

kod szkolenia: OoS / ENG DL 5d

# Implementing Cisco Quality of Service

**Cisco Continuing Education** programme is a flexible offer dedicated to all active people who have certificates on Associate, Specialist and Expert level.

Learn more how you may recertify as part of CE to keep certification status active.

#### Cisco Continuing Education Program - CE

Taking part in authorised training allows you to obtain extra points necessary to maintain certification.

QoS: 40 points CE



# Purpose of the training

The training is intended for technical engineers responsible for designing, implementing and solving problems in networks with applied QoS mechanisms.



# Benefits of completing the training

Acquiring the ability to implement advanced configuration of traffic prioritization in computer networks. The ability to diagnose and remove failures related to QoS mechanisms in networks.



### **Expected Listener Preparation**

Knowledge at CCNA level





# Training Language

Training: EnglishMaterials: English



#### Czas trwania

5 dni / 35 godzin

## Training agenda

- 1. Introduction to QoS
- Review Converged Networks
- Understand QoS
- Describe Best-Effort and Integrated Services Models
- Describe the Differentiated Services Model
- Module Summary
- Module Self-Check
- 2. Implement and Monitor QoS
- MQC Introduction
- Monitor QoS
- Define Campus AutoQoS
- Define WAN AutoQoS
- Module Summary
- Module Self-Check
- 3. Classification and Marking
- Classification and Marking Overview
- MQC for Classification and Marking
- NBAR for Classification
- Use of QoS Preclassify
- Campus Classification and Marking
- Module Summary
- Module Self-Check
- 4. Congestion Management
- Queuing Introduction



- Configure WFQ
- Configure CBWFQ and LLQ
- Configure Campus Congestion Management
- Module Summary
- Module Self-Check
- 5. Congestion Avoidance
- Congestion Avoidance Introduction
- Configure Class-Based WRED
- Configure ECN
- Describe Campus-Based Congestion Avoidance
- Module Summary
- Module Self-Check
- 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 Summary
- Module Self-Check
- 7. Link Efficiency Mechanisms
- Link Efficiency Mechanisms Overview
- Configure Class-Based Header Compression
- Configure LFI
- Module Summary
- Module Self-Check
- 8. Deploying End-to-End QoS
- Apply Best Practices for QoS Policy Design
- End-to-End QoS Deployments
- Module Summary
- Module Self-Check

#### Labs

- 1. IP SLA Setup and QoS Baseline Measurement
- 2. Configuring QoS with Cisco AutoQoS
- 3. Classification and Marking Using MQC
- 4. Using NBAR for Classification
- 5. Configuring QoS Preclassify
- 6. Campus Classification and Marking Using MQC
- 7. Configuring Fair Queuing



- 8. Configuring LLQ-CBWFQ
- 9. Configuring Campus-Based Queuing Mechanisms
- 10. Configuring DSCP-Based WRED
- 11. Configuring WTD Thresholds
- 12. Configuring Class-Based Policing
- 13. Configuring Class-Based Shaping
- 14. Configuring Class-Based Header Compression
- 15. Configuring LFI
- 16. Mapping Enterprise QoS Policy to the Service Provider Policy