



NetApp®

Microsoft Partner

- Gold Management and Virtualization
- Gold Data Platform
- Gold Application Development
- Silver Server Platform
- Silver Messaging
- Silver Collaboration and Content

Solution Brief

NetApp SnapManager for Microsoft Exchange Server

Increase availability and speed backup and recovery for Microsoft Exchange Server data



KEY BENEFITS

Optimize Business Continuity and Disaster Recovery
Perform storage maintenance, hardware lifecycle operations, and software upgrades without interrupting your business. Recover any size Exchange database in minutes versus hours or days. Add storage capacity and expand volumes without taking systems offline.

Reduce Operational and Capital Expenditures
Leverage our centralized data management capabilities to simplify and optimize Exchange data storage, according to business requirements. Streamline management and automate common tasks.

Enhance Performance
Speed data protection to minimize downtime and optimize Exchange DB performance, maximizing revenue-generating transactions.

Securely Recover Single Mailboxes Easily
Securely recover and restore individual mailboxes, e-mail messages or attachments, calendar items, deleted items, drafts, or contacts in minutes, and without disruption.

The Challenge Simplify Microsoft Exchange Server data management

Microsoft Exchange Server is a mission-critical application requiring an agile infrastructure to meet the growing data demands of many organizations. Studies show that a majority of business-critical information resides in message stores and that the typical Exchange end user spends a significant part of the workday in the Exchange environment. As the amount of Exchange use and data grows, IT administrators face numerous challenges that include:

- Meeting stringent Exchange availability service-level agreements (SLAs)
- Providing an efficient, reliable, and scalable storage infrastructure to support ever-expanding e-mail volume
- Reducing overall administration and management costs

You might also be contending with the challenge of managing multiple messaging platforms of varying vintages across the enterprise,

perhaps as the result of a merger or an acquisition. This presents an opportunity to consolidate and standardize your enterprise messaging environment. If you are migrating to Microsoft® Exchange Server 2010 or 2013, you'll want to minimize the impact on users during the transition.

Complying with government and industry regulations is another important challenge that many companies face today. You need a secure yet economical archival solution to enforce retention requirements so that your data remains complete, accurate, and accessible when you need it.

To address all of these challenges, you need an approach that focuses on storing and managing your Exchange data more efficiently and economically while increasing the availability of your enterprise messaging environment to users across your company. You also need a flexible enterprise messaging infrastructure that can readily scale to keep pace with the evolving needs of your business.

“We also make heavy use of NetApp SnapManager for Exchange with Single Mailbox Recovery software. It’s the best backup solution I’ve seen for Exchange. I can restore an entire database or a single mailbox in minutes. Prior to implementing this solution, we needed three weeks to restore our Exchange environment after a complete failure event.”

Jason Kennedy

Technology Manager, Touro Infirmary

The Solution

Deploy NetApp SnapManager for Microsoft Exchange Server

You can streamline data management and simplify configuration, backup, and restore operations for Exchange databases by using NetApp® SnapManager® for Microsoft Exchange. When deployed in combination with a NetApp Unified Storage Architecture, SnapManager software enables you to perform rapid backups and restores, resulting in an industry-leading combination of availability, scalability, performance, and reliability for Exchange environments. Because SnapManager for Exchange is integrated with NetApp SnapVault®, you can use it to manage backup and replication processes from a central console. SnapManager is also tightly integrated with Microsoft Exchange Server and uses Microsoft standard interfaces as well as the Microsoft VSS infrastructure to further simplify data management processes.

SnapManager for Exchange can be used to manage data and storage systems in physical and virtualized infrastructure environments, including VMware vSphere® and Microsoft Windows Server® and Hyper-V® as well

as private cloud implementations for integrated management, automation, and self-provisioning capability.

Microsoft Exchange availability

SnapManager software helps you simplify Exchange Server data protection by automating processes to provide hands-off, worry-free data management. You can schedule and automate Exchange database backups, use policy-based backup retention management, and simplify the migration of existing databases to NetApp storage systems. You also get built-in high-availability features that enable you to seamlessly scale Exchange databases online. Tight integration with Microsoft Failover Cluster, Microsoft Multipath I/O (MPIO), the NetApp active-active controller configuration option, and NetApp SnapMirror® software helps simplify and speed disaster recovery implementation with a mouse click. In addition, you can enjoy built-in capabilities for nondisruptive, automated, and concurrent backup verifications with three user-configurable verification modes:

- Autoverification
- Delayed verification
- No verification

You also have the option to offload verification of backup to other nonproduction hosts.

Minimize planned downtime

With NetApp storage systems and SnapManager for Exchange, you can seamlessly scale to easily add storage and expand volumes without taking Exchange Server or NetApp storage systems offline. SnapManager support for clustered Data ONTAP® software enables nondisruptive operations during your infrastructure maintenance and upgrades with seamless cluster failover capabilities in the storage subsystem. This enables you to keep pace with your company’s growing storage needs without disrupting Exchange Server availability.

