

TICT - Cisco TelePresence Installation and Configuration Training

Course Objectives

- Install Cisco TelePresence appliance hardware, including Cisco VCS, Cisco TelePresence Conductor, Cisco MCUs, Cisco Gateways, and the Cisco TelePresence MSE 8000 chassis and assign IP addressing information
- Install Cisco TelePresence Management Suite (TMS) on a preconfigured Microsoft Windows Server, and configure basic settings
- Describe hardware requirements for Cisco TelePresence Multipoint Switch
- Describe how the Cisco Unified CM 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
- Describe video and audio standards used in Cisco TelePresence; describe call routes using the Cisco VCS and Cisco Unified CM devices; provision Cisco TelePresence System endpoints and Cisco Unified IP Video Phones using Cisco Unified CM, 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 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

Prerequisites

The knowledge and skills you must have before attending this course are as follows:

- 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

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

LABS:

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