



IBM Tivoli Storage Manager FastBack

Highlights

- ***Help provide continuous data protection and recovery management for Microsoft Windows and Linux servers, both in the data center and in remote or branch offices***
- ***Get applications and users back up and running within minutes following any data loss, while full data recovery is performed in the background***
- ***Help eliminate the need for traditional backup windows by continuously capturing data changes at the block level***
- ***Help reduce storage and bandwidth requirements with block-level incremental backup and integrated data deduplication***
- ***Schedule automated data transfers based on flexible, policy-based settings***

Do you need a better backup solution, or a better recovery solution? If your business is like many that are struggling with an ever-increasing amount of data and a decreasing tolerance to system downtime, the answer is probably “both.” You need a better backup solution that reduces the amount of data at risk of loss and eliminates error-prone manual operations from the data protection process. And you need a better recovery solution that gets your operations back up within minutes following almost any type or amount of data loss.

In today's highly competitive and always-on business environment, companies of any size cannot easily tolerate the loss of data or the loss of access to critical applications for an extended period of time. There are a number of forces that can cause data loss, from an accidental or malicious deletion to virus attacks, disk and system failures, and local and regional disasters. Each of these situations requires a specific approach to protecting and recovering data and getting critical applications back online.

IBM Tivoli® Storage Manager FastBack is a smarter data protection and near-instant recovery software solution for

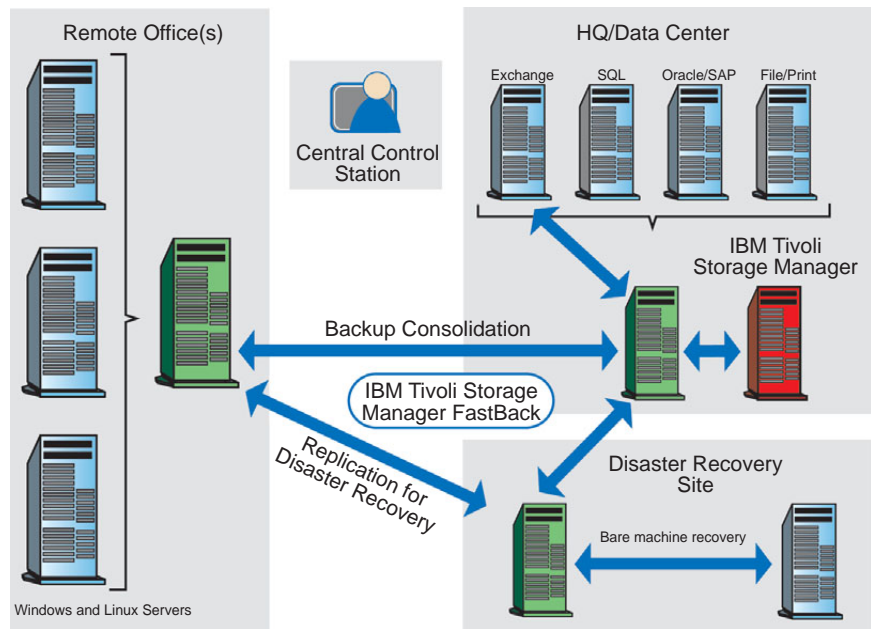
business-critical Windows® and Linux® servers, in data centers, remote offices and small- to midsized enterprises. Tivoli Storage Manager FastBack helps clients reduce the amount of data at risk between backups to almost zero, and reduces the time to recover from almost any data loss. The base Tivoli Storage Manager FastBack product includes nondisruptive block-level local backup and near instant recovery plus data deduplication and highly efficient replication for off-site disaster recovery and business resilience. Optional add-ons include:

- *IBM Tivoli Storage Manager FastBack for Bare Machine Recovery to quickly restore the operating system volume; restoring to dissimilar or virtual hardware is supported on Windows*
- *IBM Tivoli Storage Manager FastBack for Microsoft® Exchange to provide fast and granular recovery of individual e-mail objects*
- *IBM Tivoli Storage Manager FastBack for Workstations to provide automated, continuous data protection with centralized management for thousands of desktop and laptop computers*

Tivoli Storage Manager FastBack can replace the use of tape, especially in small or remote offices that may have a shortage of IT personnel. In larger offices and data centers, it can be integrated with your existing tape backup applications, such as IBM Tivoli Storage Manager, to provide an intermediary disk-based layer for significantly faster backup and recovery capabilities, while eliminating the need to shut down applications in order to run backup jobs.

