

Sun StorEdge™ T3 Array for the Enterprise with Redundant Fibre Channel Switch Configurations

Just the Facts



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Positioning

Introduction

The new Sun StorEdge™ T3 array for the enterprise (T3ES) with the redundant 8-port Fibre Channel (FC) switch is designed to offer Sun customers improved connectivity and performance, and a single manageable storage solution for migration to a SAN architecture. The key messages in this product announcement are:

- T3ES with redundant 8-port switches
- Aggressive pricing
- Installation options (unbundled)

These preconfigured, SAN-capable, extensible storage systems offer customers significant value for a relatively low cost. For a price similar to Sun's limited hub configurations, Sun offers integrated dual redundant 8-port switches with the highly available redundant Sun StorEdge T3 array for the enterprise. These cost-effective SAN-ready configurations, at the price points offered, are a demonstration of Sun's resolve to help satisfy customers' growing managed storage requirements.

Configurations

There are two basic configurations of this product:

- One Sun StorEdge T3 array for the enterprise partner pair and a redundant pair of 8-port switches configured in a 72-inch Sun StorEdge expansion cabinet
- Four Sun StorEdge T3 array for the enterprise partner pairs and a redundant pair of 8-port switches configured in a 72-inch Sun StorEdge expansion cabinet

Both configurations can be ordered with 18-GB, 36-GB, or 73-GB 10000-rpm drives, giving customers capacity that ranges from 327 GB to 5.2 TB within each cabinet. To make management simple and easy, these configurations ship with Sun StorEdge Network FC Switch 2.0 firmware and GUI management software.

With the addition of the Sun StorEdge network FC switch pair for Solaris™ 8 Operating Environment and above, Sun brings a core element of its SAN strategy to market. The initial switch feature set supports transparent mode (FC-AL) and has zoning capabilities. Subsequent firmware updates are planned to permit customers of these products to move to the switch feature set which contains full fabric support without additional cost.

The Sun StorEdge T3 array for the enterprise with Fibre Channel switch allows customers to quickly scale their storage environment by better managing anticipated data growth through zoning and unused switch ports. The switches provide flexible connectivity, enhanced storage scalability, and efficient use of hardware resources. They help enable any-to-any server/storage connectivity while simplifying SAN manageability with Sun's centralized management software that can increase administrator productivity while reducing operating costs. With these high-availability switches and Sun's new FC host bus adapter (HBA), customers can gain managed storage consolidation with increased levels of business continuance.

Sun plans to simplify the ordering process by removing Sun installation as a required element for the two new T3ES with switch configurations. Sun still encourages customers to purchase the Sun StorEdge ArrayStart™ installation service as a separate line item, especially if they are new to the Sun StorEdge T3 array or have limited resources and would benefit from Sun installation.



Key Messages

The top three high-level messages are:

- **Availability**—Both configurations contain fully redundant components: a pair of dual 8-port redundant failover switches and a pair (or pairs) of redundant failover drive controller trays.
- **Scalability**—As storage needs grow, customers can simply add more controller drive tray pairs to the switch ports for increased bandwidth and overall system availability.
- **Value**—Both configurations are priced aggressively, providing Sun customers with one of the most cost-effective storage values available in the market today.

Key Features and Benefits

Some of the key features of the Sun StorEdge T3 array for the enterprise with the redundant 8-port FC switch include those shown in the following table.

