

## UCSTD-TDM-I

### Why Firefly

This course has been assembled using the key pieces of the DCUCI course to provide summary information, with precise labs, to enable technical decision makers to understand the architecture and value of the Cisco UCS products. The materials and labs are up to date using UCS version 2.0 content. Firefly is unique as a training company in being able to offer up to date, real life technology experience to enhance the students training experience.

**Length:**  
2 Days

**Format:**  
Lecture/Lab

**Version:**  
4.7



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### Course Description

The Cisco Unified Computing System family of products is a next-generation computing solution based on industry-standard technologies and innovative management concepts. Cisco UCS redefines the way data centers will use and deploy compute resources, while reducing management overhead and increasing efficiency. This 2-day course provides you with a detailed architectural overview of how Cisco UCS can be deployed to increase compute density, reduce the cabling, power and cooling burdens, and accelerate server provisioning in both virtualized and nonvirtualized environments. The Intel processor architecture is also covered to highlight key RAS (reliability, availability, and serviceability) features as well as performance and security features.

The course includes hands-on labs to demonstrate the deployment and management of compute resources in a Cisco UCS environment.

### Who Should Attend

This course provides an introduction to the Cisco Unified Computing System for Data Center and system architects, network administrators, and systems administrators.

### Prerequisites

You will gain the most from this seminar if you have basic knowledge of Intel x86 server solutions, data center networking technologies, and storage area networks.

### Learning Objectives

- Identify the challenges facing today's data centers
- Describe how Cisco UCS addresses key concerns
- Describe Unified Fabrics and their use in Cisco UCS
- Describe the Memory and I/O Optimizations of Cisco UCS
- Describe the Cisco UCS deployment and operations model
- Describe the key Cisco UCS use cases
- Describe access network architecture for the Cisco Unified Computing System
- Discuss high availability features of the Cisco UCS
- Create basic and extended service profiles
- Discuss managing service profiles

## **Lesson 1: Challenges in the Data Center Today**

- Evolution of Server Scalability
- Management Challenges
- Blade Benefits and Challenges
- Adoption of Server Virtualization

## **Lesson 2: UCS Overview**

- Cisco UCS Overview
- Cisco UCS B-Series Chassis
- Cisco UCS B-Series Fabric
- Cisco UCS B-Series Blades
- Cisco UCS C-Series Blades
- Cisco UCS Management Model

## **Lesson 3: Unified Fabric**

- I/O Consolidation
- FCoE Architecture
- FCoE Architectures and Future Progression

## **Lesson 4: Memory and I/O Optimization**

- Cisco UCS Extended Memory Architecture
- Virtual Server Access Networks
- Cisco Nexus 1000V and Pass Through Switching

## **Lesson 5: Deployment and Operations Model**

- Service Profile Overview
- Resource Pools
- Service Profile Policies
- Service Profile Templates
- Service Profiles in the Logical Server Model
- Managing UCS Resources
- Role-Based Access Control

## **Lesson 6: Access Network Architecture**

- Server and Uplink Ports
- UCS 6100 and 6200 Port Configuration
- End-Host Mode
- EHM with L2 Disjoint Networks in UCS Release 2.0
- Fabric Interconnect SAN Connectivity
- Best Practices in Connecting UCS

## **Lesson 7: High Availability**

- High Availability Connectivity
- System Restore

## **Lesson 8: Creating Service Profiles**

- Simple vs. Expert Service Profile Wizards
- Simple Service Profile Wizard
- Service Profile Expert Wizard

## **Lesson 9: Managing Service Profiles**

- Associating and Disassociating a Service Profile to a Server Blade
- Using Service Profiles
- Management IP Address, KVM, and Virtual Media

## **Lab 1: Initial Configuration**

## **Lab 2: Creating Simple Service Profiles**

## **Lab 3: Creating Mobile Service Profiles**

## **Lab 4: Configuring Role-Based Access Control**

## **Lab 5: Reporting**