

Implementing Cisco Collaboration Applications - On Demand (CAPPS 1.0)

Modality: On Demand

Duration: 40 Hours

CLC: 10 Units

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Course Outline:

Module 1: Cisco Unity Connection

Lesson 1: Designing and Deploying Cisco Unity Connection

- Physical Server Choices for Cisco Collaboration System Applications
- VMware vSphere ESXi Versions and Licensing
- Physical and Virtual Architecture Comparison
- Virtual Machine Encapsulation and Files
- Typical Versus Custom Virtual Machine Creation
- OVA Template for Cisco Unity Connection
- Resizing Virtual Machine Resources
- Shares and Reservations
- Virtual Switch and NIC Teaming
- Storage Overview
- Sizing and Scaling Cisco Unity Connection Servers
- Active-Active, High-Availability Deployment
- Cisco Unity Connection Deployment Options
- Traffic-Pattern Evaluation Example
- Cisco Unity Connection Networking
- HTTPS Networking
- Voice Profile for Internet Mail
- Cisco MediaSense Overview
- Cisco MediaSense Virtualization and Platform Overlays
- Video Compatibility Matrix and Network Topology
- Design Guidelines for Video Greetings
- Call Flows
- Voice-Messaging Call Flows in SRST and AAR Mode

Lesson 2: Integrating Cisco Unity Connection with Cisco Unified Communications Manager

- Cisco Unity Connection Administration
- Cisco Unified RTMT
- Cisco Prime Licensing for Voice Messaging
- Add Cisco Unity Connection in Cisco PLM
- Cisco Unity Connection Integration Options
- Cisco Unity Connection SCCP Integration
- Cisco Unity Connection SIP Integration
- Cisco Unity Connection Integration Troubleshooting Tools
- On-Net and Off-Net Calls
- Call Forward Options
- Cisco Unity Connection Call Routing
- Port Monitor
- Default Call-Routing Behavior
- Integration Considerations

Lesson 3: Configuring Cisco Unity Connection Users, Templates, and Class of Service

- Cisco Unity Connection Class of Service
- Cisco Unity Connection User Templates
- User-Creation Options
- Cisco Unity Connection User
- Password Settings and Roles
- User Transfer Rules
- Greetings
- TUI Experience
- Alternate Extensions
- Voice Mailbox
- Mailbox Stores and Membership
- Message Aging Policy and Mailbox Quotas
- Private Distribution Lists
- Notification Devices

Lesson 4: Configuring the Cisco Unity Connection System

- Cisco Unity Connection System Settings Overview
- General Settings vs. User Settings
- General Configuration
- Time Zone Usage
- Cisco Unity Connection Distribution Lists
- Cisco Unity Connection Authentication
- Roles
- Cisco Unity Connection Restriction Tables
- Cisco Unity Connection LDAP Integration
- Import of Users from LDAP Server
- Phone Number Conversion
- Search Base

- LDAP Filter
- Import of Users from Cisco Unified Communications Manager

Lesson 5: Implementing Cisco Unity Connection Dial Plan and Call Management

- Cisco Unity Connection Dial Plan Components
- Dial Plan Example
- Cisco Unity Connection Call Handler Types
- Call Handler Reachability
- Auto-Attendant Example
- Call Handler Templates
- Call Handler Template Options
- Caller Input
- Default Call Handler Flow
- Greeting Analysis
- Caller Input Analysis
- Operator Call Handler
- Goodbye Call Handler
- Directory Handler
- Interview Handler

Lesson 6: Configuring Unified Messaging

- Unified Messaging Terminology
- Single Inbox High-Level Architecture
- Single Inbox Functionality
- Unified Messaging Benefits
- Exchange Integration Options
- Cisco Unity Connection Deployment Options
- Security, Compliance, and Discoverability
- Message Synchronization Architecture
- Configure Integrated Messaging
- Task List to Set Up Unified Messaging Single Inbox
- Exchange Mailbox Moves
- Backup and Restore of Mailboxes

