Implementing Cisco Video Network Devices, Part 2 (VIVND2)

Course Objectives

- Describe the components and architectures of Cisco business video solutions
- Implement Cisco Unified Communications and Cisco Collaboration video endpoints
- Implement Cisco TelePresence video endpoints
- Implement multipoint conferencing on Cisco video endpoints

Prerequisites

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

- Basic IP Networking Knowledge from Interconnecting Cisco Network Devices Part 1, Version 2.0 (ICND1) and Interconnecting Cisco Network Devices Part 2, Version 2.0 (ICND2) (or equivalent)
- Knowledge of Video Foundation Topics listed in the Implementing Cisco Video NetworkDevices, Part 1 (VIVND1) v1.0 course

Course Outline

1. Cisco Business Video Solutions

Describe the components and architectures of Cisco business video solutions

- Understanding Cisco Video Collaboration
  - Conventional Video Conferencing
  - Cisco Collaboration Solutions
  - Cisco Video-Collaboration Solution Components
  - Cisco Video-Collaboration Architecture
- Understanding Cisco Video and Content Delivery
  - Conventional Digital Media Architecture
  - Cisco DMS
  - Cisco Video- and Content-Delivery Components
  - Cisco Video- and Content-Delivery Architecture
- Understanding Cisco Video Surveillance
  - Typical Video-Surveillance Architecture Evolution
  - Cisco Connected Physical Security Solution
  - Cisco Video Surveillance Components
  - Cisco Video Surveillance Solution Architecture
- Discovering Central Video Endpoint Control Elements
  - Cisco Unified Communications Manager Video-Endpoint Registration Process
  - Cisco Unified Communications Video-Endpoint Control Plane Discovery Steps

2. Cisco Unified Communications and Collaboration Video Endpoints

Implement Cisco Unified Communications and Cisco Collaboration video endpoints

- Understanding Cisco Unified Communications and Cisco Collaboration Video Endpoint Characteristics and Installation
    - Cisco Unified Communications and Cisco Collaboration Video-Endpoint Portfolio
    - Cisco Unified Communications IP Videophone Characteristics
    - Cisco Unified Communications and Cisco Collaboration Video-Endpoint Installation
- Configuring Cisco Unified Communications and Collaboration Video Endpoints
    - Cisco Unified Communications Video-Endpoint Setup
    - Cisco Unified Communications Video-Endpoint Configuration
    - Cisco Jabber Configuration and Calibration
    - Cisco Unified Communications Video-Endpoint Status Verification
- Operating and Troubleshooting Cisco Unified Communications Video Endpoints
    - Local Cisco Unified Communications Video-Endpoint Log Verification
    - Identification and Isolation of Cisco Unified Communications Video-Endpoint Registration Issues
    - Identification and Isolation of Cisco Unified Communications Video-Endpoint Call-Setup Issues
    - Identification and Isolation of Cisco Unified Communications Video-Endpoint Media Issues

3. Cisco TelePresence Endpoints

Implement Cisco TelePresence video endpoints.

- Understanding Cisco TelePresence Endpoint Characteristics and Installation
    - Cisco TelePresence Endpoint Portfolio
    - Cisco TelePresence CTS Software-Based Endpoint Characteristics
    - Cisco TelePresence TC and TE Software-Based Endpoint Characteristics
    - Cisco TelePresence System Profile Series
    - Cisco Jabber Video for TelePresence Characteristics
- Configuring Cisco TelePresence CTS Software-Based Endpoints
    - Cisco TelePresence CTS Software-Based Endpoint Setup
    - Cisco TelePresence CTS Software-Based Endpoint Reset
    - Cisco TelePresence CTS Software-Based Endpoint Configuration
    - Cisco TelePresence CTS Software-Based Endpoint Peripheral Calibration
- Configuring Cisco TelePresence TC and TE Software-Based Endpoints
    - Cisco TelePresence TC and TE Software-Based Endpoint Setup
    - Cisco TelePresence TC and TE Software-Based Endpoint Reset
    - Cisco TelePresence TC and TE Software-Based Endpoint Peripheral Configuration and Calibration
    - Cisco TelePresence TC and TE Software-Based Endpoint Network and Call Settings Configuration
    - Cisco TelePresence TC and TE Software-Based H.323 Endpoint Configuration
    - Cisco TelePresence TC and TE Software-Based SIP Endpoint Configuration
    - Firewall Traversal Overview
    - Cisco TelePresence TC and TE Software-Based Endpoint Video Features Configuration
    - Cisco TelePresence TC and TE Software-Based Endpoints with Cisco Unified Communications Manager

