Current Technologies
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Cisco Partner
Platinum Learning
WHERE GREAT TRAINING HAPPENS EVERYDAY!

Implementing Cisco Quality of Service (QoS)

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The Implementing Cisco Quality of Service (QoS) training provides you with in-depth knowledge of QoS requirements, conceptual models such as best effort, IntServ, and DiffServ, and the implementation of QoS on Cisco platforms. The training covers the theory of QoS, design issues, and configuration of various QoS mechanisms to facilitate the creation of effective administrative policies providing QoS.

The training also gives you design and usage rules for advanced QoS features. This gives you the opportunity to design and implement efficient, optimal, and trouble-free multiservice networks. The new version of the training also includes QoS for modern wireless networks and software-defined networks. This training earns you 40 Continuing Education (CE) credits toward recertification.

How you'll benefit

This class will help you:

- Gain the skills to identify, describe, and correctly implement the appropriate QoS mechanisms that are required to create an effective administrative policy providing QoS
- Get the knowledge for designs and usage rules for advanced QoS features

Why Attend with Current Technologies CLC

- Our Instructors are in the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

Who Should Attend

The primary audience for this course is as follows:

- Gain the skills to identify, describe, and correctly implement the appropriate QoS mechanisms that are required to create an effective administrative policy providing QoS
- Get the knowledge for designs and usage rules for advanced QoS features
- Earn 40 CE credits toward recertification

Course Duration
5 days
Course Price
$4,295.00 or 43 CLCs
Methods of Delivery
- Instructor Led
- Virtual ILT
- On-Site

Prerequisites

- Cisco Certified Networking Associate v2.0 certification

OUTLINE

Module 1: Introduction to QoS

- Review Converged Networks

- Understand QoS
- Describe Best-Effort and Integrated Services Models
- Describe the Differentiated Services Model

Module 2: Implement and Monitor QoS
- MQC Introduction
- Monitor QoS
- Define Campus AutoQos
- Define WAN AutoQoS

Module 3: Classification
- Classification and Marking Overview
- Using MQC for Classification and Marketing
- NBAR for Classification
- Use of QoS Preclassify
- Classification and Marking

Module 4: Marking

Module 5: Congestion Management
- Queuing Introduction
- Configure WFQ
- Configure CBWFQ and LLQ
- Configuring Congestion Management

Module 6: Congestion Avoidance
- Congestion Avoidance Introduction
- Configure Class-Based WRED
- Configure ECN
- Describe Campus-Based Congestion Avoidance

Module 7: Traffic Policing and Shaping
- Traffic Policing and Shaping Overview
- Configuring Class-Based Policing
- Campus Policing
- Configure Class-Based Shaping
- Configure Class-Based Shaping on Frame Relay Interfaces
- Configure Frame Relay Voice-Adaptive Traffic Shaping and Fragmentation

Module 8: Link Efficiency Mechanisms
- Link Efficiency Mechanisms Overview
- Configuring Class-Based Header Compression
- Configuring LFI

Module 9: Introducing QoS for Modern Wireless Networks

Module 10: Introducing QoS for Software-Defined Networks

Module 11: Deploying End-to-End QoS
- Apply Best Practices for QoS Policy Design
- End-to-End QoS Deployments

LAB OUTLINE

Case Study 1-1: QoS Mechanisms

Lab 2-1: IP SLA Setup and QoS Baseline Measurement

Lab 2-2: Configuring QoS with Cisco AutoQoS

Case Study 3-1: Classification and Marking

Lab 3-2: Classification and Marking Using MQC

Lab 3-3: Using NBAR for Classification

Lab 3-4: Configuring QoS Preclassify

Lab 3-5: Campus Classification and Marking Using MQC

Lab 4-1: Configuring Fair Queuing

Lab 4-2: Configuring LLQ-CBWFQ

Lab 4-3: Configuring Campus-Based Queuing Mechanisms

Case Study 5-1: WRED Traffic Profiles

Lab 5-2: Configuring DSCP-Based WRED

Lab 5-3: Configuring WTD Thresholds

Lab 6-1: Configuring Class-Based Policing

Lab 6-2: Configuring Class-Based Shaping

Lab 7-1: Configuring Class-Based Header Compression

Lab 7-2: Configuring LFI