With the NetApp clustered Data ONTAP storage operating system, you have the ability to support multi-tenancy environments, where a storage cluster can be securely partitioned to isolate individual tenants—for instance, in a service provider environment—or individual applications, workgroups, business units, and so on. In addition, clustered Data ONTAP also provides storage QoS workload management

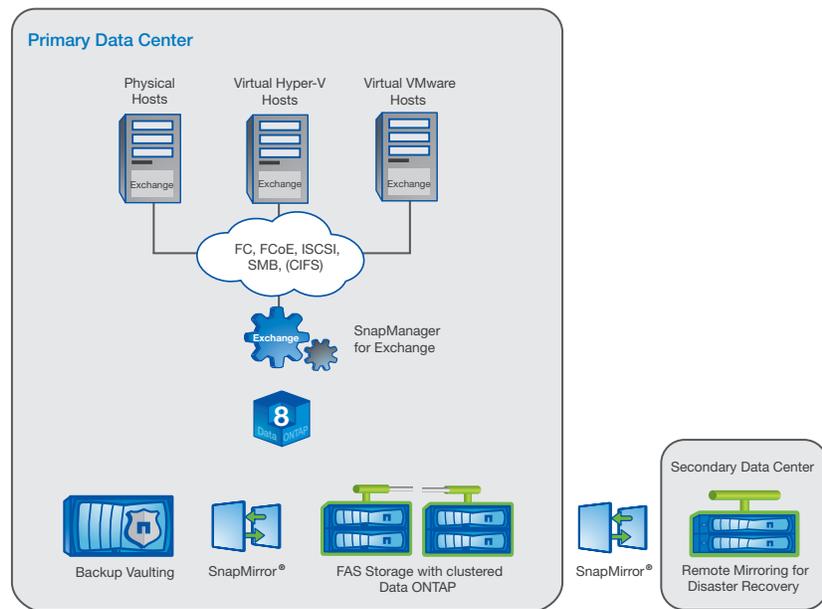


Figure 1) SnapManager in a Fibre Channel or iSCSI environment.

that allows you to reactively or proactively control the resources that can be consumed by each Exchange Server workload. The combination of multi-tenancy and QoS makes sure that Exchange Server performance is not affected by other application workloads, resulting in improved performance consistency and increased customer satisfaction.

Protect more data

With SnapManager for Exchange, you can perform full, consistent online backups of your Exchange databases that require only incremental storage space, so you can store up to 255 online copies of Exchange database backups per volume. SnapManager also offers standards-based (NDMP) integration with tape backup products.

SnapManager features “gapless backup,” which enables up-to-the-minute restore capability for database availability group (DAG) backups created from any node in the DAG. This overcomes the challenge of Exchange Server 2010 and 2013 truncating logs across all DAG nodes, because the Exchange administrator

can select which nodes retain the up-to-the-minute capability. In addition, SnapManager enables the log chain to be preserved to extend granular up-to-the-minute recoverability to all nodes in the DAG across all backups.

Reduce recovery time

Recovery of Exchange databases is quick and easy with SnapManager. You choose the specific point to which you want to recover. In a single restore operation, you can select different points of recovery, and, depending on the nature of your restore requirement, you can also choose from a wide range of restore options, including:

- Full Exchange Server content recovery, including Exchange Server 2010 and 2013 DAG as a whole
- Individual Exchange Server 2003/2007 storage group recovery
- Individual Exchange Server database recovery
- LUN recovery

With SnapManager, it’s easy to restore Exchange databases to any server of your choice. This helps to speed disaster recovery and facilitates testing of the

Snapshot™ restore procedure before an actual need occurs. SnapManager for Exchange is integrated with NetApp Single Mailbox Recovery software so that you can recover and restore an individual mailbox, e-mail messages or attachments, calendar items, deleted items, drafts, or contacts quickly and securely by using the “point-and-click” features of the SnapManager management console.

Reduce DAG reseeding time

One of biggest administrative challenges in a DAG environment is the reseeding of passive copies. Reseeding can happen whenever a restore of the active database copy is performed or the replication to one or more passive copies breaks—that is, when syncing data between the active and passive copies. Reseeding is a time-consuming and expensive process due to the amount of network bandwidth required. With SnapManager for Exchange, this issue is addressed in its entirety to make reseeding the DAG many times faster than previously possible.

“NetApp backup and recovery capabilities have reduced Microsoft Exchange disaster backup windows to minutes, helping ensure smooth backup processes that won’t disrupt our e-mail servers or operations.”

Scott Milne

Chief Information Officer, Clayton Companies

Improve TCO

You get low total cost of ownership when you deploy SnapManager for Exchange on NetApp storage systems. Our streamlined storage and data management features can greatly reduce your administrative time and expense. You can also reduce costs by optimizing your storage utilization through server consolidation and on-the-fly scalability. And because our unified architecture supports iSCSI, Fibre Channel, FCoE, and SMB (CIFS) environments, you can leverage your current network investment while deploying a long-term, highly scalable, cost-efficient storage solution.

Partner for success

NetApp Professional Services for Microsoft Applications offers a wide range of services, including Exchange Server implementation on the NetApp storage platform, disaster recovery, and high availability, as well as custom

services to help customers with their Exchange Server deployment. To meet your interoperability and performance needs, we collaborate closely with Microsoft on key product integration efforts, including performance testing, product validation, and joint development. In fact, NetApp was recently recognized as the Microsoft Partner of the Year for server solutions. NetApp Global Support and our extensive partner network can provide expert help to assist you in planning and implementing an efficient and reliable storage and data management solution for your Exchange Server environment.

You can find out more about the NetApp agile storage infrastructure at your local Microsoft Technology Center (MTC). There, you will see firsthand how the combination of Microsoft and our hardware, software, and services provides a resilient foundation for even the most

demanding enterprise messaging environment. Contact your NetApp sales representative or your NetApp reseller to arrange a visit to your local MTC. For more information about NetApp Microsoft solutions, go to www.netapp.com/microsoftsolutions.

About NetApp

NetApp creates innovative storage and data management solutions that deliver outstanding cost efficiency and accelerate business breakthroughs. Discover our passion for helping companies around the world go further, faster at www.netapp.com.

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