



NetApp™
Go further, faster

Manageability Software

NetApp VFM (Virtual File Manager)

NetApp® VFM® (Virtual File Manager™) helps solve your most challenging file management issues, including file migration, archival, and business continuity



KEY FEATURES

Pain-Free Consolidation and Migration

Consolidate file storage to NetApp and create a single view of files across your LAN or WAN. Move files from high-performance to cheaper storage without disrupting users.

Simplified Management

Manage your distributed files across heterogeneous storage with a unified logical view called a “global namespace” and create automated migration and protection policies to provide simplified and consistent access to files, even when you change the underlying storage infrastructure or experience a failure.

Optimized Business Continuity/ Disaster Recovery

Provide location-independent and uninterrupted user access to files, even during a disaster. Gain peace of mind with the knowledge that you can automatically fail over thousands of users in one step, saving administrative workload and shortening recovery windows.

THE CHALLENGES OF MANAGING DISTRIBUTED FILE STORAGE IN ENTERPRISE ENVIRONMENTS

Is your company experiencing explosive growth in storage capacity requirements? As presentations, spreadsheets, and other user- and application-generated files accumulate, are your challenges as a storage administrator also growing proportionally? Is more of your time taken up with:

- Assessing and consolidating file storage
- Migrating old files from high-performance primary storage to cheaper secondary storage
- Managing multivendor NAS storage
- Reporting on file types, date last accessed, file size, and other criteria
- Replicating data in preparation for disaster recovery

Moreover, do you have to accomplish all of these tasks without affecting users or incurring downtime? Do your users currently have to find files stored on multiple machines by using arcane file shares and file-server names? If you find yourself nodding in response to any of these questions, then our NetApp VFM might be the solution for you.

NETAPP VFM SOFTWARE: A COMPREHENSIVE SOLUTION

Our VFM software is a comprehensive solution to your unstructured data management challenges. VFM enables simplified file migration and consolidation based on predefined policies, nondisruptive file management functionality, and automated failover and disaster recovery. It provides all of these benefits by using a global namespace, which is a unified logical view across an entire storage organization that simplifies life for you and your users.

For you, the global namespace unifies and virtualizes heterogeneous files stored throughout your enterprise and pools multiple file systems into a single, logical view. This empowers you to consolidate files, moving them between storage platforms easily and painlessly. It also means that you can expand and reconfigure file storage nondisruptively. Finally, you can set up disaster recovery policies that let you cost-effectively and seamlessly fail over across geographically distributed sites, preserving business continuity.

For your users, the global namespace decouples file access from file storage locations. Just as they can access Web sites without knowing the exact locations or IP addresses, they can also access distributed files without knowing their file server locations.

They will no longer contend with multiple drive letter mappings or bombard you with frantic phone calls looking for their files.

PAIN-FREE CONSOLIDATION AND MIGRATION

Say goodbye to migration headaches

Before VFM, your consolidation process might have started with intense planning and communication cycles among multiple IT staff members and users. You might have had to create groups and shares and then migrate the files, disrupting users while you did it. Afterward, you might have updated scripts and applications, informed users of where their files were now located, asked them to reboot, and then waited for the inevitable avalanche of support calls about broken links. All told, you probably expended a great deal of administrative time and effort to perform these tasks.

After deploying VFM, your life gets much simpler. Our policy engine significantly reduces your administrative tasks by providing a high level of automation. It provides a single view into your entire storage, eliminating the need for your team to master each vendor's management interface. And the VFM global namespace shields users from physical changes during migrations and maximizes data access. Bottom line: enhanced productivity for your users, a streamlined process for you.

Say no problem to archival and compliance requirements

To enable tiered storage architectures and the movement of older files from primary onto secondary storage, you might have used yet another third-party archival program or cobbled together scripts to define migration criteria and perform the actual movement. And, of course, moving the actual files might have caused the same headaches that we discussed earlier.

With VFM, you can align archival policies and storage investments with the business value of your information and transparently move your lower-priority folders to tiered storage based on such criteria as age, access patterns, file type, and file size. Bottom line: reduced archival and compliance timelines and lowered costs with a single, intuitive interface.

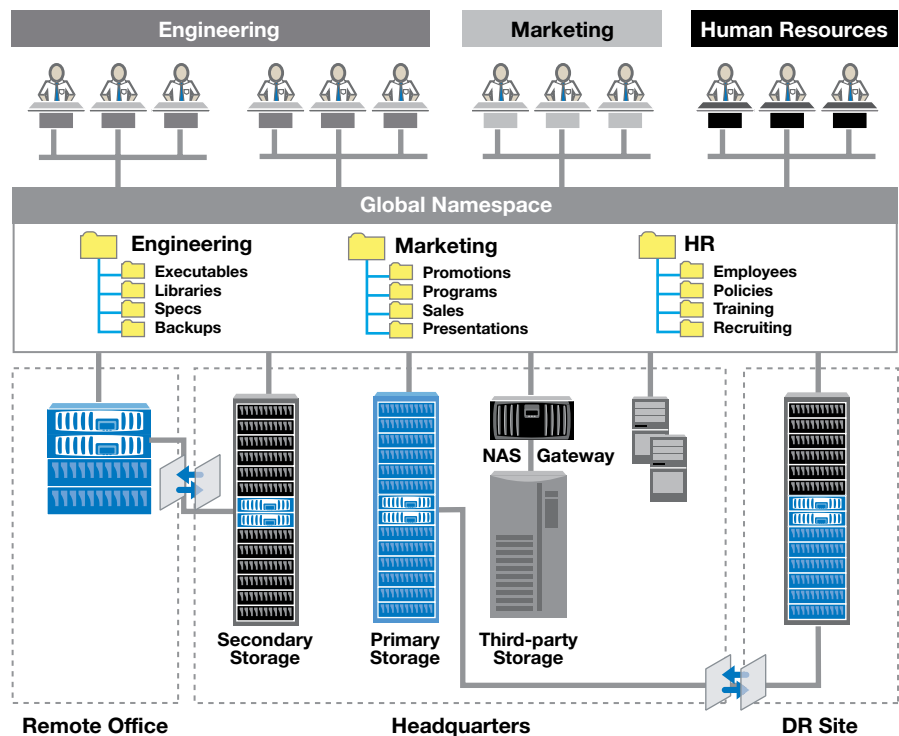
SIMPLIFIED ADMINISTRATION AND MANAGEMENT

