Tivoli

Tivoli® Storage Manager
A Solution for Managing Information

Highlights

Tivoli Storage Manager is a full-function storage software product that addresses the challenges of complex storage management across distributed environments. It protects and manages a broad range of data, from the workstation to the corporate server environment. More than 39 different operating platforms are supported—all include a consistent graphical user interface (GUI). Tivoli Storage Manager provides:

- Centralized administration for data and storage management
- Efficient management of information growth
- High-speed automated server recovery
- Full compatibility with hundreds of storage devices, as well as local area network (LAN), wide area network (WAN), and emerging storage area network (SAN) infrastructures
- Customized backup solutions for major groupware, enterprise resource planning (ERP) applications, and database products

Protecting Stored Information and e-business Strategies Globally

Tivoli Storage Manager is a premier choice for complete storage management in mixed platform environments. It is used by more than 80 of the Fortune 100 companies, and it protects more than one million systems around the world. Today, Tivoli Storage Manager features are more powerful, modular, flexible, and easier to use than ever before.

Features of Tivoli Storage Manager include:

- **Progressive backup methodology** - Saves time and disk space by backing up only new files and modified files. The progressive backup feature uses its own relational database to track data wherever it's stored, delivering direct one-step file restore. This eliminates the need for base-plus-incrementals tapes, commonly used for restore procedures in other storage management products.
- **Tape resource sharing** - Allows multiple Tivoli Storage Manager servers to use the same tape library and drives. This improves backup, recovery performance, and tape hardware asset utilization.
- **Network-free rapid recovery** - Supports high-speed client data recovery directly from a tape or CD-ROM. This minimizes recovery time by eliminating the use of network and central services resources.
- **LAN-free data transfer** - Effectively exploits SAN environments by moving back-end office and IT data transfers from the communication network to a dedicated data network or SAN. Internet Protocol (IP) communication bandwidth can then be used to improve service levels for end users and customers.
- **Dynamic multi-threaded transfer** - Permits multiple clients to simultaneously transfer data to and from the same Tivoli Storage Manager server. This new feature boosts performance backups

to more than three times faster than the rate of a single-threaded session. This speed is achieved because the number of Tivoli Storage Manager data transfer sessions is transparently optimized based on available system resources.

- **Adaptive differencing technology** - Changes the way data is transferred throughout the enterprise. Data is transferred by byte, block, or file level, based on data size and network characteristics. This newly patented technology supports a variety of connectivity strategies, including LANs, WANs, SANs, Internet, and dial-up connections. Adaptive Differencing technology is designed for mobile computer users and other users with a need to minimize data transmitted over the network.
- **Enterprise administration** - Simplifies centralized control across multiple Tivoli Storage Manager implementations,

without sacrificing network performance. This enables high-performance backups to locally attached storage devices using a minimum of network resources.

Optional Complementary Products that Enhance Your Storage Management Solution

Tivoli Storage Manager can be integrated with several optional applications that together form a powerful integrated storage management solution. These include: Tivoli Disaster Recovery Manager, Tivoli Space Manager, Tivoli Decision Support for Storage Management Analysis, and Tivoli Data Protection for databases, applications and groupware.

Tivoli Disaster Recovery Manager

Tivoli Disaster Recovery Manager protects against hardware failure, user error, and natural disasters that can result in data being lost forever. Integration with Tivoli Storage Manager automates much of the business continuity planning needed to ensure recovery in the event of disaster.

Tivoli Space Manager

Tivoli Space Manager provides hierarchical storage management to automatically migrate rarely accessed files to alternate storage, without disrupting the most frequently used files in local storage. Migrated files are automatically and transparently recalled to primary storage when needed by applications or users, freeing administrators and users from manual filing tasks.

Tivoli Decision Support for Storage Management Analysis

Tivoli Decision Support for Storage Management Analysis provides general health reporting and analysis on events (health and summary of operations), performance (client and server operations), and capacity (storage pools).

Tivoli Data Protection Product Family

Using Tivoli Data Protection products, Tivoli Storage Manager provides data protection for a wide variety of applications, databases, and groupware, ensuring that data is safe and secure no matter where it is located or how it is stored. These products interface

directly with the applications using their backup-certified utilities and interfaces, simplifying online backup and restore procedures.

