



**Tivoli** software

## IBM Tivoli Storage Manager FastBack

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### Highlights

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- ***Help provide continuous data protection and recovery management for Microsoft® Windows® 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***
- ***Schedule automated data transfers based on flexible, policy-based settings***

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 next-generation continuous data protection and recovery management platform for Microsoft Windows servers. It combines a number of leading-edge and patented

technologies to provide an extensive data protection and recovery solution for mission-critical applications, both in the data center and in remote or branch offices.

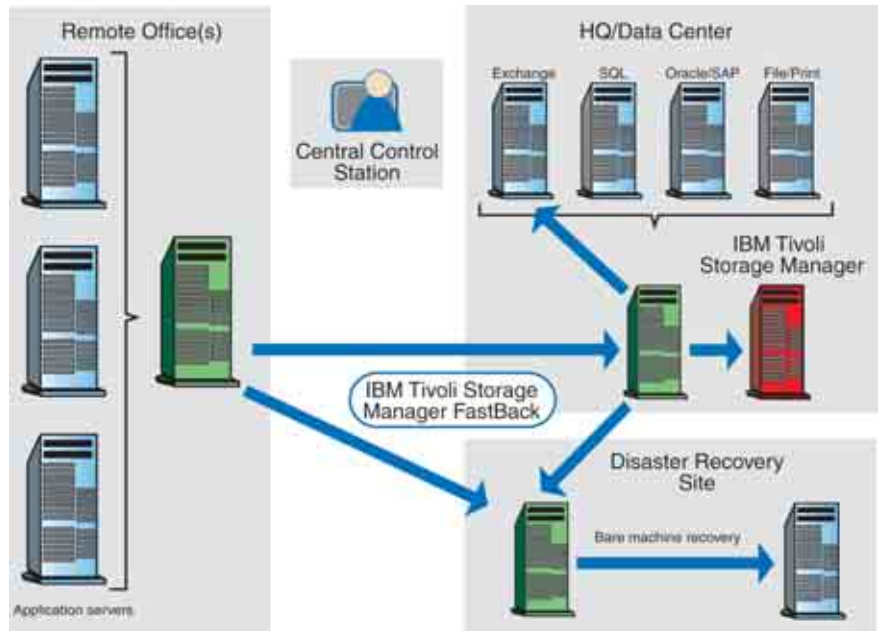
Tivoli Storage Manager FastBack can replace the use of tape, especially in small or remote offices that may have a shortage of IT personnel. In larger offices and data centers, it can be integrated with your existing tape backup applications, such as IBM Tivoli Storage Manager, to provide an intermediary 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, and 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 non-disruptive data backup as often as you need it, with the ability to restore any data asset from any Windows application almost instantly—perfect for Microsoft Exchange, Microsoft SQL Server, Oracle, IBM DB2®, and SAP.*
- **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 remote data to a central or disaster recovery site.*
- **Integrated blade server backup.** *When installed on a spare blade server, Tivoli Storage Manager FastBack can be used to help protect all of the other blades in the enclosure.*

**Continuous data protection**

Tivoli Storage Manager FastBack eliminates the need for traditional backup windows by continuously capturing data changes at the block level, with



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.

extremely low overhead on the systems it protects. 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 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 bandwidth and money. You can also select how long to keep each local and disaster recovery data set based on the needs of each application.

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 transfers only those data blocks that have changed since the last operation, using a block-level incremental model that

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

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.

Multi-threading is used to enable maximum bandwidth utilization, but when disaster recovery data and production data need to be transferred at the same time, you can limit the amount of bandwidth that Tivoli Storage Manager FastBack will attempt to use. Tivoli Storage Manager FastBack also offers an industry-standard compression option that can help reduce the volume of data transferred by as much as 50 percent.

#### **Centralized control**

With Tivoli Storage Manager FastBack, data from hundreds of remote servers can be consolidated into a single central data center. A central control station provides a monitoring and management interface, giving full access to the status of your distributed disaster recovery processes and operational status at the remote offices, as well as remote control capabilities.

#### **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

### System requirements:

#### Operating systems

- Microsoft Windows 2003 Enterprise Server (SP1 or later)
- Microsoft Windows XP Pro (SP1 or later)

#### Processor

- Intel® Pentium® or compatible, 1GHz or higher (2GHz or higher recommended)

#### Memory

- 1 GB RAM (2 GB RAM recommended)

#### Available disk space

- 300 MB

#### LAN connectivity

- 1 NIC, 100 Mbps (1 Gbps recommended)

#### Repository

- Any IDE, SCSI, iSCSI, or Fibre Channel disk, 3x the capacity of primary storage (5x recommended)

### Supported platforms:

- Microsoft XP Professional, Service Pack 1 or later
- 2000 Professional, Service Pack 3
- 2000/3 Server and Advanced Server
- Windows Volume Management (LDM)
- Windows Cluster

#### 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 2000
- 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](http://ibm.com/tivoli)

### 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](http://tivoli-ug.org)

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