



New Courses for Network Pros!

These courses cover many of the network essentials you need...from Cisco IOS software to networking, communications, and LANS.

ICND1 2.0 Operating Cisco IOS Software

Cisco IOS is a feature-rich network system software that provides network intelligence to meet all of today's networking demands. It is the industry-leading, and most widely deployed, network system software. This course describes Cisco IOS Software and the basic Cisco IOS CLI functions and operations. Learn how to navigate the Cisco IOS CLI configuration modes, use embedded keyboard help, manage configurations, and other features to improve the user experience in the CLI.

Networking, Communications, and LANS

Understanding the benefits of computer networks and how they function is important to maximize communication channels among end users. This course describes the concept of computer networking, introduces the components of a computer network, and explains how users benefit from using networks. The OSI model is introduced and the TCP/IP protocol stack and its layers are described. The course ends with describing LAN components and introduces switches and their role in the local networks.

Switch Operations

This course presents an overview of switch installation and describes how to verify the initial operation and configuration. Different Ethernet media options (copper and fiber) are described as well as the most common connectors and cable types. Ethernet frame structure is introduced and important fields are described. MAC addresses and their function are also introduced. To complete the course, switch frame processing operations are described, duplex options, collision domains are explained, and configuration examples for duplex settings are introduced.

Ethernet Operations

This course describes different Ethernet copper and fiber options. Ethernet media options are presented with a description of the most common connectors and cable types as well as the Ethernet frame structure. Switch frame processing operations and duplex options are explained. Collision domains are discussed and configuration examples for duplex settings are provided. This course concludes by describing the most common media and port issues and how to troubleshoot them.

Address Blocks and VLSM

This course starts by reviewing and working through a detailed subnetting example with specific requirements. Block sizes are introduced which show how many addresses are within the network and the course explains how the first subnet address is reserved to refer to the network itself. The course concludes by describing the role of VLSM and how to use VLSM options to allocate more than one subnet mask within a network and to subnet an already subnetted network address.

Managing Network Device Security

This course describes the steps that are required to secure local and remote access to network. It presents port security as a solution to the problem of maintaining control of utilized ports. NTP is introduced, with a configuration example detailed. This course enables the participant to define named ACLs, which are identified with descriptive names instead of numbers. The course also shows how to verify that ACLs are functioning properly and discusses some common configuration errors.

WANS and Dynamic Routing Protocols

This course describes the technologies, functions, and characteristics of WANs. This course discusses the need for routing protocols and describes the differences between interior and exterior routing protocols and also between link-state and distance vector routing protocols. The operation of link-state protocols is also explained.

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