Feature	Benefit
<ul style="list-style-type: none">• Redundant network FC switches and drive controller trays	<ul style="list-style-type: none">• Helps increase connectivity using FC switched network; increased data availability due to alternate paths to the storage arrays.
<ul style="list-style-type: none">• Factory-installed and factory-tested T3ES with redundant network 8-port FC switch	<ul style="list-style-type: none">• Saves time with easy, quick, and error-free installation.
<ul style="list-style-type: none">• Truly linear scalable performance	<ul style="list-style-type: none">• The Sun StorEdge FC switches and the Sun StorEdge T3 array for the enterprise quickly adapt to changing business IT requirements. They provide flexible, scalable, predictable, linear, high-speed I/O performance across the enterprise as capacity and/or more users are added.
<ul style="list-style-type: none">• Both configurations ship with Sun StorEdge Network FC Switch 2.0 firmware and GUI management software	<ul style="list-style-type: none">• Saves time because management is simple and easy.
<ul style="list-style-type: none">• Optimal resource utilization	<ul style="list-style-type: none">• Customers can allocate storage capacity and system bandwidth based upon need.
<ul style="list-style-type: none">• High-performance storage for the enterprise	<ul style="list-style-type: none">• The Sun StorEdge FC switches and the Sun StorEdge T3 array offer world-class performance.
<ul style="list-style-type: none">• High-availability storage for the enterprise	<ul style="list-style-type: none">• The Sun StorEdge FC switches and the Sun StorEdge T3 array for the enterprise offer full fault-tolerant failover redundancy.
<ul style="list-style-type: none">• True scalable growth	<ul style="list-style-type: none">• Now customers can easily build up their storage as they grow and configure it according to their needs for system capacity, performance, and availability.
<ul style="list-style-type: none">• One-stop shop	<ul style="list-style-type: none">• Sun can now be the one-stop storage shop for SAN components.
<ul style="list-style-type: none">• Convenient, easy management	<ul style="list-style-type: none">• Just a single console is all that is needed to locally or remotely monitor, control, and diagnose all Sun StorEdge T3 arrays for the enterprise and Sun StorEdge FC switches on a network.



Feature

- Switch configurations at hub pricing

Benefit

- The new configurations of Sun StorEdge FC switches and Sun StorEdge T3 arrays for the enterprise have aggressive pricing, making them an exceptional price/performance value.

Target Users and Markets

The new Sun StorEdge T3 array for the enterprise/Sun StorEdge network FC switch 8-port pair configurations are intended for enterprise IT environments using Sun Enterprise™ servers running Solaris 8 Operating Environment and above. These configurations are ideal for enterprise customers with failover requirements. Installed base and new customers with these requirements who desire preconfigured and pretested storage solutions to help them save time and eventually smoothly migrate to a SAN architecture in the future should opt for these configurations.

Selling Highlights

Customers are beginning to look at ways of managing massive amounts of storage for a wide variety of enterprise- and mission-critical applications. The new Sun StorEdge™ T3 array for the enterprise configurations with switch can help satisfy the enterprise needs of customers by providing a single source for the following:

- Massive-capacity storage
- High-quality, high-reliability storage
- Centrally managed storage
- High-performance storage
- Highly flexible, adaptable, reconfigurable storage
- Investment protection
- World-class, global Sun service and support

Requirements and Configuration

Applications

The Sun StorEdge™ T3 array for the enterprise configurations with switch are well suited for enterprise-level customers who desire massively scalable storage that is easy to manage. Essentially, any kind of application which is considered mission-critical or enterprise-critical, or which requires massive amounts of storage are ideal for use with these configurations, including, but not limited to:

- Messaging (e-mail, v-mail)
- Database (OLTP, DSS, OLAP, ROLAP, RDBMS, data warehousing, data marts, e-commerce)
- Web (static and dynamic)
- Technical and scientific applications (high-performance computing)
- Network or thin client (office productivity)
- Image capture and retrieval applications such as medical imaging, high-performance data acquisition, or video streaming

