

1. Record Nr.	UNINA9910823090003321
Autore	Oki Eiji <1969->
Titolo	Advanced Internet protocols, services, and applications // Eiji Oki ... [et al.]
Pubbl/distr/stampa	Hoboken, N. J., : John Wiley & Sons, Inc., c2012
ISBN	9786613621184 9781280591358 1280591358 9781118180815 111818081X 9781118180822 1118180828 9781118180808 1118180801
Edizione	[1st edition]
Descrizione fisica	1 online resource (262 p.)
Classificazione	COM043000
Disciplina	004.6
Soggetti	Computer network protocols Computer networks
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	Advanced Internet Protocols, Services, and Applications; CONTENTS; Preface; Acknowledgments; About the Authors; 1 Transmission Control Protocol/Internet Protocol Overview; 1.1 Fundamental Architecture; 1.2 Internet Protocol Basics; 1.2.1 Packet Header; 1.2.2 Internet Protocol Address; 1.2.3 Internet Protocol Classification; 1.2.4 Subnet and its Masking; 1.2.5 Subnet Calculation; 1.3 Routing; 1.3.1 Routing across Providers; 1.3.2 Routing within Edge Networks; 1.3.3 Routing Scalability; References; 2 Transport-Layer Protocols; 2.1 Transmission Control Protocol 2.1.1 Transmission Control Protocol Header Structure2.1.2 Three-Way Handshake; 2.1.3 Transmission Control Protocol Flow Control and Congestion Control; 2.1.4 Port Number; 2.2 User Datagram Protocol; 2.2.1 User Datagram Protocol Header Structure; 2.3 Stream Control Transmission Protocol; 2.3.1 Stream Control Transmission Protocol

Packet Structure; 2.3.2 Security: Prevention of SYN Attacks; 2.4 Real-Time Transport Protocol; 2.4.1 Real-Time Transport Protocol Header Structure; References; 3 Internet Architecture; 3.1 Internet Exchange Point; 3.2 History of Internet Exchange Points
3.3 Internet Service Provider Interconnection Relationships3.4 Peering and Transit; References; 4 IP Routing Protocols; 4.1 Overview of Routing Protocols; 4.1.1 Interior Gateway Protocol; 4.1.2 Exterior Gateway Protocol; 4.2 Routing Information Protocol; 4.2.1 Routing Information Protocol Header Format; 4.2.2 Update of Routing Table in Routing Information Protocol; 4.2.3 Maintenance of Routing Table in Routing Information Protocol; 4.2.4 Split Horizon; 4.2.5 Limitations of Routing Information Protocol; 4.3 Open Shortest Path First; 4.3.1 Shortest-Path Algorithm; 4.3.2 Hierarchical Routing
4.3.3 Open Shortest Path First Packet Format4.3.4 Comparison of Routing Information Protocol and Open Shortest Path First; 4.4 Border Gateway Protocol; 4.4.1 Border Gateway Protocol Message Flows; 4.4.2 Border Gateway Protocol Policy Selection Attributes; References; 5 Multiprotocol Label Switching; 5.1 Overview; 5.2 Functions and Mechanisms; 5.3 Applicabilities; References; 6 IP Quality Of Service; 6.1 Introduction; 6.2 Quality of Service in IP Version 4; 6.3 Integrated Services; 6.3.1 Packet Scheduler; 6.3.2 Packet Classifier; 6.3.3 Admission Control
6.3.4 Resource Reservation Protocol (RSVP)6.4 Differentiated Services; 6.5 Quality Of Service with Nested Differentiated Services Levels; 6.5.1 Drawbacks of Explicit Endpoint Admission Control with Path Selection; 6.5.2 OSPF-Based Adaptive and Flexible Quality of Service Provisioning; 6.5.3 Combination of Security and Quality of Service; 6.5.4 Path Selection Algorithm Analysis; References; 7 IP Multicast and Anycast; 7.1 Addressing; 7.1.1 Multicast Addressing; 7.1.2 Differences between Multicasting and Multiple Unicasting; 7.2 Multicast Routing; 7.2.1 Optimal Routing: Shortest-Path Trees
7.2.2 Unicast Routing

Sommario/riassunto

Today, the internet and computer networking are essential parts of business, learning, and personal communications and entertainment. Virtually all messages or transactions sent over the internet are carried using internet infrastructure- based on advanced internet protocols. Advanced internet protocols ensure that both public and private networks operate with maximum performance, security, and flexibility. This book is intended to provide a comprehensive technical overview and survey of advanced internet protocols, first providing a solid introduction and going on to discuss internetworking
