# Cisco Press - Cisco Catalyst QoS Quality of Service in Campus Networks

Quality of service (QoS) is the set of techniques designed to manage network resources. QoS refers to the capability of a network to provide better service to selected network traffic over various LAN and WAN technologies. The primary goal of QoS is to provide flow priority, including dedicated bandwidth, controlled jitter and latency (required by some interactive and delay-sensitive traffic), and improved loss characteristics.

While QoS has become an essential technology for those organizations rolling out a new generation of network applications such as real-time voice communications and high-quality video delivery, most of the literature available on this foundation technology for current and future business applications focuses on IP QoS. Equally important is the application of QoS in the campus LAN environment, which is primarily responsible for delivering traffic to the desktop.

Cisco Catalyst QoS is the first book to concentrate exclusively on the application of QoS in the campus environment. This practical guide provides you with insight into the operation of QoS on the most popular and widely deployed LAN devices: the Cisco Catalyst family of switches. Leveraging the authors' extensive expertise at Cisco in the support of Cisco Catalyst switches and QoS deployment, the book presents QoS from the campus LAN perspective. It explains why QoS is essential in this environment in order to achieve a more deterministic behavior for traffic when implementing voice, video, or other delay-sensitive applications. Through architectural overviews, configuration examples, real-world deployment case studies, and summaries of common pitfalls, you will understand how QoS operates, the different components involved in making QoS possible, and how QoS can be implemented on the various Cisco Catalyst platforms to enable truly successful end-to-end QoS applications.

End-to-end QoS deployment techniques for Cisco Catalyst series switches

- Examine various QoS components, including congestion management, congestion avoidance, shaping, policing/admission control, signaling, link efficiency mechanisms, and classification and marking
- Map specified class of service (CoS) values to various queues and maintain CoS values through the use of 802.1q tagging on the Cisco Catalyst 2900XL, 3500XL and Catalyst 4000 and 2948G/2980G CatOS Family of Switches
- Learn about classification and rewrite capabilities and queue scheduling on the Cisco Catalyst 5000
- Implement ACLs, ACPs, ACEs, and low-latency queuing on the Cisco Catalyst 2950 and 3550 Family of Switches
- Understand classification, policing, and scheduling capabilities of the Catalyst 4000 and 4500 IOS Family of Switches
- Configure QoS in both Hybrid and Native mode on the Catalyst 6500 Family of Switches
- Utilize Layer 3 QoS to classify varying levels of service with the Catalyst 6500 MSFC and Flexwan
- Understand how to apply QoS in campus network designs by examining end-to-end case studies

Download | **Size:** 2.28 MB

**[This hidden content is only available for our VIP member. Become VIP Member NOW**