Ordering Information

Standard Configurations

Part Number	Description
XT3ES-RS-22-655	655-GB Sun StorEdge™ T3 array for the enterprise, includes 1 Sun StorEdge T3 array for the enterprise configured in a partner group, preconfigured as 2 RAID 5 LUNs (8+1), 18 x 36.4-GB, 10000-rpm dual-ported, bidirectional FC-AL drives, two 15-meter fiber-optic cables, 2 unit interconnect cables, installed in a 72-inch Sun StorEdge expansion cabinet (fans and door included), 2 redundant 8-port FC switches with 5 GBICs each, 2-year SunSpectrum Gold SM warranty included, SRS Ready
XT3ES-RS-88-2620	2620-GB Sun StorEdge T3 array for the enterprise, includes 4 Sun StorEdge T3 arrays for the enterprise configured in four partner groups, preconfigured as 8 RAID 5 LUNs (8+1), 72 x 36.4-GB, 10000-rpm dual-ported bidirectional FC-AL drives, two copper-to-optic media interface adapters, two 15-meter fiber-optic cables, 8 unit interconnect cables, installed in a 72-inch Sun StorEdge expansion cabinet (fans and door included), 2 redundant 8-port FC switches with 5 GBICs each, 2-year SunSpectrum Gold warranty included, SRS Ready

Other Configurations

Order Number	Description
XT3ES-RS-22-655	327-GB Sun StorEdge T3 array for the enterprise, includes 1 Sun StorEdge T3 array for the enterprise configured in a partner group, preconfigured as 2 RAID 5 LUNs (8+1), 18 x 18.2-GB, 10000-rpm dual-ported bidirectional FC-AL drives, two 15-meter fiber-optic cables, 2 unit interconnect cables, installed in a 72-inch Sun StorEdge expansion cabinet (fans and door included), 2 redundant 8-port FC switches with 5 GBICs each, 2-year SunSpectrum Gold warranty included, SRS Ready
XT3ES-RS-88-1310	1310-GB Sun StorEdge T3 array for the enterprise, includes 4 Sun StorEdge T3 arrays for the enterprise configured in four partner groups, preconfigured as eight RAID 5 LUNs (8+1), 72 x 18.2-GB, 10000-rpm dual-ported bidirectional FC-AL drives, 2 copper-to-optic media interface adapters, two 15-meter fiber-optic cables, 8 unit interconnect cables, installed in a 72-inch Sun StorEdge expansion cabinet (fans and door included), 2 redundant 8-port FC switches with 5 GBICs each, 2-year SunSpectrum Gold warranty included, SRS Ready



Order Number	Description
XT3ES-RS-22-1321	1321-GB Sun StorEdge T3 array for the enterprise, includes 1 Sun StorEdge T3 array for the enterprise configured in a partner group, preconfigured as 2 RAID 5 LUNs (8+1), 18 x 73.4-GB 10000-rpm dual-ported bidirectional FC-AL drives, two 15-meter fiber-optic cables, 2 unit interconnect cables, installed in a 72-inch Sun StorEdge expansion cabinet (fans and door included), 2 redundant 8-port FC switches with 5 GBICs each, 2-year SunSpectrum Gold warranty included, SRS Ready
XT3ES-RS-88-5284	5284-GB Sun StorEdge T3 array for the enterprise, includes 4 Sun StorEdge T3 arrays for the enterprise configured in 4 partner groups, preconfigured as 8 RAID 5 LUNs (8+1), 72 x 18.2-GB 10000-rpm dual-ported bidirectional FC-AL drives, 2 copper-to-optic media interface adapters, two 15-meter fiber-optic cables, 8 unit interconnect cables, installed in a 72-inch Sun StorEdge expansion cabinet (fans and door included), 2 redundant 8-port FC switches with 5 GBICs each, 2-year SunSpectrum Gold warranty included, SRS Ready

The switches are also offered by themselves. Note that each model actually consists of a two switches in a redundant failover pair configuration.

