

Course ID #: 7000-945-ZZ-Z Hours: 28

# **Course Content**

## **Course Description:**

DCUCAI, Administering Cisco Data Center Unified Computing System with Intersight is a 4-day instructor-led course. In this Cisco UCS server training course, you will become experienced with the administration and troubleshooting of Cisco Unified Computing System (UCS) X-Series, B-Series, C-Series, next-gen UCS servers including using Cisco Intersight SaaS for UCS management. This custom-built Cisco UCS training class was developed by EnterOne using the best lessons from all available Cisco server courses to maximize the learning experience for individuals who want to focus on day-to-day administration using Intersight SaaS as the primary interface to manage UCS Infrastructure.

Using real-world scenarios and examples, this Cisco training course will explore the components of the UCS-X, B-Series Blades, C-Series Rack Mount, and cover next-gen solutions such as C4500. Intersight SaaS provides a day-to-day administrative single interface for managing UCS infrastructure. Learn to access Intersight, claim devices, run UCSM commands from Intersight, Firmware Upgrades, and other functions

### **Course Objectives:**

- Understand the B-Series and C-Series product line similarities and differences
- Claiming resources in Intersight
- Managing UCS domains in Intersight
- Describe the Intersight support for C-Series standalone and UCS managed architectures
- Understand the process for upgrading B-Series and C-Series Firmware with Intersight
- Administering service profiles, pools, and policies with Intersight running UCS natively
- Understanding RBAC with Active Directory integration
- Administering backup and restores in UCS Manager
- Learn and discuss the various management tools for Cisco UCS including Intersight
- Perform basic troubleshooting of B-Series and C-Series in normal operations with UCSM and Intersight
- Describe how to get started with Intersight programmability

### **Prerequisites:**

- Basic knowledge of Cisco routing and switching
- Basic knowledge of Cisco Unified Computing Systems
- Basic knowledge of servers and storage
- Familiarity with Cisco UCS and Hyperflex

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### Target Audience:

- Systems Administrators and Engineers
- Technical Solutions Architects
- Systems Integrators
- Channel Partners
- Value-Added Resellers

### **Topics**:

#### Lesson 1: UCS Infrastructure Components with Intersight and IMM Objective: Gain comprehensive knowledge of Cisco UCS components and management through Intersight and IMM transition tools.

- Reviewing the Cisco UCS Product Line, Use Cases, and Components
- Introduction to Cisco Intersight and IMM Best Practices
- Exploring Cisco UCS Intersight User Interfaces with IMM Integration
- Cisco UCS Intersight Management Framework and IMM Features
- UCS Intersight Use Cases in IMM Environments
- UCS Intersight Deployment Options with IMM Considerations

#### Lesson 2: Administering Cisco Servers with Intersight and Automation Tools Objective: Master administration of Cisco X-Series servers using Intersight and integrate with automation tools.

- Cisco UCS Servers and Components
- Intersight RBAC, Organizations, and Active Directory Integration
- Configuring Compute Node Network Connectivity with Intersight
- Creating Identity and Resource Pools
- Creating Intersight Server Profiles
- Creating Templates and Cloning Server Profiles
- Managing Server Profiles
- Operating System Installation Options and

Workflow

- Upgrading UCS X/C-Series Firmware
- Troubleshooting Cisco UCS X-Series Configuration
- Troubleshooting Cisco UCS B-Series Operation

#### Lesson 3: Intersight Orchestration and Programmability with ICO Objective: Explore orchestration and programmability in Intersight, including ICO, Terraform, PowerShell, Python, and Ansible.

- Intersight Orchestrator: Mastering Workflow Automation in UCS
- Navigating the Workflow Designer in Cisco Intersight
- Harnessing the Power of REST API with Intersight
- Python Scripting for Enhanced UCS Management
- Seamless Ansible Integration in the Intersight Environment
- Utilizing Terraform Provider for Efficient Intersight Operations
- ICO Integration: Bridging Intersight with Terraform and PowerShell



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Lesson 4: Administering UCS Management Tools with IMM and Automation Integrations Objective: Master administration of UCS tools using IMM best practices and automation via PowerShell and Terraform.

- UCS Management Ecosystem Overview with IMM Best Practices
- Intersight UCS Element Managers UI Launch
- Inserting infrastructure calls via the Intersight Framework with PowerShell and Terraform

Lesson 5: Operating Intersight with Advanced Security and Automation Objective: Gain proficiency in managing Cisco UCS using Intersight, focusing on advanced security, IMM integration, and system monitoring.

- Setting up Intersight SaaS and On-Prem Appliance with IMM Integration
- End Host Mode, VLAN Configuration in UCS Manager
- Implementing Security (PCI/HIPPA) Connectors with IMM Compliance
- Connected TAC and Proactive Support with Smart Call Home in IMM Environments
- Advanced Monitoring, Fault Reporting, and Server Actions in Intersight
- Server HCL, CVE, Contract Status Management using IMM
- Firmware Upgrades with Automated IMM Processes
- Standalone Management for UCS C-Series with Intersight and IMM Insights

Lesson 6: Intersight Orchestration and Programmability with ICO and Scripting Tools Objective: Learn Intersight orchestration and programmability using ICO, Terraform, PowerShell, and Python for enhanced UCS management.

- Mastering Intersight Orchestrator and Workflow Designer for UCS Automation
- Utilizing REST API with Intersight for Enhanced UCS Management
- Python Scripting for Advanced Intersight Operations
- Integrating UCS with Ansible in the Intersight Environment
- Deploying the Intersight Terraform Provider for Infrastructure as Code
- ICO Integration Strategies with Terraform and PowerShell in UCS Management

Lesson 7: Advanced Intersight UCS Operations with AI and IMM Objective: Learn the intricacies of firmware operations in Cisco UCS-X using Intersight, including managing firmware bundles and standalone firmware management.

- Intersight Platform Firmware Operations Overview
- Intersight Firmware Bundles
- Cisco Stand-Alone Firmware Management

Register for this class by visiting us at: <u>www.tcworkshop.com</u> or calling us at 800-639-3535



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# **NASBA Information**

Level: Intermediate Attendance Requirement: To be awarded the full credit hours, you must sign in and attend the entire course. Fields: Computer Software & Applications CPEs: 31.20

#### Policies: Course Registration, Cancellation, Refund and Complaint Resolution

For more information regarding administrative policies such as complaint and refund, please contact our offices at 800-639-3535 or visit us at: <u>www.tcworkshop.com</u>

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