Tivoli Storage Manager FastBack provides a flexible, cost-effective solution for a wide range of data protection and recovery needs, including:

- **Mission-critical application protection and recovery.** *Tivoli Storage Manager FastBack provides nondisruptive data backup as often as you need it, with the ability to quickly restore any data asset from almost any Windows or Linux application—perfect for Microsoft Exchange, Microsoft SQL Server, Oracle, IBM DB2®, mySAP and File Servers.*
- **Remote office backup consolidation.** *Using Tivoli Storage Manager FastBack in remote offices provides an automated, easy-to-use backup and recovery solution that far exceeds the capabilities of tape. Use the software’s integrated disaster recovery capabilities to send a copy of your data to a central or disaster recovery site.*



IBM Tivoli Storage Manager FastBack provides a complete data protection and recovery solution for mission-critical applications, both in the data center and in remote or branch offices.

- **Restore any type of data, anywhere.** *Tivoli Storage Manager FastBack provides the capability to restore individual files, folders and databases, disk volumes, and entire systems.*
- **Minimized data footprint.** *Tivoli Storage Manager FastBack’s block-level, incremental-only data capture is extremely storage and bandwidth efficient, and integrated target-side data deduplication further reduces capacity requirements.*

Continuous data protection

Tivoli Storage Manager FastBack eliminates the need for traditional backup windows by continuously capturing

data changes at the block level, with extremely low overhead on the systems it protects; it’s an excellent choice for protecting Virtual Machines without the need for a separate proxy server. Its flexible policy engine empowers administrators to make the best use of IT resources, while providing improved recovery service levels to meet stringent data protection and retention requirements on a per-application basis. Tivoli Storage Manager FastBack also provides a unique near-instant restore capability on Windows that gets your applications and users back up and running within minutes following any data loss, while full data recovery is performed in the background.

Disaster recovery: Preparing for the unexpected

A critical requirement in every data protection program is the ability to recover from the loss of an office due to an unplanned event such as a fire, flood or other disaster. Fulfilling this requirement entails storing a usable copy of the data from each office in an off-site location that is far enough from the original production facility so as not to be impacted by the same event.

Adaptive disaster recovery is an integrated feature of Tivoli Storage Manager FastBack, offering backup consolidation, central management, security, network efficiency and superior recovery options. More than simple replication of data between sites, these capabilities provide a flexible, policy-based approach to disaster recovery, helping companies balance the complex needs of the business on a per-office basis.

Bandwidth-friendly protection

Using the sophisticated Tivoli Storage Manager FastBack policy engine, administrators can select the frequency of backups on a per-application basis. You can set backups to run as often as you need to help ensure a tight recovery point objective (RPO) for your most critical applications, without wasting network bandwidth doing the same for your less-critical data. By matching the policy to the requirements, IT organizations can save storage capacity, bandwidth and money. You can also select how long to keep each data set based on the needs of each application.

