

# USE CASE: USE YOUR DIRECT-ATTACHED ARRAYS TO CREATE A SAN

## Enterprise Fibre Channel SAN Connectivity

### Convert Your Direct-Attached Storage into a SAN

ATTO's XstreamCORE™ is an external storage controller that allows IT administrators to decouple their direct-attached external SAS storage and present the storage as part of the Fibre Channel fabric to multiple hosts. ATTO's XstreamCORE storage controller reduces live migration time by eliminating the need to migrate data. When a storage area network (SAN) is created using the XstreamCORE storage controller, all physical hosts can see the storage on which VMs reside. This removes the need to migrate the VM data. The system state is the sole data that is required to be migrated by VMware vSphere® vMotion®.

### Safely and Quickly Give Your Hosts SAN Functionality

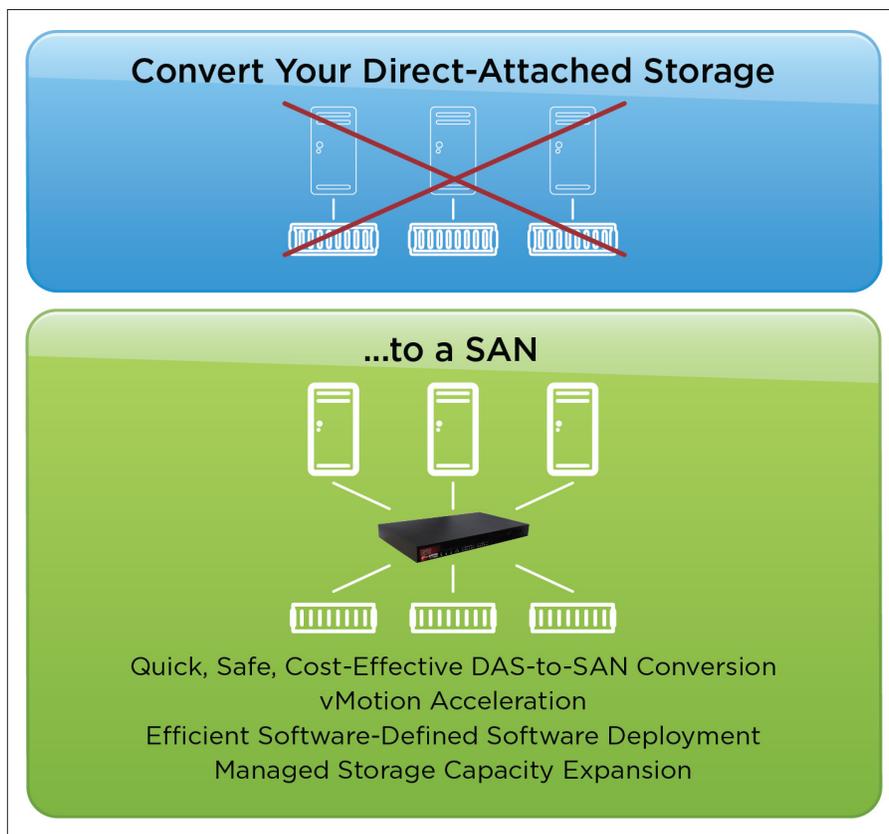
ATTO's XstreamCORE allows for Fibre Channel connectivity to be added to arrays or SAS disk shelves without risking data by changing controllers. Simply add Fibre Channel HBAs to hosts and connect your SAS storage to the XstreamCORE storage controller, then connect your hosts to the controller or fabric.

“By converting direct-attached environments to shared storage, users can experience much faster data transfers between physical hosts or between hosts and storage, allowing VMware functions like vMotion live migration to complete in a shorter amount of time.”

JAMES U'REN  
STORAGE CONTROLLER PRODUCT MANAGER  
ATTO TECHNOLOGY

#### ABOUT VMWARE VSPHERE

The vSphere platform is the best foundation for your applications, your cloud, and your business. vSphere helps you get the best performance, availability, and efficiency from your infrastructure and applications. It's the ideal foundation for any cloud environment.



**ABOUT ATTO'S XSTREAMCORE STORAGE CONTROLLER**

The controller platform features hardware acceleration engines for high-performance support for flash SSDs, HDDs, and open services and features such as data mover, VMware integration, latency analytics performance monitoring, and host LUN mapping, with new features and services in development.

