

Dell EMC OpenManage Ansible Modules for PowerEdge Servers

Accelerate automation for your PowerEdge Server infrastructure

Overview

Dell EMC OpenManage Ansible modules enable IT to use RedHat Ansible to automate and orchestrate important PowerEdge functions. OpenManage Ansible modules configure, deploy, and update rack, tower, and modular PowerEdge Servers. They operate by leveraging iDRAC Redfish REST APIs and Dell EMC API extensions.

Improve Agility with Intelligent Automation

Today's large IT data centers are complex, managing up to thousands of server configurations. It's important to unite workflows into a single pipeline. Automated provisioning ensures your business applications deploy against correctly configured environments. This brings scalability and rapid service deployments.

With OpenManage Ansible modules, you can export and import Server Configuration Profiles (SCP) and use them in Ansible playbooks. This produces rapid and consistent deployments. Using a single Ansible playbook written in human readable code, you can provision your server infrastructure.

Accelerate DevOps with Infrastructure as Code

In recent years, Infrastructure as Code (IaC) has gained widespread adoption with DevOps. IaC defines the configuration of compute, network and storage through source code that can be treated like any software. You can provision a dynamic infrastructure in a matter of seconds rather than days by simply running software commands. This guarantees a consistent and compliant infrastructure. OpenManage Ansible Modules assist you in adopting the following IaC practices for physical server deployments such as:

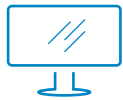
- Version control
- Peer review
- Automated testing
- Release tagging
- Release promotion
- Continuous delivery
- Continuous integration

Server Configuration Profiles seamlessly integrate into an Infrastructure as Code framework. Using SCP, system administrators and developers can easily control versions and provision their PowerEdge servers. This simplifies server deployments and helps your organization to be more agile and innovative.

OpenManage Ansible Modules for PowerEdge Servers

Features	Description	Benefit
Automated Zero-Touch Provisioning and Deployment	<ul style="list-style-type: none"> Automatically configure PowerEdge servers using the Server Configuration Profiles (SCP) captured from a golden server configuration Supports export and import of Server Configuration Profiles within the REST API messages thus eliminating the need for a network share 	<ul style="list-style-type: none"> Reduce IT staff hours required for server deployments Maintain corporate approved standards and ensure consistency for every single deployment
Agent-less (Out-of-Band) BIOS and Firmware Updates	<ul style="list-style-type: none"> Automate the BIOS and Firmware updates for PowerEdge servers from a network share (CIFS, NFS, HTTP, HTTPS) using a catalog and firmware repository containing Dell Update Packages (DUPs) Supports Server Configuration Profile (SCP) based firmware updates for 14G PowerEdge servers 	<ul style="list-style-type: none"> Provides a simple and automated way of keeping the BIOS and firmware versions up to date on PowerEdge servers Eliminates human error and minimizes downtime by leveraging the repository based firmware update process Maintain infrastructure compliance with rolling firmware upgrades
BIOS and iDRAC Configuration	<ul style="list-style-type: none"> Configure entire set of BIOS attributes (such as boot settings, memory settings, processor settings, system profiles, system security etc.) using a single task in the playbook Configure entire set of iDRAC attributes (such as users, services, Time zone and NTP settings, alert settings etc.) using a single task in the playbook 	<ul style="list-style-type: none"> Achieve faster time to value with faster build times, meaning less downtime, and improved productivity Consistent configuration every single time with version controlled playbooks and variables
OS Deployment	<ul style="list-style-type: none"> Flexible deployment options for deploying the Operating System of choice on PowerEdge Servers as supported by iDRAC – for e.g. Boot from a Network ISO, PXE boot, UEFI HTTP Boot 	<ul style="list-style-type: none"> Enables quick and easy OS deployment in line with the IT processes Allows DevOps to introduce the physical provisioning and deployment of infrastructure within the same playbook used to deploy application stack
Storage Configuration	<ul style="list-style-type: none"> View all the RAID volumes associated with a storage controller Configure multiple RAID and Virtual Drives volumes using a single task in the playbook without multiple reboots 	<ul style="list-style-type: none"> No dependencies on multiple tools to automate the storage configuration on PowerEdge servers
Deep Level Component Inventory	<ul style="list-style-type: none"> Rich set of overall and component-level inventory information for Servers, Such as iDRAC and BIOS Firmware versions, Service Tag, CPU, Memory, I/O, Controllers, Storage volumes etc. 	<ul style="list-style-type: none"> Faster development of playbooks for complex workflows by reducing manual interactions thus improving productivity

For more information, please visit Dell.com/en-us/work/learn/openmanage-integration-and-connections



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