

IBM System Storage Product Guide



Today, information has become the lifeline for business sustainability and competitive advantage. Companies of all sizes—companies like yours—are searching for practical ways to create business value—to get their arms around information, correlate insights and to confidently predict outcomes and take action.

For CIOs, the information era poses unique challenges: how to cost-effectively store, archive and retrieve a virtual explosion of new information, how to protect and secure that information, meet compliance requirements and make that information accessible for business insight, where and when it's needed.

Without a dynamic information infrastructure, you may be facing higher operational costs and greater exposure to business risks.

IBM offers Information Infrastructure solutions to help you efficiently manage information growth, support compliance, reduce storage and archiving costs and enable continuous access to information in support of business requirements.

Learn more about IBM Information Infrastructure, including the full range of data storage solutions and companion software and services offerings at: ibm.com/information_infrastructure.

What's New?

IBM has invested billions of dollars to enhance System Storage™ products and services to better meet the information infrastructure needs of businesses like yours. This Product Guide features several new products:

- IBM System Storage TS7650 ProtecTIER® Data Deduplication Appliance
- IBM XIV® Storage System IBM System Storage
- SAN Volume Controller Entry Edition

- IBM System Storage N6060 series
- IBM Self-encrypting Storage and Key Management Solution (TKLM + LTO bundle)
- IBM Virtual Tape for Mainframe (VTFM)

The following products featured in this guide have been significantly enhanced:

- IBM System Storage DS8000® R4.2 Disk System with new options for drive-level disk encryption, Solid State storage, and 1 TB SATA drives
- IBM System Storage DS3000 Express
- IBM Comprehensive Data Protection Solution (TSM Fastback bundle)

IBM Tivoli Storage Manager 6

Function and Value

IBM Tivoli Storage Manager is designed to protect your 24x7 applications and key data in the event of hardware, software or network failures. It offers move-and-store techniques and policy-based automation, which are designed to work together to help increase data and application protection, decrease disaster recovery time and reduce storage administration costs. It manages inactive data, helping you match the value of the data to the most cost-effective storage management practices. Tivoli Storage Manager is designed to scale easily to protect hundreds of computers running a dozen operating systems ranging from laptops to mainframes and connected together via the Internet, WANs, LANs or SANs. Tivoli Storage Manager also offers open, easy-to-use APIs designed to enable ISVs to more easily adapt their solutions to IBM software, allowing customers to customize, better secure and extend the functionality of their storage environment.

Highlights

- Designed to protect valuable data in the most cost-effective manner
- Designed to archive inactive data to help reduce costs
- Designed to help ensure continuity and recovery
- Designed to consolidate the servers and storage needed to protect and retain data; reduce administration time; perform backup and restore tasks faster and more often; and improve application availability and disaster recovery planning

IBM Tivoli Storage Manager Extended Edition

IBM Tivoli Storage Manager Extended Edition expands on Tivoli Storage Manager backup, restore and archive abilities. It helps expedite disaster recovery with detailed planning and automated scripts. Disaster recovery reporting functionality can track where offsite copies of data are stored. New in TSM 6 is built-in data deduplication for disk storage pools.

IBM Tivoli Storage Manager for Storage Area Networks

IBM Tivoli Storage Manager for Storage Area Networks works with servers and client computers to make data transfers over SAN. It allows SAN-connected Storage Manager servers and Storage Manager client computers to make maximum use of their direct network connection to storage.

Tivoli Storage Manager for System Backup and Recovery

IBM Tivoli Storage Manager for System Backup and Recovery delivers a flexible backup method for your AIX systems. It offers a comprehensive system backup, restore and reinstallation tool including Bare Machine Recovery, and can be executed from either the AIX command line or by using the SMIT menu interface.

IBM Tivoli Continuous Data Protection for Files

IBM Tivoli Continuous Data Protection for Files backs up your most important files the moment they are saved. It provides a real-time, continuous data protection solution for desktop and laptop computers, effortlessly and transparently, without administrative intervention.

