

# SteelEye® DataKeeper® Overview

Protect your critical data against loss or interruption in Windows environments

Human error, malicious activities, hardware failures and natural disasters can spell dire consequences for your business. Just pick up a newspaper or watch the evening news to find the data disaster du jour. That's why protecting your company's data assets is essential to your continued business success—and your livelihood. Fault-tolerant servers and storage subsystems are a good start. However, unless you have a proven solution for real-time replication, your business faces considerable risk.

There's no shortage of approaches to solve this problem. However, storage-based solutions are expensive and represent a single-point of potential failure. And, as you may have noticed, native Windows data replication tools are generally application specific, limited in scope and hard to manage. Tape backup is great for archiving, but is it really going to meet the recovery point objectives or recovery time objectives for your critical applications?

## SteelEye DataKeeper: Real-Time Data Protection

Fortunately, SIOS offers SteelEye DataKeeper, a proven, highly efficient data replication solution that protects your data while simplifying your environment and lowering your total cost of ownership. SteelEye DataKeeper keeps real-time copies of data in sync across multiple servers and data centers. It's a lightweight, host-based solution that minimizes the performance impact on your application servers and your network. Plus, when used in conjunction with SteelEye Protection Suite, it provides a proven, affordable solution for continuous application and data protection.

## Block-Level Replication for Optimal Performance and Cost Savings

SteelEye DataKeeper replicates data volumes at the block level, ensuring the most efficient replication possible. When compared to solutions that replicate at the file level, SteelEye DataKeeper uses significantly less system resources, makes more efficient use of the available bandwidth and is able to transfer more data faster across both WANs and LANs. This results in incredibly fast replication speeds—without hardware accelerators or compression devices.

#### Flexible Performance Tuning

SteelEye DataKeeper is easily customized to tune performance for your specific environment and applications. This lets you balance data protection and resource utilization for each environment. If fast replication is critical, DataKeeper can achieve over 90% bandwidth utilization to accelerate data synchronization. If minimizing network impact is the priority, DataKeeper offers nine levels of integrated compression and bandwidth throttling, allowing the optimal balance of network bandwidth and CPU utilization for each application.

## KEY BENEFITS

## **Lower Total Cost of Ownership**

- Get the most from your existing bandwidth and storage hardware with SteelEye blocklevel replication
- Eliminate the need for expensive sharedstorage devices (SANs), removing a potential single point of failure from your business-critical systems

#### **Accelerate Return on Investment**

- Automate day-to-day data replication tasks using an intuitive data management GUI
- Preserve your system and storage investments with broad-based OS and hardware support

#### **Ensure Operational Productivity**

- Gain unsurpassed replication speeds while minimizing network traffic—without hardware accelerators or compression devices
- Keep systems and people productive with rapid recovery of up-to-date data using any-point-in-time rewind

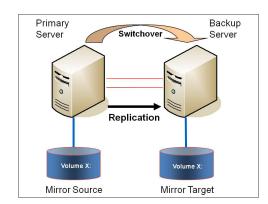


Figure 1: Multiple Replication Targets
SteelEye DataKeeper supports multiple replication
targets. The primary server can replicate data to
systems within the local data center and also on
recovery servers at remote sites.



## Complete Data Security

SteelEye DataKeeper replicates both data files and critical storage metadata information such as data access permissions. Since it replicates at the block level, DataKeeper easily replicates encrypted files, open files and other formats that challenge file-level replication solutions. DataKeeper maintains the highest levels of data protection by controlling access to the backup environment, preventing unauthorized or inadvertent update access, protecting against data corruption.

## SteelEye DataKeeper Cluster Edition

Failover clusters have become very popular for Microsoft applications. They typically have two or more nodes attached to shared storage and are used to ensure high availability of applications such as SQL Server, file servers and even entire Hyper-V virtual machines. Unfortunately, the shared storage in a traditional cluster is not only expensive, it represents a single point of failure.

That's where SteelEye DataKeeper Cluster Edition comes in. One-to-many replication lets SteelEye DataKeeper synchronize multiple host-based storage devices, eliminating the need for expensive shared storage systems.

SteelEye DataKeeper Cluster Edition is optimized for host-based replication of Windows Server 2003 and 2008 R2 multi-site clusters. This versatile solution integrates seamlessly with Windows Server Failover Cluster (WSFC) to enable "shared nothing" clusters and geographically dispersed environments. It brings the optimal balance of ease of use, features and price-performance to your business-critical Windows environments, making it easier than ever before to provide replication and high availability to geographically distributed clusters for Exchange, SQL, SharePoint, Hyper-V and other critical applications.

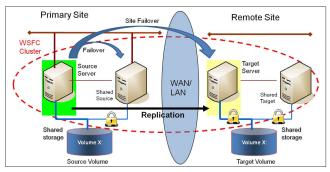


Figure 2: Remote Site Windows Cluster Failover SteelEye DataKeeper Cluster Edition can extend existing shared storage clusters to one or more remote sites for automated disaster recovery.

### Microsoft SQL Clusters Failover

SQL application failures can bring your company's productivity and revenue to a grinding halt. Traditional failover clusters provide continuous monitoring and recovery of business-critical applications, protecting you against hardware and software failures. However, what would happen should you have a complete site loss? Traditional recovery methods generally mean data loss and extended downtime, and require human intervention.

Simply use SteelEye DataKeeper Cluster Edition to configure a Microsoft multi-site failover cluster. If you experience a hardware or software failure, the application quickly recovers on the local cluster node. However, in the event of a disaster, the application can automatically failover to a backup server—with minimal to no data loss and no human intervention.

## Hyper-V VM High Availability Configuration

Virtualization is quickly becoming the norm in the data center, making it essential to ensure high availability of virtual workloads. SteelEye DataKeeper Cluster Edition makes it easy to deploy Hyper-V clusters by allowing administrators to use local attached storage in place of a SAN, yet still have the availability features such as live migration and highly available virtual machines. By eliminating the requirement for a SAN, you decrease the overall cost of your virtual infrastructure and increase your availability by eliminating the single point of failure that the SAN represents.

#### **Trust SIOS for Proven Protection**

SIOS delivers innovative software solutions that provide simple and cost-effective application availability and data protection for Linux and Windows, including virtual and cloud environments. SIOS solutions are easy to implement, use and manage—eliminating the complexity and capital expenditures associated with traditional approaches while offering superior availability and protection. To learn more about SIOS and our SteelEye solutions, visit www.us.sios.com.



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