
Interconnecting Cisco Networking Devices Part 1

Duration: 5 Days **Course Code: ICND1**

Overview:

This course focuses on providing the skills and knowledge required to install, operate, configure, and verify a basic IPv4 and IPv6 network, including configuring a LAN switch, configuring an IP router, connecting to a WAN, and identifying basic security threats. At the end of this course students should be able to complete the configuration, implementation and troubleshooting of a small branch network under supervision. test

Target Audience:

This course is designed for: Network engineers and administrators who will install, operate and troubleshoot a small branch office Enterprise network. This is an entry level course and is ideal for those individuals new to networking and looking to start their Cisco Career Certification accreditation.

Objectives:

- Upon completing this course, the learner will be able to meet these overall objectives:
 - Describe network fundamentals and build simple LANs
 - Establish Internet connectivity
 - Manage network device security
 - Expand small- to medium-sized networks with WAN connectivity
 - Describe IPv6 basics
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Prerequisites:

The knowledge and skills that a learner must have before attending this course are as follows:

- Basic Windows navigation and keyboard literacy skills
- Basic Internet usage skills
- Basic IP addressing knowledge

Testing and Certification

Recommended as preparation for:

- **100-101 - ICND1** Introduction to Cisco Network Devices Part 1
OR
 - **200-120 - CCNA** - This is a composite exam consisting of both ICND1 & ICND2
Note: Passing the ICND1 exam (100-101) results in the award of the Cisco Certified Entry Network Technician (CCENT) certification. Students taking the composite exam will only be awarded the CCNA Routing and Switching Certification, they will not be awarded the CCENT certification.
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Follow-on-Courses:

The following courses are recommended for further study:

- ICND2 - Interconnecting Cisco Network Devices Part 2- Required to gain CCNA Routing and Switching Certification
 - DESGN - Designing for Cisco Internetwork Solutions
 - IINS - Implementing Cisco IOS Network Security- Required to gain CCNA Security Certification.
 - IUWNE - Implementing Unified Wireless Networking Essentials- Required to gain CCNA Wireless Certification.
 - ICOMM - Introducing Cisco Voice and Unified Communications Administration- Required to gain CCNA Voice Certification.
 - SSPO - Supporting Cisco Service Provider IP NGN Operations - Required to gain CCNA SP Ops Certification.
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Content:

Building a Simple Network

- Exploring the Functions of Networking
- Understanding the Host-to-Host Communications Model
- Introducing LANs
- Operating Cisco IOS Software
- Starting a Switch
- Understanding Ethernet and Switch Operation
- Troubleshooting Common Switch Media Issues

Establishing Internet Connectivity

- Understanding the TCP/IP Internet Layer
- Understanding IP Addressing and Subnets
- Understanding the TCP/IP Transport Layer
- Exploring the Functions of Routing
- Configuring a Cisco Router
- Exploring the Packet Delivery Process
- Enabling Static Routing
- Managing Traffic Using ACLs
- Enabling Internet Connectivity

Managing Network Device Security

- Securing Administrative Access
- Implementing Device Hardening
- Implementing Traffic Filtering with ACLs

Building a Medium-Sized Network

- Implementing VLANs and Trunks
- Routing between VLANs
- Using a Cisco Network Device as a DHCP Server
- Introducing WAN Technologies
- Introducing Dynamic Routing Protocols
- Implementing OSPF

Introducing IPv6

- Introducing Basic IPv6
- Understanding IPv6
- Configuring IPv6 Routing

Additional Information:

Recertification

CCENT certifications are valid for three years. To recertify, pass either the ICND1 or ICND2 exam, or pass the current CCNA Routing and Switching exam, or pass a CCNA Concentration exam (wireless, security, voice), or pass any 642-XXX professional level or Cisco Specialist exam (excluding Sales Specialist exams), or pass a current CCIE or CCDE written exam.

Further Information:

For More information, or to book your course, please call us on +254 713 027 191

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Introducing Cisco Voice and Unified Communications Administration

Duration: 5 Days Course Code: ICOMM

Overview:

The Introducing Cisco Voice and Unified Communications Administration (ICOMM) course teaches learners how to maintain and operate a Cisco Unified Communications solution that is based on Cisco Unified Communications Manager, Cisco Unified Communications Manager Express, Cisco Unity Connection, and Cisco Unified Presence. This course provides the learners with the knowledge and skills to achieve associate-level competency in Cisco Unified Communications.

