

CI - ONT

Optimizing Converged Cisco Networks

Summary

Duration
5 Days

Vendor
Cisco

Category
CCNP



Introduction

Training for skills in optimizing and providing effective QOS techniques in converged networks operating voice, wireless and security applications.

Prerequisites

Students must be able to:

- Explain the fundamentals of Ethernet including CSMA / CD, port speed, port duplex, and 10Mbps to 1Gbps
- Complete the initial configuration of a switch.
- Basic Spanning Tree Protocol configuration
- Configure a switch with VLANs.
- Create basic interswitch connections.
- Troubleshoot a VLAN and VTP to the CCNA level
- Complete the initial configuration of a router.
- Fundamental security knowledge including the presence of hackers, viruses and other security threats
- Fundamental knowledge of IP Addressing including the format of IPv4 addresses, the concept of subnetting, and VLSM and CIDR as well as static and default routing
- Basic NAT / PAT
- Standard and Extended Access Lists
- Use client utilities including Telnet, IPCONFIG, Trace Route, Ping, FTP, TFTP, and HyperTerminal
- Basic IOS familiarity, including accessing the CLI on a Cisco device and specifically implementing the debug and show commands

Course Objectives

After completing this course the student should be able to:

- Explain the Cisco hierarchical network model as it pertains to an end-to-end enterprise network
- Describe specific requirements for implementing a VOIP network
- Describe the need to implement QoS and the methods for implementing QoS on a converged network using Cisco's routers and Catalyst Switches
- Explain the key IP QoS mechanisms used to implement the DiffServ QoS model
- Configure Auto QoS for Enterprise
- Describe and configure wireless security and basic wireless management

Course Outline

- Describe Network Requirements
- Describing Cisco VoIP Implementations
- Introduction to IP QoS
- Implementing the DiffServ QoS Model
- Implementing AutoQoS
- Wireless Security

Associated Certifications & Exams

On successful completion of this course students will receive a Torque IT attendance certificate.

The Optimizing Converged Cisco Networks (642-845 ONT) is a qualifying exam for the Cisco Certified Network Professional CCNP®.