

Data and Application Availability Management

DISASTER RECOVERY

• HA CLUSTERING

• DATA PROTECTION

LifeKeeper® for Microsoft SQL Server

High Availability Clustering, Data Replication and Disaster Recovery for Microsoft SQL Server

Key Features:

- Supports all versions of Windows Server 2000/2003 and SQL Server 2000 and 2005.
- Does not require identical hardware for cluster nodes.
- Can build multi-node Many-to-One and Cascading clusters across any combination of LAN and WAN. Not limited to 4 nodes.
- Supports Active / Standby as well as multiple-SQL instance Active / Active configurations.
- Supports shared and replicated storage: databases can reside on shared SCSI, single or multi-path Fibre Channel SAN, iSCSI or replicated volumes across a LAN or WAN.
- Combine with SteelEye Data Replication for tightly integrated data replication and high availability clustering from a single vendor.
- SteelEye Data Replication provides asynchronous volume replication with a single source system going to multiple targets to provide both local and remote copies of the database.
- Provides health and responsiveness monitoring and failover of key SQL services:
 - MSSQLSERVER
 - SQLSERVERAGENT
 - Distributed Transaction Coordinator
 - Microsoft Search
- LifeKeeper Extender lets you easily incorporate protection for any custom application.

SQL Server downtime costs companies around the world millions of dollars a year. Technically-savvy IT organizations work to eliminate or lessen the impact of both planned and unplanned downtime through the implementation of real-time data replication, high availability clustering and disaster recovery solutions.

SteelEye LifeKeeper for SQL Server is the industry's most comprehensive and scalable solution for eliminating SQL Server downtime from either planned or unplanned outages. With integrated data replication, high availability clustering and disaster recovery capabilities, LifeKeeper for SQL Server addresses all levels of uptime requirements, from local SQL database replication, to local application failover, to complete disaster recovery of SQL Server at a remote site.

LifeKeeper constantly monitors the health of all pieces in the SQL Server environment including servers, network connections, data volumes and SQL Server processes. On detection of any problem, LifeKeeper initiates a recovery action. This configurable action can include attempting to restart SQL Server on the same server (a local recovery), migrating the SQL Server instance to a backup server (a failover), or sending an alert to the SQL Server administrator so that the problem can be investigated. Through LifeKeeper's intuitive GUI, administrators can manually move SQL Server instances among nodes to eliminate the need for planned downtime due to maintenance. No longer does applying service packs mean that SQL Server has to be unavailable.

LifeKeeper for SQL Server does not require that you use high-end versions of either Windows or SQL Server. There is also no requirement that all servers in the cluster be identically configured. LifeKeeper is flexible so that you can deploy the HA cluster topology that makes the most sense for your business. This flexibility extends to the use of storage as well. With LifeKeeper, you can build a shared-nothing cluster using LifeKeeper Data Replication, or you can deploy a shared-storage cluster using direct attached SCSI or Fibre Channel devices.

LifeKeeper for SQL Server can also be extended across a WAN connection for full disaster recovery protection.

Whether you need real-time SQL Server data backup, high availability protection within a LAN or disaster recovery across a WAN, SteelEye LifeKeeper for SQL Server meets your business needs.



OPEN MINDS
High Availability Solutions

LifeKeeper® for Microsoft SQL Server

Data Replication for SQL Databases

SteelEye Data Replication for Windows is designed to ensure that data is always available. In a SQL Server environment, databases are replicated in real-time from a local disk located on the active SQL Server to a local disk located on a backup server. Because LKDR can operate in either synchronous or asynchronous mode, the backup server can be across either a LAN or WAN. The recovery process from a local system failure is virtually immediate because data is available on a hot disk where it can be easily accessed and restored. With the ability to do One-to-Many replication, multiple real-time copies can be made to different locations to provide the highest possible data protection.

Used alone, LKDR provides an efficient disk-to-disk data backup mechanism. When combined with LifeKeeper High Availability clustering, it becomes a powerful component in an overall SQL Server protection solution.

SQL Server High Availability Clustering

SteelEye LifeKeeper for SQL Server monitors all components of a SQL Server 2000/2005 system—including servers, storage, network connections and SQL Server processes—and initiates a recovery action on detection of a failure; it also provides a simple interface for manual movement of applications to eliminate outages from planned maintenance.

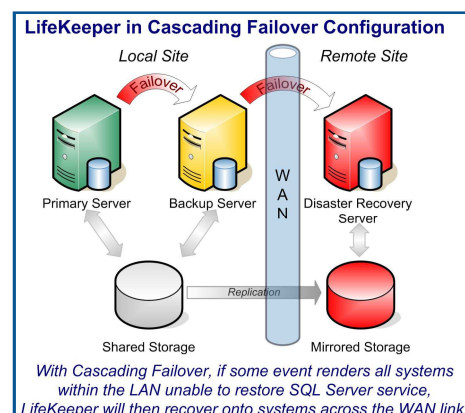
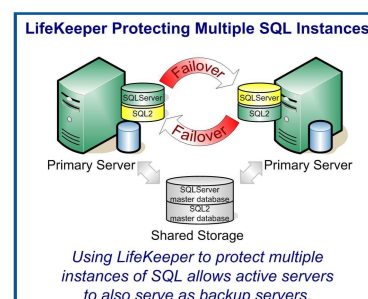
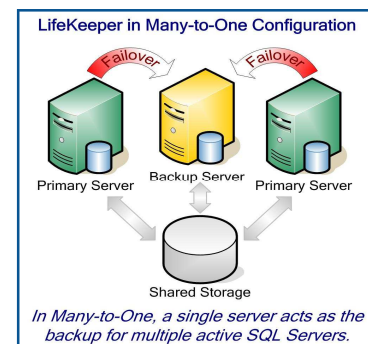
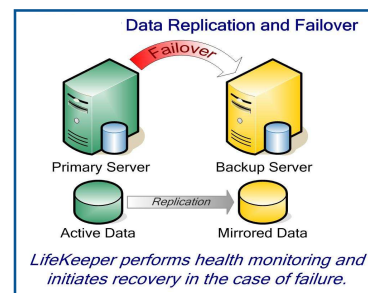
With support for both data replication and shared storage environments and the ability to build Many-to-One clusters, LifeKeeper provides maximum flexibility in configurations which can be deployed.

With LifeKeeper Extender, you can easily add protection for any application resident on top of SQL Server. LifeKeeper will monitor and recover the application with all SQL Server database dependencies taken into account. With LifeKeeper, the entire end-to-end application stack is protected.

Disaster Recovery

The Disaster Recovery capabilities within SteelEye LifeKeeper for SQL Server provide a complete and unmatched automated disaster recovery environment for protection against catastrophic failures at your primary data center. By combining asynchronous data replication across a WAN with the monitoring and recovery capabilities of LifeKeeper for SQL Server, a disaster recovery configuration for ultimate protection can be put into place easily.

With automated and integrated data replication and failover to a remote site, you can reliably replicate data asynchronously and reliably monitor critical resources over a WAN. LifeKeeper will migrate SQL Server to the remote site only in disastrous events with a choice of full automation or a manually-activated "panic button" which lets administrators make the final decision on SQL Server recovery.



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 a full range of high availability consulting and 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, or call +44 (0) 121 313 3943

