

# multi *Copy*<sup>TM</sup>

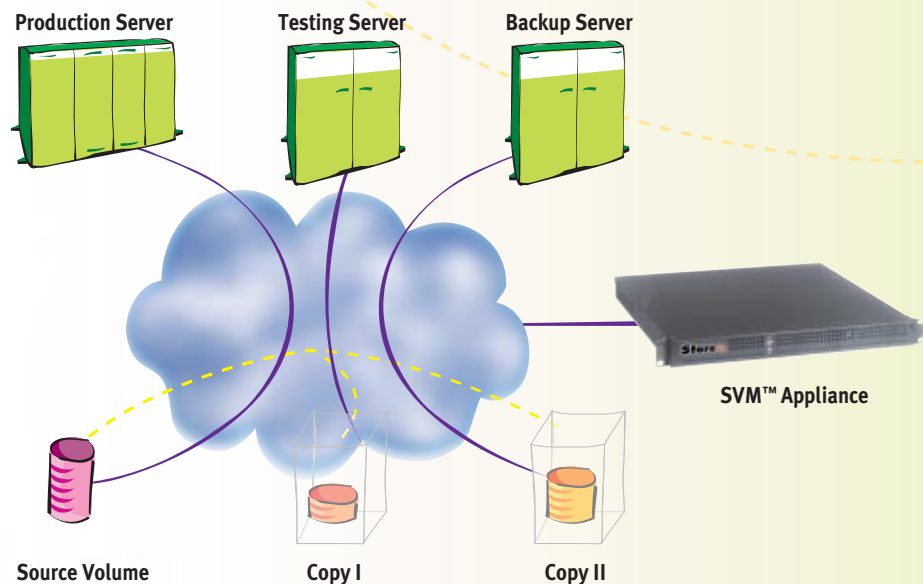
SVM<sup>TM</sup> Application

In today's information age the ability to copy and re-purpose data to support key business applications is a competitive advantage. Many mission critical business systems have become more tightly integrated through ERP, CRM and web enabled applications that depend on information currency and availability. The need for information delivery to multiple systems is time-sensitive and prompt availability of updated data might be crucial for revenue-generating applications and processes that depend on such data to provide services. The ability to **create many full copies of production volumes instantly and "on the fly" over any network bandwidth and structure**, while NOT loading production servers, is an essential attribute of an infrastructure solution designed to scale with the needs of the business.

**StoreAge's multiCopy is an innovative copy facility implemented in conjunction with StoreAge's SVM<sup>TM</sup> (Storage Virtualization Manager).**

multiCopy enables the creation of multiple physical copies of volumes, regardless of storage subsystems and SAN components. Each copy is independently accessible and instantly available, allowing production servers to access data while the copy operation is in process. multiCopy enables the copying and re-purposing of information, while leaving production servers available for productive work and uninvolved in data movement.

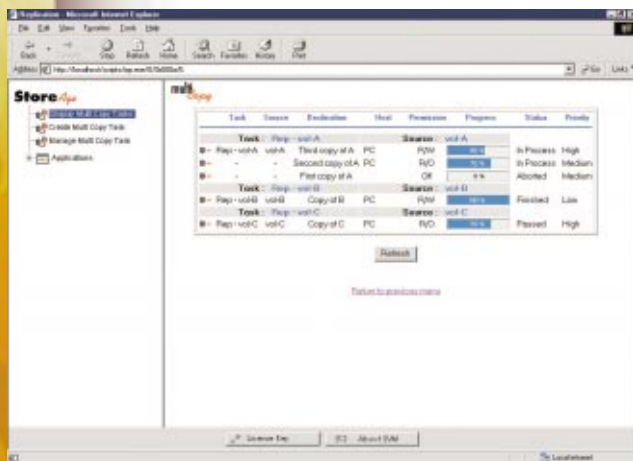
multiCopy allows organizations to eliminate their information and storage systems' bottlenecks, while enabling a variety of High Availability (HA) and high-performance capabilities such as LAN-free and Server-free Backup. A valuable business advantage is the ability to support applications' development and test them with real data, without risking data corruption.



**StoreAge**  
networking technologies

## Principles of Operation

**multiCopy** is a tool for creating multiple physical copies of a Source Volume. The Storage Administrator or policy-based storage management software (via the GUI, SAN API and CLI) can perform two distinct layers of copy tasks: (a) Create a copy of a volume, or (b) Create a "group" of copies of the same volume. In this manner, several copies of the same Source Volume can exist at any time and be assigned to different servers for applications such as backup, testing and decision support. The copies are presented to applications as regular R/W volumes. The creation of multiple copies of a single Source Volume is an independent procedure. Each copy progresses independently according to the desired Quality of Service level.



