1. Record Nr. UNINA9911019243903321

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Titolo	Distributed storage networks : architecture, protocols and management / / Thomas C. Jepsen
Pubbl/distr/stampa	Chichester, : Wiley, c2003
ISBN	9786610274055 9781118691113 1118691113 9780470871461 0470871466 9781280274053 1280274050 9780470871478 0470871474
Edizione	[1st ed.]
Descrizione fisica	1 online resource (340 p.)
Disciplina	004.6 005.758
Soggetti	Storage area networks (Computer networks) Electronic data processing - Distributed processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes lists of web sites, bibliographical references and index.
Nota di contenuto	Distributed Storage Networks Architecture, Protocols and Management; Contents; Foreword; Preface; Acknowledgements; List of Figures; List of Tables; 1 Introduction to Storage Networking; 1.1 Overview; 1.1.1 Who Should Read this Book?; 1.1.2 Overview of Contents; 1.2 Evolution of Storage Networking; 1.2.1 Mainframe Storage Networks; 1.2.2 Storage for Small Computer Systems; 1.2.3 Managing 'Islands of Storage'; 1.3 Terminology; 1.3.1 What is a Storage Network?; 1.3.2 What is a Storage Area Network?; 1.3.3 What is Network Attached Storage (NAS)?; 1.4 Storage Concepts 1.4.1 How is Storage Shared Among Different Types of Processors? 1.4.2 What is Storage Virtualization?; 1.4.3 What is a RAID?; 1.4.4 How is a RAID Different from a JBOD?; 1.5 SAN Applications; 1.5.1 Backup;

1.5.2 Disk Mirroring; 1.6 Summary; 2 Applications for Distributed Storage Networking; 2.1 Storage Integration; 2.2 Remote Backup/Restoral; 2.3 Disk Mirroring; 2.3.1 Processor-Centric Remote Disk Mirroring; 2.3.2 Storage Centric Remote Disk Mirroring; 2.3.3 'Split Mirror' Copy; 2.4 Data Migration; 2.5 Business Continuity/Disaster Recovery; 2.6 Remote Operation of Peripheral Devices
2.7 Mainframe/Open Systems Connectivity2.8 Network Attached Storage (NAS); 2.8.1 NAS File Sharing Protocol; 2.8.2 Distributing NAS Applications; 2.9 Summary; 3 Distance Considerations for Storage Networks; 3.1 Physical Layer; 3.1.1 Parallel Bus Limitations; 3.1.2 Optical Networking Considerations; 3.2 Protocol Considerations; 3.2.1 Command Execution; 3.2.2 Data Acknowledgments; 3.2.3 Remote Tape Backup over Extended Distances; 3.3 Caching; 3.4 Summary; 4 Architectures for Distributed Storage Networking; 4.1 Storage Networking in the Business Park; 4.2 Storage Networking in the Metro Network
4.2.1 ESCON/Fibre Channel in the MAN Using Link Extenders4.2.2 ESCON/Fibre Channel/GigE in the MAN Using Point-to-Point WDM; 4.2.3 ESCON/Fibre Channel in the MAN Using a WDM Ring Configuration; 4.3 Storage Networking in the Wide Area Network; 4.4 Summary; 5 Protocols for Distributed Storage Networking; 5.1 Small Computer Systems Interface (SCSI); 5.1.1 Applications; 5.1.2 Standards; 5.1.3 Network Topology - SCSI Parallel Interface (SPI); 5.1.4 Addressing; 5.1.5 Bus Protocol; 5.1.6 Physical Layer; 5.1.7 SCSI Summary; 5.2 Enterprise Systems Connection (ESCON); 5.2.1 Applications
5.2.2 Standards5.2.3 Network Topology; 5.2.4 Addressing; 5.2.5 Link and Device Level Functions; 5.2.6 Physical Layer; 5.2.7 Summary; 5.3 Fiber Connection (FICON); 5.3.1 Applications; 5.3.2 Standards; 5.3.3 Network Topology; 5.3.4 Command Protocol; 5.3.5 Data Framing; 5.3.6 Physical Layer; 5.3.7 Summary; 5.4 Fibre Channel (FC); 5.4.1 Applications; 5.4.2 Standards; 5.4.3 Network Topology; 5.4.4 Protocol Overview; 5.4.5 FC-2 Functions: Links, Frames, Sequences and Exchanges; 5.4.6 FC1 Functions: Transmission Coding; 5.4.7 FC0 Functions: Physical Layer; 5.4.8 Fibre Channel Summary
5.5 Gigabit Ethernet (GigE) and 10 Gigabit Ethernet (10 G Ethernet)

Sommario/riassunto

The worldwide market for SAN and NAS storage is anticipated to grow from US 2 billion in 1999 to over 25 billion by 2004. As business-to-business and business-to-consumer e-commerce matures, even greater demands for management of stored data will arise.With the rapid increase in data storage requirements in the last decade, efficient management of stored data becomes a necessity for the enterprise. A recent UC-Berkeley study predicts that 150,000 terabytes of disk storage will be shipped in 2003. Most financial, insurance, healthcare, and telecommunications institutions are in the proces