Options

Option Number	Description
X6746A	<p>Redundant Fibre Channel 8-port switch pair includes two 8-port Fibre Channel switches, documentation (Release Notes, Installation Guide, Sun Switch Configuration Guide, Sun Switch Troubleshooting Guide, and Admin GUI), a CD containing Fibre Channel Switch Administration GUI, and 19-inch rackmount hardware for both the switches and rack. Warranty: 2-year SunSpectrum Gold warranty included.</p> <p>Note: The Sun StorEdge network FC switch-8 (8-port redundant switch pair) is also available as an X-option for Sun customers who wish to upgrade their current Sun StorEdge T3 array storage.</p>
SG-XSWI6-32P	<p>Redundant Fibre Channel 16-port switch pair includes two 16-port Fibre Channel switches, documentation (Release Notes, Installation Guide, Sun Switch Configuration Guide, Sun Switch Troubleshooting Guide, and Admin GUI), a CD containing Fibre Channel Switch Administration GUI, and 19-inch rackmount hardware for both the switches and rack. Warranty: 2-year SunSpectrum Gold warranty included.</p>

Warranty Level and Length

Sun StorEdge T3 array for the enterprise/Sun StorEdge FC switch configurations include a 2-year SunSpectrum Gold level warranty.



Service and Support

The SunSpectrumSM program is an innovative and flexible service offering that allows customers to choose the level of service best suited to their needs, ranging from mission-critical support for maximum solution availability to backup assistance for self-support customers. The SunSpectrum program provides a simple pricing structure in which a single fee covers support for an entire system, including related hardware and peripherals, the SolarisTM Operating Environment software, and telephone support for SunTM software packages. The majority of Sun's customers today take advantage of the SunSpectrum program, underscoring the value that it represents. Customers should check with their local Sun Enterprise Services representatives for program and feature availability in their areas.

SunSpectrum program support contracts are available both during and after the warranty program. Customers may choose to uplift the service and support agreement to meet their business needs by purchasing a SunSpectrum contract. For more information on the SunSpectrum program offerings refer to the following URL:

http://service.central/TS/ESP/SunSpectrum/Feature_Matrix/index.html.

The four levels of SunSpectrum support contracts are outlined below.

Program	Description
Mission-Critical SunSpectrum PlatinumSM Support	Designed to support client-server, mission-critical solutions by focusing on failure prevention, rapid recovery and year round technical services planning. Support is provided 24 x 7.
Business-Critical SunSpectrum GoldSM Support	Includes a complete package of proactive and responsive services for customers who require maximum uptime for their strategic business critical systems. Support is provided 24 x 7.
System Coverage SunSpectrum SilverSM Support	Combines the service expertise, responsive on-site support, technical support by telephone, and SunSolve SM CD/on-line services. Support is provided 8 a.m. to 8 p.m. Mon. through Fri.
Self-Directed SunSpectrum BronzeSM Support	Provided for customers who rely primarily upon their own in-house service capabilities. Helps enable customers to deliver high-quality service by giving them access to UNIX [®] expertise, Sun-certified replacement parts, software releases, and technical tools. Support is provided 8 a.m. to 5 p.m. Mon. through Fri.



Glossary

Block	An overly used term. Often used to describe the amount of data sent or received by the host per I/O operation. Also used to describe the size of an atomic read/write operation to/from a disk. In the context of the Sun StorEdge™ T3 array, represents the size of each cache buffer, and also the disk interleave factor (also known as stripe unit, chunk, interlace factor). Sun StorEdge T3 array block size can be 16, 32, or 64 KB.
Bus	A point-to-point network component. Used by Sun™ Management Center software to represent a network link to which many other hosts may be connected.
Channel	An interface directed toward high-speed transfer of large amounts of information.
Chunk	A quantity of information that is handled as a unit by the host and disk device.
Controller unit	The standalone controller unit is the smallest possible array configuration. The architecture integrates disks, data cache, hardware RAID, power, cooling, uninterrupted power supply (UPS), diagnostic capabilities, and administration into a versatile, standalone component. The controller unit includes external connections to a data host (or hub or switch), and to a management network.
Disk array	A subsystem that contains multiple disk drives, designed to provide performance, high availability, serviceability, or other benefits.
Disk group	A grouping of disk drives and the data on them that facilitates organization and the movement of disks between systems.
Event	A change in the state of a managed object.
Fabric	A group of interconnections between ports that includes a fabric element.
FC-AL	Fibre Channel arbitrated loop, a loop topology used with Fibre Channel.
Fiber	A wire or optical strand. Spelled <i>fib</i> re in the context of Fibre Channel.
Fiber-optic cable	Jacketed cable made from thin strands of glass, through which pulses of light transmit data. Used for high-speed transmission over medium to long distances.
Frame	An indivisible unit for transfer of information in Fibre Channel.
FRU	Field replaceable unit.
Full duplex	A communications protocol that permits simultaneous transmission in both directions, usually with flow control.
GBIC	Gigabit interface converter.



