline{N}ame',
```

```
'JobId': 11114}],
    'Targets': [{
      'TargetType': {
      'Id': 1000,
      'Name': 'DEVICE'},
'Data': 'DCIM:INSTALLED#701__NIC.Mezzanine.1A-1-1=111111111111111,
      'Id': 11115,
      'JobId': 11116}],
    'StartTime': None,
    'UpdatedBy': None,
    'EndTime': None,
    'Id': 11117,
    'JobType': {
      'Internal': False,
      'Id': 5,
      'Name': 'Update_Task'}
}
```

Examples

```
- name: "Update firmware from DUP file using device ids."
  dellemc ome firmware:
   hostname: "192.168.0.1"
   username: "username"
   password: "password"
   device_id:
     -11\overline{1}11
      - 22222
    dup file: "/path/Chassis-System-Management_Firmware_6N9WN_WN64_1.00.01_A00.EXE"
- name: "Update firmware from DUP file using device service tags."
 dellemc ome firmware:
   hostname: "192.168.0.1"
   username: "username"
   password: "password"
   device service tag:
     - KLBR111
      - KLBR222
  dup file: "/path/Network Firmware NTRWO WN64 14.07.07 A00-00 01.EXE"
```

Manage jobs

This section describes the modules using which you can manage job operations.

Following are the tasks for managing jobs:

- View job details
- · Manage power state operations

View job details

Module: dellemc_ome_job_facts

Synopsis

This module retrieves job details for a given job ID or the entire job queue.

Options

Table 60. dellemc_ome_job_facts

Parameter	Required	Default	Choices	Comments
hostname	Yes	NA	NA	Target IP Address or hostname
username	Yes	NA	NA	Target username
password	Yes	NA	NA	Target user password

Parameter	Required	Default	Choices	Comments
port	No	443	NA	Target HTTPS port
job_id	No	NA	NA	Unique ID of the job
system_query_options	No	NA	 top: Number of records to return. Default value is 100. skip: Number of records to skip. Default value is 0. filter: Filter records by the values supported. 	Options for pagination of the output

```
msg:
  description: Overall status of the job facts operation.
  returned: always
  type: str
job_facts:
  description: Details of the OpenManage Enterprise jobs.
  returned: success
  type: dict
  sample: {
    "value": [
       "Builtin": false,
       "CreatedBy": "system",
"Editable": true,
       "EndTime": null,
       "Id": 12345,
       "JobDescription": "Refresh Inventory for Device",
       "JobName": "Refresh Inventory for Device", "JobStatus": {
         "Id": 2080,
         "Name": "New"
       },
"JobType": {
         "Id": 8,
         "Internal": false,
         "Name": "Inventory_Task"
       "LastRun": "2000-01-29 10:51:34.776",
       "LastRunStatus": {
         "Id": 2060,
         "Name": "Completed"
       "NextRun": null,
"Params": [],
"Schedule": "",
"StartTime": null,
       "State": "Enabled",
       "Targets": [
           "Data": "''",
            "Id": 123123,
            "JobId": 12345,
            "TargetType": {
             "Id": 1000,
              "Name": "DEVICE"
       "UpdatedBy": null,
"Visible": true
  ] }
```

```
- name: Get all jobs details.
dellemc ome job facts:
```

```
hostname: "192.168.0.1"
username"
password: "password"

- name: Get job details for id.
dellemc_ome_job_facts:
hostname: "192.168.0.1"
username: "username"
password: "password"
job_id: 12345

- name: Get filtered job details.
dellemc_ome_job_facts:
hostname: "192.168.0.1"
username: "username"
password: "password"
system_query_options:
top: 2
skip: 1
filter: "JobType/Id eq 8"
```

Manage power state operations

Module: ome_power_state

Synopsis

This module performs the supported power state management operations.

Options

Table 61. ome_power_state

Parameter	Require d	Default	Choices	Comments
hostname	Yes	NA	NA	Target IP Address or hostname
username	Yes	NA	NA	Target username
password	Yes	NA	NA	Target user password
port	No	443	NA	Target device HTTPS port
power_state	Yes	NA	onoffcoldbootwarmbootshutdown	Desired end power state
device_id	No	NA	NA	Targeted device id. i NOTE: I(device_id) is mutually exclusive with I(device_service_tag).
device_service_ta	No	NA	NA	Targeted device service tag. NOTE: I(device_service_tag) is mutually exclusive with I(device_id).

Return Values

```
msg:
    type: str
    description: "Overall power state operation job status."
    returned: always
    sample: "Power State operation job submitted successfully."
job_status:
    type: dict
```

