Dell EMC VxBlock Central Workflow Automation

Reference Guide

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DELL EMC

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Introduction

This guide provides an overview of the VxBlock Central Workflow Automation library with a detailed description of the automated steps for each workflow.

The automation and orchestration of system resources for a Converged System enables an administrator to deliver services quickly at a reduced cost, while improving operational efficiency. VxBlock Central Workflow Automation enables you to use automated workflows to deploy and configure your Converged System across compute, storage, and network layers in both physical and virtual environments.

Developed to integrate with VMware vRealize Orchestrator, VxBlock Central Workflow Automation reduces administration overhead by providing a library of workflows.

VxBlock Central Workflow Automation is available as an optional orchestration module of VxBlock Central. Once VxBlock Central Workflow Automation is entitled, you can access the software package from the Download Center.

Revision history

Date	Document revision	Description of changes
September 2019	1.0	Initial release

VxBlock Central Workflow Automation Library

Workflow	Supported systems
Provision Host (ESXi) & Add Host to Cluster - SD Boot	VxBlock and Vblock 350, 540, 740, and VxBlock 1000
Provision Host (ESXi) & Add Host to Cluster - VMAX/PowerMax Boot	VxBlock and Vblock 740 and VxBlock 1000
Provision Host (ESXi) & Add Host to Cluster - XtremIO X2 Boot	VxBlock and Vblock 540 and VxBlock 1000
Provision Host (ESXi) & Add Host to Cluster - Unity Boot	VxBlock and Vblock 350 and VxBlock 1000
Create Service Profile Template	VxBlock and Vblock 350, 540, 740 and VxBlock 1000
Provision Bare Metal Server - VMAX/PowerMax Boot	VxBlock and Vblock 740 and VxBlock 1000
Provision Bare Metal Server- UCS	VxBlock and Vblock 740 and VxBlock 1000
Add Host to Cluster	VxBlock and Vblock 350, 540, 740, and VxBlock 1000

Note: Vblock Systems require VMware vSphere 6.5 or 6.7 to use VxBlock Central Workflow Automation.

Compute Capacity Expansion

VxBlock Central Workflow Automation reduces the time spent completing compute capacity expansions on Converged Systems by eliminating the manual steps and the number of tools required.

The following figure is an example of the steps automated by the **Provision Host (ESXi) & Add Host to Cluster - SAN Boot** workflow:

For optimal performance and management, expand the compute environment in groups of up to five Cisco UCS servers for each service workflow. You can run multiple service workflows in parallel.

Provision Host (ESXi) & Add Host to Cluster - SD Card Boot

This workflow helps you expand the compute capacity of your Converged System by provisioning Cisco UCS B-Series blade servers using the SD card, installing ESXi, and adding the servers to an existing host cluster.

The following manual steps are automated by this workflow:

1. Determine the available resources (blades) and carry out data validation.
2. Identify a service profile in use by the existing service.
3. Assign the service profile to each blade.
4. Configure the zoning on the SAN switches.
5. Power on the physical servers.

6. Install ESXi on SD card.
7. Add the servers to existing ESXi cluster.
8. Assign the cluster datastores to newly provisioned blade(s).
9. Add the host to VDS and complete network configuration.
10. Schedule an RCM scan.

Provision Host (ESXi) & Add Host to Cluster - SAN Boot

These workflows help you expand the compute capacity of your Converged System by provisioning Cisco UCS B-Series blade servers using the Boot LUN of the storage array, installing ESXi, and adding the servers to an existing host cluster.

The following workflows are available for SAN Boot:

- **Provision Host (ESXi) & Add Host to Cluster - VMAX/PowerMax Boot**
- **Provision Host (ESXi) & Add Host to Cluster - XtremIO Boot**
- **Provision Host (ESXi) & Add Host to Cluster - Unity Boot**

The following manual steps are automated by this workflow:

1. Determine the available resources (blades) and carry out data validation.
2. Identify a service profile in use by existing service.
3. Assign the service profile to each blade.
4. Configure the zoning on the SAN switches.
5. Provision the Boot LUN from the storage array.
6. Power on the physical servers.
7. Install ESXi.
8. Add the servers to existing ESXi cluster.
9. Assign the cluster datastores to newly provisioned blade(s).
10. Adds the host to VDS and completes network configuration.
11. Schedule an RCM scan.

Create New Service Profile Template

This workflow creates a service profile template you can use in the provisioning of a new ESXi cluster.

The following manual steps are automated by this workflow:

1. Set the profile name and type.
2. Set the vNICs template and adapter policy.
3. Set the vHBAs template and adapter policy.
4. Assign the vNICs and vHBAs to blade servers.
5. Establish boot, maintenance, and operational policies.

Provision Host (Bare Metal) - VMAX/PowerMax

This workflow helps you expand the compute capacity of your bare metal Converged System by provisioning Cisco UCS B-Series blade servers using the Boot LUN from VMAX/PowerMax.

The following manual steps are automated by this workflow:

1. Determine the available resources (blades) and carry out data validation.
2. Identify a service profile in use by existing service.
3. Assign the service profile to each blade.
4. Configure the zoning on the SAN switches.
5. Provision the Boot LUN from the storage array.
6. Power on the physical servers.

Provision Host (Bare Metal)

This workflow helps you expand the compute capacity of your bare metal Converged System by provisioning Cisco UCS B-Series blade servers.

The following manual steps are automated by this workflow:

1. Determine the available resources (blades) and carry out data validation.
2. Identify a service profile in use by existing service.
3. Assign the service profile to each blade.
4. Power on the physical servers.

Add Host to Cluster

This workflow helps you add a provisioned Cisco UCS B-series blade server to a VMware vCenter cluster.

The following manual steps are automated by this workflow:

1. Add the host to a cluster.
2. Place the host in maintenance mode.