GUI	Graphical user interface. The GUI provides the user with a method of interacting with the computer and its special applications, usually via a mouse or other selection device. The GUI usually includes such things as windows, an intuitive method of manipulating directories and files, and icons.
Heterogeneous hosts	Various application servers that run the Solaris™ Operating Environment or Microsoft Windows NT Server operating environment and are attached to the same storage.
Hot-plug	A hot-plug component means that it is electrically safe to remove or add that component while the machine is still running. Typically, the system must be rebooted before the hot-plug component is configured into the system.
Hot spare	A drive in an array that is held in reserve to replace any other drive that fails. Hot spares are continuously powered up and spinning. This allows the array processor to have immediate access to a functioning drive for possible reconstruction of lost data.
Hot-swap	A hot-swap component can be installed or removed by simply pulling the component out and putting the new one in. The system will either automatically recognize the component change and configure itself as necessary or will require user interaction to configure the system; however, in neither case is a reboot required. All hot-swappable components are hot pluggable, but not all hot-pluggable components are hot-swappable.
Hub	A device for connecting fiber cables.
Interleaved memory	Helps reduce memory access time by permitting multiple memory components to operate in parallel. Memory is divided into n banks arranged so that every n th byte is supplied by a different memory bank. In a two-way interleaved system, the first double word is supplied by bank 0 while the second is supplied by bank 1. Normally, the size and extent of interleave is arranged so that a single typical request is satisfied by as many banks as possible. This arrangement permits a single memory request to be fulfilled without waiting for memory recycle time.
I/O rate	A measure of a device's capacity to transfer data to and from another device within a given time period, typically as I/O operations per second.
IOPS	Input/output operations per second. A measure of I/O performance, this is commonly used to quote random I/O performance.
IP	Internet protocol. A set of protocols developed by the United States Department of Defense to communicate between dissimilar computers across networks.
Link	One inbound fiber and one outbound fiber connected to a port.
LRC	Loop redundancy circuit



MIA	Media interface adapter. A small electronic device that converts electrical signals to optical signals. It performs that same function as a gigabit interface converter (GBIC) but is installed on the outside of the storage array. Sun selected the MIA so the installed base of PCI and SBus host bus adapters could be used with this new generation of storage arrays.
Micron	One millionth of a meter. Also called <i>micrometer</i> .
Mirror synchronization	The process by which VERITAS Volume Manager software keeps two or more copies of data identical.
Mirroring	In RAID terminology, refers to the redundant storage of data, either by duplicating the exact data or generating parity data bit-for-bit.
Module	A software component that may be loaded dynamically to monitor data resources of systems, applications, and network devices.
Multimode fiber	An optical wave guide which allows more than one mode (rays of light) to be guided.
Network	An arrangement of nodes and connecting branches, or a configuration of data processing devices and software connected for information exchange.
N_Port	A port attached to a node for use with point-to-point or fabric topology.
NL_Port	A port attached to a node for use in all three topologies (point-to-point, arbitrated loop, or fabric).
Node	A device that has at least one N_Port or NL_Port.
NVRAM cache	A non-volatile (battery-backed) random access memory area used as an intermediate store for data between a host computer system and disk drives.
Optical fiber	Any filament of fiber, made of dielectric material, that guides light.
Packet-switched bus	A bus in which information is transmitted in fixed-sized units. This type of bus is often associated with the use of split transactions. Gigaplane™ and UPA are packet-switched buses.
Parity	In an array environment, data that is generated from user data and is used to regenerate user data lost due to a drive failure. Used in RAID 5.
Partner group	Two controller units may be paired in a <i>partner group</i> to create a configuration with redundant controllers, redundant data, and management paths, allowing for cache mirroring, controller failover, and path failover capability. The partner group is thus the minimum storage configuration for enterprise environments that call for high availability. As with standalone controller units, partner groups may be configured with additional units to double capacity and/or spindle count.
Point-to-point	A topology where exactly two ports communicate.
RAID	Redundant array of independent disks. A set of disk drives that appear to be a single logical disk drive to an application such as a database or file system. Different RAID levels provide different capacity, performance, high availability, and cost characteristics.