Lesson 7: Troubleshooting Cisco Unity Connection

- Troubleshooting Cisco Unity Connection
- Reorder Tone
- Call Forward to Cisco Unity Connection
- Route Pattern Affecting Call Forward
- Login Not Working
- PIN Not Accepted
- MWI Issues
- MWI Status
- Wrong Greeting
- Time Schedule

- Voice Messages
- Call Handler Transfer Issues
- Call Handler Issues
- AAR and Cisco Unified SRST Issues
- Cisco Unified RTMT
- Cisco Unity Connection Performance Counters
- Alert Properties
- Reporting in Cisco Unity Connection
- MWI Troubleshooting
- Macro Traces

Lesson 8: Deploying Voice Mail Redundancy in Branch Offices

- Introduction to Cisco Unity Connection SRSV
- Specifications for Virtual Platform Overlay
- Cisco Unity Connection SRSV Solution
- Cisco Unity Connection SRSV Licensing
- Limitations in Cisco Unity Connection SRSV Mode
- SRSV Configuration Checklist for Branch Sites
- Activate Cisco Unity Connection SRSV
- DNS, Domains, and Self-Signed Certificates
- Cisco Unity Connection SRSV Menu Overview
- SRSV Configuration Checklist for Headquarters Site
- Set Up Headquarters Cisco Unity Connection
- Automatic Provisioning and Polling
- Monitor the Provisioning and Polling Status
- Replicate System Distribution List
- Troubleshooting Issues in Provisioning

Module 2: Cisco Unity Express

Lesson 1: Designing and Deploying Cisco Unity Express

- Cisco Unity Express
- Cisco Services-Ready Engine
- User Access
- Cisco Unity Express Auto-Attendant
- Schedules
- Integrated Messaging
- Distribution Lists
- Notifications
- Notification for Scheduled Backup
- Cisco Unity Express Integration
- Deployment Models
- Voice Messaging System Comparison

Lesson 2: Integrating Cisco Unity Express with Cisco Unified Communications Manager Express

- Voicemail Integration on Cisco Unified Communications Manager Express
- Service Module
- Dial Peer Configuration
- Voicemail Access for SCCP Phones
- MWI for SIP-Controlled IP Phones
- MWI Options
- MWI Outcall
- MWI Using SIP Notification Messages
- MWI SIP for Ephone-dns
- Transcoding
- Connecting and Initiating Cisco Unity Express Module
- Software Installation
- Software Versions and Licenses
- Configure SIP Triggers for Default Applications: Voicemail
- Configure MWI Outcall Directory Numbers
- Configure MWI Using SIP Notify

Lesson 3: Configuring Cisco Unity Express User Accounts and Features

- System Settings
- Authentication Rules
- Subscribers
- User Import
- Mailboxes
- Mailbox Defaults
- Adding Mailboxes
- Distribution Lists
- Schedules and Holidays
- Web Inbox
- Message Notification
- Privilege Levels
- Cisco Unity Express VoiceView Express
- Integrated Messaging

Lesson 4: Configuring Call Routing with Cisco Unity Express Auto-Attendant

- Cisco Unity Express Auto-Attendant Overview
- Cisco Unity Express Auto-Attendant Operation Example
- Cisco Unity Express Auto-Attendant Features
- Cisco Unity Express Windows Editor for Auto-Attendant Interactive Voice Response Script
- Comparison
- Cisco Unity Express Auto-Attendant Configuration Checklist
- Prompts
- Administration Via Telephone
- Default System Scripts
- Call Flow
- Application Ports
- Editor Express

- Cisco Unity Express Windows Editor for Auto-Attendant Interactive Voice Response Scripts
- Scripts