Feature	Benefits
Block-level incremental capture	<ul style="list-style-type: none">• Very low impact on application servers—ideal for virtual machines• Eliminates the need for backup windows• Superior performance with both large numbers of small files and for very large files such as databases
Target-side data deduplication	<ul style="list-style-type: none">• Reduces the amount of disk capacity required• Post process does not impact backup or application server performance
Policy-based backup engine	<ul style="list-style-type: none">• Balances application recovery requirements with processing, network and storage resources• Select schedule of snapshots based on the needs of each application• True Continuous Data Protection (CDP)*• Helps reduce costs while improving recovery service levels for mission-critical applications
Storage area network (SAN) backup	<ul style="list-style-type: none">• SAN-based backup processes that do not impact local area network (LAN) bandwidth
FastBack Mount/Virtual Recovery	<ul style="list-style-type: none">• File system view into the backup repository allows click-drag-drop recovery of any file or folder• Restores full access to any volume in seconds, while recovery occurs in the background*• Optional bare machine recovery component recovers from a full system failure, even to dissimilar hardware*
Point-in-time recovery	<ul style="list-style-type: none">• Roll back to any previous point in time to recover from accidental deletions, virus attacks, rolling corruptions, etc.• Maintain any number of previous generations
Remote office support	<ul style="list-style-type: none">• Helps reduce costs of backup system management• Helps improve backup and recovery service levels• Helps improve reliability and minimize recovery failures
Integration with tape infrastructure	<ul style="list-style-type: none">• Leverages current investments• Offloads the impact of tape backups from application servers
Central management	<ul style="list-style-type: none">• Centrally manage all backup and recovery operations• Single Web-based interface• Manages both local and remote offices
Full automation	<ul style="list-style-type: none">• “Set it and forget it” policy engine• Self-managing repository always has a set number of data iterations on hand for easy rollback and fast recovery
Application aware	<ul style="list-style-type: none">• Support for almost all Windows and Linux-based applications, including IBM DB2, Microsoft Exchange and SQL, Oracle and mySAP• Optional IBM Tivoli Storage Manager FastBack for Microsoft Exchange component recovers granular Exchange data objects quickly

* Available for Windows clients only

With Tivoli Storage Manager FastBack, data transfers over the WAN or Internet can be scheduled to make the most effective use of your available bandwidth and to limit the impact on other applications. The software securely transfers only those data blocks that have changed since the last operation, supporting multiple encryption mechanisms, using a block-level incremental model that slashes the amount of data sent over the WAN or Internet compared to standard replication and file-based backup consolidation solutions. Tivoli Storage Manager FastBack also automatically bundles large numbers of small files to dramatically reduce the latency overhead associated with TCP/IP file transfers.

Centralized control and reporting

With Tivoli Storage Manager FastBack, data from multiple remote servers can be consolidated into a single central data center. A central control station provides a monitoring and management interface, giving access to operational status at the remote offices, as well as the central site.

Tivoli Storage Manager FastBack includes built-in reporting to summarize how repositories, policies, and snapshots consume resources in your backup environment. There are a dozen types of reports that can be run ad hoc

or on a scheduled basis. For example, you can prepare an executive summary to identify the successful and failed backups and the size of backups, along with a summary of the repository usage.

Integrating remote and central operations

The ability to recover data from remote offices is becoming increasingly crucial as the number of remote offices grows and the amount of data in them increases. Because Tivoli Storage Manager FastBack is an integrated component of IBM Tivoli Storage Manager, it makes it easier for organizations with remote offices to add remote data to their core storage-related processes such as archive, retention and compliance. The software's adaptive disaster recovery capabilities also make it easier to send copies of remote data to a central site or to a disaster recovery site while helping to minimize the risk of data loss during transport.

Security and reliability

Tivoli Storage Manager FastBack offers industry-standard Secure Sockets Layer (SSL) encryption when a virtual private network (VPN) or other secure channel is not available to your remote offices. The software's protocol uses industry-standard Secure File Transfer

Protocol (FTP/S) out-bound connections to perform transfers, eliminating the need for custom firewall configurations at the remote office.

To help ensure data integrity for your disaster recovery operations, data sent to the central disaster recovery repository is committed only after all of the data has been received and verified. Tivoli Storage Manager FastBack leverages self-healing capabilities to maintain a reliable and available recovery resource.

Extended backup and recovery solutions

Part of the IBM Tivoli Storage Manager product family, IBM Tivoli Storage Manager FastBack can be extended through add-on components such as IBM Tivoli Storage Manager FastBack for Microsoft Exchange and IBM Tivoli Storage Manager FastBack for Bare Machine Recovery. IBM Tivoli Storage Manager FastBack Center offers the full set of capabilities as a bundled solution that combines the core application with these two additional modules.

When Tivoli Storage Manager FastBack is used in conjunction with IBM Tivoli Storage Manager, customers benefit from an extensive data protection, archive, retention and recovery solution that can help reduce risk and costs, and can help provide exceptional levels of service management.