Read-ahead	Sequential data that has been read from disk into cache without having actually been requested by the application host, in anticipation that it will be requested by the host. When the request occurs, it can be serviced as a low latency cache hit, thus improving host application performance.
Receiver	The circuitry that receives signals on a fiber, and the ultimate destination of data transmission.
Reconstruction	The process of rebuilding lost data on a replacement drive after a drive failure.
Redundancy	Duplication for the purpose of achieving fault tolerance. Refers to duplication or addition of components, data and functions within the array.
Responder	The logical function in an N_Port responsible for supporting the exchange initiated by the originator in another N_Port.
SAN	Storage area network. SAN architecture uses high-performance, high-capacity Fibre Channel switches to connect storage islands. This approach provides physical connectivity, but does facilitate information sharing or simplify management across servers.
Segment	Another overly used term; in the context of the Sun StorEdge T3 array, 1/8 of a cache buffer. In the Sun StorEdge T3 array, a segment is the smallest size of I/O possible between cache and disk. Segment size is 2, 4, or 8 KB, depending on block size.
Serial transmission	Data communication mode where bits are sent in sequence in a single fiber.
Single-mode fiber	A step index fiber wave guide in which only one mode (ray of light) will propagate above the cutoff wavelength.
Stripe size	Total amount of data in a disk stripe; i.e. block size multiplied by number of data disks in the stripe.
Stripe width	Total number of disks in a disk stripe.
Striping	Spreading or interleaving logical contiguous blocks of data across multiple independent disk spindles. Striping allows multiple disk controllers to simultaneously access data, improving performance.
Switch	The name of an implementation of the fabric topology.
Switched-loop architecture	Splits the drive interface into multiple, independent loops so that the RAID controller has its own drive loop, plus access to other drive loops. Improves performance and expansion flexibility for enterprise networks.
Topology	The components used to connect two or more ports together. Also, a specific way of connecting those components, as in point-to-point, fabric, or arbitrated loop.
Transceiver	A transmitter/receiver module.
Transfer rate	The rate at which bytes or bits are transferred, usually measured in megabytes per second.



Volume	A volume is a virtual disk into which a file system, DBMS, or other application can place data. A volume can physically be a single disk partition or multiple disk partitions on one or more physical disk drives. Applications that use volumes do not need to be aware of their underlying physical structure. Software handles the mapping of virtual partition addresses to physical addresses.
Write-behind mode	A data write is acknowledged to the application host as soon as it is in (mirrored) cache, without having yet been committed to disk, in order to reduce write latency. Also known as write-back or fast-write mode.
Write-through mode	A data write is acknowledged only when data is fully committed to disk.

Materials Abstract

All materials will be available on SunWIN except where noted otherwise.

