
QoS Module

Overview

Quality of Service (QoS) plays an important role in today's converged communications networks. Converged networks carrying data, voice and video simultaneously, need QoS to provide differentiation of services between various application streams. Each application with its own requirements presents a challenging task to the network administrator. While an acceptable end-to-end delay for a voice stream ranges from 150 to 200 ms, a data application such as FTP file download might not have strict end-to-end delay requirements. QoS needs to provide acceptable service to both of these requirements.

A built-in reliability mechanism manages packet loss for TCP applications. However, for voice and video applications that use UDP, proper queuing mechanisms must be in place to handle the packet drops. QoS is primarily concerned with identifying different traffic types, classification of the traffic and prioritizing the streams.

Features

- MAC access lists based on source, destination MAC addresses
- IP access lists based on source, destination IP addresses
- DSCP-CoS mapping
- 802.1p VLAN-based priority
- IP precedence mapping
- Layer 4 source and destination port matching
- VLAN and VLAN range matching
- Traffic policing and shaping
- Setting CoS based on access-lists

Benefits

- More importance to critical applications that are more delay sensitive such as voice and video
- Control of network resources from a network management perspective
- Efficient use of available bandwidth
- Improve overall network resource usage

Requirements

- ZebOS Network Services Module

Standard Deliverables

- Source Code (written in ANSI compliant C)
- Installation Guide
- Configuration Guide
- Command Reference Guide
- Developer Guide