

Cisco Training: Inter-Networking Devices Essentials Part 1 (ICND1C, 4 jours)

Description

The course Inter-Networking Devices Essentials Part 1 (Cisco Training) is an exploration of core networking components including IP addressing, network services, switching, routing & more. The training includes the OSI reference model, network topology design, VLANs, IPv4 & Ipv6 and more. This course prepares the student for CCNA certification (Part 1).

Tarifs

- Tarification: \$3,750/person
- Rabais de 10% lorsque vous inscrivez 3 personnes.

Plan de cours

Internetworking Essentials

The Essential Concepts of Internetworking

Internetworking Models

Understanding the Purpose and Usefulness of the OSI Reference Model

About Physical Network Segmentation

About Logical Network Segmentation

Understanding the Topology of a Cisco Based Network

Exam Preparation

Practice Lab

Review of Ethernet Networking and Data Encapsulation

Ethernet Networks in Review

Physical Media: Types and Use

Packet Transfer on a Wired Network

Packet Transfer on a Wireless Network

The Cisco Three-Layer Hierarchical Model

The Communication Process: Wireless, LAN and WAN

Exam Preparation

Practice Lab

Introduction to TCP/IP: Version 4

Introducing TCP/IP

About TCP/IP Communication

IP Addressing

IPv4 Address Types and Classes

Configuring Network Clients

Configuring Device Interfaces

Understanding DHCP: Role and Function

Understanding DNS: Role and Function

About NAT: Types and Design

Exam Preparation

Practice Lab

Sub-netting: Theory and Practice

Reviewing Address Classes

The Basic Communication Process: Logical Segmentation of the Network

The Basics of Sub-netting
Determining Host and Domain Requirements
Variable Length Subnet Masks (VLSMs)
About Summarization
Planning and Designing Networks
About VLANs: Theory and Practice
Exam Preparation
Practice Lab: Designing a TCP/IP based Network
Practice Lab: Troubleshooting TCP/IP

Cisco's Internetworking Operating System (IOS)

IOS Components: Interface and Components
Tips and Tricks: AutoComplete and Command Execution
Working with Configuration
Working with Interfaces
Working with Device Features
Exam Preparation
Practice Lab

Managing a Cisco Internetwork

The Internal Components of a Cisco Router
The Router Boot Sequence
Managing Configuration Register
Backing Up and Restoring the Cisco IOS
Backing Up and Restoring the Cisco Configuration
Using Cisco Discovery Protocol (CDP)
Using Telnet
Resolving Hostnames
Checking Network Connectivity and Troubleshooting
Exam Preparation
Practice Lab

IP Routing

Routing Basics
The IP Routing Process
Configuring IP Routing in Our Network
Dynamic Routing
Distance-Vector Routing Protocols
Routing Information Protocol (RIP)
Verifying Your Configurations
Exam Preparation
Practice Lab

Exploring WAN Connectivity

Overview of WAN Technologies
Introduction to Wide Area Networks
Cable and DSL
Cabling the Serial Wide Area Network
High-Level Data-Link Control (HDLC) Protocol
Point-to-Point Protocol (PPP)
Frame Relay
Virtual Private Networks
Exam Preparation
Practice Lab

Introducing IPv6

IPv6 Addressing Basics

IPv6 Address Types

IPv6 Cisco Requirements

Planning an IPv6 Network

Implementing DHCPv6

Implementing DNSv6

Planning the Network

Implementing the Network

Exam Preparation

Practice Lab