```
description: "Power state operation job and progress details from the OME."
returned: success
sample: {
  "Builtin": false,
  "CreatedBy": "user",
"Editable": true,
  "EndTime": null,
  "Id": 11111,
  "JobDescription": "DeviceAction Task",
  "JobName": "DeviceAction_Task_PowerState",
  "JobStatus": {
    "Id": 1111,
    "Name": "New"
  "JobType": {
    "Id": 1,
    "Internal": false,
    "Name": "DeviceAction_Task"
  "LastRun": "2019-04-01 06:39:02.69",
  "LastRunStatus": {
    "Id": 1112,
    "Name": "Running"
  "NextRun": null,
  "Params": [
    {
      "JobId": 11111,
"Key": "powerState",
"Value": "2"
    },
    {
      "JobId": 11111,
"Key": "operationName",
      "Value": "POWER_CONTROL"
   },
  "Schedule": "",
  "StartTime": null,
  "State": "Enabled",
  "Targets": [
    {
      "Data": "",
      "Id": 11112,
      "JobId": 11111,
      "TargetType": {
        "Id": 0000,
        "Name": "DEVICE"
      },
    },
  ],
  "UpdatedBy": null,
  "Visible": true
```

```
- name: Power state operation based on device id.
  ome_powerstate:
    hostname: "192.168.0.1"
    username: "username"
    password: "password"
    device_id: 11111
    power_state: "off"

- name: Power state operation based on device service tag.
    ome_powerstate:
    hostname: "192.168.0.1"
    username: "username"
    password: "password"
    device_service_tag: "KLBR111"
    power_state: "on"
```

```
- name: Power state operation based on list of device ids.
  ome_powerstate:
    hostname: "192.168.0.1"
    username: "username"
    password: "password"
    device_id: "{{ item.device_id }}"
    power_state: "{{ item.state }}"
    with_items:
    - { "device_id": 11111, "state": "on" }
    - { "device_id": 22222, "state": "off" }

- name: Power state operation based on list of device service tags.
    ome_powerstate:
        hostname: "192.168.0.1"
        username: "username"
        password: "password"
        device_service_tag: "{{ item.service_tag }}"
        power_state: "{{ item.state }}"
    with_items:
        - { "service_tag": "KLBR111", "state": "on" }
        - { "service_tag": "KLBR1222", "state": "off" }
```

Manage users

The following tasks are responsible for managing user accounts:

- · View user account details
- · Configure user accounts

View user account details

Module: ome_user_info

Synopsis

This module retrieves the list and basic details of all user accounts or details of a specific user account.

Options

Table 62. ome_user_info

Parameter	Required	Default	Choices	Comments
hostname	Yes	NA	NA	Target IP Address or hostname
username	Yes	NA	NA	Target username
password	Yes	NA	NA	Target user password
port	No	443	NA	Target device HTTPS port
account_id	No	NA	NA	Unique ID of the account
system_query_options	No	NA	filter: Filter records for the supported values. I(filter) query format must be aligned with OData standards.	Options for filtering the output.

Return Values

```
msg:
    type: str
    description: Over all status of fetching user facts.
    returned: on error
    sample: "Failed to fetch the user facts"
user info:
```

```
type: dict
description: Details of the users.
returned: success
sample: {
       "192.168.0.1": {
    "Id": "1814",
           "UserTypeId": 1,
           "DirectoryServiceId": 0,
"Description": "user name description",
            "Name": "user name",
            "Password": null,
           "UserName": "user name",
           "RoleId": "10",
           "Locked": false,
           "IsBuiltin": true,
            "Enabled": true
      }
  }
```

Examples

```
- name: Retrieve basic details of all accounts.
  ome user info:
   hostname: "192.168.0.1"
   username: "username"
   password: "password"
- name: Retrieve details of a specific account identified by its account ID.
 ome user info:
 hostname: "192.168.0.1"
 username: "username"
 password: "password"
 account id: 1
- name: Get filtered user info based on user name
 ome_user_info:
 hostname: "192.168.0.1"
 username: "username"
 password: "password"
  system query options:
    filter: "Username eq 'test'"
```

Module: dellemc_ome_user_facts

Synopsis

This module retrieves the list and basic details of all user accounts or details of a specific user account.

i NOTE: This module is deprecated and replaced with ome_user_info.

Options

Table 63. dellemc_ome_user_facts

Parameter	Required	Default	Choices	Comments
hostname	Yes	NA	NA	Target IP Address or hostname
username	Yes	NA	NA	Target username
password	Yes	NA	NA	Target user password
port	No	443	NA	Target device HTTPS port
account_id	No	NA	NA	Unique ID of the account

```
msg:
  type: str
  description: Over all status of fetching user facts.
  returned: on error
  sample: "Failed to fetch the user facts"
ansible_facts:
  type: dict
  description: Details of the users.
  returned: success
  sample: {
         "192.168.0.1": {
             "Id": "1814"
             "UserTypeId": 1,
             "DirectoryServiceId": 0,
             "Description": "user name description",
"Name": "user_name",
             "Password": null,
             "UserName": "user_name",
"RoleId": "10",
             "Locked": false,
             "IsBuiltin": true,
             "Enabled": true
         }
    }
```

Examples

