

Disaster Recovery

Pillar Axiom™ Storage System



Highlights:

- Enterprise-enhanced Serial ATA disk enables cost-effective, rapid restores
- Centralized solution securely copies data from all sites through the IP network to offsite storage facilities
- Asynchronous copying is distance independent
- Quality of Service priorities serve mission-critical data first and fastest

The Challenge: Cost-Effective Business Continuance

Maintaining business continuity in the face of disruption begins in the data center. A critical component of any business continuance strategy is disaster recovery—restoring data to applications according to its business priority. Key metrics of the business continuance plan are the Recovery Time Objective (RTO)—the maximum amount of time data can be unavailable before impacting business integrity—and the Recovery Point Objective (RPO), or the level of acceptable data loss that does not compromise operations and compliance. Specific RTO and RPO values vary according to the business value of the data.

In today's fast-paced markets, rapid restoration can mean the difference between survival and the end of a business. Restoration from tape can take days or even weeks. Growing dependence upon IT systems to operate and serve customers forces enterprises to evaluate disaster recovery processes that allow them to quickly restore lost data and storage systems. Certain applications require synchronous mirroring to secondary data centers, but most applications can adequately meet their RTO and RPO values with less-expensive asynchronous backup to offsite storage facilities.

The Solution: Disk-Based Disaster Recovery

Offsite storage should be located well away from primary data center site to assure recovery from widespread natural disasters. Asynchronous backup systems work well over long distances and should be immune to network delay.

Disk-based storage has dropped in price, making it economically accessible for disaster recovery. Systems built with SATA-based disks are far less expensive than Fibre Channel disks, but they require supporting components to achieve the enterprise-class availability of Fibre Channel systems.

Pillar Data Systems™ offers an enterprise-class disaster recovery solution without the traditional enterprise cost. Its solution is driven by the Axiom File Replicator, which copies data to the Pillar Axiom storage system. Enterprise class features ensure high availability, data integrity, and data security.

Disaster Recovery Issues**Pillar Disaster Recovery Solution**

Offsite storage located hundreds or thousands of miles from primary data center	Axiom File Replicator is insensitive to network latency because it performs asynchronous copying
Low bandwidth WAN; high volume of data	After first replication, Axiom File Replicator only copies changes made to existing files, reducing recurring bandwidth requirements; bandwidth throttling accommodates low-speed links
Data is located in multiple sites	Axiom File Replicator can serve many-to-one replication and one-to-many restoration
Confidential data traverses public network	Robust security features such as encryption protect data
Not all data has equal business value—some has a low RTO, some has a high RTO	Administrators establish policies for replication and restoration of specific file systems according to RTO value. Quality of Service levels in both Axiom File Replicator and the Axiom Storage system prioritize data according to its business value. Mission-critical data is stored on the rapidly spinning outside band of each disk, enabling faster restores.
Need rapid restores for certain applications	Disk-based copies are immediately available to begin restores
Disk storage can be costly	SATA-based disks in the Axiom Storage system are less expensive than Fibre Channel disks, significantly reducing the cost of a disk-only disaster recovery solution.
System availability is crucial	Multiple high availability features on the Pillar Axiom ensure enterprise-class performance: RAID technology with up to Three mirrored copies, local hot-spare drives, dual storage controllers, and dual intrasystem links.

Results

Pillar knows how valuable your data is to your organization. Its combination of the Pillar Axiom storage system and Axiom File Replicator creates a solution with enterprise-class availability features that minimize the risk of catastrophic data loss or inability to restore. Pillar disaster recovery solutions balance your business continuance requirements with affordability to meet your needs without busting your budget.

Pillar Data Systems takes a sensible, customer-centric approach to networked storage. We started with a simple, yet powerful idea: Build a successful storage company by creating value that others had promised, but never produced. At Pillar, we're on a mission to deliver the most cost-effective, highly available networked storage solutions on the market. We build reliable, flexible solutions that, for the first time, seamlessly unite SAN with NAS and enable multiple tiers of storage on a single platform. In the end, we created an entirely new class of storage. www.pillardata.com

