



Interconnecting Cisco Network Devices

ICND

5 day

Overview :

ICND is a five-day instructor led course which focuses on using Cisco Catalyst switches and Cisco routers connected in local-area networks (LAN) and wide-area networks (WAN) typically found at small to medium network sites. Upon completion of this training course, you will be able to select, connect, configure and troubleshoot the various Cisco networking devices

Target Audience :

This course is intended for network administrators and technicians, new to Cisco products and services, who are responsible for implementing and managing small and medium business networks.

Objectives:

- Build a functional configuration to support the specified network operational requirements, given a network design
- Use the appropriate show commands to display network operational parameters so that anomalies are detected
- Use the appropriate debug commands to monitor network operational parameters so that anomalies are detected
- Explain how bridging and switching operates
- Explain the purpose and operations of the Spanning-Tree protocol
- Build a functional router configuration to support the specified network operational requirements, given a network design
- Describe the features and operation of static and dynamic routing

Course Content :

Course Introduction

- Overview
- Course Goals & Objectives
- Course Flow

Configuring Catalyst Switch Operations

- Introducing Basic Layer 2 Switching & Bridging Functions
- Identifying Problems that occur in Redundant Switched Topologies
- Introducing Spanning Tree Protocol
- Configuring a Catalyst Switch

Extending Switched Networks with Virtual Lans

- Introducing VLAN Operations
- Configuring VLAN's

Determining IP Routes

- Introducing Routing
- Introducing Distance Vector Routing
- Introducing Link-State and Balanced Hybrid Routing
- Enabling RIP
- Enabling IGRP
- Enabling EIGRP
- Enabling OSPF
- Implementing Variable-Length Subnet Masks

Managing IP Traffic with ACLs

- Overview
- Introducing ACL's
- Configuring IP ACL's
- Scaling the Network with NAT and PAT

Establishing Serial Point-to-Point Connections

- Introducing Wide-Area Networks
- Configuring Serial Point-to-Point Encapsulation

Establishing Frame Relay Connections

- Introducing Frame Relay
- Configuring Frame Relay

Completing ISDN Calls

- Configuring ISDN BRI and PRI
- Configuring Dial on Demand Routing

Course Prerequisites :

Delegates are required to meet the following prerequisites:

To fully benefit from ICND, you should already possess certain prerequisite skills, which can be gained from completing the INTRO course. We would also strongly recommend passing the INTRO Exam Number 640-821.

Working knowledge of:

- Commonly used networking terms and topologies
- The basic functions of a network protocol
- Fundamental network device roles (eg, hub, bridge, router & switch)
- The Open System Interconnection (OSI) reference model
- The use of Windows 95/NT to run multiple applications
- Accessing the Internet or an intranet
- Binary and hexadecimal numbering
- Subnetting

Testing and Certification :

Recommended as preparation for exam(s):

- ICND Exam Number 640-811
- CCNA Exam Number 640-801

The CCNA exam contains material that is covered in both the INTRO and ICND courses. Students who take and fail the CCNA exam (640-801) without having completed the INTRO course will be regarded as not having fully met the ICND pre-reqs and thus will not be entitled to a free exam re-sit under Azlan's quality charter

Follow on Courses :

The following courses are recommended for further study:

- BSCI - Building Scalable Cisco Internetworks
- BCMSN – Building Cisco Multi-Layer Switched Networks

Further Information :

ICND/	For More information, or to book your course, please call us on 01 814 8200 email salesdesk.ie@globalknowledge.ie Global Knowledge, 3rd Floor, Jervis House, Millennium Walkway, Dublin 1, Ireland http://www.globalknowledge.ie/	
-------	---	--