This course introduces the architecture, components, functionalities, and features of Cisco Unified Communications solutions and describes how daily job tasks, such as system monitoring, moves, adds, and changes are performed on Cisco Unified Communications Manager, Cisco Unified Communications Manager Express, Cisco Unity Connection, and Cisco Unified Presence.

Target Audience:

This course is designed for: Network administrators Network engineers CCNA Voice candidates Systems Engineers

Objectives:

- Upon completing this course, the learner will be able to meet these overall objectives:
- Describe the components of a Cisco Unified Communications solution and identify call signaling and media stream flows
- Provide an overview of administrator and end-user interface options in Cisco Unified Communications Manager, Cisco Unified Communications Manager Express, Cisco Unity Express, Cisco Unity Connection, and Cisco Unified Presence
- Understand call flows in Cisco Unified Communications Manager and Cisco Unified Communications Manager Express
- Perform endpoint and end-user administration tasks in Cisco Unified Communications Manager and Cisco Unified Communications Manager Express
- Describe the telephony features supported in Cisco Unified Communications Manager and Cisco Unified Communications Manager Express
- Administer users in Cisco Unity Connection and Cisco Unified Presence, and enable the most commonly used features for both applications
- Describe how to maintain a Cisco Unified Communications solution

Prerequisites:

The knowledge and skills that a learner must have before attending this course are as follows:

- Working knowledge of converged voice and data networks
- Basic knowledge of Cisco IOS gateways
- Basic knowledge of Cisco Unified Communications Manager and Cisco Unity Connection
- CCENT, CCNA Routing and Switching or any Cisco CCIE certification

To gain the prerequisite skills and knowledge, Cisco strongly recommends the knowledge of the following courses:

- Interconnecting Cisco Networking Devices Part 1 (ICND1)

Testing and Certification

Recommended as preparation for :

- 640-461 - Introducing Cisco Voice and Unified Communications Administration

ICOMM is one of the courses required for the **Cisco Certified Network Associate CCNA Voice** Certification.

Follow-on-Courses:

- Implementing Cisco Voice Communications and QoS (CVOICE)
- Implementing Cisco Unified Communications Manager Part 1 (CIPT1)
- Implementing Cisco Unified Communications Manager Part 2 (CIPT2)
- Troubleshooting Cisco Unified Communications (TVOICE)
- Cisco Unified Communications Applications (CAPPS)

Content:

Overview of Cisco Unified Communications Solutions

- Understanding the Components of Cisco Unified Communications Solutions
- Understanding the Characteristics of Cisco Unified Communications Solutions

Overview of Administrator and End-User Interfaces

- Understanding Administrator Interfaces
- Understanding End-User Interfaces

Call Flows in Cisco Unified Communications Manager and Cisco Unified Communications Manager Express

- Understanding Call Flows and Call Legs
- Understanding the Configuration Components Impacting Call Flows in Cisco Unified Communications Manager
- Understanding the Configuration Components Impacting Call Flows in Cisco Unified Communications Manager Express

Endpoint and End User Administration

- Understanding Endpoint Characteristics and Configuration Requirements
- Understanding Endpoint Implementation Options
- Understanding End-User Characteristics and Configuration Requirements
- Understanding End-User Implementation Options

Enablement of End User Telephony and Mobility Features

- Understanding Telephony Features
- Enabling Telephony Features
- Understanding Mobility Features
- Enabling Mobility Features

Enablement of Cisco Unity Connection and Cisco Unified Presence

- Understanding Cisco Unity Connection
- Understanding End User and Voice Mailbox Characteristics and Configuration Requirements
- Understanding End User and Voice Mailbox Implementation Options
- Understanding Cisco Unified Presence
- Enabling Cisco Unified Presence

Cisco Unified Communications Solutions Maintenance

- Providing End-User Support
- Understanding Cisco Unified Communications Manager Reports
- Understanding Cisco Unified Communications Manager CDR Analysis and Reporting Tool Reports
- Monitoring the System with Cisco Unified Real-Time Monitoring Tool
- Monitoring Voice Mail in Cisco Unity Connection
- Understanding the Disaster Recovery System

Further Information:

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