

Course Description: CCVP2 Boot Camp course runs at an accelerated pace, with extended hours, 8:00 AM to 8:00 PM each day, covering material from the CIPT1 v5.0 course and the CIPT2 v5.0 course.

CCVP2 v5.0 prepares you for installing, configuring, and maintaining a Cisco IP telephony solution. The course includes lab activities in which you will perform post installation tasks and configure Cisco Unified CallManager; configure gateways, gatekeepers, and switches; and build route plans to place intracluster and intercluster Cisco IP phone calls. You will also configure telephony class of service (calling restrictions) and numerous user telephone features, services, media resources, and applications.

CCVP2 v5.0 is also designed to provide learners with the necessary knowledge and skills to enable video calls and to secure, monitor, and manage a Cisco Unified Communications solution based on Cisco Unified CallManager, the call-routing and signaling component of the Cisco Unified Communications solution.

Who Should Attend: This course is for Channel Partners/Resellers, Customers, and Employees.

Prerequisites: Students should have experience with the following: Interconnecting Cisco Network Devices (ICND1 & ICND2); Cisco CCNA® certification recommended; Building Cisco Multilayer Switched Networks (BCMSN); working knowledge of fundamental terms and concepts of computer networking to include LANs, WANs, and IP switching and routing; ability to configure and operate Cisco routers and switches and to enable VLANs and DHCP; Cisco Voice over IP (CVOICE); Fundamental knowledge of converged voice and data networks; and the ability to configure voice interfaces on Cisco voice-enabled equipment for connection to traditional, non-packetized telephony equipment and to configure the call flows for POTS and VoIP dial peers.

Benefits of Attendance: Upon completion of this course, students will be able to:

- Deploy a Cisco CallManager 5.0 server in a cluster using a supported IP telephony deployment model.
- Perform platform and general administration, and implement disaster recovery.
- Deploy SCCP and SIP endpoints in a Cisco CallManager 5.0 cluster.
- Deploy a dial plan consisting of gateways, trunks, route plan elements, hunt groups, partitions, and calling search spaces.
- Implement multiple site deployments with fallback telephony services in the remote branches, call admission control over the WAN bandwidth, and automated call rerouting through the PSTN when the WAN bandwidth is insufficient.
- Configure Cisco CallManager to enable end-user features and services.
- Harden Cisco IP telephony devices, prevent toll fraud, understand cryptographic concepts, and apply cryptography to a Cisco Unified CallManager cluster.
- Make IP video telephony calls with Cisco Unified Video Advantage and describe the basic components and characteristics of video calls and Cisco Unified CallManager configuration parameters that enable video.

Course Outline:

Course Introduction

Overview
Course Goal and Objectives
Course Flow
Additional References
Your Training Curriculum

Module 1: Get Started with CiscUnified CallManager Release 5.0

Introducing CiscUnified CallManager Release 5.0
Evaluating CiscUnified CallManager Release 5.0 Deployment Options
Installing CiscUnified CallManager Release 5.0

Module 2: Administration of CiscUnified CallManager Release 5.0

Administering the CiscP Telephony Platform
Performing General Administration
Configuring CiscUnified CallManager Release 5.0 Basic Settings
Implementing Disaster Recovery

Module 3: Deployment of CiscUnified CallManager Release 5.0 Endpoints

Configuring CiscCatalyst Switches
Evaluating CiscP Telephony Endpoints
Configuring CiscUnified CallManager tSupport CiscP Phones
Configuring SIP Endpoints
Managing Endpoints with CiscUnified CallManager BAT

Module 4: Deployment of a Dial Plan on CiscUnified CallManager Release 5.0

Understanding Dial Plans
Configuring CiscUnified CallManager Trunks
Configuring Voice Gateways
Configuring Basic Dial Plan Elements
Configuring Hunt Groups and Call Coverage
Configuring Complex Dial Plan Elements
Implementing Calling Privileges and Restrictions

Module 5: Implementation of Multiple Site Deployment

Understanding Call Admission Control in CiscUnified CallManager Release 5.0
Configuring Call Admission Control in CiscUnified CallManager Release 5.0

Configuring CiscUnified SRST

Module 6: CiscUnified CallManager Features and Services

Configuring Media Resources
Configuring User Features - Part 1
Configuring User Features - Part 2
Configuring CiscUnified CallManager Attendant Console

Module 7: Secure IP Telephony

Preventing Toll Fraud
Hardening the IP Phone
Understanding Cryptographic Fundamentals
Understanding PKI
Understanding CiscP Telephony Authentication and Encryption Fundamentals
Configuring CiscP Telephony Authentication and Encryption

Module 8: Enable IP VideTelephony

Introducing IP VideTelephony
Configuring CiscUnified VideAdvantage

Module 9: Monitor and Manage IP Telephony

Introducing CiscUnified CallManager Serviceability
Monitoring Performance
Configuring Alarms and Traces
Managing Call Accounting
Using Additional Management and Monitoring Tools

Lab Outline

Lab 2-1: Performing Platform Administration
Lab 2-2: Performing General Administration
Lab 2-3: Configuring CiscUnified CallManager 5.0 Basic Settings
Lab 2-4: Backing Up and Restoring CiscUnified CallManager 5.0
Lab 3-1: Configuring Auxiliary or Voice VLANs
Lab 3-2: Configuring CiscUnified CallManager tSupport CiscP Phones
Lab 3-3: Configuring SIP Endpoints
Lab 3-4: Using the Bulk Administration Tool
Lab 4-1: Configuring CiscUnified CallManager Trunks
Lab 4-2: Configuring Voice Gateways
Lab 4-3: Configuring Basic Dial Plan Elements
Lab 4-4: Configuring Hunt Groups and Call Coverage

Lab 4-5: Configuring Complex Dial Plan Elements
Lab 4-6: Implementing Calling Privileges and Restrictions
Lab 5-1: Configuring Call Admission Control
Lab 5-2: Configuring SRST
Lab 6-1: Configuring Media Resources
Lab 6-2: Configuring User Features
Lab 6-3: Configuring CiscUnified CallManager Extension Mobility
Lab 6-4: Configuring Presence and BLF Functionality
Lab 6-5: Configuring Additional Features
Lab 6-6: Configuring CiscUnified CallManager Attendant Console
Lab 7-1: Preventing Toll Fraud
Lab 7-2: Hardening the IP Phone
Lab 7-3: Configuring CiscP Telephony Authentication and Encryption
Lab 8-1: Enabling CiscUnified VideAdvantage
Lab 9-1: Monitoring Performance
Lab 9-2: Configuring Alarms and Traces
Lab 9-3: Configuring CiscUnified CallManager CAR
Lab 9-4: Enabling Dependency Records, Configuring CiscUnified CallManager Dialed Number Analyzer, and Using QRT