NetApp™
Go further, faster

Systems

NetApp FAS2000 Series

Take control of your fast-growing data and maximize your shrinking budgets with an affordable, and easy-to-use storage system from NetApp

THE CHALLENGE

Explosive data growth
Whether you are responsible for a remote or branch office, a department, or a midsized enterprise, you are challenged more than ever before by shrinking budgets, overextended staff, and the need to do more with less. These challenges, coupled with the increasing complexity of your Windows® environment, can quickly eat into your budget and affect your productivity.

THE SOLUTION

Build for now and for the future
As your company grows, so does your need for efficient data storage. At NetApp, we think that you should install a data infrastructure only once and then expand as your needs grow. Our common end-to-end Unified Storage architecture makes it possible for you to expand capacity and add functionality to our systems quickly and easily. NetApp® FAS2000 series systems deliver the right blend of price, performance, and scalability.

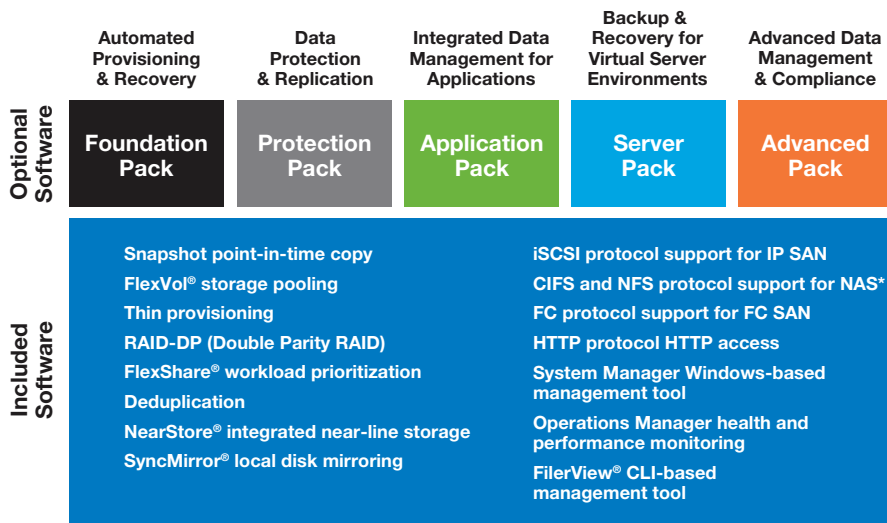Our FAS2000 series entry systems offer you excellent value:

- Integrated block- and file-level data access over Fibre Channel and Ethernet networks delivers capacity where you need it, when you need it, regardless of user or application

- Primary and/or secondary storage
- Intelligent management software
- Data-protection capabilities of high-end systems with NetApp ease of use
- Internal SAS (serial-attached SCSI) or SATA drives
- Built-in remote management

INCREASE EFFICIENCY

NetApp FAS2000 systems provide a powerful range of technologies and features based on Data ONTAP® to help increase storage utilization and the efficiency of your system and storage administrators.

- NetApp Snapshot™ provides point-in-time images, enabling you to perform near-instantaneous file-level or full data set recovery, and its minimal performance overhead makes it uniquely suited for protecting your production data.
- Thin provisioning helps avoid the costly over provisioning and time-consuming reconfiguration that is typical with other storage solutions.
- Deduplication enables you to store only one copy of each unique data object, substantially reducing capacity requirements.
- Highly efficient RAID-DP® protects against multiple failures in a RAID group.

	Automated Provisioning & Recovery	Data Protection & Replication	Integrated Data Management for Applications	Backup & Recovery for Virtual Server Environments	Advanced Data Management & Compliance
Optional Software	Foundation Pack	Protection Pack	Application Pack	Server Pack	Advanced Pack

Included Software

Snapshot point-in-time copy

FlexVol® storage pooling

Thin provisioning

RAID-DP (Double Parity RAID)

FlexShare® workload prioritization

Deduplication

NearStore® integrated near-line storage

SyncMirror® local disk mirroring

iSCSI protocol support for IP SAN

CIFS and NFS protocol support for NAS*

FC protocol support for FC SAN

HTTP protocol HTTP access

System Manager Windows-based management tool

Operations Manager health and performance monitoring

FilerView® CLI-based management tool

* Included on preconfigured FAS2020 systems.

Figure 1) Included software and optional software packs.

ADAPT QUICKLY TO CHANGE

To help your data storage infrastructure adapt as your business grows, we offer:

- A new level of performance to support your most demanding applications
- New integrated SAS connectivity that enables up to 136TB of capacity as needed to support all your workloads

With the breadth of included and optional software you can:

- Dynamically expand or contract volumes or LUNs with a single command
- Upgrade from entry-level FAS2000 systems to midrange and high-end NetApp systems, using the same operating system, toolset, and software products
- Easily expand data management capabilities as your needs grow by using optional NetApp Software Packs,* which provide enterprise-proven capabilities for automated provisioning and restoration, simple efficient disaster recovery, automated application, and virtual machine-aware backup, recovery, and cloning

New simplified product structure enables flexibility to order preconfigured systems that include high-capacity drives at attractive prices; or customize your configuration by ordering configure-to-order systems that allow you to choose drive quantity, type, and capacity.

SIMPLE TO ACQUIRE, DEPLOY, AND MANAGE

You don't need to be a storage expert to acquire, deploy, and manage FAS2000 storage systems and to keep your NetApp storage infrastructure in line with business requirements.

