



NetApp™
Go further, faster



Software

NetApp S Family Software

Flexible software options let you build affordable solutions both today and in the future

KEY FEATURES

Standard on all S family systems:

Data ONTAP® S Family Edition

- FlexVol®
- RAID-DP®
- Snapshot™

CIFS

iSCSI

SnapDrive for Windows

(S Family Edition)

SnapRestore®

S Family Manager

Optional:

NFS

SnapManager® for Exchange

(S Family Edition)

SnapManager for SQL Server™

(S Family Edition)

SnapMirror®

SnapVault®

NetApp's unique approach to data storage enables our customers to do more with less, regardless of their size, market, or IT budget. One core software platform runs through all of our storage systems and supports simultaneous solutions for file servers and SANs, with intelligent underlying features and optional additional licenses. Built from the ground up, it's the foundation that supports both our success and yours.

STANDARD SOFTWARE

The Data ONTAP operating system is our proprietary software environment that runs on all NetApp® storage systems regardless of price or capacity. Build your solutions with confidence using the same foundation as some of the largest installations in the world. Features are licensed in Data ONTAP and can be enabled at any time without additional software installation. An emphasis on usability and affordability make the S family ideal for midsized enterprises and multiunit remote office installations. Data ONTAP includes many industry-leading features; some of the most valuable are detailed here.

- FlexVol, also known as thin provisioning, is a feature that lets a NetApp system pool storage and automatically grow or shrink that storage based on the amount of actual data stored in it. This reduces the time you spend managing capacity requirements, might lower the amount of capacity you require, and maximizes system efficiency.
- RAID-DP (NetApp's implementation of RAID 6) handles two concurrent disk drive failures without any performance penalty. All NetApp systems can exponentially increase your data protection level for only the cost of one additional disk drive.
- Snapshot software creates point-in-time copies of a complete file system or LUN that consume a fraction of the space of a traditional backup and take milliseconds to create. Struggling with backup windows? Wish your users could recover their own files? Searching for an efficient database backup method that doesn't sacrifice restore time? Want to do a local backup, replicate it to an off-site location, and then migrate it off to tape? Snapshot copies revolutionize the way NetApp customers address backup and recovery. The S550 supports 255 Snapshot copies per volume (over 16,000 per system).



The following Data ONTAP data transport protocols and software licenses are included with every S family product:

- CIFS is for Windows® file sharing. NetApp licenses the Microsoft® Common Internet File System technology to assure compatibility in Active Directory environments and make integration seamless for new users.
- iSCSI is a SAN protocol allowing S family products to host databases such as Exchange and SQL Server or virtual servers from companies such as VMware. NetApp has long been a world leader in iSCSI shipments and pioneered the adoption of Ethernet-based SANs.
- SnapRestore enables data recovery at the volume level. Vastly powerful, it can restore a Snapshot copy of a complete multiterabyte file system or data volume in seconds. Use it for disaster recovery, in test and development environments, and as a part of a layered data protection strategy with other NetApp products.
- SnapDrive for Windows makes NetApp LUNs appear as local disks to a Windows server. Server administrators can expand LUNs online and ensure error-free integration with tools like SnapManagers and SnapMirror.

- S Family Manager is a management tool based on Windows that allows an S family product to be configured and maintained. Typical storage tasks are handled with a graphical user interface immediately familiar to any Windows user. S Family Manager is the only supported user interface for S family products (other NetApp command line tools or tools based on Java™ are not supported).

OPTIONAL SOFTWARE

NFS is used for UNIX® and Linux® file sharing. NetApp has contributed significantly to the stability and performance of the Network File System protocol and has long championed its use in database environments. Numerous vendors, including Oracle and VMware, support NetApp installations over NFS.

SnapMirror software automatically synchronizes data between NetApp systems in multiple locations. Ideal for disaster recovery or data distribution, it handles NAS and/or SAN data replication at the block level for maximum efficiency and performance. SnapMirror on the S family operates only in an asynchronous mode.

SnapVault software enables disk-based backup and recovery between NetApp systems or sites. Centralize management and standardize data collection from multiple remote offices with this block-level incremental backup solution. The SnapVault primary license is available for the S family and backs up to a target FAS system with a SnapVault secondary license.

SnapManager for Exchange (S Family Edition) software integrates our Snapshot technology directly into the Microsoft Exchange Server application, for consistent backup and restore in seconds, with up to 255 copies, in a fraction of the space and time taken up by tape backup. Restore complete databases in seconds and combine with SnapMirror for off-site disaster recovery.

SnapManager for SQL Server (S Family Edition) software integrates our Snapshot technology directly into the Microsoft SQL Server application, for consistent backup and restore in seconds, with up to 255 copies, in a fraction of the space and time taken up by tape backup. Restore complete databases in seconds and combine with SnapMirror for off-site disaster recovery.

COMPREHENSIVE SERVICES

NetApp Global Services provides comprehensive support, installation, and services. ConsultingEdge provides a complete, flexible set of consulting services to help you plan, implement, and optimize storage solutions.

WORLD-CLASS SUPPORT

NetApp technical support centers are Service Capability and Performance (SCP) certified, and our Global Support has received multiple STAR Awards by the Service and Support Professionals Association (SSPA) and has been inducted into the prestigious Hall of Fame.

CUSTOMER EXAMPLES

Which software choice is right for you? Listed here are some real-life customer challenges, NetApp configurations, and the results that our customers achieved. For more information, read the complete story online.

CUSTOMER	CHALLENGE	NETAPP COMPONENTS	RESULTS
Mellano & Co., a flower grower and wholesaler	<ul style="list-style-type: none">- Virtualize 60 desktops with VMware®- Adopt disk-based backup- Leverage existing storage for additional virtualization projects	<ul style="list-style-type: none">CIFSiSCSISnapDrive for WindowsSnapshot technologySnapRestore	<ul style="list-style-type: none">- Consolidated storage and improved performance- Eliminated terminal server software licenses
Ahearn-Jasco & Co., an accounting firm	<ul style="list-style-type: none">- Replicate Windows file shares off-site- Store VMware virtual machines- Replicate both NAS and SAN data off-site for disaster recovery	<ul style="list-style-type: none">CIFSiSCSISnapDrive for WindowsSnapshot technologySnapRestoreSnapMirror	<ul style="list-style-type: none">- Eliminated five servers- Reduced VMware backup consumption by 83%- Implemented off-site disaster recovery for the first time
Intense Lighting, a manufacturing firm	<ul style="list-style-type: none">- Consolidate Windows file servers- Backup and recovery for Microsoft Great Plains- Back up and recover Exchange data	<ul style="list-style-type: none">CIFSiSCSISnapDrive for WindowsSnapshot technologySnapRestoreSnapManager for ExchangeSnapManager for SQL Server	<ul style="list-style-type: none">- Eliminated additional headcount requirement- Cut backup window from 14 hours to eight minutes- Slashed backup management time
Teavana, a retail store chain	<ul style="list-style-type: none">- Manage 800% growth- Increase backup frequency from weekly to daily- Build a disk-based backup solution	<ul style="list-style-type: none">CIFSiSCSISnapDrive for WindowsSnapshot technologySnapRestoreSnapMirror	<ul style="list-style-type: none">- Automated off-site disaster recovery for both NAS and SAN data- Backups completed daily- Windows file sharing performance improved by 20%

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

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