



# FlexPod® Data Center QuickStart Implementation

## Why Skyline Advanced Technology Services?

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 FlexPod®?

**Contact your Skyline-ATS Account Manager today for more information on how we can help.**

**800-375-9546  
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## Description

The FlexPod Data Center Quickstart Implementation is a unique five (5) day Skyline Advanced Technology Services (ATS) onsite offering designed to assist partners/customers who are new to the Cisco® and NetApp® Validated Designs. A dedicated Skyline-ATS UCS/NetApp 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 UCS/NetApp 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, NetApp Storage, deploying servers, and attaching them to LANs and SANs.

## Overall Objectives

- Collaborate with key personnel to review design and determine functionality goals.
- Creation of Service Profiles and initial configuration of UCS servers, including implementation of a server operating system and testing.
- 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.
- UCS/NetApp Physical Installation, including connection to existing or new network infrastructure.



## Training Objectives

- Describe the
  - Cisco UCS system architecture, hardware components, and options.
  - Cisco UCS Manager and components.
  - Process of configuring Service Profile templates to allocate physical resources.
  - Maintenance processes and High Availability (HA) configuration.
- Define connectivity requirements for the Cisco UCS platform.
- Explain Storage Technologies, and the NetApp storage implementation.

## FlexPod Deployment

1. A Bill Of Material Design Overview pre-installation.
2. Install one (1) UCS system with up to two (2) Fabric Interconnects, two (2) chassis and sixteen (16) blades.
3. Configure up to two (2) Service Profile templates.
4. Connection of the UCS to the upstream network and storage devices.
5. Assist in initial install and configuration of up to two (2) Server Operating Systems.
6. Test Failover and functionality of the UCS system.

## Prerequisites

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

- Must have a familiarity with the server environment(s) which will be built on the FlexPod platforms.

## Who Should Purchase this QuickStart?

The primary audience for this workshop 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 pre-Installation.
- Partner/Customer must be prepared to assist with network, UCS, VMWare® and NetApp® connectivity/configuration.
- Personnel to help with physical lifting, rack and stack.
- Proper power circuits and cables for the FlexPod equipment.
- Proper rack and other supporting infrastructure (e.g., HVAC).

## Statement of Work

After the Skyline-ATS UCS Engineer thoroughly qualifies the partner's/customer's FlexPod requirements, a detailed Statement of Work will be submitted for partner/customer approval prior to the Quickstart Implementation engagement.

## Discounted Instructor Led Training

For those partners/customers that want to increase their knowledge of Data Center and UCS technologies beyond what is provided in this implementation they will be given special authorization to purchase up to ten (10) open enrollment Cisco Nexus® or Data Center Unified Computing classes at 40% off the retail price.



## FlexPod 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 two (2) to four (4) hours for the whiteboard session. Topics to be discussed:
  - Physical Architecture Overview
    - Fabric Interconnects
    - B-Series Chassis
    - B-Series servers
    - SAN
    - Upstream networking
    - System rack, stack and cabling
2. Inventory Hardware
3. Rack, stack, and cable hardware including cabling and configuring the UCS System, Nexus switching infrastructure, and NetApp storage environment from a provisionally racked state.

### Day 2

1. Whiteboard Session 2 – Provide an overview of SAN connectivity and storage options as well as discussion of the UCS initial configuration. Plan for two to four hours for the whiteboard session. Topics to be discussed:
  - Storage
    - SAN (FC/FCOE/Ethernet Storage)
    - SAN Switching
    - SAN Networking
    - UCS SAN Implementation
    - UCS System Configuration
2. Configuring Cluster
3. Configuring Physical Ports
4. Configuring System Management
5. Upgrading Firmware
6. Configuring Resource Pools
7. Define configuration parameters based on customer topology and design
8. Configure Hardware
9. Configure Management Ports and HTTP access

10. Configure upstream connections
11. Configure Local Access Control
12. Configure / Upgrade Firmware

### Day 3

1. Configure Fabric Interconnect Network and Storage Ports.
2. Configure server resource pools (e.g., VLANs, MACs, WWNN, WWPN, etc.).

### Day 4

1. Whiteboard Session 3 – Provide an overview of server profiles and configuration. Plan for two 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 profile(s).
3. Install and configure ESX or ESXi on all blade servers.
4. Installing a VMware-supported Windows or Linux operating system to run on the Flexpod infrastructure and test end to end connectivity.
5. Set up Nexus switching/NetApp storage and vCenter management systems.
6. Complete configuration parameters for the rest of the UCS System (e.g., NTP, DNS, SNMP, etc.).
7. Assist the client with verification that VMs can see Network/Storage Data stores.

### 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.