Lesson 5: Troubleshooting Cisco Unity Express

- Call Processing to Messaging System Call Flow
- Cisco Unified Communications Manager Express
- Cisco Unity Express Troubleshooting
- Logging
- Cisco Unity Trace Tool
- Using trace Commands via CLI
- GUI Macro Feature
- SIP Troubleshooting
- SIP Call Flow
- Troubleshooting SIP Issues
- Troubleshooting MWI Issues
- Troubleshooting Mailbox Issues
- Interpreting TUI Sessions

Module 3: Cisco Unified IM and Presence Implementation

Lesson 1: Designing and Deploying Cisco Unified IM and Presence

- Cisco Unified Communications Manager Presence Introduction
- Cisco Unified Communications Manager Presence
- Indicators for Speed-Dial Presence
- Cisco Unified Communications Manager Call History Presence
- Cisco Unified Communications Manager Subscribe CSS
- Cisco Unified Communications Manager Presence Groups
- Cisco Unified Communications IM and Presence Introduction
- Microsoft Integration
- OVA Template for Cisco Unified Communications IM and Presence
- Cisco Unified Communications IM and Presence Cluster
- Cisco Unified Communications Manager Deployment Options
- Service Discovery
- Quality of Service
- Cisco Jabber Port Usage
- Enterprise Instant Messaging
- Multicloud Deployment
- Federated Deployment
- Microsoft OCS Federation
- Mapping of Presence Status
- Federation Preparation

Lesson 2: Describing Cisco Unified Communications IM and Presence Components and Communication Flows

- Cisco Jabber Information Flow in Deskphone Mode

- Cisco Jabber Information Flow in Softphone Mode
- Cisco Jabber in Phone-Only Mode
- Cisco Jabber and Voicemail
- Cisco Jabber and Conferencing
- Integration with LDAP for Cisco Jabber
- Cisco Unified Communications IM and Presence, Active Directory, and Exchange
- Cisco Unified Communications IM and Presence Architecture
- Cisco Unified Communications IM and Presence Cluster
- Cisco Jabber Login Flow
- Access for Cisco Jabber without VPN

Lesson 3: Integrating Cisco Unified Communications IM and Presence

- Set Up Cisco Unified Communications Manager for Presence
- Checklist for Cisco Unified Communications Manager Setup
- Cisco Jabber UC Services
- Implementing Cisco Unified Communications IM and Presence
- Checklist for Cisco Unified Communications IM and Presence Setup
- Cisco Unified Communications IM and Presence Services
- Cisco Jabber Service Discovery
- Service Discovery: Domain
- Service Discovery: Operating Mode
- Cisco UDS SRV Record
- SRV Records
- DNS SRV Record Priorities and Weights
- Troubleshoot DNS SRV Entries
- Methods of Installation
- Create a Custom Installer

Lesson 4: Configuring Cisco Unified Communications IM and Presence Features and Implementing Cisco Jabber

- Cisco Jabber in Phone-Only Mode
- Configure Cisco Jabber in Softphone Mode
- Legacy Client Settings
- Cisco Jabber UC Services
- Upload Jabber-Config File to TFTP Server
- Visual Voicemail Interface for Cisco Jabber
- Cisco Jabber in Softphone Mode
- Cisco Jabber Account Options
- Connection Status
- LDAP Profile Test
- Voicemail Profile Test
- Enable End Users and Devices for CTI
- Cisco Jabber in Deskphone Mode

Lesson 5: Configuring Cisco Jabber Mobile and Integrating Directory Servers

- Cisco Jabber Framework Alignment
- Configuration URL
- Legacy Client Settings
- Video Features
- Dial-via-Office Reverse Calling
- Low-Bandwidth Mode
- URL Handlers
- Secure Cisco Jabber on Mobile
- Add Cisco Jabber in Cisco Unified Communications Manager
- Cisco Jabber User Configuration XML File
- Cisco Jabber Configuration Sources
- Cisco Jabber Contact Sources
- Contact Lookup
- Cisco UDS Directory Access
- Photo Support

Lesson 6: Verifying and Troubleshooting Tools for Cisco Unified IM and Presence Components

