Record Nr. UNISA996466039003316 Quality of Service in Multiservice IP Networks [[electronic resource]]: **Titolo** International Workshop, QoS-IP 2001, Rome, Italy, January 24-26, 2001 Proceedings / / edited by Marco Ajmone Marsan, Andrea Bianco Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa 2001 **ISBN** 3-540-44554-4 Edizione [1st ed. 2001.] 1 online resource (XII, 442 p.) Descrizione fisica Lecture Notes in Computer Science, , 0302-9743;; 1989 Collana 004.6/6 Disciplina Soggetti Computer communication systems Software engineering Computer science Application software Management information systems Computer Communication Networks Software Engineering/Programming and Operating Systems Popular Computer Science Software Engineering Information Systems Applications (incl. Internet) Management of Computing and Information Systems Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Connection Admission Control I -- Design and Implementation of Scalable Admission Control -- Analysis and Performance Evaluation of a Connection Admission Control Scheme Based on the Many Sources Asymptotic -- Call Admission Control and Routing of QoS-Aware and Best-Effort Flows in an IP-over-ATM Networking Environment --Statistical Bounds -- An Upper Bound to the Loss Probability in the Multiplexing of Jittered Flows -- Novel Architectures for QoS Provisioning -- SMART: A Scalable Multipath Architecture for Intradomain QoS Provisioning -- Definition and Experimental Evaluation of an Architecture for Joint Quality of Service Control in Multimedia

Networks -- Quality-of-Service Guarantees for Multicast Traffic in Heterogeneous Multi-service Networks -- Invited Paper -- Resource Allocation and Admission Control Styles in QoS DiffServ Networks --QoS for Multicast Traffic -- A Multicast Transport Service with Bandwidth Guarantees for Diff-Serv Networks -- Source Modelling --Modeling the Stationary Behavior of TCP Reno Connections -- A Markov Model for the Design of Feedback Techniques to Match Traffic Specification Parameters in MPEG Video Sources -- Intrastandard Hybrid Speech Coding for Adaptive IP Telephony -- IP Telephony --Implementation of a Test-Bed for Telephony over IP: Architectural, Theoretical, and Performance Issues -- Router and Switch Algorithms -- Enhanced Weighted Round Robin Schedulers for Bandwidth Guarantees in Packet Networks -- Router Architectures Exploiting Input-Queued Cell-Based Switching Fabrics -- Packet Discard Schemes for Differentiated Services Networks with ATM Switching Systems --Analysis and Simulation of WF2Q+ Based Schedulers: Comparisons and Compliance with Theoretical Bounds -- Invited Paper -- Requirements on the TCP/IP Protocol Stack for Real-Time Communication in Wireless Environments -- Multicast Routing -- Multicast Routing by Multiple Tree Routes -- Differentiated Services -- Optimal Design of Optical Ring Networks with Differentiated Reliability (DiR) -- An Optical Packet Switch for IP Traffic with QoS Provisioning -- A Policy Management Framework Using Traffic Engineering in DiffServ Networks -- QoS in Wireless Networks -- Quality of Service Issues in Multi-service Wireless Internet Links -- Enhancing the General Packet Radio Service with IP QoS Support -- Genetic Algorithm for Mobiles Equilibrium Applied to Video Traffic -- Connection Admission Control II -- PCP: An End-to-End Measurement-Based Call Admission Control for Real-Time Services over IP Networks -- Admission Control for Distribution of Smoothed Video Using Patching Algorithms -- A Migration Path for the Internet: From Best-Effort to a QoS Capable Infrastructure by Means of Localized Admission Control.

## Sommario/riassunto

IP is clearly emerging as the networking paradigm for the integration of the tr-?c?ows generated by a variety of new applications (IP telephony, multimedia multicasting, e-business, ...), whose performance requirements may be extremely di?erent. This situation has generated a great interest in the development of te-niques for the provision of quality of service (QoS) guarantees in IP networks. Two proposals have already emerged from the IETF groups IntServ and Di?- Serv, but research and experiments are continuing, in order to identify the most e?ective architectures and protocols. The Italian Ministry for University and Scienti?c Research has been funding a research program on these topics, named "Techniques for quality of service guarantees in multiservice telecommunication networks" or MQOS for short, in the years 1999 and 2000. At the end of its activity, the MQOS program has organized in Rome (Italy) in January 2001 the International Workshop on QoS in Multiserevice IP N- works (QoS-IP 2001), for the presentation of high-quality recent research results on QoS in IP networks, and the dissemination of the most relevant research results obtained within the MQOS program.