

Hands-On

# Cisco UCM Business Edition 5000 and 6000

Implementation and Administration



## Course Description

This Hands-On course focuses on the initial configuration, verification, administering and basic troubleshooting of Cisco Unified Communications Manager Business Edition 6000.

There is a strong emphasis on Hands-On lab oriented tasks to configure, verify and go through administration set-up, day-to-day management tasks and support details. The course needs to run in a equipment ready environment where students can focus on specific areas of interests. Students requiring more in-depth knowledge should attend our other UCM BE courses aimed at specific areas.

Keep in mind that our courses can be tailored to specific needs and requirements. If access to equipment is not available, specific equipment may be provided for additional fees, upon request.



## Students Will Learn

- The skills and knowledge necessary for initial Cisco Unified Communications Manager Business Edition 5000/6000 configuration as well as day-to-day administration and management tasks.

## Target Audience

Support and deployment personnel, Administrators, or anyone who or needs an understanding of the Cisco Unified Communications Manager implementation e.g. Channel Partner / Reseller, Customer, Employees.

## Prerequisites

A basic knowledge of data and voice networks. Students are not required to have any previous experience with Cisco Unified Communications Manager, but it would be helpful.

## Course Outline

- Server Architecture.
- IP Telephony Overview.
- Cisco Unified Communications Business Edition 6000 Architecture.
- IP Telephony Call Flows.
- Cisco Unified Communications Manager features.
- Cisco IP Phones and Phone Settings.
- IP Phone User Interfaces.
- Adding IP phones in Cisco Unified Communications Manager using the Auto-registration process.
- Manually adding IP phones in Cisco Unified Communications Manager.
- Configuring Directory Numbers.
- Moving/changing IP Phones and Directory Numbers.
- Deleting IP Phones.
- Adding a PC to the IP Phone Data Port.
- Additional IP Phone Administration - IP Phone Hardening.
- Speed Dials.
- Personal Address Book.
- Configuring/modifying IP Phone Softkeys and Button Templates.
- Loading IP Phone Firmware.
- Administration of the Corporate User Directory.
- Add/Delete/Modify Cisco Unified Communications Manager End User Configuration.
- Administration of Cisco Unified Communications Manager LDAP Integration.
- Add/Delete/Modify End Users in Microsoft Active Directory.
- Modifying LDAP Integration and Custom LDAP Filters.
- Administering the End User Web Login.
- Administering User Telephony Features such as Call Pickup, Call Park, Callback, Intercom and Do Not Disturb.
- Call Forwarding.
- IP Phone Services.
- Extension Mobility.
- Extension Mobility Cross-Cluster.
- Call Coverage - Hunt Pilot, Hunt Lists and Line Groups.
- Call Routing in Cisco Unified Communications Manager.
- Dial Plan Administration.
- Digit Translation.
- Media resources Conferencing, Music on Hold, Transcoding.
- Call Admission Control (Limiting The Number of Calls).
- Class of Service (Partitions and Calling Search Spaces).
- SIP Trunks.
- IP Telephony and Voicemail integration overview.
- Cisco Unity Connection integrated messaging architecture.
- IP Telephony and voicemail call flows.
- Voicemail clients and user interfaces.
- Administrative tools and interfaces.
- Cisco Unity Connection features.
- Configuring Cisco Unified Communications Manager for integration with Cisco Unity Connection (SIP).
- Configuring Cisco Unity Connection for integration with Cisco Unified Communications Manager (SIP).

- Managing AXL servers.
- Cisco Unity Connection system Service and Enterprise parameters.
- Cisco Unity Connection user authentication rules.
- Adding users and mailboxes in Cisco Unity Connection.
- Managing mailboxes.
- LDAP integration.
- Directory Handlers and Interview Handlers.
- Managing Greetings.
- Cisco Unity Connection call routing, call handling and auto-attendant.
- Phone View
- IP Telephony and Call Centre Integration Overview.
- Cisco Unified Contact Centre Express Architecture.
- IP Telephony and Call Centre Call Flows.
- Cisco Unified Contact Centre Express features.
- Agent and Supervisor Roles.
- User Privileges.
- CTI Route Point and CTI Ports.
- Applications, Triggers and Call Centre Queues.
- Uploading Prompts.
- Uploading Scripts.
- Add/Delete/Modify Users.
- Assigning Agents to Call Centre Queues.
- Administration of Cisco Unified Communications Manager Integration and Configuration.
- Verifying/Changing How Calls are Distributed from Call Centre Queues to Agents.
- Administration of Call Centre Resources (Agents and Supervisors).
- Administering Skills Based Resources.
- Assigning/Modifying Skills and Skill Levels to Agents.
- Introduction to the various Unified Contact Centre Express Agents.
- Cisco IP Phone Agent.
- Cisco Agent Desktop Installation and Configuration.
- Cisco Supervisor Desktop Installation and Configuration.
- Using the Unified Contact Centre Express Agents.
- Monitoring Agents.
- Cisco Unified Communications Manager IM and Presence Architecture.
- IM and Presence Server Features.
- Configuring Cisco Unified Communications Manager for Integration with the IM and Presence Server.
- Configuring the IM and Presence server for integration with Cisco Unified Communications Manager.
- IM and Presence Server System Parameters.
- IM and Presence Server Security Parameters.
- End user configuration.
- LDAP integration.
- Cisco Unified Client Services Framework.
- Cisco Unified Personal Communicator client.
- Cisco Jabber clients.
- Desk Phone Control (CTI).
- Click-to-call.
- Making voice calls.
- Core IM and Presence.
- Point-to-point Instant Messaging (Chat).
- Visual Voicemail.
- Cisco Unified Provisioning Manager.
- Backup and Disaster Recovery.
- Monitoring and Troubleshooting.
- CDR Analysis and Reporting Tool.
- Real Time Monitoring Tool.

- Additional topics may be added on request.

### **Unified Communications in a Virtualized Environment Course Option**

- Licensing Model for Virtualized UC Applications
- UCS hardware
- RAID Controller Considerations
- Upgrading Server BIOS
- BIOS configuration e.g.boot order
- Configure Cisco Integrated Management Controller (CIMC) for remote management
- VMware ESXi Installation
- Install and configure virtual machines (VMs)- ova templates
- Installing UC Applications on Cisco UCS Servers:

- Installation up to web login adding a phone;

- CUCM

- CUC

- CUP

- UCCX

- Install logs via the serial port of the VM
- Virtualization Operations and Maintenance
- In-Band Hardware Monitoring
- Out-of-Band Hardware Monitoring
- Intelligent Platform Management Interface (IPMI)
- Cisco Integrated Management Controller (CIMC).
- Backup, Restore, and Server Recovery

### **Delivery Method**

Instructor-Led with numerous Hands-On labs and exercises.

### **Equipment Requirements**

**(This apply's to our hands-on courses only)**

BTS always provides equipment to have a very successful Hands-On course. BTS also encourages all attendees to bring their own equipment to the course. This will provide attendees the opportunity to incorporate their own gear into the labs and gain valuable training using their specific equipment.

## Course Length

5 Days