

# **High-Touch Delivery Learning Services**

# Cisco TelePresence Installation and Configuration Training (TICT)



The Cisco TelePresence Installation and Configuration Training version 1.0 instructor-led course offered by High-Touch Delivery Learning Services will provide participants with the skills and knowledge needed to install and configure the main infrastructure components of a Cisco TelePresence® network. Infrastructure devices covered in this course include Cisco TelePresence Video Communication Server (VCS), Cisco TelePresence Management Suite (TMS), Cisco TelePresence Multipoint Control Unit (MCU), Cisco TelePresence Server, Cisco TelePresence Multipoint Switch (CTMS), Cisco TelePresence MSE8000 and associated blades, Cisco TelePresence Manager, and Cisco TelePresence Conductor. In addition, this course covers provisioning of Cisco TelePresence System endpoints and Cisco® Unified IP Phones from Cisco UCM and configuring Session Initiation Protocol (SIP) trunks to link Cisco UCM to Cisco VCS.

#### **Duration**

Five days.

## **Target Audience**

This course is designed for engineers responsible for installing and configuring a telepresence network. The primary audience for this course includes:

- Customer support providers who provide second- and third-level support rather than firstlevel helpdesk support
- Partner technical professionals

#### **Course Objectives**

Upon completion of this course, you should be able to:

- Install Cisco TelePresence appliance hardware and the Cisco TelePresence MSE 8000 chassis and assign IP addressing information; install Cisco TelePresence Management Suite (TMS) on a preconfigured window server and configure basic settings
- Describe hardware requirements for Cisco TelePresence Manager and Cisco TelePresence Multipoint Switch

- Describe how the Cisco UCM and Cisco VCS interact; describe which endpoints interoperate and how the Cisco TelePresence Server can be used to facilitate any endpoint working with any other endpoint
- Configure the basic settings needed on a Cisco VCS; interpret the messages sent by H.323 and SIP endpoints during a registration, a call,, and a deregistration
- Recall and describe video and audio standards used in Cisco TelePresence; describe call
  routes suing the Cisco VCS and Cisco UCM devices; provision Cisco TelePresence
  System endpoints and Cisco Unified IP Video Phones using Cisco UCM, Cisco TMS, and
  Cisco VCS
- Create search rules and transforms, a DNS zone, and subzones on the Cisco VCS for a given scenario; configure a firewall traversal connection and describe its effects on devices
- Configure a Cisco TelePresence Multipoint Switch, a Cisco TelePresence MCU, a Cisco TelePresence Server, Cisco TMS, Cisco TelePresence Conductor, and a Cisco ISDN Gateway; describe the operation of Cisco TelePresence Manager
- Describe clustering capabilities of Cisco VCS, Cisco TMS, Cisco TelePresence
   Conductor, Cisco TelePresence Multipoint Switch, Cisco TelePresence Manager, Cisco TelePresence MCU, and Cisco TelePresence Server
- Describe the roles of a LAN and of QoS on a telepresence network
- Describe basic security features on Cisco TelePresence endpoints and infrastructure devices and the encryption capabilities of SIP and H.323 registrations and calls
- Use the Cisco VCS to prevent both calls and registrations of certain endpoints and describe the effects of authentication on Cisco TMS provisioning

## **Course Prerequisites**

Following are the prerequisites for this course:

- Cisco TelePresence Support and Operations Training (TSOT) or equivalent knowledge and experience
- Networking knowledge including IPv4 addressing, OSI 7-layer model, uses of switches and routers, DHCP, cabling, and DNS

#### **Course Outline**

The course outline is as follows:

- · Module 1: Initial Installation and Setup
- Module 2: Interoperability
- Module 3: Gatekeepers and SIP Registrars
- Module 4: Provisioning
- Module 5: Call Routing
- · Module 6: Device Configuration
- · Module 7: Bandwidth Management
- Module 8: Redundancy and Clustering
- Module 9: Security

#### **Lab Outline**

The lab outline is as follows:

- Lab 1: Cisco VCS Basic Configuration
- Lab 2: Cisco VCS H.323 Setup and Endpoint Registration
- Lab 3: Cisco VCS SIP Setup and Endpoint Registration
- Lab 4: Cisco Unified IP Phone Registration to Cisco UCM Using Auto Registration
- Lab 5: Cisco VCS Configuration for Call Routing and Interworking
- Lab 6: Cisco TelePresence System Endpoint Registration to Cisco UCM
- · Lab 7: Cisco TMS Provisioning
- Lab 8: Writing Regular Expressions
- Lab 9: Cisco VCS: Creating Transforms
- · Lab 10: Cisco VCS: Neighbor Zones and Search Rules
- Lab 11: Cisco UCM
- Lab 12: Cisco VCS: Traversal Zone Configuration
- Lab 13: Cisco VCS: DNS Zone Configuration
- Lab 14: CTMS Configuration
- Lab 15: Cisco MCU Configuration
- Lab 16: Cisco Conductor Configuration
- Lab 17: Cisco ISDN Gateway Dial Plan Writing
- Lab 18: Cisco ISDN Gateway Dial Plan Configuration
- Lab 19: Cisco TMS Configuration
- Lab 20: Cisco TelePresence Manager User Interface and CTMS Connectivity
- Lab 21: Subzone Configuration
- Lab 22: Cisco VCS Authentication Configuration
- Lab 23: Provisioning Authentication Configuration



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