- Tivoli Data Protection for Lotus Notes®
- Tivoli Data Protection for Lotus® Domino™
- Tivoli Data Protection for SAP R/3
- Tivoli Data Protection for Microsoft® SQL server
- Tivoli Data Protection for Microsoft Exchange
- Tivoli Data Protection for Informix
- Tivoli Data Protection for Oracle

Integration with Complementary Tivoli Offerings

Tivoli Storage Manager integrates with several Tivoli offerings to provide scalable, customizable solutions that grow with your organizational needs. These include:

- Tivoli SANergy™ File Sharing
- Tivoli Removable Media Manager

- Tivoli Asset Management
- Tivoli Availability Management
- Tivoli Change Management
- Tivoli Network Management
- Tivoli Operations Management
- Tivoli Security Management
- Tivoli Service Level Management

Supported Platforms

Supported Tivoli Storage Manager Server Platforms for Desktop:
IBM® OS/2® Version 2.1; Microsoft Windows NT® Version 4.1; Windows® 2000 Version 4.1

Midrange:
IBM AS/400® Version 3.1.2

UNIX®:
HP-UX Version 4.1; IBM AIX® Version 4.1, Sun Solaris™ Version 4.1

Mainframes:
IBM OS/390® Version 4.1; IBM VM/ESA® Version 3.1.2

Supported Applications and Databases:
IBM DB2®, Informix, Lotus Notes, Lotus Domino, Microsoft Exchange Server, Microsoft SQL Server, Oracle, SAP R/3, Sybase (requires SQL Backtrack)

Supported Client Environments:
Apple Macintosh; Auspex; Data General DG/UX; Digital Open VMS; Digital Tru64 UNIX (formerly Digital UNIX); HP-UX; IBM AIX, IBM AS/400, OS/390 UNIX System Services, OS/2 LanServer, OS/2 WARP®; Linux®; Microsoft Windows NT, Microsoft Windows 95, Microsoft Windows 98, Microsoft Windows NT DEC Alpha, Microsoft Windows 2000; NCR UNIX SVR4; NEC EWS-UX/V; Novell NetWare; Pyramid Nile; SCO Open Server, SCO UnixWare; Sequent DYNIX/ptx®; Siemens Nixdorf Sinix Reliant UNIX; Silicon Graphics IRIX; Sun Solaris; Tandem Guardian (ETI)

For more information and currently supported platforms and operating systems, visit www.tivoli.com/storage.

Management Service	What It Does	What It Means To You
Progressive backup methodology	Backs up only new and changed files after the initial full backup. Enables the one-step recovery of files.	Shortens backup and recovery windows and minimizes the amount of data that must be backed up. Reduces network traffic and enables fast recovery of files.
Point-in-time restore	Restores a file system to a previous point in time.	Quickly and easily restores a system to a point in time prior to data corruption.
Rapid recovery	Performs centralized backups and high-speed LAN-free restores.	Improves restore performance and provides more flexible disaster recovery options with business impact.
LAN-free backup	Enables movement of data across SAN(backup/restore, archive/retrieve, and migrate/recall).	Provides high-performance backup/restore. Minimizes network traffic, improving application and transaction response times.
Tape pooling	Enables LAN-free data movement (backup/restore, archive/retrieve, and migrate/recall) form advanced SAN functionality.	Improves usage of existing storage peripherals by pooling and sharing drives between multiple servers over traditional IP and fibre channel networks.
Instant archive	Creates archival data image based on file backups already stored on the storage management server.	Offers high performance methodology for creating archives. Minimizes network traffic. Improves application and transaction response time.
Policy management	Manages data based on business requirements.	Reduces overall storage costs and coordinates data types with different backup requirements. Ensures business policies are aligned with storage policies.
Point-in-time backup	Automatically restarts backup process from the point of failure. Ensures maximum integrity and availability of Tivoli Storage Manager.	Improves system performance and eliminates the need to redo backup or restore operations that have already been completed.
Fault tolerance	Provides mirrored relational database with rollback capability.	Ensures 100% data integrity and availability of critical business application data.

Tivoli

Manage. Anything. Anywhere.™