



Implementing Cisco Quality of Service (QoS)

مُلَاصَحه :

The Implementing Cisco Quality of Service (QoS) v2.1 course provides students with in-depth knowledge of IP QoS requirements, conceptual models using Differentiated Services (DiffServ), Integrated Services (IntServ) and Best Effort (over provisioning), and the implementation of IP QoS on Cisco IOS switch and router platforms.

The curriculum covers the theory of IP QoS, design issues, and configuration of various QoS mechanisms to facilitate the creation of effective administrative policies providing QoS. Case studies and lab exercises included in the course help students to apply the concepts mastered in individual modules to real-life scenarios.

The course also gives students design and usage rules for various advanced IP QoS features and the integration of IP QoS with underlying Layer 2 QoS mechanisms, allowing them to design and implement efficient, optimized, and trouble-free multi-service networks

مدت دوره: ۴۰ ساعت

پیش نیاز: گذراندن درس CCNA و یا داشتن دانش معادل آن

اهداف دوره: در انتهای این دوره دانشجویان قادر خواهند بود:

- Given a converged network, explain the need to implement Quality of Service (QoS) and explain methods for implementing and managing QoS
- Given a converged network, identify and describe different models used for ensuring QoS in a network and explain key IP QoS mechanisms used to implement the models
- Given a converged network, explain the use of MQC and AutoQoS to implement QoS on the network
- Given a converged network and a policy defining QoS requirements, successfully classify and mark network traffic to implement the policy
- Given a congested network, use Cisco QoS queuing mechanisms to manage network congestion
- Given a converged network, use Cisco QoS congestion avoidance mechanisms to reduce the effects of congestion on the network
- Given a network, use Cisco QoS traffic policing and traffic shaping mechanisms to effectively limit the rate of network traffic

سرفصل دوره:

Module 1: Introduction to IP QoS

Module 2: The Building Blocks of IP QoS

Module 3: Introduction to Modular QoS CLI and Auto-QoS

Module 4: Classification and Marking

Module 5: Congestion Management

Module 6: Congestion Avoidance

Module 7: Traffic Policing and Shaping

Module 8: Link Efficiency Mechanisms

Module 9: QoS Best Practices