## Key Benefits

### High Performance

Creating multiple copies of a volume on separate physical storage devices enables the increase of applications' performance by mounting the **multiCopies** to a backup server or to a DB server. Those applications can now access another storage subsystem, resulting in a much higher performance in terms of IO/Sec and MB/Sec. Furthermore, **multiCopy** does not use any server resources and is executed exclusively by the SVM platform.

### Data Protection

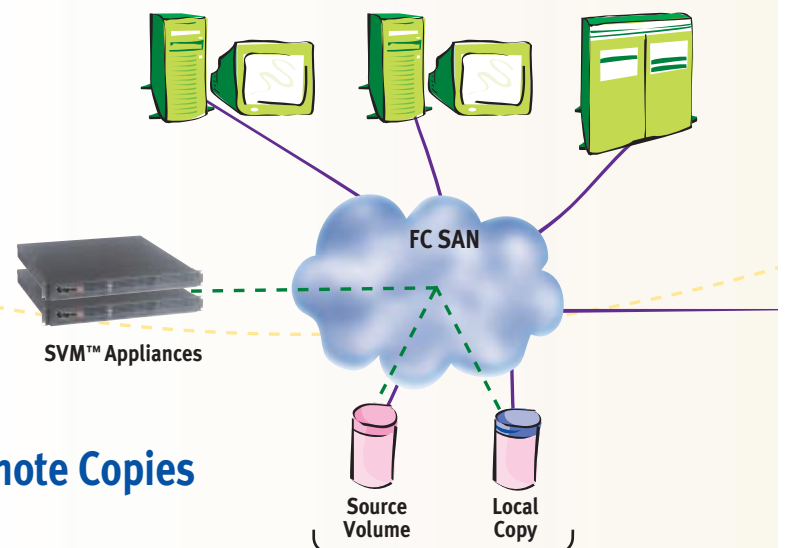
**multiCopy** enables the creation of multiple physical copies of the same Source Volume at different points in time. These copies provide for rapid recovery in case of failure, significantly enhancing business continuity.

### Central Copy Management

Using the SVM's management capability, **multiCopy** provides a common methodology and tool for managing the copy processes across the entire SAN.

### Reduced TCO

**multiCopy** can copy volumes across multiple storage subsystems from different suppliers, enabling organizations to apply the most cost-effective purchasing strategy over an extended period of time.



## LAN Free, Local & Remote Copies

## Features

### Quick Copy for Instant Availability

Copies are instantly available for both Read and Write operations - even while being created. Applications can immediately start using the copies while *multiCopy* continues to move the data in the background with no need to wait for completion of the copy operation.

### One-to-Many Copies

It is possible to create multiple independent copies of the same Source Volume, allowing each new volume to become part of an independent application. The actions of creating, pausing, resuming and mounting these volumes can be managed as a process for the entire target group or on a single-copy basis.

### Defining Priorities between Copies

Administrators can define priorities for the copy processes according to their needs, optimizing network load, significance of data and more.

### Pause/Resume

A copy task can be paused and resumed according to the organization's needs and network load.

