



Sun StorEdge™ Configuration Service 1.0 Release Notes

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Sun StorEdge™ Configuration Service 1.0 Release Notes

This document contains the latest supplementary information. Use it with the latest version of the *Sun StorEdge Configuration Service 1.0 Installation Guide* (part number 816-4294).

This document contains the following topics:

- “Software Requirements” on page 3
- “Software Notes” on page 5
- “Known Issues” on page 9
- “Known Limitations” on page 11
- “Documentation Issues” on page 13

Software Requirements

This product supports the following storage systems:

- Sun StorEdge T3 Array
- Sun StorEdge 9900 Series

This product requires the Solaris™ Operating Environment:

- Solaris 8 4/01 release, or later, with recommended patch cluster
- Solaris 9

This product requires one of the following browsers:

- Netscape Navigator 4.76 or greater
- Internet Explorer 5.x or greater

This product requires:

- 100 to 200 Mbytes of memory, depending upon the number of Sun StorEdge T3 arrays being managed

Software Notes

This section contains caveats about Sun StorEdge Configuration Service (SECS) functionality:

- “Accessing Documentation on the CD-ROM” on page 5
- “Using Browser-Based Applications” on page 5
- “Using Network Connections to Discover and Manage Sun StorEdge T3 Arrays” on page 6
- “Initializing Sun StorEdge T3 Array Volumes” on page 6
- “Polling Sun StorEdge T3 Arrays” on page 6
- “Resetting or Shutting Down Sun StorEdge T3 Arrays” on page 7
- “Unsupported Sun StorEdge T3 Array Configuration Options and System Information” on page 7
- “Monitoring Sun StorEdge T3 Array Health” on page 8

Accessing Documentation on the CD-ROM

You can find the Sun StorEdge Configuration Service 1.0 documentation on the CD-ROM in the `/Docs` directory.

Using Browser-Based Applications

Because the Sun StorEdge Configuration Service software is a browser-based application, it may be necessary to hold the Shift key and click Reload to refresh the page on Netscape, or click Refresh in Internet Explorer. This will update values on the page. Needing to reload or refresh prevents having data changed on the page while you are trying to make updates.

Asset Discovery Time

The time to access the main asset screen after discovery is approximately 5 seconds. However, the first time through completing discovery is approximately five minutes. Subsequent accessibility is approximately 5 seconds.

Using Network Connections to Discover and Manage Sun StorEdge T3 Arrays

The Sun StorEdge Configuration Service software depends upon the Sun StorEdge T3 ethernet interface for discovery and management.

Initializing Sun StorEdge T3 Array Volumes

Initializing a volume on a Sun StorEdge T3 array takes time. While the volume is being initialized, *perform no other operations on that array.*

Polling Sun StorEdge T3 Arrays

The Sun StorEdge Configuration Service polls the Sun StorEdge T3 arrays on intervals that balance the software's performance requirements while reducing network traffic and load on the Sun StorEdge T3 processor. Critical items like state and status are polled at higher rates than things like the serial number for a disk drive. Because of these polling intervals the Sun StorEdge Configuration Service and the array can be out of synchronization for a period of time.

TABLE 1 shows the general polling time intervals used by the Sun StorEdge Configuration Service to access Sun StorEdge T3 arrays.

TABLE 1 Polling Action Time Intervals

Action	Time Intervals
State, status, and other health-type properties of volumes or physical components that are viewed by the Sun StorEdge T3 telnet commands <code>fru stat</code> or <code>vol stat</code>	60 seconds
Static properties of physical components like vendor, model, and serial number which only change when fru component is replaced	2 minutes
System Properties set via the T3 telnet commands <code>set</code> or <code>sys</code>	2-3 minutes
Changes in port values	2 minutes
Changes to volume properties (other than status)	3 minutes
Changes to slice and LUN information (with Sun StorEdge T3 2.1 firmware)	3 minutes

If you are actively working within the Sun StorEdge Configuration Service software when you change values, these time intervals don't apply.

Resetting or Shutting Down Sun StorEdge T3 Arrays

When a device is reset or shutdown, the Sun StorEdge Configuration Service software will actively monitor the device for its return. When a device first disappears, the device will be polled after 2 minutes and then polled ten times at 1 minute intervals. If the device fails to return after this time period, the device will be polled at an interval of around 15 minutes. The number of down devices may increase the 15 minute interval by 20 seconds per device.

Unsupported Sun StorEdge T3 Array Configuration Options and System Information

The following Sun StorEdge T3 system information and configuration options are not supported in this version of the Sun StorEdge Configuration Service software.

