



**NetApp™**  
Go further, faster

Software

# NetApp SnapMirror

Increase availability and speed recovery  
of your business-critical applications



## KEY FEATURES

### Simplify setup and administration

Set up SnapMirror® in minutes and centralize administration and operations with our easy-to-use Protection Manager software.

### Reduce storage and network costs

Replicate from FC to lower-cost ATA storage and lower the amount of bandwidth required by transferring only changed data blocks.

### Increase availability

Minimize downtime with fast data replication and failover, including virtualized environments.

### Improve flexibility

Choose asynchronous, synchronous, or semi-synchronous replication using FC or IP network protocols.

### Increase value

Use instant, storage-efficient clones from the mirror copy to accelerate other business processes.

## THE CHALLENGE

### Provide instant access to your business-critical data

In today's 24x7 global world, you need to protect and quickly recover your data in the event of damaging natural or man-made events. You also need an efficient way to distribute your data to remote locations for development and testing, for QA, or to meet archive and compliance mandates. Without an effective data protection and distribution strategy, your operations can be brought to a standstill, resulting in lost productivity, reputation, and revenue.

## THE SOLUTION

### Increase availability and speed recovery with NetApp SnapMirror software

NetApp® SnapMirror software is a cost-effective, easy-to use disaster recovery and data distribution solution. It replicates data at high speeds over LAN or WAN, providing you with high data availability and fast disaster recovery for your business-critical applications, including Microsoft® Exchange, Microsoft SQL Server™, and Oracle®. By mirroring data to one or more NetApp storage systems and continually updating the mirrored data, your data is kept current and you can use the mirrored data for multiple purposes.

If your business is geographically dispersed and all locations need access to the same data set, such as training videos or CAD tools, you can use SnapMirror to distribute the same data to all locations. Employee productivity and efficiency are dramatically improved by allowing local access to current mirrored data.

## SIMPLIFY SETUP AND ADMINISTRATION

You can set up your SnapMirror solution in minutes and easily handle administration and operation tasks using our Protection Manager software. Built-in SNMP support enables easy integration with any SNMP framework. With our simplified setup and use, you reduce the likelihood of operator error during the recovery process, enabling faster recovery from disaster.

## REDUCE STORAGE AND NETWORK COSTS

With NetApp's SnapMirror solution, you can save money by replicating data from FC storage to less expensive ATA storage. In addition, you can cut your network bandwidth requirements and costs by leveraging third-party WAN acceleration technologies along with NetApp Snapshot™ technology to send only changed data blocks quickly over the network. For

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example, you can perform an initial full-volume transfer using tapes and then use the tapes to populate data in your remote locations. Then, you only need to update the new and changed blocks incrementally over your network, significantly reducing your network bandwidth requirements.

To further reduce your network bandwidth requirements, SnapMirror automatically takes checkpoints during data transfers. If your system goes down, the transfer restarts from the most recent checkpoint. To eliminate the need for full transfers when recovering from a broken mirror or loss of synchronization, SnapMirror also performs intelligent resynchronization. If data on the mirrored copy was modified during application testing, it can be quickly resynchronized with the production data by copying the new and changed data blocks from the production system to the mirrored copy.

### IMPROVE FLEXIBILITY

You can easily deploy NetApp SnapMirror in any FC or IP networking infrastructure that provides enough bandwidth to handle the data transfers. You get better use of your existing equipment and increased availability because you can fail over between paths.

SnapMirror also provides you with the flexibility to choose the level of RPO (from 0 to 24 hours) that meets your requirements, using synchronous, asynchronous, or semisynchronous replication.

You can also choose from a variety of different storage configurations or models for your source and mirrored systems. For example, a multihop (or cascading)

configuration lets your NetApp SnapMirror target volume serve as a source for other targets, with each mirror pair running on its own schedule to meet site-specific requirements. This is the perfect solution if you need to replicate data to a nearby DR site using synchronous mode (to prevent data loss in the event of a site disaster) and then replicate over a longer distance on the second hop using asynchronous mode (to protect against a regional disaster).

### INCREASE VALUE AND VERSATILITY

With SnapMirror, you can reduce your overall TCO and make it easier to justify the DR investment by putting your DR site to active business use. Because our solutions help increase the efficiency of your storage utilization, you no longer need multiple physical copies of data for each business use. Our FlexClone® technology enables you to create near-instantaneous, space-efficient copies of data on your DR storage. You can use these copies for application testing, QA, and production staging—without any negative effect on your production system. You also get a readable mirror copy, enabling you to centralize backup of your data to tape from multiple data centers. This helps reduce your investment in tape infrastructure as well as off-load the production system from tape backups.

To extend the power of SnapMirror to your virtualized storage environment you can leverage VMware® Site Recovery Manager for rapid, reliable, and affordable automated site disaster recovery. Integration with SnapMirror lets you achieve high levels of availability through instantaneous recovery and access your data through your failed-

over virtual machines on the secondary site. Together, these products provide a robust disaster recovery solution that reduces the risk, cost, and complexity associated with traditional disaster recovery approaches.

For maximum value, your SnapMirror solution can be used for any of the following purposes:

- Disaster recovery
- Data distribution (send data long distances)
- Remote data access with readable mirror copy
- Off-site tape archival (replicate to remote site and then back up to tape)
- Online data migration
- Testing, development, QA, and production staging (combined with FlexClone)
- Load balancing (spread load by accessing mirrored data)
- Compliant data protection (combined with SnapLock® software)

### PARTNER FOR SUCCESS

When you partner with our Professional Services and Global Support teams, you gain access to our extensive storage expertise, innovative technologies, and best practices. You can accelerate the return on your infrastructure investments and get the most business benefit from them. We respond quickly to your problems, no matter where in the world they occur, and, with one of the most flexible support programs in the industry, you always get just the support you need for your unique IT and business requirements.



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