Collateral	Description	Purpose	Distribution	Token # or COMAC Order #
PowerPack				
– <i>Sun StorEdge™ T3 Array for the Enterprise with Redundant Fibre Channel Switch Configurations, Just the Facts</i>	Reference Guide (this document)	Sales Tool, Training	SunWIN, Reseller Web	130189
– <i>Sun StorEdge T3 Array, Just the Facts</i>	Reference Guide	Sales Tool, Training	SunWIN, Reseller Web	112864
– <i>Sun StorEdge T3 Array Customer Presentation</i>	Presentation Overview; Slide Notes for Presentation	Sales Tool	SunWIN, Reseller Web	120838
– <i>Sun StorEdge T3 Array Technical Presentation</i>	Presentation with Slide Notes	Sales Tool	SunWIN, Reseller Web	120839
Product Literature				
– <i>Sun StorEdge T3 Array Quick Reference Card</i>	Quick Reference Card	Sales Tool	SunWIN, Reseller Web	73691
– <i>Literature: Sun StorEdge T3 for the Workgroup Data Sheet</i>	Data Sheet	Sales Tool	SunWIN, Reseller Web, COMAC	DE1074-0108576
– <i>Literature: Sun StorEdge T3 for the Enterprise Data Sheet</i>	Data Sheet	Sales Tool	SunWIN, Reseller Web, COMAC	DE1165-0117451
– <i>Sun StorEdge T3 Array Elevator Pitch</i>	Presentation with Notes	Sales Tool	SunWIN, Reseller Web	120363
– <i>Sun StorEdge T3 Array FastFacts</i>	Fast Facts	Sales Tool	SunWIN, Reseller Web	120364
White Papers				
– <i>Sun StorEdge T3 Array Performance Tuning White Paper</i>	Technical Brief	Sales Tool, Training	SunWIN, Reseller Web	119879
– <i>Sun StorEdge T3 Architecture White Paper</i>	Technical Brief	Sales Tool, Training	SunWIN, Reseller Web	120366
– <i>Fibre Channel Technology from Sun Microsystems</i>	Technical Brief	Sales Tool, Training	SunWIN, Reseller Web	65659
– <i>Fibre Channel versus Alternative Storage Interfaces: An Overview</i>	Technical Brief	Sales Tool, Training	SunWIN, Reseller Web	65663



Collateral	Description	Purpose	Distribution	Token # or COMAC Order #
Quote Sheets				
– <i>Customer Quote Sheet for Sun StorEdge T3 Array</i>	Quote Sheet	Sales Tool	SunWIN, Reseller Web	119896, FE1270-0
– <i>T3 partner Quote Sheet for the Sun StorEdge T3 Array</i>	Quote Sheet	Sales Tool	SunWIN, Reseller Web	119934
Success Stories				
– <i>AB Watley Success Story</i>	Success Story	Sales Tool	SunWIN, Reseller Web	120147
– <i>Network Commerce Inc. Success Story</i>	Success Story	Sales Tool	SunWIN, Reseller Web	120005
– <i>Bluelight Success Story</i>	Success Story	Sales Tool	SunWIN, Reseller Web	120003
Competitive				
– <i>CLARiiON Beat Sheet Competitive White Paper</i>	Competitive White Paper	Training	SunWIN	112069
– <i>EMC Beat Sheet Competitive White Paper</i>	Competitive White Paper	Training	SunWIN	109825
– <i>Sun StorEdge T3 Array Competitive Presentation</i>	Competitive Presentation	Sales Tool	SunWIN, Reseller Web	120840
– <i>Sun StorEdge vs. EMC Pocketfacts</i>	Pocket Facts	Training	SunWIN	117277, BE962-0
– <i>Competitive Edge Sun StorEdge T3 Solution vs. CLARiiON FC4500</i>	Competitive White Paper	Training	SunWIN	120367
– <i>Competitive Edge Sun StorEdge T3 Solution vs. Compaq RA8000</i>	Competitive White Paper	Training	SunWIN	120368
– <i>Competitive Edge Sun StorEdge T3 Solution vs. EMC 8430</i>	Competitive White Paper	Training	SunWIN	120369
External Web Sites				
– <i>Sun StorEdge Array Main Page</i>	http://www.sun.com/storage/disk.html			
– <i>Fibre Channel Association</i>	http://www.fibrechannel.com			
– <i>Fibre Channel Loop Community</i>	http://www.fcloop.org			

