

1. Record Nr.	UNINA9910449841803321
Autore	Brooks David B
Titolo	Water [[electronic resource]] : local-level management / / by David B. Brooks
Pubbl/distr/stampa	Ottawa, : International Development Research Centre, c2002
ISBN	1-280-71802-1 9786610718023 1-55250-200-7
Descrizione fisica	1 online resource (86 p.)
Collana	In focus, from research to policy
Disciplina	333.91
Soggetti	Water resources development Water-supply - Management Water quality management Water resources development - Research Ressources en eau - Exploitation Eau - Approvisionnement - Gestion Eau - Qualit - Gestion Ressources en eau - Exploitation - Recherche Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Issued also in French under title: L'eau, gerer localement.
Nota di bibliografia	Includes bibliographical references (p. 67-70).
Nota di contenuto	Contents; Foreword; Preface; Part 1. The Issue; Part 2. The Approaches; Part 3. The Results: Propositions for Governance and Research; Part 4. Recommendations; Part 5. Future Directions; Appendix: Sources and Resources; The Publisher;
Sommario/riassunto	Today, more than 1 billion people lack access to safe drinking water. Within the next 25 years, fully one-third of the world's population will experience severe water scarcity. It is clear that disparities in the availability and supply of fresh water are truly a matter of life and death, and constitute one of the great governance imperatives of our time. This publication summarizes the results of three decades of IDRC-supported research on water supply. It demonstrates that some of the most powerful responses to water scarcities have been mounted at the

2. Record Nr.	UNINA9910830492603321
Autore	Welzl Michael <1973->
Titolo	Network congestion control [[electronic resource]] : managing Internet traffic / / Michael Welzl
Pubbl/distr/stampa	Chichester, West Sussex, England ; ; Hoboken, NJ, : J. Wiley, c2005
ISBN	1-280-28759-4 9786610287598 0-470-02531-X 0-470-02529-8
Descrizione fisica	1 online resource (283 p.)
Collana	Wiley Series on Communications Networking & Distributed Systems
Disciplina	004.67/8 004.678
Soggetti	Internet Telecommunication - Traffic - Management
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 (p. [243]-257) and index.
Nota di contenuto	Network Congestion Control; Contents; Foreword; Preface; List of Tables; List of Figures; 1 Introduction; 1.1 Who should read this book?; 1.2 Contents; 1.3 Structure; 1.3.1 Reader's guide; 2 Congestion control principles; 2.1 What is congestion?; 2.1.1 Overprovisioning or control?; 2.2 Congestion collapse; 2.3 Controlling congestion: design considerations; 2.3.1 Closed-loop versus open-loop control; 2.3.2 Congestion control and flow control; 2.4 Implicit feedback; 2.5 Source behaviour with binary feedback; 2.5.1 MIMD, AIAD, AIMD and MIAD; 2.6 Stability; 2.6.1 Control theoretic modelling 2.6.2 Heterogeneous RTTs2.6.3 The conservation of packets principle; 2.7 Rate-based versus window-based control; 2.8 RTT estimation; 2.9 Traffic phase effects; 2.9.1 Phase effects in daily life; 2.10 Queue management; 2.10.1 Choosing the right queue length; 2.10.2 Active queue management; 2.11 Scalability; 2.11.1 The end-to-end argument; 2.11.2 Other scalability hazards; 2.12 Explicit feedback; 2.12.1 Explicit

congestion notification; 2.12.2 Precise feedback; 2.13 Special environments; 2.14 Congestion control and OSI layers; 2.14.1 Circuits as a hindrance; 2.15 Multicast congestion control
 2.15.1 Problems 2.15.2 Sender- and receiver-based schemes; 2.16 Incentive issues; 2.16.1 Tragedy of the commons; 2.16.2 Game theory; 2.16.3 Congestion pricing; 2.17 Fairness; 2.17.1 Max-min fairness; 2.17.2 Utility functions; 2.17.3 Proportional fairness; 2.17.4 TCP friendliness; 2.18 Conclusion; 3 Present technology; 3.1 Introducing TCP; 3.1.1 Basic functions; 3.1.2 Connection handling; 3.1.3 Flow control: the sliding window; 3.1.4 Reliability: timeouts and retransmission; 3.2 TCP window management; 3.2.1 Silly window syndrome; 3.2.2 SWS avoidance; 3.2.3 Delayed ACKs 3.2.4 The Nagle algorithm 3.3 TCP RTO calculation; 3.3.1 Ignoring ACKs from retransmissions; 3.3.2 Not ignoring ACKs from retransmissions; 3.3.3 Updating RTO calculation; 3.4 TCP congestion control and reliability; 3.4.1 Slow start and congestion avoidance; 3.4.2 Combining the algorithms; 3.4.3 Design rationales and deployment considerations; 3.4.4 Interactions with other window-management algorithms; 3.4.5 Fast retransmit and fast recovery; 3.4.6 Multiple losses from a single window; 3.4.7 NewReno; 3.4.8 Selective Acknowledgements (SACK); 3.4.9 Explicit Congestion Notification (ECN)
 3.5 Concluding remarks about TCP 3.6 The Stream Control Transmission Protocol (SCTP); 3.7 Random Early Detection (RED); 3.8 The ATM 'Available Bit Rate' service; 3.8.1 Explicit rate calculation; 3.8.2 TCP over ATM; 4 Experimental enhancements; 4.1 Ensuring appropriate TCP behaviour; 4.1.1 Appropriate byte counting; 4.1.2 Limited slow start; 4.1.3 Congestion window validation; 4.1.4 Robust ECN signalling; 4.1.5 Spurious timeouts; 4.1.6 Reordering; 4.1.7 Corruption; 4.2 Maintaining congestion state; 4.2.1 TCP Control Block Interdependence; 4.2.2 The Congestion Manager; 4.2.3 MulTCP 4.3 Transparent TCP improvements

Sommario/riassunto

As the Internet becomes increasingly heterogeneous, the issue of congestion control becomes ever more important. In order to maintain good network performance, mechanisms must be provided to prevent the network from being congested for any significant period of time. Michael Welzl describes the background and concepts of Internet congestion control, in an accessible and easily comprehensible format. Throughout the book, not just the how, but the why of complex technologies including the Transmission Control Protocol (TCP) and Active Queue Management are explained. The text also gives