Sun StorEdge (TM) T3 Array FAQs

- Q. What host platforms are supported with the Tier 2 VERITAS Volume Manager license that is included with the Sun StorEdge T3 for the enterprise models?
- A. Both Tier 1 and Tier 2 licensing levels are supported with the included license on Sun StorEdge T3 for the enterprise models.

Desktop Workstation	
and Workgroup	Ultra(TM) 60, 80 workstations
Server:	Sun Enterprise(TM) 250, 450, 220R, 420R
Tier 1	workgroup servers

Departmental Server: Sun Enterprise(TM) E3500, E4500, E5500 Tier 2

- Q. What are the differences between the Sun StorEdge T3 array for Workgroup and the Sun StorEdge T3 array for the Enterprises?
- A. The Sun Sun StorEdge T3 arrays are offered in the following models:

Sun StorEdge T3 array for the Workgroup	StorEdge(TM) T3 array for the Enterprise
 Single RAID controller RAID Levels 0, 1 and 5 1 or 2 LUNS/Array Component Manager 2.1 SRS 2.0 Ready Standard Warranty Customer Installed 	 Dual RAID controllers RAID Levels 0, 1 and 5 2 to 4 LUNS per pair Sun StorEdge Component Manager 2.1 SRS 2.0 Ready 2 Year Warranty Gold level service Sun StorEdge ArrayStartSM installation Volume Management Software

Q. Can I use the Sun StorEdge T3 array as a boot device?

A. Yes, Booting from the SBus (SOC+) is currently supported on Sun Enterprise 3500– Sun Enterprise 6500 servers.

Booting from the Sun StorEdge T3 array from PCI based systems will be supported with the release of the next generation PCI Fibre Channel host bus adapter and SolarisTM 8 operating environment

Q. What platforms and Operating Systems can I boot from?

Server Platform	Boot Support
Ultra 60, Ultra 80	No
Sun Enterprise 220R, 250, 420R, 450	No

Sun Enterprise 3500–6500	Yes
Sun Enterprise 10000	No

	PCI HBA	SBus HBA
Solaris 2.6	No	No
Solaris 7 (11/99)	No	Yes
Solaris 8	No	Yes

- Q. I was not able to find loop interconnect cables to connect two Sun StorEdge T3 arrays for the Workgroup in the parts descriptions or in the X–Option Sun price list, why is Sun not offering these cables?
- A. Loop interconnect cables are intended for paired controller configurations only and are offered only as part of the Sun StorEdge T3 Workgroup to Enterprise upgrade service. This service will ensure that customers have the highest available and reliable Sun StorEdge T3 systems.
- Q. Can 18GB and 36GB drives be mixed in a single array?
- A. No, There are currently no plans to support drive mixing.
- Q. Can a 18GB tray and a 36GB tray be mixed in the same partner group?
- A. No, There are currently no plans to support mixing different array capacities in a partner group.
- Q. Can the Sun StorEdge A5x00s/A3500s/A1000s/D1000s and Sun StorEdge T3 arrays be used within the same host system?
- A. Yes, the Sun StorEdge T3 array has been tested with various combinations of the above listed Sun storage systems.
- Q. How many Fibre Channel host connections are on each Sun StorEdge T3 array?
- A. There is a single 100MB/sec host connection on each array. Every array MUST be connected to a host bus adapter (HBA) or a FC–AL Hub. Normal operation for a partner group configuration requires TWO FC–AL connections.
- Q. Does the Sun StorEdge T3 array have multi–host support? If so how many hosts/initiators?
- A. There is currently a TWO initiators per loop limitation for the Sun StorEdge T3 for the Workgroup (single tray) and a SINGLE initiators limitation for the T3 arrays Enterprise (paired arrays) configurations. This limitation currently applies to both FC–AL hub and switch configurations.