Unsupported Configuration Options:

- TFTP boot
- boot delay
- TFTP file
- Network time protocol (Sun StorEdge T3 2.1 firmware)
- System time
- Log file setup
- Host file setup
- On or off line diagnostics
- SNMP setup and alarms

Unsupported System Information:

- Manufacture dates for disk drives, controller cards, power/cooling units, interconnect cards
- Timer
- Performance statistics
- Fabric state properties
- T3 health

Monitoring Sun StorEdge T3 Array Health

Sun StorEdge T3 health monitoring is not included in the Sun StorEdge Configuration Service. Sun's Storage Automated Diagnostic Environment (SADE) 2.0 software provides health monitoring and diagnostic tools for the Sun StorEdge T3 arrays. The Sun StorEdge Configuration Service can be configured to invoke SADE. See "To Run the Configuration Script" in the *Sun StorEdge Configuration Service 1.0 Installation Guide*.

Known Issues

Sun StorEdge T3 Array Device Contention

Users should be careful not to issue configuration or control operations on the same device at the same time from multiple sessions of the Sun StorEdge Configuration Service because the results can be unpredictable. Direct management of a Sun StorEdge T3 array through the use of a Sun StorEdge T3 Telnet client session can also conflict with Sun StorEdge Configuration Service management.

Therefore, any Sun StorEdge T3 array should be managed by only one instance of the Sun StorEdge Configuration Service.

Inactivity Time Out Adjustment on Sun StorEdge Configuration Service

The Sun StorEdge Configuration Service imposes an inactivity time limit on both web-based sessions and CLI sessions.

The inactivity time limit is composed of an inactivity time-out threshold after which a warning is issued that the session will be terminated within an additional amount of time.

There are some configuration operations that, depending on factors such as the state of the device managed, network latencies, number of devices affected by a single command (for example, issuing the same command against a large number of device instances), etc. can trigger a user inactivity time-out disconnect.

You may be able to avoid time-outs by executing long-running commands against fewer devices at a time. Alternately, you can increase the default time-out value.

In order to modify the default values of the time-out, the Sun StorEdge Configuration Service storage administrator can modify specific runtime configuration parameters. The following steps can be used to modify the parameters:

- 1. Make sure the Sun StorEdge Configuration Service is running.**

If it is not running, issue the following command:

```
# /etc/init.d/secs start
```

2. Using your preferred editor, edit the appropriate configuration file.

a. For Telnet connections, issue the following:

```
# <edit> /opt/SUNWdm/gre/etc/services/inetd/telnet.properties
```

b. For Shell connections, (ssh or local sesh invocations), issue the following:

```
# <edit> /opt/SUNWdm/gre/etc/services/inetd/shell.properties
```

Note – Do this in spite of the “DO NOT EDIT THIS FILE” message in the file.

3. Change the following values:

```
secs.service.inetd.daemon.[telnet|shell].net.time.warn  
secs.service.inetd.daemon.[telnet|shell].net.time.disconnect
```

The values are expressed in milliseconds.

The default value for 'warn' - the inactivity time-out threshold- is 900000 milliseconds (15 minutes), at the end of which the warning is issued.

The default value for 'disconnect' - the inactivity time-out disconnect- is 300000 milliseconds (5 minutes) at the end of which the session is terminated.

At their discretion, the user should replace the default values with appropriate or tolerable values.

4. The values are incorporated in to the running application at the next restart.

The restart can be done on a subsequent system reboot, or by executing a shutdown and subsequent restart by using the following commands:

```
# /etc/init.d/secs stop  
# /etc/init.d/secs start
```

5. Verifying that the changes are effective can be done by inspecting the file(s) modified and seeing that the intended values are assigned to the modified lines.

Known Limitations

- **Bug 4630091:** Sun StorEdge Configuration Services may not display correct Hot Spare Status for 2nd Volume on Sun StorEdge T3/T3+ unit. When adding a second volume, the Sun StorEdge Configuration Service software may not indicate the presence of a hot spare.

Work Around:

Use `telnet` to create a session with the Sun StorEdge T3 array. Use `vol list` to display hot spare information. See “To Add a Volume” in the *Sun StorEdge Configuration Service 1.0 Administrator’s Guide*.

- **Bug 4666065:** Setting GUI `time out` requires editing the `web.properties` file.

Work Around:

Although the `web.properties` file states it should not be edited, you can carefully edit the `time-out` entry. See “Inactivity Time Out Adjustment on Sun StorEdge Configuration Service” on page 9 for the procedure to edit the time-out entry.

- **Bug 4683644:** Incorrect WWN permission setting after the group perm is set to non-default. This bug is due to an existing Sun StorEdge T3 array bug (4658417 “No token for group permissions”). In some cases, the Sun StorEdge Configuration Service software is not able to report group permissions correctly when the member WWN’s permission is higher than the group’s. As a result, the subsequent permission change may also be affected, since the Sun StorEdge Configuration Service software will reassign array’s group permission based on the false group permission reported in the Sun StorEdge Configuration Service software.

Work Around:

None.

