



CASE STUDIES

HIGHLIGHTS

Goal: For BMO Capital Markets New York to create a disaster recovery plan and improve data backup, while holding down costs.

Solution: HP StorageWorks Storage Mirroring Software

Results: Improved productivity, a reduction in costs related to off-site tape management, and a reduction in IT support costs

CUSTOMER PROFILE

BMO Capital Markets
www.bmocm.com

BMO Capital Markets, the investment and corporate banking practice of BMO Financial Group, is an integrated full-service investment bank, capitalizing on industry specialties and distinctive capabilities.

Headquarters: Toronto, Canada

Industry: Financial services

BMO Capital Markets New York Builds Disaster Recovery Plan Using HP StorageWorks Storage Mirroring as a Data Recovery Solution

BMO Capital Markets New York was looking into a low-cost, reliable data mirroring solution for its disaster recovery site. To solve the problem, it turned to HP StorageWorks Storage Mirroring Software (SM). SM was able to solve the problem immediately upon installation, and has become an integral part of a data recovery and business continuity plan for BMO Capital Markets New York.

Benefits

Table with 2 columns: OBJECTIVE and BENEFITS ACHIEVED. It lists three objectives: creating a business continuity plan, making more efficient use of IT staff, and increasing uptime, with corresponding benefits for each.

“Our competitive edge is the data we use, and we had to make sure that we would be able to recover from a potential serious disruption to our business in the event of a disaster, by making critical data available to our business users as quickly as possible.”

Rick Onggo
Team Leader, Network Server Infrastructure
BMO Capital Markets New York

■ To solve its problems, BMO Capital Markets chose HP StorageWorks Storage Mirroring, which provides host-based, real-time continuous replication as a low-cost alternative for data mirroring. Storage Mirroring provides protection against server or storage failures with onsite data and server redundancy, allowing restoration in minutes with minimal or no loss of data and productivity.

The Challenge: Build a Business Continuity Plan with a Fast Data Recovery Time

The financial services firm BMO Capital Markets in New York recently built a disaster recovery facility in New Jersey. As part of its business continuity plan, the company was looking into a quick way of recovering data in the event of a disaster. Restoring from tapes was not considered a good solution due to the length of time it takes to retrieve tapes from the off-site storage facility and because of the amount of time it takes to restore data from tapes to the servers.

BMO Capital Markets was looking for a comprehensive disaster recovery solution that would do the following:

- **Form the basis of a business continuity plan.** BMO Capital Markets needed to find software that would help it build a failsafe business continuity plan. It had data clusters in its New York and New Jersey offices, and wanted to be able to use the New Jersey clusters for business continuity. It needed software for replicating and restoring data.
- **Offer reliable, low-cost, simple-to-use disaster recovery solution for data access.** BMO Capital Markets in New York was looking for low-cost, real-time data replication software that would be easy to implement and maintain. The software also needed to be able to restore data as quickly as possible in the event of a disaster.

BMO Capital Markets Chooses HP StorageWorks Storage Mirroring

To solve its problems, BMO Capital Markets chose HP StorageWorks Storage Mirroring (SM), which provides host-based, real-time continuous replication. Patented replication and failover technology continuously captures byte-level changes as they happen and replicates those changes to one or more target servers at any location without geographic limitations. Storage Mirroring provides protection against server or storage failures with onsite data and server redundancy, allowing restoration in minutes with minimal or no loss of data and productivity.

Designed for small-medium businesses, SM continuously captures and replicates changes at the byte level as they occur, while providing high availability for file, Exchange, SQL and Oracle environments.

When disaster strikes, SM provides protection against server or storage failures with onsite data and server redundancy, getting customers up and running in minutes with minimal or no loss of data and productivity. This enables customers to locate their target server as far away as they would like to ensure maximum protection against outages or disasters. Storage Mirroring is server, storage and network independent so it will work with today's applications as well as best-of-breed hardware and software purchased in the future.

“SM has worked very well in our environment for data replication. It’s done everything we asked of it, and is a critical part of our business continuity plan.”

Rick Onggo
Team Leader, Network Server Infrastructure
BMO Capital Markets New York

The Bottom Line for BMO Capital Markets New York

BMO Capital Markets New York has seen improved productivity, a reduction in costs related to off-site tape management, and a reduction in IT support costs due to the implementation.

The greatest benefit will come from the speed it takes to restore data in the event of a disaster. IT staff will not have to engage in an off-site tape retrieval exercise. In the event of a disaster, there is no way to know how long it will take for an off-site tape vendor to respond to a tape-retrieval request. Thanks to SM, the data is readily available on the New Jersey servers at the point of a disaster; it only takes minimal effort for the IT staff to make the data available to end users. Because there is no need to retrieve tapes from an off-site facility, there is a cost savings in not having to retrieve tapes and in IT labor in not having to go through the time-consuming process of restoring tapes.

SM uses continuous, asynchronous, byte-level replication, and captures changes as they occur. It also copies only changed bytes, which reduces network use, enables quicker replication and reduces latency.

Its e-mail notification feature offers considerable benefits. The management console can send events to any e-mail address, which eliminates the need to have the management console open and continuously monitoring events. In addition to sending email, it can also send messages to a pager or cell phone. Notification can be configured for each server, source and target, allowing different users to receive events for each different server. Users can also choose the level of events they would like to be informed: informational, warning and/or errors.

SM offers unlimited distance replication, so that replication is possible to a disaster recovery site far away from product servers, over standard IP networks, for maximum protection against data loss from failures and other disasters. It integrates with existing backup solutions, and can replicate data to perform remote backups and snapshots at any time without impacting production servers. It works over standard network protocols, and replicates over any existing IP network — LAN, WAN — for deployment without additional infrastructure costs.

In addition, improved system resource management provides high levels of data protection by reducing disconnects due to high rates of data change in data and subsequently the need to re-mirror.



About BMO Capital Markets

BMO Capital Markets, the investment and corporate banking practice of BMO Financial Group, is an integrated full-service investment bank, capitalizing on industry specialties and distinctive capabilities. It offers a complete range of services including capital raising, M&A, treasury and market risk management, debt and equity research, institutional sales and trading, and securitization.

About Hewlett-Packard Company, StorageWorks Division

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