



## Solution Brief

# NetApp SnapMirror

Unified replication for the Data Fabric

### Key Benefits

#### Reduce Bandwidth Utilization and Storage Footprint

- Thin replication and native network compression reduce bandwidth utilization and reduce secondary storage requirements.

#### Use a Standardized Multipurpose Replication Solution

- NetApp® SnapMirror® software can protect your business with simple, efficient replication for disaster recovery and backup and can extend the value of replicated data to accelerate your business.

#### Increase Availability

- Industry-leading selective failover points help improve application availability, allowing you to rapidly recover from mirrored data corruption or accidental data loss.

#### Reduce Management Overhead

- You can easily manage replication between storage endpoints and across the hybrid cloud, from flash to disk to cloud.

### The Challenge

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

In today's always-on global business environment, you need to protect and quickly recover your data if damaging natural or human-made events occur. You also need to maximize your investments and get the most out of your IT infrastructure. An effective data protection strategy is vital to prevent your operations from being brought to a standstill, which could result in lost productivity and revenue and damage to your reputation. And if you can reuse your secondary facility for business intelligence or development and testing, you can turn your backup and DR solution into a business accelerator.

### Solution

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

NetApp SnapMirror software is a cost-effective, easy-to-use unified replication solution across the Data Fabric. It replicates data at high speeds over LAN or WAN. You get high data availability and fast data replication for your business-critical applications, such as Microsoft Exchange, Microsoft SQL Server, and Oracle, in both virtual and traditional environments. When you replicate data to one or more NetApp storage systems and continually update the secondary data, your data is kept current and is available whenever you need it. No external replication servers are required.

SnapMirror delivers powerful data management capabilities for virtualization, protecting your critical data while providing the flexibility to move data between locations and storage tiers, including cloud service providers. Integration with Citrix, Microsoft, and VMware technology helps make the benefits of SnapMirror in a physical server environment equally applicable in virtual environments. For example, you can leverage VMware vCenter Site Recovery Manager for rapid, reliable, and affordable backup and DR. Integration with SnapMirror enables rapid recovery and access to your data through your failed-over virtual machines on the secondary site.

#### Reduce Network Bandwidth Utilization and Storage Footprint

SnapMirror leverages NetApp ONTAP® storage efficiencies by sending only changed blocks over the network. SnapMirror also uses built-in network compression to accelerate data transfers and reduce network bandwidth utilization by up to 70%. With SnapMirror, you can leverage one thin replication data stream to create a single repository that maintains both the active mirror and prior point-in-time copies, reducing network traffic by up to 50%. In addition to enabling failover to an earlier point in time (to recover from mirrored data corruption or data loss), it also eliminates the need for a separate infrastructure for maintaining backups at the DR site. You can therefore reduce DR site storage costs by up to 40% (because there is only one baseline copy for both).

## Reduce Management Overhead

Simplify management of your backup and disaster recovery with NetApp OnCommand® Unified Manager. Set up SnapMirror in minutes and easily perform administrative tasks such as moving source and destination volumes within clusters nondisruptively, even while replication is taking place. You can choose from a variety of configurations for your source and destination systems, from multihop cascades to fan-in and fan-out. SnapMirror policies can be applied on a storage virtual machine (SVM) basis. Therefore, you can easily manage data protection for shared virtual infrastructures, or you can aggregate thousands of LUN and volume-level replication relationships into a handful of policies. Any changes to the primary SVM—for example, adding, deleting, or moving LUNs or volumes—are automatically replicated to the secondary storage, simplifying the management of data replication.

You can upgrade to future versions of SnapMirror nondisruptively, even for complex SnapMirror topologies (including bidirectional replication). You don't have to be concerned about source and destination version conflicts, so you can upgrade at your own pace, without end-user impact.

## Lower Your Total Cost of Ownership and Accelerate Your Business

With SnapMirror, you can reduce your overall TCO by up to 60% and make it easier to justify the secondary storage investment by putting your secondary 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. Data is stored natively, so features such as NetApp FlexClone® technology enable you to create near-instantaneous, space-efficient copies of data on your secondary or tertiary storage. You can use these copies for multiple business functions without any negative effect on your production system.

## Data distribution

Sometimes you have to move data: to migrate arrays at the turn of a lease, switch from SAS to SSD or SATA storage, consolidate remote offices, or simply set up a new location. SnapMirror provides a fast, efficient, and flexible method to move data. If your business is geographically dispersed and all locations need access to the same dataset, such as training videos or CAD tools, you can use SnapMirror to distribute the same data to all locations.

## Data analytics and business intelligence

Running extensive analysis might be critical for your business, but it is hard on the performance of production environments. With SnapMirror and FlexClone, you can leverage replicated data to run complex analyses on secondary data copies.

## Faster development and testing

To accelerate application development, you can quickly clone replicated data at the DR site and use it for development and testing (dev/test) of applications. Colocation of DR and dev/test environments can significantly improve utilization of backup or DR facilities, and on-demand dev/test clones provide as many data copies as you need to get to production more quickly.

## Data retention and compliance

For some use cases, government regulation or internal policies dictate data retention periods. NetApp SnapLock® for WORM data retention is supported with SnapMirror, so you can meet compliance requirements to protect data through backup and DR.

## Data Fabric Solution for Cloud Backup

You may be driving an initiative to take advantage of the benefits of cloud for backup and archive. SnapMirror integrates with NetApp AltaVault™ to enable efficient backup of volumes, LUNs and files to the cloud.

## Partner for Success

When you partner with our Professional Services and Customer Success Operations 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 a superior level of business benefit from them. We respond quickly to your problems, no matter where in the world they occur. And because we have one of the most flexible support programs in the industry, you get just the support that you need for your unique IT and business requirements.

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## About NetApp

Leading organizations worldwide count on NetApp for software, systems and services to manage and store their data. Customers value our teamwork, expertise and passion for helping them succeed now and into the future.

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