- System Dashboard
- Cisco Unified IM and Presence Reporting
- Presence Viewer
- System Troubleshooter
- Cisco Jabber Connection Status
- Troubleshoot Common Cisco Jabber Issues
- Cisco Unified IP Phone Cannot Be Selected
- In Softphone Mode, Telephony Is Not Possible
- Users Are Not Shown as On the Phone During an Active Call
- End User Cannot Log into Cisco Jabber
- Search for Contacts Returns No Results
- End User Cannot Control the Cisco Unified IP Phone 9971
- Trace Filter Settings
- Troubleshoot SIP Integration

Module 4: Video Provisioning and Integration in a Unified Communications Deployment

Lesson 1: Deploying Cisco Collaboration Systems Applications with Cisco Prime Collaboration

- Cisco Prime Collaboration Overview
- Complete Lifecycle Management
- Cisco Prime Collaboration Standard and Advanced
- Automated System Provisioning
- Domains, Service Areas, and Subscriber Types: Example
- Administration Levels
- LDAP Import
- Subscriber Roles
- Deployment Aspects in Cisco Prime Collaboration

- Day-1 Services Infrastructure
- Day-2 Services
- Single Provisioning Interface
- Multilanguage Support
- Dashboard
- Cisco Prime Telephone Self-Care

Lesson 2: Describing Video Infrastructure

- Collaboration Infrastructure
- Architectural Evolution
- Combined Model and Methods
- Cisco Prime Collaboration Manager
- High-Level Function of Collaboration Infrastructure
- Dual Approach
- Cisco TelePresence VCS Characteristics
- Cisco VCS Cluster Size
- Call Control Terminology
- Connecting Cisco Unified Communications Manager and VCS Clusters
- Dial Plans
- Conferencing
- Multiparty Conferencing
- Cisco TelePresence Conductor
- Cisco Jabber Video for TelePresence (Movi)
- DNS SRV Records
- Automated Provisioning with Cisco VCS and TMS
- Portfolio Simplification

Lesson 3: Describing Cisco TMS

- Cisco TMS Introduction
- Business Needs for Cisco TMS
- Cisco TMS Platform Overview
- Cisco TMS Overview
- Endpoint and Infrastructure Support
- Cisco TMS Scale and Management
- Cisco TMS Conference Call Routing
- Cisco TMS Conference Port Reservation
- Call Launch Options
- Calendaring Options
- Cisco TelePresence Conductor Support
- Recommended Cisco TMS Scheduling Deployment Mode
- Adding Cisco VCS Endpoints to Cisco Unified Communications Manager
- Integration of Cisco TMSXE with Microsoft Exchange
- Cisco TMS Provisioning Extension

Labs

- Lab1: Integrating Cisco Unity Connection with Cisco Unified Communications Manager
- Lab 2: Configuring Cisco Unity Connection Users
- Lab 3: Configuring Cisco Unity Connection System Settings
- Lab 4: Implementing Cisco Unity Connection Call Management
- Lab 5: Configuring Cisco Unified Messaging
- Lab 6: Troubleshooting Cisco Unity Connection (Optional)
- Lab 7: Integrating Cisco Unity Express with Cisco Unified Communications Manager Express
- Lab 8: Configuring Cisco Unity Express System Setting and Users
- Lab 9: Implementing Call Routing with Cisco Unity Express Auto-Attendant
- Lab 10: Troubleshooting Cisco Unity Express (Optional)
- Lab 11: Integrate Cisco Unified Communications IM and Presence with Cisco Unified Communications Manager
- Lab 12: Configure Unified Communications IM and Presence Features and Implement Cisco Jabber
- Lab 13: Configure Cisco Jabber Mobile and Integrate Directory Servers (Optional)
- Lab 14: Troubleshoot Cisco Unified Communications IM and Presence (Optional)
- Lab 15: Provisioning with Cisco Prime Collaboration
- Lab 16: Deploying Cisco TMS and Video Applications