QOS: Implementing Cisco Quality of Service

QOS v2.5 includes several updates and aligns to a minimally updated blueprint. In comparison to the previous version, all graphics have been updated and content flow has been changed to reduce the amount of slides covered during course delivery. Several topics have been removed, while some topics, such as Cisco AutoQoS, QoS monitoring, and Campus QoS have been added or expanded. Course content has been adapted to Cisco IOS Software Release 15 and technically updated. Labs were expanded and reflect an updated topology and current networking gear.

Listenpreis

3.395,00 € exkl. MwSt

4.040,05 € inkl. MwSt

Dauer

5 Tage

Leistungen Präsenz
- Schulung im Trainingscenter
- Verpflegung
- Teilnahmebestätigung / Zertifikat

Leistungen bei VCL Training
- Technischer Support
- Online Zugang
- Teilnahmebestätigung / Zertifikat

Ihre Ansprechpartnerin

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- **Module 1 Introduction of 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 and Marking**
  - Classification and Marking Overview
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  - NBAR for Classification
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  - Campus Classification and Marking
- **Module 4 Congestion Management**
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  - Configure WFQ
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  - Configure Campus Congestion Management
- **Module 5 Congestion Avoidance**
  - Congestion Avoidance Introduction
  - Configure Class-Based WRED
  - Configure ECN
  - Describe Campus-Based Congestion Avoidance
- **Module 6 Traffic Policing and Shaping**
  - Traffic Policing and Shaping Overview
  - Configure 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 7 Link Efficiency Mechanisms**
  - Link Efficiency Mechanisms Overview
  - Configure Class-Based Header Compression
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- **Module 8 Deploying End-to-End QoS**
  - Apply Best Practices for QoS Policy Design
  - End-to-End QoS Deployments

Ziele

- Explain the need for QoS, describe the fundamentals of QoS policy, and identify and describe the different models that are used for ensuring QoS in a network
- Explain the use of MQC and AutoQoS to implement QoS on the network and describe some of the mechanisms used to monitor QoS implementations
- Given a converged network and a policy defining QoS on the network and describe some of the mechanisms used to monitor QoS implementations
- Use Cisco QoS queing mechanisms to manage network congestion
- Use Cisco QoS congestion avoidance mechanisms to reduce the effects of congestion on the network
- Use Cisco QoS traffic policing and traffic shaping mechanisms to effectively limit the rate of network traffic
- Given a low speed WAN link, use Cisco link efficiency mechanisms to improve the bandwidth efficiency of the link
- Describe the recommended best practices and methods used for end-to-end QoS deployment in the enterprise

Zielgruppe

The primary target audiences for the course are:

- Pre- and post-sales technical engineers responsible for designing, implementing, or troubleshooting networks
- Network architects responsible for designing multiservice networks to carry voice, video, and data traffic in enterprise or service provider environments
- Advanced Unified Communications Specialization
- Master UC Specialization
- Master Telepresence ATP

Secondary target audiences are:

- CCIE R&S Candidates

Voraussetzungen

This sections lists the skills and knowledge that learners must possess to benefit fully from the course. It includes recommended Cisco learning offerings that the learner may complete to benefit fully from this course.

The learner should possess the knowledge and skills associated with the Cisco Certified Networking Associate Implementing and Administering Cisco Solutions (CCNA).