Overview

Integration between Cisco UCS Director and Cisco HyperFlex System

The integration between Cisco UCS Director and Cisco HyperFlex System begins after you create the Cisco HX Data Platform clusters. After you configure the integration, Cisco UCS Director can communicate with the components of a supported Cisco HyperFlex System, including the following:

- VMware vCenter

- Supported Cisco UCS servers that are managed by Cisco UCS Manager

- Cisco HX Data Platform

You can use Cisco UCS Director to manage the following for a supported and integrated Cisco HyperFlex System:

- Inventory collection

- Discovery of clusters, disks, datastores, and controller VMs

- Datastore provisioning and management

- Automation and orchestration of VM provisioning

- Status reporting

- Replication of VMs between clusters for disaster recovery

Cisco UCS Director

Cisco UCS Director is a complete, highly secure, end-to-end management, orchestration, and automation solution for a wide array of Cisco and non-Cisco data infrastructure components, and for the industry's leading

converged infrastructure solutions based on the Cisco UCS and Cisco Nexus platforms. For a complete list of supported infrastructure components and solutions, see the Cisco UCS Director Compatibility Matrix.

Cisco UCS Director is a 64-bit appliance that uses the following standard templates:

- Open Virtualization Format (OVF) for VMware vSphere

- Virtual Hard Disk (VHD) for Microsoft Hyper-V

Management through Cisco UCS Director

Cisco UCS Director extends the unification of computing and networking layers through Cisco UCS to provide you with comprehensive visibility and management of your data center infrastructure components. You can use Cisco UCS Director to configure, administer, and monitor supported Cisco and non-Cisco components. The tasks you can perform include the following:

- Create, clone, and deploy service profiles and templates for all Cisco UCS servers and compute applications.

- Monitor organizational usage, trends, and capacity across a converged infrastructure on a continuous basis. For example, you can view heat maps that show virtual machine (VM) utilization across all your data centers.

- Deploy and add capacity to converged infrastructures in a consistent, repeatable manner.

- Manage, monitor, and report on data center components, such as Cisco UCS domains or Cisco Nexus network devices.

- Extend virtual service catalogs to include services for your physical infrastructure.

- Manage secure multi-tenant environments to accommodate virtualized workloads that run with non-virtualized workloads.

Automation and Orchestration with Cisco UCS Director

Cisco UCS Director enables you to build workflows that provide automation services, and to publish the workflows and extend their services to your users on demand. You can collaborate with other experts in your company to quickly and easily create policies. You can build Cisco UCS Director workflows to automate simple or complex provisioning and configuration processes.

Once built and validated, these workflows perform the same way every time, no matter who runs the workflows. An experienced data center administrator can run them, or you can implement role-based access control to enable your users and customers to run the workflows on a self-service basis, as needed.

With Cisco UCS Director, you can automate a wide array of tasks and use cases across a wide variety of supported Cisco and non-Cisco hardware and software data center components. A few examples of the use cases that you can automate include, but are not limited to:

- VM provisioning and lifecycle management

- Network resource configuration and lifecycle management

- Storage resource configuration and lifecycle management

- Tenant onboarding and infrastructure configuration

- Application infrastructure provisioning

- Self-service catalogs and VM provisioning

- Bare metal server provisioning, including installation of an operating system

Cisco HyperFlex HX-Series Systems

Cisco HyperFlex HX-Series System provides a fully contained virtual server platform, that combines all three layers of compute, storage, and network with the powerful Cisco HX Data Platform software tool resulting in a single point of connectivity for simplified management. The Cisco HyperFlex HX-Series Systems are modular systems designed to scale out by adding HX nodes under a single UCS management domain. The hyperconverged system provides a unified pool of resources based on your workload needs.

Figure 1: Overview of the Cisco HyperFlex System
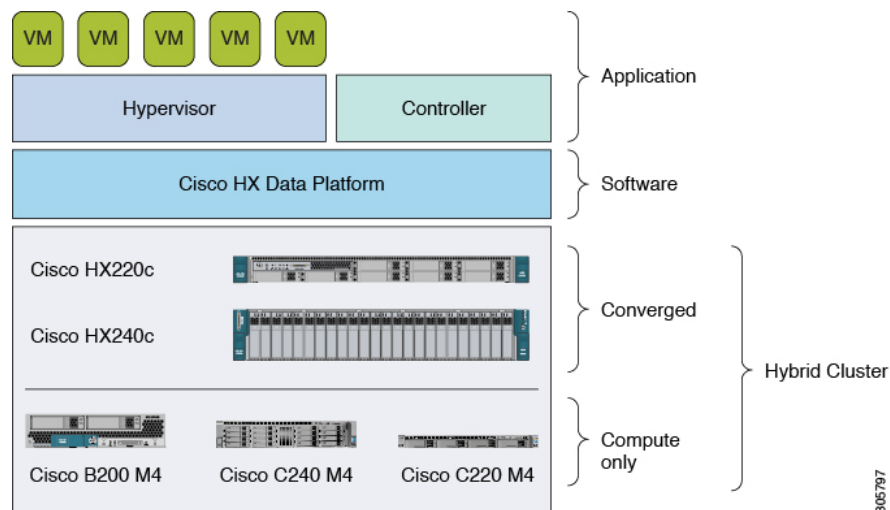
Cisco HyperFlex HX-Series System Documentation

See the listed Cisco HyperFlex HX-Series System document for the associated tasks.

You can access links to all Cisco HyperFlex HX-Series System documentation on the Cisco HyperFlex Systems Documentation Roadmap.

To perform the following	See the document
Review a list of new features, known issues, and workarounds.	Release Notes for Cisco HX Data Platform
Install and complete initial setup of your HX Data Platform.	HyperFlex Node Hardware Installation Guides Cisco HyperFlex Systems Getting Started Guide
Administer, manage, and monitor your HX Storage Cluster using the HX Data Platform plug-in on your VMware vSphere Web Client.	Cisco HyperFlex Systems Administration Guide

To perform the following	See the document
Administer, manage, and monitor your HX Storage Cluster using the HX Data Platform command line interface on an HX controller VM.	Cisco HX Data Platform Command Line Interface Reference Guide