

# Data and Application Availability Management

DISASTER RECOVERY

• HA CLUSTERING

• DATA PROTECTION

## SteelEye Data Replication for Windows

### Key Features:

- Supports all versions of Windows 200x Server
- Industry's fastest replication engine; replicates only changes to minimize bandwidth usage; highly optimized for WAN connections; per mirror programmatic bandwidth throttles
- Any-Point-In-Time Rewind allows rollback to any previous dataset
- Built-in Browser-based Data Recovery Wizard
- Multiple Replication targets across any combination of LAN and WAN
- Synchronous and Asynchronous
- Multiple Levels of Compression
- Replicate data from any enterprise Windows application including Microsoft Exchange, SQL Server, IIS, SAP and Oracle
- Integration with LifeKeeper HA clustering provides full application and data protection

### Real-time Continuous Data Protection for Windows

SteelEye® Data Replication for Windows (SDR-W) provides volume-level host-based replication and continuous data protection (CDP) for all versions of Windows server across both local-area and wide-area networks. For companies looking to protect their critical data against corruption and loss, for organizations looking to supplement their tape-based archive systems with more real-time backup and recovery and for IT shops that need the fastest possible recovery plans while also ensuring off-site disaster recovery protection, SteelEye Data Replication for Windows delivers the solution.

#### Any Point in Time Rewind

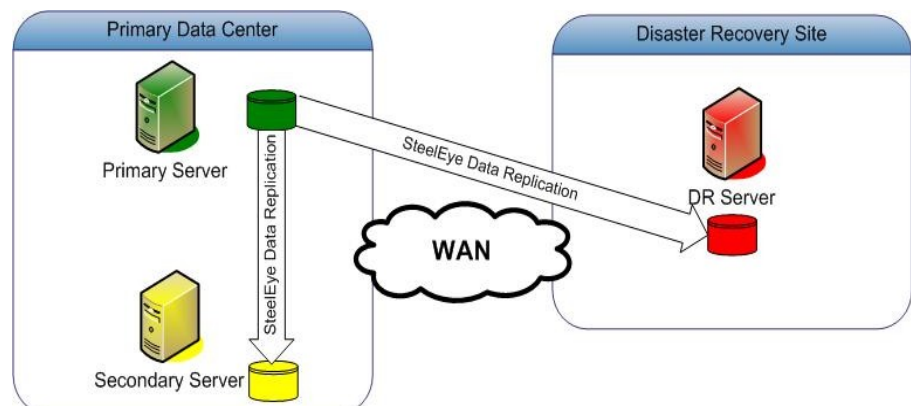
CDP is a key tool to protect users from data loss caused by corruption, viruses, and user or software errors. Immediately upon noticing data integrity issues, users can mount the replicated data on a backup volume and then move backward and forward through the data stream via time stamps or other user-defined bookmarks until the optimal set of data is constructed. That data is then placed into service and normal operations resume.

Other CDP solutions let users move in one direction during the restore process. The SteelEye solution supports both rewind and advance, so users can build a temporary dataset, test it, and then rebuild another if needed by moving either forward or backward in the replicated data.

#### Multiple Replication Targets

For companies who need the enhanced protection of more than one backup of critical business data, SteelEye Data Replication also supports multiple replication targets, which can span any combination of local and remote sites. Local data recovery is assured by continuous backup within the local data center, while asynchronous remote data replication protects against local disasters.

One sample configuration is shown in the diagram below where a single source system, the Primary Server, is replicating data to two target systems—the Secondary Server within the same local data center and the DR Server within the Disaster Recovery Site. Data Recovery can take place using the volumes attached to either of these servers, giving the ultimate in protection. SDR-W isn't limited to only two targets, so if you need even more copies of the data spread across your IT environment, that is easily accomplished.



OPEN MINDS

High Availability Solutions



SteelEye  
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COMPETENCE AND  
SUPPORT CENTRE

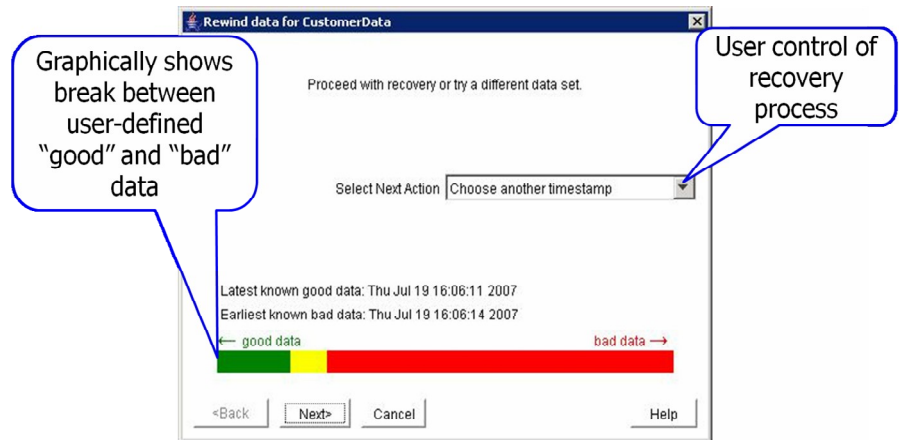
# SteelEye Data Replication for Windows

## Easy-to-use Data Recovery Wizard

The process of managing data recovery is handled through a built-in Data Recovery Wizard. This simple-to-use tool guides users through the building of a new temporary dataset from the backup using timestamps or other bookmarks, validating the dataset for consistency via appropriate tools and then looping back through these steps as needed until the optimal dataset is built. An intelligent binary search technique speeds the rebuilding process to optimize recovery time. Once the desired dataset is built, the wizard places it back into service onto the production server and resumes normal business operations.

