# Cisco Virtualized Infrastructure Manager Deployment and Operations (DCCVIM) v1.0

## What you'll learn in this course

The **Cisco Virtualized Infrastructure Manager Deployment and Operations (DCCVIM) v1.0** teaches you how to deploy and manage the Network Function Virtualization Infrastructure (NFVI) platform, reducing user error and providing visualization deployment to manage multiple Cisco<sup>®</sup> Virtualized Infrastructure Manager (VIM) pods from a single portal. Cisco VIM Unified Management is a hardware platform and hypervisor-independent solution that combines Network Function Virtualization (NFV) and Software-Defined Networking (SDN).

This course teaches you how to deploy, operate, and maintain Day 0, Day 1, and Day 2 configurations on the Cisco VIM Unified Management release 3.0. You will be introduced to the hardware components used in the Cisco VIM Unified Management solution, and how to identify the OpenStack components and their functions. The course introduces the Cisco Virtualized Infrastructure Manager (CVIM) Monitor (MON) User Interface (UI) tools, and how to maintain and operate within that solution.

### **Course duration**

- Instructor-led training: 3 days in the classroom with hands-on lab practice
- Virtual instructor-led training: 3 days of web-based classes with hands-on lab practice

## How you'll benefit

This course will help you:

- · Construct and install the Cisco VIM Unified Management to streamline management of the NFVI platform
- Learn how to deploy, operate, and maintain Day 0, Day 1, and Day 2 configurations on the Cisco VIM Unified Management release 3.0
- Introduce the hardware components used in the Cisco VIM Unified Management solution, and how to identify the OpenStack components and their functions

## Who should enroll

- Channel partners and resellers
- System and network engineers
- Technical architects
- Technical support personnel

## How to Enroll

#### Instructor-led training

- Find a class at the Cisco Learning Locator.
- Arrange training at your location through <u>Cisco Private Group Training</u>.

## **Technology areas**

Service Provider

### **Course details**

#### **Objectives**

After taking this course, you should be able to:

- Describe the Cisco hardware components used in the Cisco VIM Unified Management solution
- Describe the Cisco Network Function Virtualization Infrastructure (NFVI) Design
- Discuss how Virtual Extensible LAN (VXLAN) is used with Cisco VIM
- Explain the Cisco VIM deployment
- Explain the process for a fresh Cisco VIM installation
- · Describe how to operate the Cisco VIM tools
- Explain the troubleshooting required for the ToR

#### **Prerequisites**

It is recommended that you have the following prerequisite knowledge and skills:

- An understanding of Cisco Data Center Foundations (DCFNDU)
- Familiarity with the operation and administration of Red Hat Enterprise Linux
- Familiarity with OpenStack

#### **Outline**

- Cisco VIM Unified Management Hardware and Topology Overview
  - NFVI and SDN Architecture Overview
  - Cisco VIM POD Configurations
- Cisco Network Function Virtualization Infrastructure (NFVI) Design
  - Solution Design Use Cases
  - Cisco VIM POD Design Use Cases
- VXLAN Solution with Cisco VIM
  - VXLAN Overview
  - Cisco VIM and VXLAN Solution Design

- Cisco VIM Deployment Overview
  - Cisco VIM Installer Overview
  - · Cisco VIM Representational State Transfer (REST) API
- Cisco VIM Operation
  - Verify Cisco VIM
  - Logging Information
- Cisco VIM Monitor
  - Cisco VIM Monitor Alerts
  - Cisco VIM Monitor Dashboards
- Troubleshooting Cisco VIM
  - Troubleshooting the Cisco Network Convergence System (NCS) 5500
  - Troubleshooting Cisco Nexus 9000 Cisco (N9K)

#### Lab Outline

- Management Node Installation
- Cisco VIM Installation
- VMs Installation
- Cisco VIM MON

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