

High availability with fast backup and recovery for Microsoft Exchange data



IBM System Storage N series with SnapManager for Microsoft Exchange



SnapManager in a Fibre Channel/iSCSI environment

The challenge: Provide for the high availability of Exchange data while reducing costs

Microsoft Exchange has become a mission-critical application. Studies show that a majority of business-critical information resides in message stores and that the typical Exchange user spends a significant part of the workday in the Exchange environment. IT administrators are challenged to meet stringent Exchange availability service-level agreements (SLAs) while managing a proliferation of Exchange servers and identifying ways to reduce overall administration and management costs.

The solution: IBM System Storage N series with SnapManager for Microsoft Exchange

SnapManager® software for Microsoft Exchange is a comprehensive data management solution designed to help you streamline storage management while simplifying configuration, backup, and restore operations for Exchange

Highlights

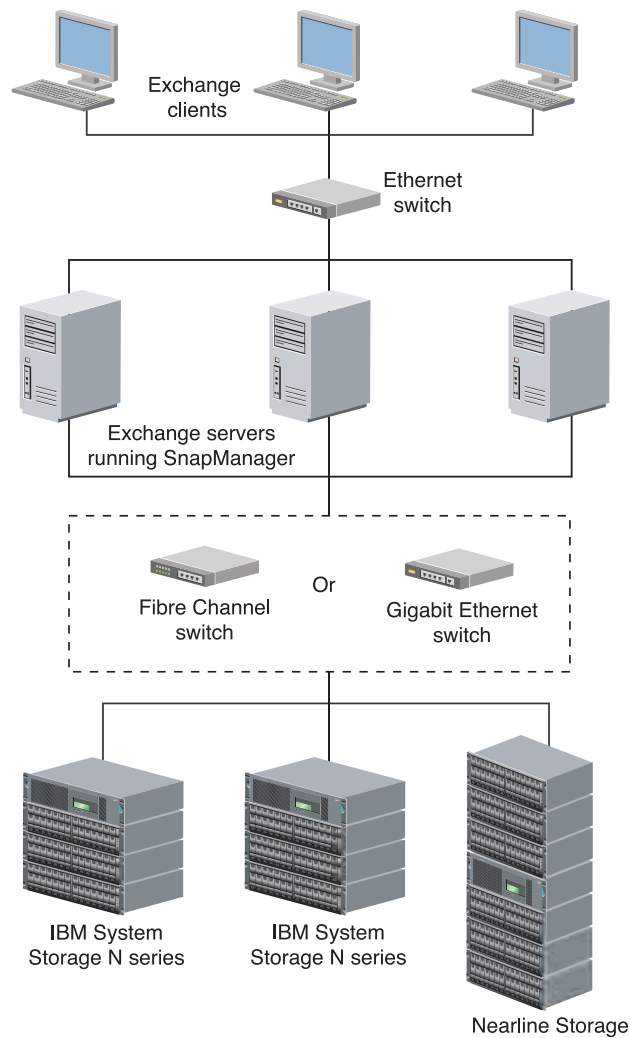
- **Near-instantaneous hot backups and rapid restores—**
Designed to help improve backup and restore times
- **Storage administration task automation with wizards—**
Supports streamlining management and automating common tasks to enable administrators to spend less time on maintenance and more time on value-added tasks
- **On-the-fly scalability—**
Designed to allow you to add storage capacity and expand volumes while avoiding taking the Microsoft® Exchange server or the System Storage™ N series storage system offline

databases. Deployed in combination with N series storage systems, SnapManager software is designed to provide near-instantaneous hot backups and rapid restores to deliver a robust combination of availability, scalability, performance, and reliability for Exchange environments.

Helps improve exchange availability with near-instantaneous backup and recovery

SnapManager software supports your efforts to simplify Exchange data protection by automating management processes to help you achieve hands-off data management. SnapManager is designed to allow you to schedule and automate Exchange database backups, use policy-based backup retention management, and simplify the migration of existing databases to N series storage systems.

SnapManager software is also designed to offer high availability, with features that allow you to expand Exchange databases online. It supports tight integration with Microsoft Cluster Server (MSCS) and Multi Path I/O (MPIO). It also integrates with the N series Clustered Failover option and SnapMirror software to help simplify disaster recovery implementation.



In addition, SnapManager software has built-in capabilities designed to provide for non-disruptive, automated backup verification. There are three user-configurable verification modes: auto-verification, delayed verification, and no verification. You may also offload verification of backup to other non-production hosts.

Helps reduce planned downtime with on-the-fly scalability

N series storage systems with SnapManager is designed to allow you to easily add storage and expand volumes without taking Exchange or N series storage systems offline. This can help you keep pace with your company's growing storage needs.

Helps reduce the complexity of Exchange storage

SnapManager software is designed to provide consistent online backup of Exchange databases, performing full online backups that require only incremental storage space. You may store up to 255 online copies of Exchange database backups.

SnapManager software also supports standards-based integration with tape backup products. It is tightly integrated with Microsoft Exchange using Microsoft standard interfaces. In the Windows® 2003 environment, SnapManager utilizes the Microsoft VSS Infrastructure, and in the Windows 2000 environment, it integrates with the Exchange Backup APIs.

SnapManager features are designed to help you rapidly recover Exchange databases. You can choose the point in

time you want to recover to, up to the minute. You can try different points of recovery within a single restore operation. Depending on the nature of your restore requirement, you can also choose from a wide range of restore options: full Exchange Server content recovery, individual Exchange storage group recovery, individual Exchange database recovery, and virtual disk recovery. Even individual mailbox recovery may be performed with the Single Mailbox Recovery software add-on to SnapManager software.

SnapManager features allow you to easily restore Exchange databases to any server of choice. This can help your restoration efforts at the time of disaster recovery. It also facilitates your testing of the snapshot restore procedure before an actual need occurs.

Helps improve TCO

N series with SnapManager software is designed to help you achieve a low total cost of ownership by improving Exchange availability and simplifying management. In addition, the ability to add disks while avoiding downtime can help further optimize storage utilization. Streamlined storage management features support your efforts to reduce administrative time and expense.

Finally, the ability to support both Ethernet and Fibre Channel environments can help you leverage your current network investment while deploying a long-term, highly scalable storage solution.

System Requirements

SnapManager for Microsoft Exchange requires:

- *SnapDrive™ software*
- *SnapRestore® software*
- *FCP or iSCSI protocol*
- *Microsoft Windows 2000 or 2003 Server*
- *Microsoft Exchange Server 2000, 2003 or 2007*

For more information

Contact your IBM representative or IBM Business Partner or visit:

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