Cristie Bare Machine Restore

Cristie Bare Machine Recovery (CBMR) integrates with IBM Tivoli Storage Manager to provide a Bare Machine Recovery (BMR) solution for Windows, Linux, SUN Solaris and HP-UX. CBMR combined with Tivoli Storage Manager functionality allows customers to recover a Windows 2000, XP or 2003 operating system to a new disk drive, RAID array or a completely new machine using only a CD and a disaster recovery backup stored in the Tivoli Storage Manager server. This functionality is also supported for Linux, SUN Solaris and HP-UX operating systems. Cristie also offers TBMR, which enables the bare machine recovery of protected systems directly from the Tivoli Storage Manager data repository, without the need for a separate backup solution.

IBM Tivoli Storage Manager for Enterprise Resource Planning

IBM Tivoli Storage Manager for Enterprise Resource Planning protects your vital SAP system data. Now you can improve the availability of your SAP database servers and reduce your administration workload with automated data protection designed for mySAP environments.

IBM Tivoli Storage Manager for Mail

IBM Tivoli Storage Manager for Mail protects data on e-mail servers running Lotus® Domino® or Microsoft Exchange. This software module for Tivoli Storage Manager automates data protection, enables "hot" backups without shutting down the server and improves data restore performance. New in version 6 is the ability to restore individual e-mail objects and mailboxes in Microsoft Exchange environments.

IBM Tivoli Storage Manager for Microsoft SharePoint

IBM Tivoli Storage Manager for Microsoft SharePoint is a policy-based backup and recovery solution. Quickly and confidently restore your Microsoft SharePoint business data and content after almost any kind of business interruption.

IBM Tivoli Storage Manager for Space Management

IBM Tivoli Storage Manager for Space Management moves inactive data to reclaim online disk space for important active data. It frees administrators and users from manual file system pruning tasks, and can allow you to defer the need to purchase additional disk storage.

IBM Tivoli Storage Manager FastBack

Next-generation data protection and recovery solution provides customers the power to quickly recover any amount of Microsoft Windows server data, anywhere in the organization, from any previous point-in-time, following almost any type of data loss. These solutions are an excellent complement to IBM Tivoli Storage Manager offerings, providing additional protection and recovery capabilities for Microsoft Windows servers in the data center and in remote/branch offices.

IBM Tivoli Storage Manager FastBack for Microsoft Exchange

Fast and easy recovery of individual e-mail objects from a Microsoft Exchange Database (EDB), including messages, attachments, contacts, calendar entries, tasks, notes and journal entries. Works with either TSM FastBack or TSM for Mail.

IBM Tivoli Storage Manager FastBack for Bare Machine Recovery

Restores the operating system volume of Microsoft Windows servers, within an hour, to similar, dissimilar or Virtual server platforms. Used in conjunction with the near-instant data volume restore capabilities of TSM FastBack, an entire server workload can be moved and operational, anywhere in the organization, to recover from almost any type of disaster, in about an hour.

IBM Tivoli Storage Manager FastBack Center

IBM Tivoli Storage Manager FastBack Center is a convenient, cost-effective, easy-to-order and deploy combination of TSM FastBack, TSM FastBack for Microsoft Exchange and TSM FastBack for Bare Machine Recovery.

IBM Tivoli Storage Manager for Advanced Copy Services IBM Tivoli Storage Manager for Copy Services

IBM Tivoli Storage Manager for Advanced Copy Services and IBM Tivoli Storage Manager for Copy Services help protect mission-critical data that requires 24x7 availability. They offer ready-to-use, product-based solutions designed to implement high-efficiency backup and restore processes and helps eliminate backup-related performance issues. TSM for Copy Services provides the integration with Microsoft Volume Shadow Copy Service (VSS) and VSS providers for snapshots. TSM for Advanced Copy Services provides the integration with IBM FlashCopy as supported by IBM System Storage SAN Volume Controller (SVC), IBM System Storage DS6000, IBM System Storage DS8000, IBM XIV Storage System, and other snapshot mechanisms. New enhancements in version 6 for Oracle and SAP environments help accelerate backup and restore processes.

IBM TotalStorage Expert Family

Adds value to the storage subsystem solution by providing information for better management.

