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2.5.9 Generic considerations related to service requirements2.6 Service Quality Descriptors; 2.6.1 Measurement-based determination of traffic profile; 2.7 Summary; 3 Network Mechanisms for Multi-service Quality Support; 3.1 Introduction to Network Quality Support; 3.2 Policing of Traffic at Ingress; 3.3 About Layers; 3.4 Types of Network Support for Service Quality; 3.4.1 Capacity reservation; 3.4.2 Differentiated treatment; 3.4.3 Differentiation of service quality instantiation; 3.4.4 Summary of generic network service quality support mechanisms; 3.5 Service Support in ATM
3.5.1 ATM service models3.5.2 Summary of ATM service support; 3.6 Service Support Models in Internet Protocol; 3.6.1 Best effort service model; 3.6.2 Controlled-load service support; 3.6.3 Guaranteed QoS support; 3.6.4 RSVP; 3.6.5 Statistical QoS: DiffServ model; 3.6.5.1 EF PHB; 3.6.5.2 AF PHB group; 3.6.5.3 Other PHBs; 3.6.5.4 Functions of a DiffServ router; 3.6.5.5 Summary of DiffServ; 3.6.6 Summary of IP QoS service models; 3.7 Routing in IP Networks; 3.7.1 On addressing; 3.7.2 IP routing protocol-based methods; 3.7.3 ATM overlays; 3.7.4 Lower layer tunnels: MPLS; 3.8 Link Layer Issues
3.8.1 Performance3.8.2 A note on scheduling; 3.9 Summary; 4 Traffic Engineering for Multi-service IP Networks; 4.1 Traffic Engineering; 4.1.1 Context of traffic engineering; 4.1.2 The traffic engineering process; 4.1.3 Obtaining performance data from the network and analysing it; 4.1.3.1 Traffic aggregate performance measurements; 4.1.3.2 Obtaining data relevant for routing control; 4.1.4 Performance enhancement; 4.1.5 Scope of network optimization; 4.2 IP Routing Control and Traffic Engineering; 4.2.1 Optimizing routing based on service quality characteristics
4.2.2 Traffic engineering using MPLS

Sommario/riassunto

While more and more data is shifted from circuit-switched to packet-switched networks, the users of these networks expect a smooth, continuously unproblematic service (unrelated to the amount of data transported). Therefore, the reliability of a network as well as the satisfaction of its users relies largely on Quality of Service (QoS). Service quality through resource management in IP networks will ensure that sufficient resources are available to fulfil the delay of applications and packet loss requirements.This year several books on QoS from the angle of operators/engineers have bee