IBM Tivoli Storage Manager FastBack at a glance

Backup and DR Server system requirements:

Operating systems

- Microsoft Windows 2003 Standard or Enterprise Server (SP1 or later)
- Microsoft Windows 2008 Enterprise Server (SP1 or later)

Processor

- 4 GHz Dual Intel® Pentium® or compatible

Memory

- 3 GB RAM, 2 GB virtual memory

Available disk space

- 200 MB for FastBack Server, 200 MB for Documents and Settings folder

LAN connectivity

- 1 NIC, 100 Mbps (1 Gbps recommended)

Repository

- Any IDE, SCSI, iSCSI, or Fibre Channel disk, three times the capacity of primary storage (five times recommended)

Backup Client supported platforms:

- Microsoft XP Professional, Service Pack 1 or later
- Microsoft Windows 2000 Standard, Advanced or Professional, Service Pack 3
- Microsoft Windows 2003 Standard or Enterprise, Service Pack 1 or later
- 2008 Server
- SUSE Linux Enterprise Server 10, SP2
- RedHat Enterprise Linux 5 Server Advanced Platform

Microsoft Cluster support

- Supports Microsoft Windows 2003 Cluster Server configurations

Microsoft VSS support

- Integrated with Microsoft VSS writers to back up Exchange and SQL Servers
- Note: VSS not available on pre-Windows 2003 platforms

Microsoft Exchange support

- Microsoft Exchange 2003
- Microsoft Exchange 2007

Microsoft Active Directory support

- Integrated with Microsoft Active Directory for improved administration and security

Management

- Java™-based GUI, SNMP and CLI
-



For more information

To learn more about IBM Tivoli Storage Manager FastBack, contact your IBM representative or IBM Business Partner, or visit ibm.com/tivoli/storage

About IBM Tivoli software from IBM

Tivoli software offers a service management platform for organizations to deliver quality service by providing visibility, control and automation—visibility to see and understand the workings of their business; control to effectively manage their business, help minimize risk and protect their brand; and automation to help optimize their business, reduce the cost of operations and deliver new services more rapidly. Unlike IT-centric service management,

Tivoli software delivers a common foundation for managing, integrating and aligning both business and technology requirements. Tivoli software is designed to quickly address an organization's most pressing service management needs and help proactively respond to changing business demands. The Tivoli portfolio is backed by world-class IBM Services, IBM Support and an active ecosystem of IBM Business Partners. Tivoli clients and Business Partners can also leverage each other's best practices by participating in independently run IBM Tivoli User Groups around the world—visit tivoli-ug.org

Disclaimer: The customer is responsible for ensuring compliance with legal requirements. It is the customer's sole responsibility to obtain advice of competent legal counsel as to the identification and interpretation of any relevant laws and regulatory requirements that may affect the customer's business and any actions the customer may need to take to comply with such laws. IBM does not provide legal advice or represent or warrant that its services or products will ensure that the customer is in compliance with any law or regulation.

© Copyright IBM Corporation 2009

IBM Corporation Software Group
Route 100
Somers, NY 10589
U.S.A.

Produced in the United States of America
November 2009
All Rights Reserved

IBM, the IBM logo, ibm.com and Tivoli are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at ibm.com/legal/copytrade.shtml

Intel and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Java is a trademark of Sun Microsystems, Inc. in the United States, other countries or both.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

Other company, product and service names may be trademarks or service marks of others.

References in this publication to IBM products and services do not imply that IBM intends to make them available in all countries in which IBM operates.

Product data has been reviewed for accuracy as of the date of initial publication. Product data is subject to change without notice. Any statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

THE INFORMATION PROVIDED IN THIS DOCUMENT IS DISTRIBUTED "AS IS" WITHOUT ANY WARRANTY, EITHER EXPRESS OR IMPLIED. IBM EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements (e.g. IBM Customer Agreement, Statement of Limited Warranty, International Program License Agreement, etc.) under which they are provided.



Recyclable, please recycle.

TID14022-USEN-01