

Administering Cisco UCS X-Series Solutions with Intersigh

Duration: 5 Days **Course Code: N1_INTUCSX** **Version: 1.0** **Delivery Method: Virtual Learning**

Overview:

This 2-part deep-dive training covers Cisco UCS X-Series server family and how Intersight can be the enablement platform for all UCS servers. We will cover Intersight features such as IWOM, IST, ICO, and programmability either On-Prem or in the Cloud. Attendees will learn the breadth of the physical X-Series (pools, policies, firmware, so much more) platform as well as maintaining existing infrastructure with Intersight Infrastructures Services. Also covered is how to manage physical, virtual, cloud platforms and deploy to any or all.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

The primary audience for this course is as follows: Server Administrators Systems Engineers Storage Administrators Technical Solutions Architects Integrators and Partners Consulting Systems Engineers Network Administrators Network Engineers Network Managers Architects

Objectives:

- Upon completing this course, the learner will be able to meet these overall objectives:
- Understand, describe, and configure Cisco Intersight (on prem and SaaS models)
- Understand, describe, and configure Intersight Advanced features (IST, ICO, IWOM)
- Understand, describe, and configure IMM and UMM mode for UCS
- Understand, describe, and configure Cisco X-Series (FI, IFM, X210c Server, Adv Fabric Module)
- Create Intersight Pools, Policies, and Management for X-Series
- Design and operate Cisco UCS with Intersight Managed Mode Solutions

Content:

Section 1: Intersight Foundations

- Intersight Architecture
- Licensing
- Essentials
- Advantage
- Premier
- Security
- Role-Based Access Control (RBAC)
- Administration
- Dashboards Management
- Create and Manage Widgets
- Intersight Managed Mode vs. UCS Managed Mode

Section 2: Monitoring and Maintaining UCS Infrastructure with Intersight

- Device health and Monitoring
- Virtualization Monitoring
- Integrated Support
- Infrastructure Configuration
- Server Deployment
- Standalone C-Series Management

Section 3: Designing and Operationalizing Cisco UCS Solutions with Intersight

- Hyperconvergence Overview
- Cisco HyperFlex HX-Series Servers
- Designing Intersight Deployment Options
- Configuring Intersight Managed Mode

Section 4: Configuring Cisco UCS Server Hardware

- Cisco UCS X-Series Blade Servers
- Cisco UCS B-Series Blade Servers
- Cisco UCS C-Series Rack Servers
- Cisco UCS S-Series Rack Servers
- Cisco Virtual Interface Cards
- Cisco X-Fabric Modules

Section 5: Designing Cisco UCS LAN and SAN Connectivity

- Cisco UCS Fabric Interconnects
- Cisco UCS Fabric Interconnect Ethernet End-Host Mode Compared to Switching Mode
- Cisco UCS Fabric Interconnect Uplink Pinning
- Cisco UCS X-Series Connectivity

Section 6: Configuring Cisco UCS-X in IMM Mode

- Fabric Interconnect Domain Profiles and Policies
- Chassis Policies
- Cisco UCS Server Profiles
- Identity Pools
- Server Pools

Section 7: Implementing Cisco UCS Firmware Updates

- Update X-Series Firmware with Intersight
- Update Cisco UCS C-Series Server Firmware
- Download Tasks for the Infrastructure Image
- Download Tasks for Cisco UCS B-Series Firmware Packages
- Best Practices for Updating Firmware in Cisco UCS Manager
- Firmware Upgrades Using Auto Install
- Capability Catalog Updates
- Host Firmware Packages
- Driver Updates for Operating Systems and Hypervisors

Section 8: IWO (Intersight Workload Optimizer)

- Overview
- App/Infrastructure Dependencies
- Analytics
- Full Stack Automation
- Ecosystem (AppD, SolarWinds, etc)
- Application Resource and Performance Management

Section 9: IKS (Intersight Kubernetes Services)

- Overview K8s
- App and Infrastructure integration
- Creating a Profile
- Out of Box Container Interfaces
- Networking
- Storage
- Load Balancing
- Managing K8s Clusters
- IWE

Section 10: ICO (Intersight Cloud Orchestrator)

- Overview
- Tasks
- Workflows
- Customized Workflows
- Deploying Virtual Infrastructure
- Deploying Physical Infrastructure
- Managing Infrastructure

Section 11: IST (Intersight Services for Terraform)

- Overview
- Connecting to Git
- Deploying the IST Agent to Intersight
- Creating an Agent Pool
- Setting Variables
- Deploying a Run from ICO
- Deleting a Run from ICO

Lab Outline:

Labs are designed to assure learners a whole practical experience, through the following practical activities.

Part I:

- Explore Cisco Intersight
- Configure UCS-X in IMM Mode
- Configure NTP, LAN, SAN, Server Policies in IMM Mode
- Configure Intersight Identity Pools
- Configure a Cisco UCS Server Profile Using Pools
- Configure a Server Profile Template
- Build an ESXi Host in X-Series
- Optional: Convert a UMM domain to IMM Domain

Part 2:

- Exploring IWOM
- Deploy an on-prem K8s with IKS
- Deploy a workload using Intersight Cloud Orchestrator
- Deploy a workload using IST to UCS-X
- API Crawl Lab
- API Walk Lab
- API Run La

- IP Pools
- Intersight Provisioning Policies
- Server Policies
- Domain Policies
- Cluster Policies
- Configuring Cisco UCS Server Profile Templates
- Deriving Profiles to Blades
- Deploying ESX to a Blade using Intersight
- Managing vCenter in Intersight

Section 12: Intersight API Overview

- Architecture of API
- Access methods
- Request Semantics
- Management Information Model
- Querying the API
- Performing Tasks

Further Information:

For More information, or to book your course, please call us on 0800/84.009

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