    - Cisco Jabber Video for TelePresence Configuration and Calibration
    - User-Facing Call Feature Configuration
- Operating and Troubleshooting Cisco TelePresence Endpoints
    - Cisco TelePresence TC and TE Software-Based Endpoint Hardware, Software, Log, and Status Information Collection
    - Local Cisco TelePresence TC and TE Software-Based Endpoint Software and Configuration Maintenance
    - Cisco TelePresence TC and TE Software-Based Endpoint Issue Identification and Isolation
    - Cisco TelePresence CTS Software-Based Endpoint Hardware, Software, Log, and Status Information Collection
    - Cisco TelePresence CTS Software-Based Endpoint Issue Identification and Isolation
    - Cisco Jabber Video for TelePresence Issue Identification and Isolation

4. Multipoint Conferencing

Implement multipoint conferencing on Cisco video endpoints.

- Understanding Cisco Multipoint Conferencing
    - Cisco TelePresence Multipoint Media Infrastructure
    - Cisco TelePresence MCU
    - Cisco TelePresence Server
    - Cisco TelePresence Multipoint Switch
    - Ad Hoc Multipoint Conferences
    - Cisco TMS
    - Cisco WebEx Solutions
- Configuring and Monitoring Cisco Multipoint Conferencing
    - Configuring Cisco TelePresence MultiSite
    - Configuring Cisco TelePresence Multiway
    - Scheduling Conferences Using Cisco TMS
    - Monitoring Conferences Using Cisco TMS
    - Setting Up and Accessing Cisco TelePresence MCU Conferences Using the Auto- Attendant
    - Verifying Conferences and Call Statistics on the Cisco TelePresence MCU

Appendix: Cisco DMP

Implement Cisco DMP endpoints

- Understanding Cisco DMP Characteristics and Installation
    - Cisco DMP Components
    - Cisco DMP Characteristics
    - Cisco DMP Installation
- Configuring the Cisco DMP
    - Cisco DMP Setup Overview
    - Cisco DMP Reset and Hardening
    - Cisco DMP Peripheral Configuration and Calibration
    - Cisco DMP File Storage Configuration
    - Cisco DMP Network and Power Source Configuration
    - Cisco DMP Status Verification
    - Cisco DMP Media Buffer Adjustment
    - Cisco DMP TVzilla Browser Settings

    - Cisco DMP Media Play Control and Verification
- Operating and Troubleshooting the Cisco DMP
    - Cisco DMP Hardware, System Logs, and Status Information Collection
    - Local Cisco DMP Software Maintenance
    - Central Cisco DMP Software Maintenance and Status Verification
    - Cisco DMP Peripheral and Network Issue Identification and Isolation

Labs

- Lab 1-1: Discovering the Endpoint Access Network
- Lab 1-2: Discovering Central Endpoint Control Elements
- Lab 2-1: Implementing Cisco Unified Communications and Cisco Collaboration Video Endpoints
- Lab 2-2: Operating and Troubleshooting Cisco Unified Communications and Cisco Collaboration Video Endpoints
- Lab 3-1: Implementing Cisco TelePresence CTS Series Endpoints
- Lab 3-2: Implementing Cisco TelePresence TC and TE Software-Based Endpoints
- Lab 3-3: Operating and Troubleshooting Cisco TelePresence Endpoints
- Lab 4-1: Implementing Multipoint Calls on Cisco Collaboration Endpoints
- Lab A-1 (Appendix): Implementing the Cisco DMP
- Lab A-2 (Appendix): Operating and Troubleshooting the Cisco DMP