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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
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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