Product	Function and Value
IBM TotalStorage ETL Expert	Provides a high-performance monitoring tool to help simplify the management of IBM tape subsystems that include the IBM TotalStorage Enterprise Tape Library, Virtual Tape Server and Peer-to-Peer Virtual Tape Server
IBM TotalStorage XRC Performance Monitor	Provides the ability to monitor and evaluate the performance of a running XRC configuration; the monitor function provides information at the real-time, historic and summary levels

DFSMS™ Family

Provides automated and central storage management in the z/OS environment

Product	Function and Value
DFSMSdfp™	Provides data access, program and device management functions that furnish effective management of active data
DFSMSdss™	Provides data movement, copy, backup and space management functions
DFSMShsm™	Provides backup, recovery, migration and space management functions that furnish effective management of inactive data
DFSMSrmm™	Provides a policy-driven solution for the management of removable media, such as tape cartridges and reels
DFSORT™	Provides a solution for faster and easier data sorting, reporting and analysis
DFSMSStvs	Enables batch jobs and IBM CICS® (Customer Information Control Systems) online transactions to update shared VSAM data sets concurrently

IBM TotalStorage Productivity Center

Product	Function and Value	Highlights
IBM TotalStorage Productivity Center Basic Edition	IBM TotalStorage Productivity Center Basic Edition is designed to provide basic storage resource management through a centralized location. It extends existing management of a single storage system and provides capabilities such as storage reporting, monitoring, policy-based management and storage provisioning.	<ul style="list-style-type: none"> • Inexpensive entry point for IT managers requiring basic asset and capacity reporting. • Designed to provide storage management via the SNA Storage Management Interface Specification (SMI-S), which includes the IBM System Storage DS family, IBM System Storage SAN Volume Controller (SVC) and other vendor storage devices that have implemented support for the SMI-S standards.
IBM TotalStorage Productivity Center for Disk	In a pooled or virtualized SAN environment, multiple devices work together to create a storage solution. IBM TotalStorage Productivity Center for Disk is designed to provide integrated administration, performance analytics, capacity utilization, storage optimization, green tools and replication features for these environments.	<ul style="list-style-type: none"> • Designed to help reduce the complexity and cost of storage management while improving data availability • Offers centralized, open standards-based management of storage devices • Designed to help enhance storage administrator productivity • Offers proactive management of storage devices
IBM TotalStorage Productivity Center for Data	IBM TotalStorage Productivity Center for Data is a Storage Resource Management (SRM) tool for storage environments that provides a set of policy-driven, automated tools for managing storage capacity, availability, events, performance and assets, including DAS, NAS and SAN technologies.	<ul style="list-style-type: none"> • Designed to help leverage and optimize existing storage resources and perform storage management with a high level of control • Designed to help maximize storage utilization • Designed to help you manage more storage with the same staff
IBM TotalStorage Productivity Center for Fabric	IBM TotalStorage Productivity Center for Fabric is designed to help automate the management of heterogeneous storage networks and works with a broad range of devices so businesses can leverage and better use existing technology investments. It is designed to provide comprehensive management of physical and logical configurations for multi-vendor SANs with automatic resource discovery, event monitoring and alerting, zone control and SAN error-prediction capabilities.	<ul style="list-style-type: none"> • Designed to help predict storage network failures before they happen, enabling preventative maintenance • Designed to help accelerate problem isolation when failures occur • Designed to create a single point of control, administration and security for the management of heterogeneous storage networks

