

Solving Problems in Modern Networks with Quality of Service

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Abstract

A modern network exists to serve its applications and users. Its resources of bandwidth, delay, jitter (delay-variation), and packet-loss need to be managed appropriately to deliver good Quality of Service (QoS) to the appropriate applications and users.

This presentation discusses the practical need for QoS in a modern network, be it an Enterprise or Service Provider (SP) and exposes the various QoS architectures & techniques available today. We discuss the common scenarios, and how the various QoS methods help solve the associated problems and help protect the critical applications. Within these various scenarios, we dig into the details of VoIP, Video over IP (Conferencing & Streaming), Enterprise Applications, and SLA (Service Level Agreements) requirements – and the QoS techniques to meet them. We will also address the tie-ins of IP QoS with ATM, Frame-Relay, and Ethernet QoS. Last but not the least, we will de-mystify MPLS QoS, including DS-TE (DiffServ-Aware Traffic Engineering). At the end of this presentation, the attendee will be able to walk away with a good understanding of QoS needs in typical modern networks, the key architectures & techniques, and a broad understanding of application requirements. This talk is intended as a concise, no nonsense session on ‘Applied QoS’.

Biography of Technology Speaker

Vijay Krishnamoorthy has more than seven years of networking and communications industry experience. In 1997, Vijay joined Cisco’s IOS Technologies Division which develops Cisco IOS® software. Currently, he is product manager for Quality of Service, and his expertise includes routing protocols, quality of service, and operating systems. Prior to joining Cisco, Vijay was a consulting engineer for Enterprise networking projects that included LAN/WAN design, implementation and troubleshooting.

Vijay has presented technical sessions at the Networkers Conference in 2000 on Quality of Service, and Broadband Year 2002 on MPLS QoS. He was awarded a masters degree in Computer Science from the University of Wisconsin.