

Cisco Unified Communications Professional (CUCP) - Comprehensive Training Syllabus

Presented by Netminion Solutions

This intensive program covers the implementation, administration, and advanced features of Cisco Unified Communications Manager (CUCM), Cisco Unity Connection (CUC), and essential supporting technologies.

Module 1: Unified Communications Fundamentals & Infrastructure

Topic Area	Key Learning Outcomes
1.1 Voice Technologies Overview	Differentiate between Traditional Voice (TDM/PSTN) and Unified Voice (IP-based) architectures. Understand the benefits and requirements of a Unified Communications (UC) solution.
1.2 Cisco UC Product Introduction	Introduce the primary components of the Cisco Collaboration Portfolio (CUCM, CUC, Cisco Contact Center, etc.). Understand the function of each product within the solution.
1.3 Endpoint Registration Process	Detail the complete phone registration flow with CUCM, covering the critical roles of NTP, DHCP, DNS, and TFTP servers in a UC environment.
1.4 Backup and Disaster Recovery	Implement and manage the Device Backup for CUCM and Cisco Unity Connection (CUC) environments to ensure business continuity.

 Module 2: Cisco Unified Communications Manager (CUCM) Administration

Topic Area	Key Learning Outcomes
2.1 CUCM Graphical User Interface (GUI)	Navigate and administer the CUCM interface for configuration, monitoring, and maintenance.
2.2 User and Device Provisioning (BAT)	Utilize the Bulk Administration Tool (BAT) for efficient creation, modification, and deletion of users and IP phones. Master basic User Management workflows.
2.3 Basic Call Features (CME)	Configure essential features on both CUCM and Cisco Unified Communications Manager Express (CME), including: Call Forward, Call Pickup, Paging, Intercom, and Transfer Intercom.
2.4 Advanced CUCM Features	Implement and troubleshoot complex call features such as Call Park, Call Pickup, and Intercom within the CUCM environment.
2.5 Extension Mobility (EM)	Configure and manage the Extension Mobility service, enabling users to log in to any IP phone and access their personal directory number and settings.

🌐 Module 3: Advanced Call Routing and Dial Plan Design

Topic Area	Key Learning Outcomes
3.1 Globalized Call Routing Foundation	Master the use of Partition and Calling Search Space (CSS) to control and manage call access permissions within the dial plan.
3.2 Call Routing Components	Configure and apply all elements of call routing: Route Pattern, Route List, Route Group, and Gateways.
3.3 Gateways and Protocols	Understand and configure various gateway types (MGCP, H.323, SIP) and their role in connecting CUCM to the PSTN or other IP networks.
3.4 Dial Plan Manipulation	Implement Translation Patterns and Transformation Masks to manipulate calling and called numbers for globalized and localized routing.
3.5 Specialized Routing Features	Configure Call Hunting (Line Group) for distributing calls to a group of numbers, and implement Single Number Reach (SNR) for mobile voice access.

💡 Module 4: Collaboration Applications and Survivability

Topic Area	Key Learning Outcomes
4.1 CUCM and CUC Integration	Integrate Cisco Unity Connection (CUC) with CUCM using both SCCP and SIP protocols for seamless voicemail and message waiting indicator (MWI) functionality.
4.2 Auto Attendant Console	Configure and manage Auto Attendant Call Handlers in CUC for automated call routing, menu options, and greeting management.
4.3 Survivability and Redundancy	Implement Survivable Remote Site Telephony (SRST) and Standard Local Route Group (SLRG) to ensure call processing continuity during WAN outages.

🔧 Module 5: Operations, Administration, Maintenance, and Troubleshooting (OAM&T)

Topic Area	Key Learning Outcomes
5.1 Real-Time Monitoring Tool (RTMT)	Utilize the RTMT to collect performance statistics, monitor system health, and capture logs for essential operational tasks.
5.2 Troubleshooting Methodologies	Apply systematic troubleshooting steps for common UC issues related to endpoint registration, dial plan failures, and voice quality.

🌟 Transform Your Team with Netminion Solutions: Your Collaboration Experts

At **Netminion Solutions**, we specialize in cutting-edge network training and project completion, empowering your IT workforce to master the complex, high-demand field of Cisco Unified Communications (UC).

Why Choose Netminion Solutions?

- **Certification Alignment:** Our curriculum is meticulously designed around the official **CCNP Collaboration** blueprint (covering the 350-801 CLCOR and key advanced topics), ensuring your team gains **relevant, certifiable expertise**.
- **Practical, Hands-on Mastery:** We move beyond theoretical concepts. Our training focuses on real-world scenarios, allowing engineers to **implement, troubleshoot, and optimize** mission-critical UC services like globalized call routing, high availability (SRST), and integration between CUCM and Unity Connection.
- **Project Readiness:** By the end of this program, your engineers will be prepared not just to manage, but to **lead complex collaboration projects**, maximizing your return on investment in Cisco technology and minimizing operational downtime.

Invest in Netminion Solutions to turn your current team into expert Cisco Collaboration architects and administrators.