IBM TotalStorage Productivity Center

IBM TotalStorage Productivity Center for Replication	<p>TotalStorage Productivity Center for Replication is designed to simplify and automate the configuration of your replication environment allowing for more effective Metro Mirror, Global Mirror and IBM FlashCopy management. It is also designed to monitor and automate copy operations across devices to support a replication environment.</p> <p>TotalStorage Productivity Center for Replication is available in both Two-Site and Three-Site Business Continuity options and provides disaster recovery management through planned and unplanned failover and fallback automation for the IBM ESS Model 800, IBM DS6000, IBM DS8000 and the IBM System Storage SAN Volume Controller.</p>	<ul style="list-style-type: none"> • Automates the configuration of your IBM DS8000, DS6000™ and ESS Model 800 and the IBM SAN Volume Controller advanced copy services features • Monitors and manages the replication operations to ensure successful completion from your source volumes to your disaster recovery volumes • Allows you to monitor the progress of the copy services so you can verify the amount of replication that has been done as well as the amount of time needed to complete the replication • Designed to provide automated failover to keep your critical data online and available to your users even if your primary site fails. When the primary site comes back on, the software manages fallback to the default configuration as well.
IBM TotalStorage Productivity Center Standard Edition	Combines the best of Disk, Data and Fabric products together as one orderable product.	<ul style="list-style-type: none"> • Having Disk, Data and Fabric allows higher levels of value—i.e., combined SAN and disk performance reports or automated workflows to do provisioning (under the control of Tivoli Provisioning Manager)
IBM System Storage Productivity Center	An integrated offering that provides a consolidated focal point for managing IBM storage products as well as managing mixed-vendor storage environments. SSPC provides enhancements to daily storage administration by making available a broader set of configuration functions.	<ul style="list-style-type: none"> • Combines the power of a customized IBM System x server with preinstalled storage software that represents a significant point of centralized management. SSPC enhances several rudimentary device utilities for easier, more intuitive, context-based administration and, on the whole, lowers resource overhead.



ibm.com/storage

IBM Global Services for System Storage and Storage Networking

Data Storage Services from IBM can help you achieve business objectives by creating cost-effective data storage solutions that address the requirements of key business applications. These solutions can support multiple platforms and product vendors, helping to provide enhanced protection for critical business data, increased asset utilization, availability and reliability levels with reduced management costs.

IBM Global Services, as the leading data storage services provider, brings best practices from its thousands of customer engagements to work with your employees to integrate new solutions and technology with your business and IT needs. IBM offers a comprehensive portfolio of data storage services including:

- Assess**
 - Analysis of enterprise information needs and environment
 - Defined enterprise-wide storage strategies
 - Quantified business benefits
- Plan**
 - Backup/restore and business continuity planning
 - Performance and capacity planning
 - Enterprise security architecture
 - Storage migration and consolidation
- Design**
 - Networked storage architecture design
 - SAN configuration and integration services
 - Proof of concept, validation and certification
- Implement**
 - Implementation, testing and migration services
 - Education and training
 - Installation, relocation, cabling and site preparation
- Run**
 - Business and application recovery services
 - Systems monitoring and management
 - Managed Storage Services

IBM Global Services has a track record in offering services for open and mainframe storage, data migration, installation and support services for IBM and non-IBM environments. Some examples are:

- IBM Storage Strategy Assessment assists with the vision and strategy, assessment, architecture and conceptual designs to help customers optimize their storage infrastructure to new architectures.
- IBM Planning Services for 3494 Automated Tape Library and Virtual Tape Server can help improve tape storage management and gain control of an often expanding library of tapes.
- IBM Operational Support Services for Tivoli Storage Manager assists customers in the planning and implementation of storage management software.
- IBM Managed Storage Services offer scalable, cost-effective storage capacity, management and backup/restore services on a usage basis.

More information about IBM storage services can be found at ibm.com/services/storage.

IBM Global Financing

Financing that supports throughout the technology life cycle

IBM Global Financing can help you accelerate your acquisitions of the latest technology and services, and help make your IT and information infrastructure projects more affordable by providing competitive, customized financing of your storage, server, PC, software and services investments. In addition, IBM Global Financing can also enable you to reduce technology obsolescence risk and handle planning for disposal and replacement of your IT hardware assets. With single-source, customized, competitive financing of the entire life cycle of your IT equipment, it is easier to manage both the up-front investment and the ongoing operating costs.

From acquisition through daily use, buyback and disposal, our end-to-end offerings form the foundation of a cohesive technology management strategy, improve asset management and increase your flexibility in small and large IT projects.

Offerings, rates, terms and availability may vary by country. Contact your local IBM representative or visit the Web at ibm.com/financing

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