



# Sun StorEdge™ Target Emulation 1.2 Release Notes

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# Sun StorEdge Target Emulation 1.2 Release Notes

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## Introduction

These Release Notes describe product considerations for the Sun StorEdge™ Target Emulation (STE) 1.2 software. STE is SCSI target emulation software (the STE driver plus one or more target mode drivers) over a Fibre Channel.

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# Typographic Conventions

Typeface	Meaning	Examples
AaBbCc123	The names of commands, files, and directories; on-screen computer output	Edit your <code>.login</code> file. Use <code>ls -a</code> to list all files. <code>% You have mail.</code>
<b>AaBbCc123</b>	What you type, when contrasted with on-screen computer output	<code>% <b>su</b></code> <code>Password:</code>
<i>AaBbCc123</i>	Book titles, new words or terms, words to be emphasized	Read Chapter 6 in the <i>User's Guide</i> . These are called <i>class</i> options. You <i>must</i> be superuser to do this.
	Command-line variable; replace with a real name or value	To delete a file, type <code>rm filename</code> .

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## Related Documentation

Application	Title	Part Number
man pages	<code>steadm(1M)</code> <code>steconf(1M)</code> <code>stxprint(1M)</code> <code>ste.cf(4)</code> <code>sftm(7D)</code> <code>ste(7D)</code>	N/A
Hardware Installation	<i>Sun StorEdge SBus FC-100 Host Adapter Installation and Service Manual</i>	802-7572

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## Qualified Platforms

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**Note** – This release supports the target servers indicated below. PCI-based target servers are not supported.

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**TABLE 1** Target Configuration

Target Server	Fibre Channel Host Adapter	Storage System
Sun Enterprise™ Server models ES3500, ES4x00 to ES6x00, ES10000	SBus - P/N 501-3060	Any storage system supported by Sun

**TABLE 2** Initiator Configuration

Qualified Initiators	Fibre Channel Host Adapter
Sun Enterprise PCI-based servers	PCI - P/N 375-0040

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## Product Considerations

### SOC+ Fibre Channel Host Adapter

You may not use the SOC+ Fibre Channel Host Adapter in dual mode. That is, you cannot configure one port for Target Mode and use the other port of the same SOC+ card for an initiator.

### Partition Usage

- The Solaris operating environment reserves space for header information at the beginning of each disk. You may not write to this space.
- Configure Fibre Channel Ports with a LUN 0.

- STE does not support presenting the same back-end partition on multiple LUNs on the same Fibre Channel Port. You may, however, present the same partition on multiple ports, as shown below.

```
# Virtual Disks
vdisk1  /dev/rdisk/c2t17d0s1  tm0      1      online
vdisk5  /dev/rdisk/c2t17d0s1  tm1      1      online  ro
```

## Serviceability of a System Panic

In the unlikely event of a system panic, the Sun Storage Cache Management software (SUNWscm) will capture the panic dump and Storage library information. The capture is enabled by default so that if a failure caused by software or hardware does occur, it can be diagnosed on the first incident.

The information is captured by the `/etc/init.d/issdump` script for use by Sun Enterprise Services. (`/etc/init.d/issdump` is linked to `/etc/rc2.d/S19issdump`.)

When installing SUNWscm, make sure your dump partition (normally the primary swap partition) is large enough to dump all configured memory on your server. You also must ensure that the `/var/crash` directory has enough free space to hold a crash dump file.

## Running STE with Instant Image

STE and SV cannot share the same volume. If you are using Instant Image and you have a volume that you want under STE control, remove the volume from SV control, add the volume to the `ste.cf` file, then restart Instant Image.

## Restrictions

- STE does not support Veritas Dynamic Multipathing or Alternate Pathing
- STE 1.2 is not supported in a clustered environment

## Reconfiguration Requirement

If you reconfigure any hardware, reconfigure the `ste.cf` file as well.

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# Open Bugs

*4216804, 4216809*

## *STE and Veritas Volume Manager 2.6*

Veritas Dynamic Multipathing (DMP) does not support STE disks.

**Workaround:** In order to manage STE disks using Veritas Volume Manager on the initiator, you must disable the Veritas DMP:

1. **Unmount all file systems created on Volume Manager volumes.**

```
# umount
```

2. **Stop the Volume Manager.**

```
# vxdctl stop
```

3. **Remove the vxdmp driver from the /kernel/drv directory.**

```
# rm /kernel/drv/vxdmp
```

4. **Edit the /etc/system file and remove the following line:**

```
forceload: drv/vxdmp
```

5. **Remove the Volume Manager DMP files.**

```
# rm -rf /dev/vx/dmp /dev/vx/rdmp
```

6. **Symbolically link /dev/vx/dmp to /dev/dsk.**

```
# ln -s /dev/dsk /dev/vx/dmp
```

7. Symbolically link `/dev/vx/rdmp` to `/dev/rdsk`.

```
# ln -s /dev/rdsk /dev/vx/rdmp
```

8. Reboot the system to disable the DMP functionality.

```
# /usr/sbin/shutdown -i6
```

4346340

*“vxvol -f stop” STE backend Vx vols can’t be restarted.*

If a volume becomes unavailable to the cache layer, the cache marks that device “offline”. Stopping VxVM volumes result in them being marked “offline”. The cache does not poll for offline devices to come back online. They must be brought online in the cache manually.

**Workaround:** If you wish to do Volume Manager maintenance, bring STE down first. If you do however end up in the situation where the cache has off-lined devices, you may re-enable by bringing the cache down and then back up again.

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