With NetApp System Manager, you can:

- Rapidly deploy NetApp storage systems, typically within minutes after installation.
- Provision storage for SAN (iSCSI/FCP) and NAS (CIFS/NFS), for both physical and virtualized server environments.
- Simple, workflow-based wizards automate the most common device management tasks.
- Manage NetApp storage via your Windows Management Console, minimizing training and management costs.**

LOWER TCO

The FAS2000 is an economical storage system, and NetApp's unique data management capabilities help the FAS2000 support lower TCO than other systems in its class.

FAS2000 series storage systems offer you:

- Segment-leading efficiency that can cut storage cost by 50%
- Universal knowledge set for all products that can slash administrative overhead by up to 60%
- No needs for retraining as you expand capabilities or upgrade to larger systems.

According to an analysis by Oliver Wyman, with a NetApp solution you get lower acquisition costs, lower management costs, and lower system downtime costs.

Managing server and application sprawl on a shoestring budget is now a lot easier with the NetApp FAS2000 series.
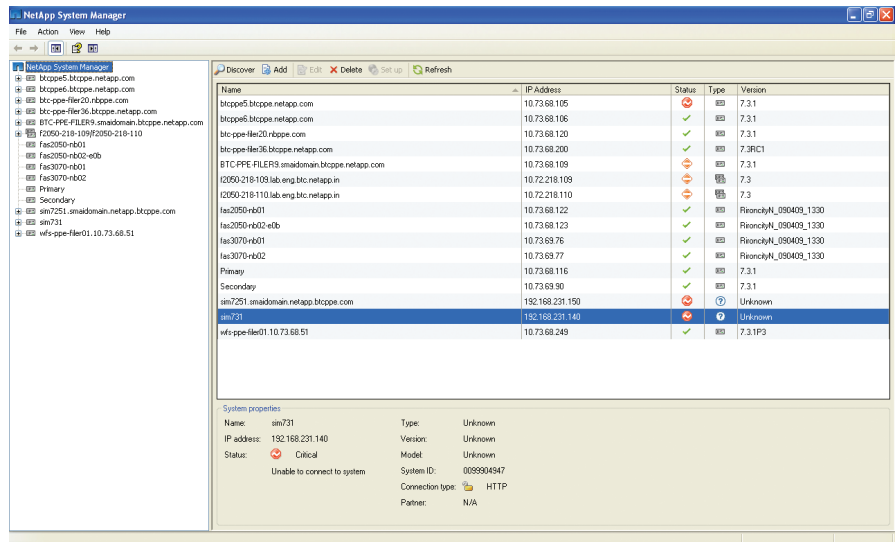
Figure 2) Simple, intuitive and easy to use NetApp System Manager Console.

CHOOSING THE RIGHT SYSTEM FOR YOUR NEEDS

All members of the FAS2000 family feature Data ONTAP and offer industry leading technology in an affordable, easy-to-use package. Each system provides segment-leading performance, efficiency, and value.

NetApp offers three systems in the FAS2000 family to help you find the perfect balance of price, performance, and features to best fit your needs.

FAS2020

Most affordable platform in family, ideal for value-oriented deployments

- For midsized enterprises, remote offices, and local storage that need low system acquisition costs
- Excellent for consolidating virtualized environments with one to three Windows applications and lighter file-serving workloads
- Offered in easy-to-order, preconfigured systems that include high-capacity drives at attractive prices

FAS2040

Ideal for higher performance or capacity needs

- For distributed or midsized enterprise sites that require more performance and higher capacity
- Ideal for consolidating virtual environments with multiple workloads and Windows applications
- Offered in flexible configure-to-order systems that allow you to choose drive quantity, type, and capacity.

FAS2050
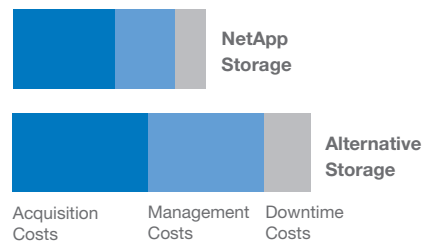
Ideal for specialized storage deployments

- Offers the highest internal drive count and advanced I/O connectivity (10GbE, FCoE, additional FC/GbE ports)
- Easily scalable and able to handle multiple workloads and Windows applications
- Offered in easy-to-order, preconfigured systems that include high-capacity drives

* FAS2000 Software Packs provide a simple way to add licenses for powerful data management software. For details, see the FAS2000 Software Packs Datasheet.

** See the System Manager Datasheet for details.

FAS2000 SERIES OVERVIEW	FAS2020	FAS2040	FAS2050
Form factor	2U/12 Drive	2U/12 Drive	4U/20 Drive
Dual controllers	Yes	Yes	Yes
Maximum raw capacity	68TB	136TB	104TB
Maximum disk drives	68	136	104
Maximum Ethernet ports	4	8	8*
Maximum Fibre Channel ports	4	4	8*
Onboard SAS port	No	2	4*
10Gbe support	No	No	Yes*
FCoE support	No	No	Yes*
Multipath Expansion	No	No	Yes*
Remote management	Yes	Yes	Yes
Storage protocols	FCP, iSCSI, NFS, CIFS	FCP, iSCSI, NFS, CIFS	FCP, iSCSI, NFS, CIFS

All specifications are for dual-controller, active-active configurations
* Combines integrated ports with I/O expansion cards

Figure 3) Proven lower TCO.
Studies by Oliver Wyman show that your total cost of ownership for NetApp storage systems is substantially lower than the cost of storage from other major vendors. Read the full reports at www.netapp.com/tco.

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 NetApp.com

www.netapp.com