- Q. Are Long Wave GBICs supported on the Sun StorEdge T3 array?
- A. No, There are currently no plans to support the Long Wave GBIC on the Sun StorEdge T3 array. Extended distance functionality will be moved to the Fibre Channel Switch when they become available.
- Q. What is the maximum distance supported between the host and the array?
- A. The Sun StorEdge T3 array supports a 500-meter distance between host and array using 50/125-micron multi-mode Fibre Channel cables.
- Q. Can both the Sun StorEdge A5000s and Sun StorEdge T3 arrays be connected on the same Fibre Channel loop/hub?
- A. No, mixing of the Sun StorEdge A5000s and Sun StorEdge T3s arrays on the same Fibre Channel loop/hub is not supported.
- Q. Can FC–AL hubs be used with the Sun StorEdge T3 arrays. How many arrays can be connected to a single hub?
- A. Yes, up to (4) Sun StorEdge T3 arrays can be attached to the Sun 7 port hub.
- Q. Can the Sun StorEdge T3 LUN size grow and contract dynamically without service disruption?
- A. No, Dynamic LUN expansion/contraction is not supported.
- Q. Can the Sun StorEdge T3 LUN block size change dynamically without service disruption?
- A. No, Dynamic block size changes cannot take place without service disruption.
- Q. What is a Media Interface Adapter (MIA)
- A. The Media Interface Adapter is a small electronic device that converts electrical signal 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.
- Q. When will support for the Sun StorEdge T3 expansion units be available?
- A. Sun is currently evaluating configuration using the Sun StorEdge T3 expansion unit no date has been set for these configurations.

Rack Questions

- Q. What rack mount options are available for the Sun StorEdge T3 array?
- A. Rack mount rail kits are available in 4U for mounting a single array and 7U for mounting pairs of arrays. Rack mount rail kits are available for the Sun Enterprise 5500 and Sun Enterprise 6500 and the Sun StorEdge 72" Expansion cabinet/19" RETMA rack. (Internal rack mount support for the Sun Enterprise 5500 and Sun Enterprise 6500 available Q1FY01)
- Q. What is the X9676A T3 mounting tray? When do I need to order this?
- A. The X9676A T3 mounting tray is designed to convert an EXISTING single table top Sun StorEdge T3 array into a rack ready configuration. One mounting tray is required for every array. The specific rack mount rail kit for a supported rack is required in addition to the mounting tray.

Table Top Array + T3 Mounting Tray + Rack Mount rail mounting kit

XT3WG-TT-11-163	X9676A	X9673A (4U Kit)
XT3WG-TT-11-327		X9674A (4U Kit)
XT3ES-TT-22-327		X9663A (7U Kit)
XT3ES-TT-22-655		X9664A (7U Kit)

Order the rack ready (RR) version of the array + the rack mount rail kit ONLY when ordering NEW arrays.

- Q. How many T3 trays will fit in the Sun StorEdge 72" cabinet?
- A. Eight (8) Sun StorEdge T3 array for the Workgroup OR (8) eight Sun StorEdge T3 array for the Enterprise trays will fit in the Sun StorEdge 72" cabinet.
 - (8) Sun StorEdge T3 arrays for the Workgroup consume 32 RUs (Rack Units) using eight 4U rack mount rails.
 - (8) Sun StorEdge T3 array for the Enterprises consume 28 RUs (Rack Units) using four 7U rack mount rails.
- Q. Can I mix Sun StorEdge A5000s/A3500s/A1000s/D1000s and Sun StorEdge T3 arrays in a Sun StorEdge 72" expansion cabinet?
- A. No, only the Sun StorEdge T3 arrays can be configured together in a Sun StorEdge expansion cabinet at this time.
- Q. Can the Sun StorEdge T3 array be factory or field configured internal to the Sun Enterprise 5500 or Sun Enterprise 6500 system cabinet?

- A. No, There is currently no support for factory or field rack mounting the Sun StorEdge T3 array in the Sun Enterprise 5500 or Sun Enterprise 6500 system cabinet. We are currently in the process of qualifying up to (2) Sun StorEdge T3 arrays in these cabinets. Availability is planned for late Q1FY01.
- Q. Can the Sun StorEdge T3 array be factory or field configured internal to the rack mountable Sun Enterprise 4500 server in the Sun StorEdge expansion cabinet, also known as the E4502–R?
- A. No, support for internal attach of the Sun StorEdge T3 array with W4502–R will be available Q1FY01.
- Q. Will the Sun StorEdge T3 array be supported internal to the Sun Enterprise 10000 server?
- A. The Sun Enterprise 10000 business team will make announcements on the availability of these options in the near future.
- Q. Do we absolutely need to have the screen door for the Sun StorEdge 72" expansion cabinet?
- A. Yes, the door is required to meet FCC Class A electromagnetic interference rules (EMI).
- Q. Why is RETMA listed as a potential rack mounting type in the X9663A and X9673A part numbers?
- A: Because the rack mount kits are designed in compliance with EIA310D Electronics Industries Association (EIA) standard. (RETMA is the former name for EIA)

