



Cisco HyperFlex Data Center QuickStart Implementation*

*Cisco HyperFlex Edge with Cisco Intersight QuickStart is also available

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Skyline Advanced Technology Services (ATS) offers Professional Services for a variety of Cisco® centric solutions. From inception to realization, our senior staff of engineers are available for any size project or duration for the following services:

- Consulting Services
- Installation Services
- Network Design
- Staff Augmentation

For an in-depth discussion regarding your technical and staffing needs, our team is with you every step of the way.

Are you deploying Cisco HyperFlex?

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Cisco HyperFlex Overview

The Cisco HyperFlex™ platform includes hybrid, all-flash, and all-NVMe configurations to scale to any workload. It is built on the proven UCS integrated network fabric and UCS Servers. This faster-to-deploy, simpler-to-manage, and easier-to-scale system provides a unified pool of infrastructure resources to power applications as your business needs dictate.

Description

The Cisco HyperFlex Data Center QuickStart Implementation is a unique five (5) day Skyline ATS onsite offering designed to assist partners/customers who are new to Cisco's Hyperconverged Infrastructure (HCI) technology. A dedicated Skyline ATS Data Center Engineer is assigned to the partner's/customer's site location for the QuickStart implementation. The engagement is focused on the initial design, preparation of partner's/customer's existing infrastructure, implementation, and deployment of an operational Cisco HyperFlex system.

The intended audience is partner/customer support personnel who not only need deployment services, but also need a well-defined knowledge transfer on UCS, Cisco HyperFlex Storage, deploying servers, and attaching them to the Network.



Overall Objectives

- Collaborate with key personnel to review design and determine functionality goals.
- UCS/HX physical installation, including connection to existing or new network infrastructure.
- Creation of Service Profiles and initial configuration of UCS servers, including install of ESXi operating systems.
- Deployment of vCenter and Cisco HyperFlex.
- Interactive training and design sessions geared to educate the partner/customer and finalize the design.
- Ensure that the implementation is successful by testing and verifying the connectivity, redundancy, functionality, and storage. Then, backing the system up.

Training Objectives

- Describe the Cisco UCS/HX system architecture, hardware components, and options.
- Cisco UCS Manager familiarity and configuring Service Profile templates.
- Cisco HyperFlex installer and Management interface overview.
- Maintenance processes and High Availability (HA) configuration.
- Define connectivity requirements for the Cisco UCS platform.
- Explain the Cisco HyperFlex Data Platform's features and function.

Cisco HyperFlex Deployment

1. A bill of material design overview pre-installation.
2. Install 1 UCS system with 2 Fabric Interconnects and 3 Cisco HyperFlex Nodes.
3. Configure Service Profile templates for HX servers.
4. Connection of the Fabric Interconnects to the upstream network.
5. Install and configure HX server ESXi operating systems, and vCenter.
6. Deploy Cisco HyperFlex Data Platform on the Cluster.
7. Test failover and functionality of the system

Prerequisites

The knowledge and skills that a learner must have prior to the engagement is as follows:

- Some familiarity with VMware ESXi and vCenter.

Who Should Purchase this QuickStart?

The primary audience for this QuickStart is:

- Server Administrators
- Storage/SAN Administrators
- Systems/Storage Engineers
- Network Engineers

The secondary audience for this workshop is:

- Network Administrators

Customer Responsibilities

- A bill of material design overview before installation.
- Partner/Customer must be prepared to assist with network, UCS, and VMware connectivity and configuration.
- Personnel to help with physical lifting, and rack and stack.
- Proper power circuits and cables for the Cisco HyperFlex equipment.
- Proper rack and other supporting infrastructure (e.g., HVAC).
- Provide all Hardware, Software, and Licensing.

Statement of Work

After the Skyline ATS Data Center Engineer thoroughly qualifies the partner's/customer's Cisco HyperFlex requirements, a detailed statement of work will be submitted for partner/customer approval prior to the QuickStart implementation engagement.



Disclaimer

This service is intended to assist partners/customers with a basic implementation and understanding of Cisco HyperFlex. The following services are out of scope and are NOT INCLUDED in this service:

- Migration of customer network/infrastructure.
- Compute only node installation.
- Cisco HyperFlex Edge Deployments
 - Cisco HyperFlex Edge QuickStarts are also available.
- Cisco HyperFlex Stretch Deployments

NOTE: Skyline can provide these services after scoping the specific requirements. Additional costs may apply



Cisco HyperFlex QuickStart Schedule

Day 1

1. Whiteboard Session 1 – Provide an overview of the Unified Computing System, review of network design and physical connections. Plan for between 2 to 4 hours for the whiteboard session. Topics to be discussed:
 - UCS Architecture Overview
 - Fabric Interconnects
 - UCS Server types
 - Upstream networking
 - How the system is interconnected.
2. Inventory Hardware.
3. Rack, stack, and cable hardware.

Day 2

1. Gather/Verify Configuration information (e.g., VLANs, MACs, IPs, Passwords, NTP server etc.).
2. Configure Fabric Interconnect Network and Server Ports.
3. Buildout all needed pools in UCS Manager.
4. Perform Software Upgrades as needed.

Day 3

1. Whiteboard Session 2 – Provide an overview of server profiles and configuration. Plan for 2 hours for the whiteboard session. Topics to be discussed:
 - UCS Service Profiles.
 - Initial Configuration.
 - Local Storage / vHBA SAN Storage.
 - vNIC Networking.
 - Boot Policy.
 - Server OS Installation.
 - Auto-Configuration.
2. Configure server profiles.
3. Install and configure ESXi on all servers.
4. Set up vCenter.
5. Complete configuration for UCS and VMware (e.g., NTP, DNS, SNMP, Licensing etc.).

Day 4

1. Whiteboard Session 3 – Provide an overview of Cisco HyperFlex Data Platform and its integration with VMware. Plan for between 2 to 4 hours for the whiteboard session. Topics to be discussed:
 - Cisco HyperFlex Architecture Overview.
 - o Cisco HyperFlex deployment types.
 - o Cisco HyperFlex Converged Node servers.
 - o Cisco HyperFlex Data Platform components.
 - o Cisco HyperFlex deployment process.
 - o Cisco HyperFlex management.
 - o ESXi Cisco HyperFlex Integrations.
2. Deploy Cisco HyperFlex Installer OVA.
3. Go through the install process for Cisco HyperFlex.
4. Verify Cisco HyperFlex Health.
5. Install Cisco HyperFlex plugin for vCenter.
6. Create Volumes.
7. Deploy a VM for testing.
 - a. Verify VLANs.
 - b. Verify Cisco HyperFlex volumes.
 - c. Verify redundancy.

Day 5

1. Provide on-site support for any outstanding issues.
2. Backup configuration.
3. Finalize documentation.
4. Provide installation and configuration review with customer.