```
- name: Retrieve basic details of all accounts.
  dellemc_ome_user_facts:
    hostname: "192.168.0.1"
    username: "username"
    password: "password"

- name: Retrieve details of a specific account identified by its account ID.
  dellemc_ome_user_facts:
    hostname: "192.168.0.1"
    username: "username"
    password: "password"
    account_id: 1
```

Configure user accounts

Module: ome_user

Synopsis

This module:

- · creates a new user account.
- · modifies or deletes an existing user account.

Options

Table 64. ome_user

Parameter	Required	Default	Choices	Comments
hostname	Yes	NA	NA	Target IP Address or hostname
username	Yes	NA	NA	Target username
password	Yes	NA	NA	Target user password
port	No	443	NA	Target device HTTPS port
state	No	present	presentabsent	C(present) creates a user in case the I(UserName) provided inside I(attributes) does not exist .

Parameter	Required	Default	Choices	Comments
				 C(present) modifies a user in case the I(UserName) provided inside I(attributes) exists. C(absent) deletes an existing user.
user_id	No	NA	NA	 Unique ID of the user to be deleted. Either I (user_id) or I (name) is mandatory for C (absent) operation.
name	No	NA	NA	 Unique name of the user to be deleted Either I (user_id) or I (name) is mandatory for C (absent) operation.
attributes	No	{}	NA	Payload data for the user operations. It can take the following attributes for C(present): UserTypeld DirectoryServiceld Description Name Password UserName Roleld Locked Enabled NOTE: OME will throw an error message if required parameter is not provided for the operation. NOTE: See OpenManage Enterprise API Reference Guide for more details.

```
msg:
  description: Overall status of the user operation.
  returned: always
  type: str
  sample: "Successfully created a User"
user_status:
  description: Details of the user operation, when I(state) is C(present). returned: When I(state) is C(present).
  type: dict
  sample:
         "Description": "Test user creation",
         "DirectoryServiceId": 0,
         "Enabled": true,
         "Id": "61546",
         "IsBuiltin": false,
         "Locked": false,
"Name": "test",
         "ObjectGuid": null,
         "Oem": null,
         "Password": null,
         "PlainTextPassword": null,
         "RoleId": "10",
         "UserTypeId": 1
    }
```

```
- name: create user with required parameters.
ome_user:
hostname: "192.168.0.1"
```

```
username: "username"
    password: "password"
    attributes:
      UserName: "user1"
      Password: "UserPassword" RoleId: "10",
      Enabled: True
- name: create user with all parameters
  ome user:
    hostname: "192.168.0.1"
    username: "username" password: "password"
    attributes:
      UserName: "user2"
      Description: "user2 description"
      Password: "UserPassword"
      RoleId: "10"
      Enabled: True
      DirectoryServiceId: 0
      UserTypeId: 1
      Locked: False
      Name: "user2"
- name: modify existing user
  ome_user:
    hostname: "192.168.0.1"
    username: "username" password: "password"
    state: "present"
    attributes:
      UserName: "user3"
RoleId: "10"
      Enabled: True
      Description: "Modify user Description"
- name: delete existing user using id.
  ome_user:
    hostname: "192.168.0.1"
    username: "username"
    password: "password"
    state: "absent"
    user_id: "1234"
- name: delete existing user using name.
  ome user:
    hostname: "192.168.0.1"
    username: "username"
password: "password"
    state: "absent"
    name:"name"
```

Troubleshooting

- · While creating new iDRAC users, the provided values are not getting applied completely on 14G servers.
- In case the user is not created with all the required user settings, change the user setting with action option modify in the $dellemc_configure_idrac_users$ module.

Accessing documents from the Dell EMC support site

You can access the required documents using the following links:

- · For Dell EMC Enterprise Systems Management documents —
- · For Dell EMC OpenManage documents —
- · For Dell EMC Remote Enterprise Systems Management documents —
- · For iDRAC and Dell Lifecycle Controller documents —
- · For Dell EMC OpenManage Connections Enterprise Systems Management documents —
- · For Dell EMC Serviceability Tools documents —
- **1.** Go to .
 - 2. Click Browse all products.
 - 3. From **All products** page, click **Software**, and then click the required link from the following:
 - Analytics
 - · Client Systems Management
 - · Enterprise Applications
 - · Enterprise Systems Management
 - Public Sector Solutions
 - Utilities
 - · Mainframe
 - Serviceability Tools
 - Virtualization Solutions
 - Operating Systems
 - Support
 - **4.** To view a document, click the required product and then click the required version.
- · Using search engines:
 - · Type the name and version of the document in the search box.