The step-by-step interface shown at right greatly simplifies what can be a difficult task, finding the last good data point among all of the replicated data. Integrating data recovery with the placement of the new data set into service automatically is a feature enabled by the integration of SteelEye Data Replication with LifeKeeper HA clustering.

Also, if multiple volumes are related such that their data needs to be kept in sync, the Wizard will automatically rewind the volumes together to ensure data consistency.



## Unsurpassed Replication Speeds

SteelEye Data Replication v6 delivers the industry's fastest replication speeds across WANs in order to ensure complete and continuous data protection. Through the use of software techniques that assure a constant and optimal flow of data across any wide-area connection, regardless of latency, SteelEye Data Replication achieves over 90% bandwidth utilization without the need for hardware accelerators or compression devices and provides the highest WAN throughput of any software-based replication solution on the market today. For environments where even greater throughput is desired, this updated version also includes an integrated compression engine that can be tuned by users to one of nine compression levels.

In order to manage the accelerated network traffic, per-mirror replication throttles, also called speed limits, have been implemented to provide administrators complete control over cross-site bandwidth usage.

In the event of a network failure, re-synchronizing data and disks is fast and dependable with SteelEye intent-logging capability.

## Complete Data Security

SteelEye Data Replication incorporates several critical features to ensure the highest levels of data protection and security. SDR-W replicates not only data files but also storage metadata which contain critical information such as data access permissions that are vital to maintaining data security in the backup environment. During operation, SteelEye CDP maintains the highest levels of data protection by controlling access to the backup environment to prevent unauthorized or inadvertent update access, and to eliminate the potential for data corruption.

## High Performance - Resource Efficient - Cost Savings

SDR-W replicates data at the block level, below the file system, and only backs up data changes to minimize the demand on systems and networks. Unlike file-based approaches to data replication, SDR-W is not dependent upon the file system to gain data access and does not incur the same levels of server resource utilization or latency that can cause critical out-of-sync conditions. Because SDR-W works below the file system, there are no issues with backing up "in use" files.

## Scalable Availability and Disaster Recovery

SDR-W is an integral component of the SteelEye LifeKeeper family of data protection, high availability clustering and disaster recovery products. Integrating with LifeKeeper High Availability Clustering delivers comprehensive, automated data recovery and application availability protection. When deployed across a WAN link, organizations can establish a complete automated solution for disaster recovery protection over wide area networks.

# SteelEye Data Replication for Windows

SteelEye Data Replication for Windows delivers all of the features needed by IT administrators to ensure complete protection for business-critical data. By delivering highly optimized Host-based Replication and Continuous Data Protection and supporting multiple targets across any combination of LAN and WAN, SteelEye Data Replication, all of your organizations information is secure, protected and always available.

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| <b>Host-Based, Volume Level</b>        | <b>Continuous Data Protection (CDP)</b>                  | <b>Supports any Windows Application</b>                |
| <b>Synchronous and Asynchronous</b>    | <b>Multiple Data Copies across LAN and WAN</b>           | <b>All versions of Windows 200x Server</b>             |
| <b>Change Only Replication</b>         | <b>Rewind and Advance Capability</b>                     | <b>GUI with at-a-glance status</b>                     |
| <b>Local and Remote Configurations</b> | <b>Browser-based Data Recovery Wizard</b>                | <b>Command Line Interface for programmatic control</b> |
| <b>WAN Optimized</b>                   | <b>Rollback via timestamps or user-defined bookmarks</b> | <b>Full Read/Write Access to Target</b>                |
| <b>Per Mirror Bandwidth Throttles</b>  | <b>Journaling of Writes</b>                              | <b>Double-Byte Support</b>                             |
| <b>9 Compression Levels</b>            | <b>Whitespace elimination</b>                            | <b>Integration with LifeKeeper HA Clustering</b>       |

## About Open Minds and SteelEye Technology

Open Minds High Availability Solutions are the registered SteelEye Support and Competence Centre for the UK and Ireland. Open Minds provides advice and a full range of professional services to assist organisations with the assessment, design and implementation of solutions for ensuring High Availability within their environments.

SteelEye, a Microsoft Gold Certified Partner, is the leading provider of data and application availability management solutions for business continuity and disaster recovery for Linux and Windows.

To contact Open Minds, visit our website at [www.openminds.co.uk](http://www.openminds.co.uk), call +44 (0) 121 313 3943 or email [sales@openminds.co.uk](mailto:sales@openminds.co.uk)

