Veritas Storage Foundation™ Basic

Heterogeneous online storage management for edge-tier workloads

Veritas Storage Foundation Basic is a free version of the industry-leading Storage Foundation solution designed for heterogeneous online storage management of edge-tier workloads with up to four file systems, four volumes, and two processor sockets per system. Storage Foundation Basic combines the industry-leading Veritas File System and Veritas Volume Manager products, along with advanced features that include centralized multihost management (when combined with the new Storage Foundation Management Server), online configuration and administration, Dynamic Multi-pathing, and easy-to-use data migration tools. Unlike point tools, Storage Foundation Basic is the only solution to address the administrative challenges of managing diverse workloads for edge-tier environments. Storage Foundation Basic delivers the same enterprise reliability, scalability, performance, and proven technology as Storage Foundation.

Storage Foundation Basic is available for free download at www.symantec.com/sfbasic or from your Symantec sales representative.

Highlights

- Centralized storage management—Manage multiple hosts, both Linux® and UNIX® based, from a central interface, improving operational efficiencies across a heterogeneous infrastructure.
- Increased storage utilization—Maximize storage capacity across heterogeneous operating systems and storage hardware.

- I/O path availability and performance—Efficiently spread I/O across multiple paths for maximum performance, load balancing, SAN booting, and path failure protection and fast failover.
- Seamless data migration—Migrate data across operating systems and diverse platforms with online tools for simple server migrations.
- Multi-vendor hardware infrastructure—Help reduce capital expenditures with broad support for heterogeneous operating systems and storage hardware.
- Enterprise reliability, scalability, and performance—
 Comprehensive online management feature set with a range of enterprise-class support options.

Centralized storage management

Combined with the Storage Foundation Management Server, organizations can centrally manage their application, server, and storage environments across server platforms from multiple vendors. This leads to faster application deployment times, higher service levels, reduced risk of human error, and comprehensive visibility throughout the environment.

Administrators can quickly and easily create new application, server, and storage environments to support a heterogeneous data center infrastructure. As applications are upgraded or migrated to new hardware, administrators will be able to centrally manage host-to-host migrations and do a premigration check to verify that the server and storage configurations are correctly set up before the migration begins. With Storage Foundation Management Server,

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administrators can identify and visualize potential problems with applications and storage resources by correlating health and status information across multiple applications, servers, and storage. This increased visibility enables rapid problem resolution that typically spans multiple organizational structures.

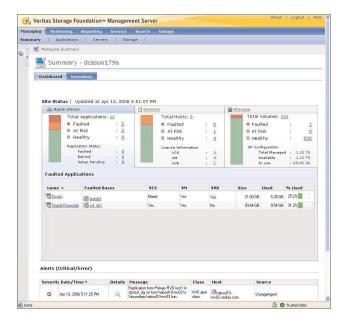


Figure 1. The Veritas Storage Foundation Management Server provides centralized visibility and management of storage and server resources.

Increased storage utilization

Storage Foundation Basic allows administrators to improve storage utilization and capacity management across heterogeneous operating systems and storage hardware. Storage volumes and file systems can be grown dynamically or capacity reclaimed and storage can be dynamically provisioned to new applications without any modifications by the end user. Daily and repetitive storage tasks can be automated and performed online, including RAID reconfiguration, defragmentation, file system resizing, and volume resizing.

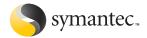
Storage Foundation Basic enables storage virtualization across edge-tier workloads, whether there are multiple volumes within a single server or volumes that span and are visible to multiple servers. Physical disks can be grouped into logical units (LUNs) and volumes are dynamically sized and resized to improve disk utilization and eliminate storage-related downtime. This improves storage utilization and sets the stage to move data seamlessly between different operating systems and storage arrays and spread I/O across multiple paths to improve performance.

I/O path availability and performance

With Dynamic Multi-pathing (DMP), storage I/O performance and availability are enhanced across heterogeneous server and storage infrastructures. DMP has intelligent algorithms to load-balance storage I/Os across multiple host bus adapters (HBAs) for faster throughput, and increases the application's availability by rerouting I/Os to an available data path in the event of a path failure. Additionally, multihost DMP management for firmware upgrades and path management will be centrally managed with the Storage Foundation Management Server feature. The improved load balancing and management capabilities enhance the administrator's productivity and reduces application downtime.

Seamless data migration

In addition to providing the same storage management solution for all operating systems, Storage Foundation Basic can actually make the same set of data accessible to all major operating systems. Administrators no longer need to use NFS or tape to move data between operating systems.



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With the Portable Data Containers feature, administrators can export data from one operating system and import it on another in minutes, without ever creating a copy of the data or moving the data. Storage Foundation Basic quickly and automatically converts the data for the new platform, whether it is UNIX or Linux.

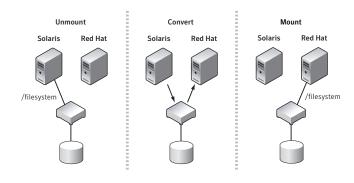


Figure 2. Export data from one operating system and import it on another in minutes, without creating a copy of the data or moving the data using Portable Data Containers.

Multi-vendor hardware infrastructure

Veritas Storage Foundation provides comprehensive platform support for a heterogeneous server and storage infrastructure with no hardware, database or application agenda. This provides enterprises with the freedom to choose industry-leading functionality across platforms without getting locked into proprietary solutions.

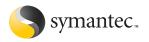
Enterprise reliability, scalability and performance

Unlike many freeware alternatives, Storage Foundation
Basic is an enterprise-class product with enterprise-class
support. Users can choose to use free self-service, online
support or select from a range of support subscriptions.
Additionally, as workloads evolve, Storage Foundation Basic
can be seamlessly upgraded with no interruption to Veritas
Storage Foundation Standard or Veritas Storage Foundation
Enterprise.

Veritas Storage Foundation Basic features

Feature	Benefit
Volume Manager and File System	The core of Storage Foundation is the industry-leading Veritas Volume Manager and Veritas File System software.
Management Server	Centralizes management across multiple server platforms to provide complete visibility to application, server, and storage resources.
Dynamic Multi-pathing (DMP)	Balances I/O across all available paths between the server and the storage array to improve performance and availability. With Dynamic Multi-pathing, common failures from I/O path, HBA, or switches can be avoided because administrators can spread I/O across all available paths.
Online administration	Limits the amount of time disks need to be offline for maintenance by performing volume and file system resizing (including shrinking), domain reconfiguration, file system defragmentation, backup, and off-host processing while the data remains online and available.
Portable Data Containers	Easily and quickly converts data for use on different operating systems. Makes it easy to migrate to new operating systems.
Automated performance tuning	Automatically tunes each write for optimal performance. Administrators no longer need to tune writes manually for performance
Hot relocation	Automatically migrates data from failing disks to healthy disks.
RAID support	Supports all levels of RAID for maximum availability and performance.
Support for all major storage arrays	Lets companies choose the storage hardware that best fits their needs.

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Operating systems supported

- Sun[™] Solaris[™]
- Red Hat™ Linux
- SUSE Linux

Note: Please consult http://support.veritas.com for the most current and detailed operating system and storage array support information.

More information

Visit our Web site

http://enterprise.symantec.com

To speak with a Product Specialist in the U.S.

Call toll-free 1 (800) 745 6054

To speak with a Product Specialist outside the U.S.

For specific country offices and contact numbers, please visit our Web site.

About Symantec

Symantec is the world leader in providing solutions to help individuals and enterprises assure the security, availability, and integrity of their information. Headquartered in Cupertino, Calif., Symantec has operations in more than 40 countries. More information is available at www.symantec.com.

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