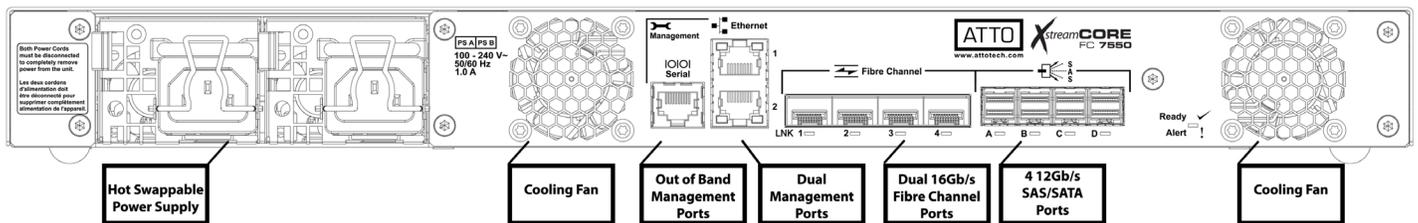
**VMware Ready XstreamCORE Storage Controller**

What makes XstreamCORE different than other storage controllers is a pair of industry-leading technologies designed to allow storage architects to build highly scalable, shared storage solutions that take advantage of commodity flash and capacity storage, enabling systems builders to manage up to 240 storage devices from a single pane of glass. The XstreamCORE storage controller includes support for VAAI to enhance performance of virtual machine management operations by off-loading these operations to the XstreamCORE. With hardware offload, VMware ESXi™ hosts may perform certain operations faster while consuming less host CPU and memory resources, storage fabric, and network bandwidth.

ATTO Technology's XstreamCORE storage controller has earned the VMware Ready logo, signifying to customers that it has met specific VMware integration and interoperability standards and works effectively with VMware infrastructure, which can optimize customer environments.

**Create a Safe, Fast SAN Using the XstreamCORE Storage Controller**

XstreamCORE provides the same or lower costs with full redundancy when compared to the options of purchasing a new SAN or converting the controllers of an array to provide Fibre Channel SAN connectivity. There is minimal disruption to the production environment; no risk to the data because the controllers remain the same; and an increase to the backbone capacity, which allows the arrays to run at wire speed. XstreamCORE and ATTO Fibre Channel host bus adapters (HBAs) can be installed during a minimal maintenance window. The Fibre Channel fabric can be created during production hours. During the conversion, arrays are disconnected from the servers and mapped to the ATTO XstreamCORE storage controller, and the hosts are connected to the Fibre Channel fabric. Virtual machines can be backed up in minutes as compared to hours or days. Backbone speed is increased to 16GB, and the attached arrays will have up to 12GB SAS connectivity.



## ATTO TECHNOLOGY

For nearly 30 years, ATTO Technology, Inc. has been a global leader across the IT and media and entertainment markets, specializing in storage and network connectivity and infrastructure solutions for the most data-intensive computing environments. ATTO solutions provide a high level of connectivity to all storage interfaces, including Fibre Channel, SAS, SATA, iSCSI, 40/10GbE, and Thunderbolt. ATTO is the Power Behind the Storage.

## SYSTEM SPECS

- xCORE hardware acceleration technology to eliminate bottlenecks.
- eCORE control engine to add common, open storage services.
- XstreamVIEW remote management user interface for configuration, monitoring, and management of ATTO's storage controller products.
- Up to four 16GB/s Fibre Channel ports.
- Four x4 12GB/s mini-SAS HD connectors (16 phys).
- Up to 2.2M 4K IOPS with <4 microseconds latency.

## Use Cases

Increase ROI and lifespan of existing storage solutions by quickly and cost effectively converting direct-attached SAS RAID, JBOD, or JBOF storage to high-performance SAN technology.

- Is VMware vSphere 6.0 certified.
- Easily changes architecture from direct attached to shared storage, adding DAS storage on a fabric quickly.
- Improves live migration completion time from hours down to a few minutes.
- Installs on four ESXi servers in under an hour.
- Requires no data migration.

## Find Our Solutions in the VMware Solution Exchange

<https://solutionexchange.vmware.com/store/companies/atto-technology-inc>

## Learn More

To learn more about how ATTO Technology and vSphere can improve performance in vMotion live migration, download our white paper at <http://bit.ly/2h2SUHq>.

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