ATTO TECHNOLOGY
SOLUTION BRIEF

ATTO FibreBridge® 6500 and XstreamCORE™ FC 7500

A Stretch Cluster Foundation

Disaster Avoidance

Disaster avoidance involves proactive behavior to circumvent an impending storage outage. Even if a partial site failure occurs, disasters tend to affect an entire site. Disaster avoidance technologies allow for configuration of a host, cluster or site in a fashion that keeps systems running with minimal interruption. There may be a brief outage at one location followed by a restart at the recovery site, but a minimum outage sustained under controlled circumstances is considered to be an acceptable alternative to an extended one.

Downtime Avoidance

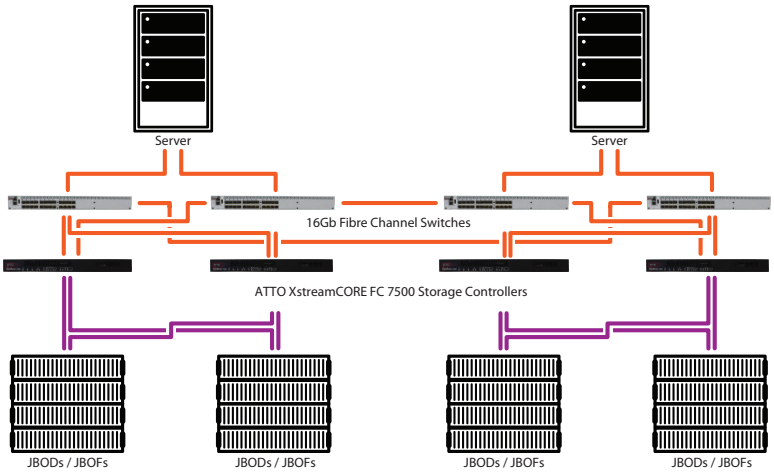
Downtime avoidance is similar to disaster avoidance. The main difference is that with downtime avoidance, virtualization technologies can move virtual machines (VMs) or virtual storage with no interruption to service.

Disaster Recovery

Disaster recovery helps to rapidly restore services when there is an unexpected outage and the recovery time is unknown. In these environments, the goal is to rapidly return to full operation, usually in a different data center.

High Availability and Fault Recovery

High-availability technology reduces the length of an outage sustained by a failure and allows for rapid recovery of system services. High availability clusters provide automated fault recovery in a reactive fashion, with VMs restarted as required to recover from unplanned outages.



Lower TCO and Decreased Latency

A stretch cluster provides a low total cost of ownership (TCO) solution by creating enterprise-class storage services on industry standard server and storage hardware. This solution provides 24/7 uptime with business continuity for real-time, mission-critical applications enabling organizations to virtualize these applications and maintain high availability access. Utilizing Fibre Channel to create a high- performance storage area network (SAN) makes sure data is always synchronized between data center sites. It is important to have reliable, predictable, low-latency links between sites in a stretch cluster; ATTO XstreamCORE™ and FibreBridge® storage controllers are building blocks that add enterprise Fibre Channel connectivity to up to 10 shelves of low cost SAS/SATA drives while introducing up to only four microseconds of latency. When paired with standard JBOD or JBOF enclosures, ATTO storage controllers represent a foundational data center component-one that companies can use to architect stretch cluster solutions that enable active site balancing, downtime avoidance and disaster recovery with more flexibility and a lower TCO than native Fibre Channel storage.

Building out a Stretch Cluster

The requirements for building a stretch cluster will depend on an organization's needs for reliability, capacity and performance. For a high-availability solution, software-defined storage software can identify multiple controllers and communicate between multiple sites. For situations where availability is not the top priority, a single controller will suffice-as long as a second controller is used for redundancy at the remote site. While performance at the remote location will be dictated by the link connecting the sites, the local site can benefit from a high-performance storage controller like the ATTO XstreamCORE FC 7500. ATTO storage controllers provide options for all performance and price needs: a pair of XstreamCORE controllers can deliver up to 1.47M 4K IOPS, while a pair of FibreBridge 6500 controllers can achieve about 120K 4K IOPS. Scalability is another asset of both products, with both supporting up to 240 disk drives while adding enterprise Fibre Channel to serial-attached storage (SAS) JBOD storage.