## Typical Implementations

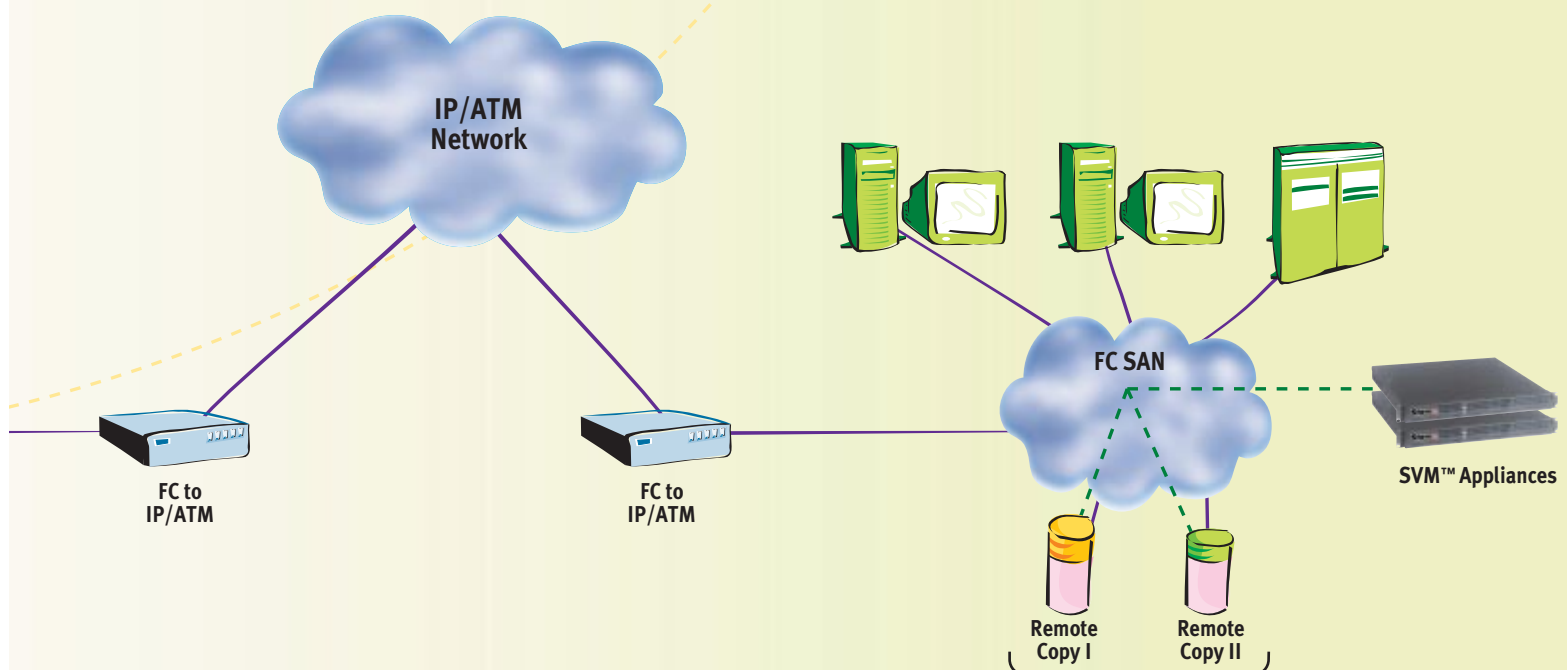
### Enabling High Performance

#### LAN-Free and Server-Free Backup

Administrators can create an independent physical copy, allocate it to a backup server and execute the organization's backup activities via that server. No LAN traffic is needed (LAN-Free Backup); the original application server is not involved (Server-Free Backup); and the backup server may access a separate storage system. In this way, the backup window is practically nil from the application standpoint, assuring continuous availability of the enterprise's on-line data.

### Rapid and Reliable Application Testing

Using *multiCopy*, a variety of applications can be tested with real data, enabling rapid and reliable application or OS release testing. This capability is enhanced even further when using StoreAge's *multiView*<sup>™</sup> (a multiple-level snapshot application) in conjunction with *multiCopy*.



## P rerequisite

StoreAge SVM™ (Storage Virtualization Manager), a 1U, rack-mountable Virtualization Appliance and associated host agents, installed in the SAN.

## P latforms Supported

Microsoft Windows NT 4.0  
Microsoft Windows 2000  
Sun Solaris  
Linux  
HPUX  
AIX  
Other - Consult your StoreAge representative

## A bout SVM™

SVM™ (Storage Virtualization Manager) is a SAN appliance that provides virtual volume management in heterogeneous environments. The SVM features storage capacity and storage performance pooling across the entire SAN space. Uniquely designed to virtualize storage off the data path, the SVM does not impose any performance penalty and thus delivers a highly scalable and highly available SAN infrastructure at levels not found with alternative approaches. The SVM provides centralized management for distributed enterprise storage, significantly reducing the Total Cost of Ownership. It is an ideal platform for SAN-aware Storage Applications such as Remote Mirroring, Snapshot and others, and a key enabler for business continuity strategies.

# StoreAge

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## T he life of a storage administrator using multiCopy

Here are some of the IT manager's problems and challenges that are solved using multiCopy technology:

- I need to copy a volume from my production site to a remote site over the IP network, using a different storage subsystem at the remote site. This task must not affect the production data during the copy process or following it.
- My backup window is shrinking. I need to perform the backup without taking the production system off-line and without degrading its performance.
- I need to copy a volume from vendor A's storage box to vendor B's storage box without using the LAN nor the production server's CPU.
- I need to simultaneously create three copies of a production volume for performance testing.

*Solve all these problems with the multiCopy solution*

The Virtualization Architects