

WHITE PAPER >

STORSERVER BACKUP APPLIANCE WITH INSTANT RESTORE

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Helping to provide seamless data protection and recovery for critical Windows and Linux servers**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 nearly instantly following any data loss, while full data recovery is performed in the background
- Eliminate the need for traditional backup windows by continuously capturing block-level data changes
- 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 most that are struggling with an ever-increasing amount of data and a decreasing tolerance for 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, no company can 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.

The STORServer® Backup Appliance with Instant Restore™ is a smarter data protection and near instant recovery appliance solution for business-critical Windows® and Linux® servers, in data centers, remote and branch offices and small-to-midsized enterprises.

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The STORServer Backup Appliance with Instant Restore reduces the amount of data at risk between backups to almost zero, and reduces the time to recover from almost any data loss. The addition of Instant Restore to the STORServer Backup Appliance solution provides non-disruptive 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-on features include:

- Bare Machine Recovery to quickly restore the operating system volume; restoring to dissimilar or virtual hardware is supported on Windows
- Backup for Microsoft® Exchange to provide fast and granular recovery of individual e-mail objects

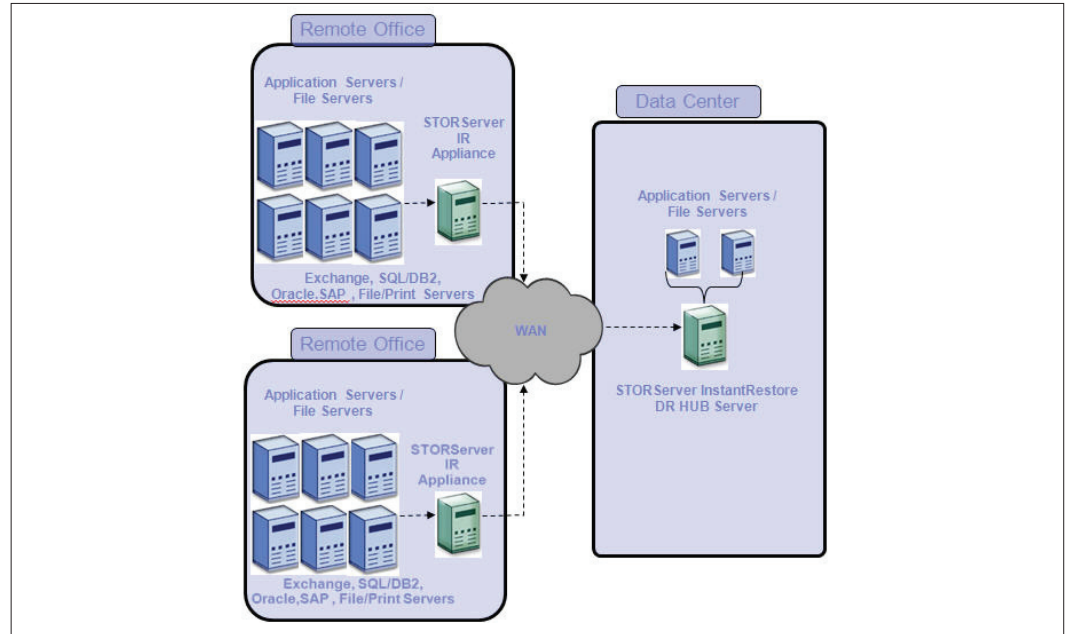
Instant Restore can replace the use of tape, especially in small or remote offices that may have a shortage of IT personnel. In larger offices and data centers, it can be integrated with your existing STORServer Backup Appliance or TSM server to provide an intermediary disk-based layer for significantly faster backup and recovery capabilities, while eliminating the need to shut down applications in order to run backup jobs.

The STORServer Backup Appliance with Instant Restore provides a flexible, cost-effective solution for a wide range of data protection and recovery needs, including:

- **Mission-critical application protection and recovery.** Provides non-disruptive 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.** Provides an automated, easy-to-use backup and recovery solution that far exceeds the capabilities of tape in remote offices. Use the Instant Restore software's integrated disaster recovery capabilities to send a copy of your data to a central or disaster recovery site.
- **Restore any type of data, anywhere.** Restore individual files, folders and databases, disk volumes, and entire systems.
- **Minimized data footprint.** Ideal for remote and branch offices, block-level, incremental-only data capture is extremely storage and bandwidth efficient, and integrated target-side data deduplication further reduces capacity requirements.

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STORServer Backup Appliance with Instant Restore provides a complete data protection and recovery solution for mission-critical applications, both in the data center and in remote or branch offices.

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Continuous data protection

The STORServer Backup Appliance with Instant Restore eliminates the need for traditional backup windows by frequently or 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. It 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.

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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.

Disaster recovery is an integrated feature of the STORServer Backup Appliance with Instant Restore, 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 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.

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 Instant Restore is an integrated component of the STORServer Backup Appliance, 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 appliance's 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.

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Security and reliability

The STORServer Backup Appliance with Instant Restore 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. Industry-standard Secure File Transfer Protocol (FTP/S) out-bound connections are used 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. The STORServer Backup Appliance with Instant Restore leverages self-healing capabilities to maintain a reliable and available recovery resource.

Extended backup and recovery solutions

Part of the STORServer Backup Appliance product family, Instant Restore can be extended through add-on functionality for Microsoft Exchange and Bare Machine Recovery. STORServer Backup Appliance with Instant Restore offers the full set of capabilities as a bundled solution that combines the core applications with these two additional modules.

When Instant Restore is used in conjunction with the STORServer Backup Appliance, 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. 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. In remote and branch offices, the solution 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. Large numbers of small files are automatically bundled to dramatically reduce the latency overhead associated with TCP/IP file transfers.

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Features	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
Source-side data deduplication	<ul style="list-style-type: none"> • Eliminates transmission of redundant data even across multiple sites • Integrated with Target-side deduplication
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"> • Optional SAN-based backup processes that do not impact local area network (LAN) bandwidth
Instant Restore 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

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Integration with disaster recovery infrastructure	<ul style="list-style-type: none"> • Leverages current investments • Offloads the impact of tape backups from application servers • Full automation
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 STORServer Backup Appliance with Instant Restore for Microsoft Exchange component recovers granular Exchange data objects quickly

* Available for Windows clients only

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STORServer Backup Appliance with Instant Restore at-a-glance

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

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For more information

To learn more about STORServer Backup Appliances with Instant Restore, contact STORServer or your STORServer Business Partner, or visit www.storserver.com

About STORServer and IBM

- STORServer has been engineering Tivoli® Storage Manager products for 13 years
- STORServer with Instant Restore is only available to existing STORServer Appliance and TSM customers
- The STORServer appliance with Instant Restore comes fully configured and installs quickly

The STORServer Backup Appliance is designed to quickly address an organization's most pressing data protection needs, help proactively respond to changing business demands and solve backup, archive and disaster recovery needs once and for all. The STORServer portfolio is backed by world-class STORServer Services, Support and an expert channel of Business Partners.

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ABOUT STORSERVER

STORServer, Inc., headquartered in Colorado Springs, CO is a leading provider of data backup solutions for the mid-market. We offer a complete suite of appliances, software, and services that solve today's backup, archive and disaster recovery challenges. For more information on STORServer, please visit the company's website at www.storserver.com.

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