RETMA is an industry standard for a 19" cabinet, with mounting flanges per EIA310D

-Although the kits are designed to comply with the standard (they do not violate the standard), it doesn't mean that the rail kits will fit in ANY manufacture rack or "standard cabinet"

Sample Configurations

- Q. What are some sample Sun StorEdge T3 for the Workgroup and Enterprise array configurations?
- A. Sample Configuration 1 Sun StorEdgeT3 array the Workgroup, Table Top Array

18.2GB Single Controller Unit -100 PCI FC-AL HBA Single Channel n StorEdge Component Manager V2.1 Software Media, Docs

Sample Configuration 2

(2) Sun StorEdge T3 arrays for the Workgroup Rack Ready trays field installed in an existing Sun StorEdge 72" cabinet.

Qty	Part #	Description
2	XT3WG-RR-11-163	9 x 18.2GB Single Controller Unit RR
2	X9673A	4U Single Rack Mount Rail Kit for 72"
		Sun StorEdge(expansion or RETMA Rack
2	X6729A	FC–100 PCI FC–AL HBA Single Channel
1	SCMMS-210-9P99	Sun StorEdge Component Manager V2.1
		Software Media, Docs

Sample Configuration 3

Sun StorEdge T3 array for the Workgroup Rack Ready Tray Factor Configured in a 72" StorEdge Expansion Cabinet

Qty	Part #	Description
8	T3WG-RR-11-327R5	9 x 36.4GB Single Controller Unit RR
1	SG-ARY030A	Factory Configured 72" Sun StorEdge
		Expansion Cabinet
2	3858A	U.S./Canada power cord for 72" Sun StorEdge
		expansion cabinet
1	9818A	Front door assembly for 72" Exp. cabinet
1	9819A	Fan assembly for Factory-installation in the
		72" Expansion Cabinet
8	X6730A	SOC+ SBus FC-AL HBA Dual Channel (1 GBIC)
1	SCMMS-210-9P99	Sun StorEdge Component Manager V2.1
		Software Media, Docs

Sample Configuration 4Sun StorEdge T3 array for the Enterprise(6) Arrays (3) partner groups factory configured in a StorEdge72" Expansion Cabinet

Qty	Part #	Description
1	T3ES-RH-44-1310	4 x (9 x 36.4GB) Four Controller Units in 72" Sun StorEdge Rack with 2 Hubs
1	T3ES-RR-22-655R5	2 x (9 x 36.4GB) Dual Controller factory mounted in 72" Sun StorEdge(TM) Rack
2	3858A	U.S./Canada power cord for 72" StorEdge expansion cabinet
2	X6730A	SOC+ SBus FC-AL HBA Dual Channel(1 GBIC)
1	VVMGS-304-9999	Sun StorEdge Volume Manager 3.0.4
		License, Media and Docs
1	SCMMS-210-9P99	Sun StorEdge Component Manager V2.1
		Software Media, Docs

Sample Configuration 5 Sun StorEdge T3 array the Enterprise 8 Arrays, 4 partner groups Factory Configured in a 72" Sun StorEdge Expansion Cabinet

Qty	Part #	Description
1	XT3ES-RK-88-2620	8 x (9 x 36.4GB) Eight Controller Unit in a 72" StorEdge(TM) cabinet
2	3858A	U.S./Canada power cord for 72" Sun StorEdge expansion cabinet
4	X6730A	SOC+ SBus FC-AL HBA Dual Channel(1 GBIC)
4	X6731A	FC-AL OE Module 100MB/S
1	VVMGS-304-9999	Sun StorEdgeVolume Manager 3.0.4 License, Media and Docs
1	SCMMS-210-9P99	Sun StorEdge Component Manager V2.1 Software Media, Docs

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