Say hello to automation and efficiency

If you have multivendor file storage, then you also have multiple management interfaces for files. Now multiply the number of management interfaces by the number of people in your IT department who need training on each of those interfaces, and you end up with a vast matrix of possibilities for human error.

With VFM, you get a unified view of your pool of storage devices across the organization. This single view allows you to centralize management of files such as home directories by having one logical view of all home directories and shared files spread across NetApp storage and that of other vendors.

In addition to working within a single view, our robust policy engine enables you to automate many of your organization's consolidation processes. You can set up and test policies at any time, and once you've authorized those policies for production, you can schedule those policies to run after hours for minimum impact. By streamlining and automating processes for migration, archival, and failover, you reduce errors, reduce user downtime, and standardize processes across your enterprise. Bottom line: simplified management of heterogeneous storage and far fewer crashes or unplanned downtime due to manual human processes.



OPTIMIZED BUSINESS CONTINUITY AT A LOWER TOTAL COST OF OWNERSHIP

Say Eureka! about your business continuity planning capabilities

We think it's clear that business continuity planning has come to mean much more than just disaster recovery. In fact, continuity is a function of disaster recovery (how fast you are able to recover from a failure) and availability (how much uptime you maintain). So any business continuity planning must address both. VFM can help you facilitate disaster recovery and maximize availability, at a lower total cost of ownership (TCO).

Smooth disaster recovery

As you know, disaster recovery isn't just about replicating files; you also need to fail over users in a fast and seamless manner. This can be more difficult if you have geographically disparate, heterogeneous environments.

If your company has many remote office locations, each one of which has its own IT team, then you might not currently have a central backup location. Your company might be creating different replication scenarios for each branch office, or even maintaining a tape backup infrastructure at each branch.

By deploying VFM, you can implement a cost-effective disaster recovery solution that provides seamless failover across all sites while still managing the global process in a centralized way. Because you can have a single, logical view of data across multiple locations, and because of the tight VFM integration with our SnapMirror,[®] SnapLock,[®] and Snapshot[™] products, you can use the policies to replicate data to a central backup location, regardless of the size of the data, the distance between your locations, or the heterogeneity of your storage.

Uncompromised performance

The combination of the VFM namespace architecture services and the ability to streamline operations and automate intelligent processes reduces the amount of data sent over the network. This, in turn, improves data movement and increases performance across your overall IT infrastructure. With VFM, you can complete consolidation jobs faster, decrease file replication time, perform multiple simultaneous file transfers, and decrease bandwidth utilization. Bottom line: higher performance and shorter recovery windows lead to a reduced total cost of ownership.

WHEN TO USE VFM

You should use VFM when you want to:

- Consolidate servers or migrate direct-attached storage to NetApp storage systems without disrupting your users
- Create storage tiers based on the relative importance of enterprise data
- Simplify file access and server administration by eliminating multiple drive-letter mappings
- Centralize replication of files on geographically distributed servers to one or more locations
- Distribute files from data center to remote offices in a cascaded manner
- Instantly fail over clients accessing files on multiple NetApp storage systems and Windows[®] servers to one or more secondary devices

VFM EDITIONS

VFM comes in Enterprise Edition and Migration Edition.

Enterprise Edition

The Enterprise Edition is the comprehensive solution to the problem of managing files in multivendor storage architectures. Our global namespace capability, combined with

automated file management solutions such as migration and consolidation, archiving, and disaster recovery, helps you realize sustained operating advantages and lasting TCO benefits.

Migration Edition

The Migration Edition focuses solely on migration and contains a subset of the functionalities of the Enterprise Edition. It simplifies namespace management and helps you migrate data nondisruptively to NetApp storage. Once you've purchased the Migration Edition, you can easily upgrade to the Enterprise Edition.

YOUR VFM RETURN ON INVESTMENT

Whether you are performing one-to-one, many-to-one, or one-to-many migration, VFM can help you easily and quickly move large amounts of files between physical locations. You can also set up the hundreds of migration jobs that once required copious amounts of planning, execution, and management through a single, intuitive interface.

Where your storage network was once a patchwork of platform islands, you can

now build bridges between them and manage your multivendor storage as a single resource. VFM is vendor-agnostic and leverages technologies such as the inherent Microsoft® DFS capability to create a global namespace that centralizes management of user home directories.

All of this streamlining and simplifying has quantifiable benefits. VFM can help you drastically reduce:

- Consolidation time as compared to traditional methods
- Primary storage usage
- File replication times
- Network bandwidth utilization

Sound good? It gets better: VFM also comes with NetApp's world-class service and support infrastructure.

GET EXCEPTIONAL ENTERPRISE SERVICE AND SUPPORT

We deliver global enterprise-class services, support, and consulting that can help you plan, evaluate, and implement your Windows file storage strategy through every phase to maximize your return on investment as your business grows.

Feature	Migration Edition	Enterprise Edition
File Virtualization	•	•
Windows Migration	•	•
UNIX® Migration		•
Namespace Management		•
Remote Office Management		•
Business Continuity		•
Data Lifecycle Management		•
Policy Management		•
Data Reporting		•



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