

1. Record Nr.	UNINA9911019601403321
Titolo	End-to-end quality of service engineering in next generation heterogeneous networks / / edited by Abdelhamid Mellouk
Pubbl/distr/stampa	London, : ISTE Hoboken, NJ, : Wiley, 2009
ISBN	1-282-16528-3 9786612165283 0-470-61147-2 0-470-39411-0
Descrizione fisica	1 online resource (474 p.)
Collana	ISTE ; ; v.63
Altri autori (Persone)	MelloukAbdelhamid
Disciplina	004.6 621.3821
Soggetti	Computer networks - Quality control Internetworking (Telecommunication)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	End-to-End Quality of Service Engineering in Next Generation Heterogenous Networks; Table of Contents; Chapter 1. Challenges for End-to-End Quality of Service over Heterogenous Networks; 1.1. Introduction; 1.2. Research challenges in end-to-end QoS; 1.3. Contents; 1.3.1. Chapter 2: principles and mechanisms for Quality of Service in networks; 1.3.2. Chapter 3: different approaches to guarantee Quality of Service; 1.3.3. Chapter 4: Quality of Service-based adaptive routing approaches; 1.3.4. Chapter 5: optical networks: new challenges and paradigms for Quality of Service 1.3.5. Chapter 6: pushing Quality of Service across interdomain boundaries1.3.6. Chapter 7: Internet-based collaborative teleoperation: towards tailorable groupware for teleoperation; 1.3.7. Chapter 8: survivability-oriented Quality of Service in optical networks; 1.3.8. Chapter 9: MAC protocols for Quality of Service provisioning in mobile ad hoc networks; 1.3.9. Chapter 10: Quality of Service-based scheduling mechanisms in mobile networks; 1.3.10. Chapter 11: Quality of Service in wireless ad hoc and sensor networks; 1.3.11.

Chapter 12: Quality of Service challenges in WiMAX networks  
1.3.12. Chapter 13: Quality of Service support for MPLS-based wired-wireless domains  
1.3.13. Chapter 14: Quality of Service control in VoIP applications; 1.3.14. Chapter 15: towards collaborative teleoperation based on human scale networked mixed reality environments; 1.3.15. Chapter 16: Quality of Service driven context awareness using semantic sensors infrastructure; 1.3.16. Chapter 17: effect of transmission delay on haptic perception in shared virtual environments; 1.4. Conclusion; Chapter 2. Principles and Mechanisms for Quality of Service in Networks; 2.1. Introduction  
2.2. Concepts and definitions  
2.2.1. Definitions of QoS in a networking context; 2.2.2. End-to-end QoS; 2.2.3. Classes (levels) of service; 2.2.4. Differentiated classes of service; 2.3. QoS parameters and application classification; 2.3.1. QoS parameter types; 2.3.2. Application classification; 2.3.3. QoS parameter specification; 2.3.4. Traffic models; 2.3.5. Service level agreements; 2.4. Mechanisms and functions for QoS provisioning; 2.4.1. General issues; 2.4.2. QoS establishment; 2.4.3. Admission control; 2.4.4. QoS negotiation and renegotiation; 2.4.5. Resource management  
2.4.6. QoS signaling protocols  
2.4.7. Routing; 2.4.8. Traffic control mechanisms; 2.4.9. QoS control, maintenance, monitoring; 2.4.10. QoS policy; 2.4.11. QoS mapping and translation; 2.5. Overview of IntServ, DiffServ and MPLS; 2.5.1. Integrated services architecture; 2.5.2. DiffServ architecture; 2.5.3. MPLS; 2.6. Conclusion; 2.7. References; Chapter 3. Different Approaches to Guarantee Quality of Service; 3.1. Introduction to QoS; 3.1.1. Different QoS requirements; 3.1.2. Organization of chapter; 3.2. Means of managing an end-to-end time constraint  
3.2.1. Components of an end-to-end response time

---

### Sommario/riassunto

A modern communication network can be described as a large, complex, distributed system composed by higher interoperating, smaller sub-systems. Today, the proliferation and convergence of different types of wired, wireless, and mobile networks are crucial for the success of the next generation networking. However, these networks can hardly meet the requirements of future integrated-service networks, and are expected to carry multimedia traffic with various Quality of Experience (QoE) and Quality of Service (QoS) requirements. Providing all relevant QoS/QoE issues in these heterogeneous network

---