



End-to-End QoS in the Network

How Cisco IT Builds End-to-End QoS into Its Network



A Cisco on Cisco Case Study: Inside Cisco IT

Overview

- Challenge

Consistently Supporting Applications across the Network

- Solution

Developing a New Version of QOS

- Results

Consistent QOS across the Cisco Network

- Next Steps

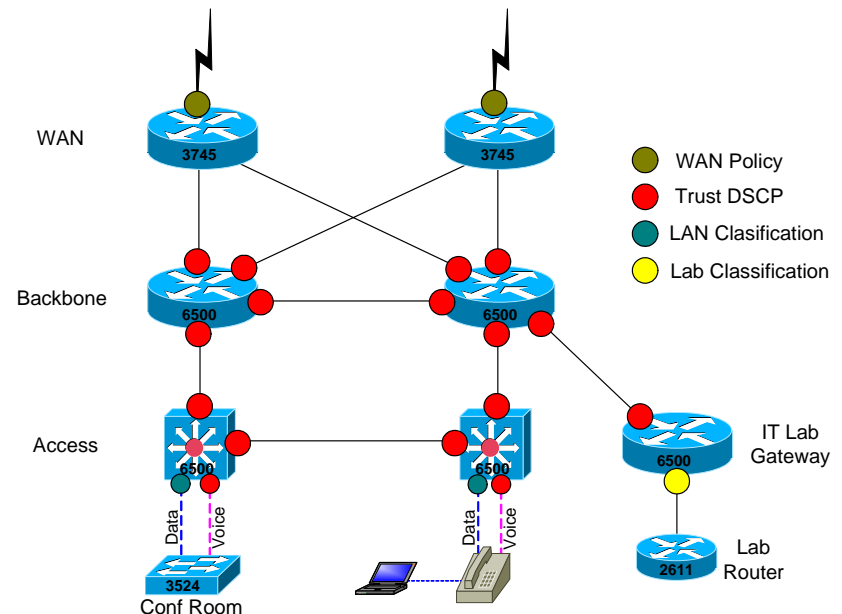
Standardizing and Automating QOS Configurations

Challenge: Consistently Supporting Applications across the Network

- Lack of comprehensive, end-to-end QOS that addressed the network consistently—from user devices at the LAN edge to the WAN
- Traffic from Cisco Labs, which could be problematic, required prioritization
- Employees requiring VOIP capability over the Cisco VPN were concerned about service quality
- Communication and network service providers were not in synch with Cisco network traffic categorization

Solution: Developing a New Version of QOS

- Traffic follows defined processes as it moves from source to destination devices
- Trust/classification boundary is established at the LAN edge closest to connected devices external to the network infrastructure
- Traffic arriving at the LAN edge switch is classified as trusted / un trusted
- Applications are grouped according to priority, creating an easy-to-maintain model



Results: Consistent QOS across the Cisco Network

- Significantly fewer voice application-related calls to Cisco GTRC
- Greatly decreased support problems with applications that have strict host-to-host latency requirements
- The ability to more intelligently address bandwidth capacity issues
- Consistent QOS standards across the hardware and software

Next Steps: Standardizing and Automating QOS configurations

- Making it easier to “push” and manage QOS configurations across the enterprise through automation
- Building real-time monitoring capabilities that facilitate trouble shooting, improve the quality of reports, and further enhance network capacity planning

To read the entire case study, or for additional Cisco IT case studies on a variety of business solutions, visit Cisco on Cisco: Inside Cisco IT

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