- **Bug 4699151:** The documentation for Simple Network Management Protocol (SNMP) setup does not give an example of how to configure SNMP though the Sun StorEdge Configuration Service software.

Work Around:

Configure SNMP through the Administration tab (see “Configuring SNMP Notification” in the online help or *Sun StorEdge Configuration Service 1.0 Administrator’s Guide*). The host and port correspond to the host where the SNMP manager is running and which port the SNMP manager is listening to. The SNMP manager must be able to handle SNMP version 2 traps. The default port number is 9162.

- **Bug 4703342:** Selecting multiple Sun StorEdge T3 arrays and performing certain multiple array operation causes a time out. On the Asset page only the “Store Password”, “Change Password”, and “Remove Devices” actions work if a user selects multiple Sun StorEdge T3 arrays. The “Shutdown”, “Reset”, and “Show LUNs” actions should only be used with a single Sun StorEdge T3 array selected.

Work Around:

Select and individually perform each Sun StorEdge T3 array individually.

- **Bug 4712244:** Because there is no distinction between foreground user interaction and background array interaction, the Sun StorEdge Configuration Service software CLI tends to time out on long running commands. See “Inactivity Time Out Adjustment on Sun StorEdge Configuration Service” on page 9 for a description of the procedure to edit the time-out entry.

This problem can be experienced when information on several Sun StorEdge T3 arrays is displayed.

The following is one example:

```

Welcome to the StorEdge shell V1.0
SeSh [1] cd /devices/array/sun/t3
SeSh [2] config info -v * abc10.domain.name
abc11.domain.name
abc12.domain.name abc13.domain.name
abc14.domain.name
abc15.domain.name abc17.domain.name
abc19.domain.name
abc21.domain.name abc23.domain.name
abc4.domain.name
abc9.domain.name brm7b10-100 brm7b10-102 brm7b10-38
brm7b10-40 brm7b10-42 brm7b10-44 brm7b10-45 brm7b10-96 brm7b10-
98 brm7b13-11 brm7b13-5 brm7b13-7 brm7b13-9 brm7b15-13 brm7b15-
15 brm7b15-17 brm7b2-88 brm7b2-90 brm7b2-92 brm7b3-126 brm7b3-127
brm7b3-128 brm7c10-11 brm7c10-13 brm7c11-18 brm7c11-7 brm7c21-26
brm7c21-28 brm7c6-2 brm7c6-4 brm7c8-16 brm7c8-9
WARNING: Inactivity timeout, 300 seconds before connection
timeout.
INFO: Connection terminated due to user inactivity.

```

- **Bug 4712398:** When the Sun StorEdge Configuration Service is used to create two volumes on a partner-pair at the same time, the correct volume status of ‘unmounted’ is not reported for the first volume until the initialization of the second volume has completed. The Sun StorEdge Configuration Service may report that the first volume creation operation has failed when, in fact, it has completed successfully.

Documentation Issues

This section lists updates to the Sun StorEdge Configuration Service 1.0 documentation.

- “Updates to the Sun StorEdge Configuration Service 1.0 Administration Guide” on page 13
- “Updates to the Sun StorEdge Configuration Service 1.0 Installation Guide” on page 14
- “Updates to the Online Help” on page 14

Updates to the *Sun StorEdge Configuration Service 1.0 Administration Guide*

The *Sun StorEdge Configurative Service 1.0 Administrator’s Guide* (part number 816-4295 only) and the online help should be modified to include the following clarifications:

TABLE 2 *Sun StorEdge Configuration Service 1.0 Administration Guide* Updates

Page Number	Section Title	Change
5	Starting and Stopping the Daemons	The <code>/etc/init.d/secs.wbem</code> daemon only needs to be used with the Solaris 8 operating environment.

Updates to the *Sun StorEdge Configuration Service 1.0 Installation Guide*

The *Sun StorEdge Configuration Service 1.0 Installation Guide* (part number 816-4294) should be modified to include the following clarifications:

TABLE 3 *Sun StorEdge Configuration Service Installation Guide Updates*

Page Number	Section Title	Change
18	To Start the Sun StorEdge Configuration Service Daemons	The <code>/etc/init.d/secs.wbem</code> daemon only needs to be used with the Solaris 8 operating environment.
21	To Stop the Sun StorEdge Configuration Service Daemons	The <code>/etc/init.d/secs.wbem</code> daemon only needs to be used with the Solaris 8 operating environment.

Updates to the Online Help

The online help should be modified to include the following clarifications:

TABLE 4 *Online Help Updates*

Section Title	Change
Sun StorEdge Configuration Service Log Files	See page 4 of the <i>Sun StorEdge Configuration Service 1.0 Administration Guide</i> for file names.
To Start the Sun StorEdge Configuration Service Daemons	The <code>/etc/init.d/secs.wbem</code> daemon only needs to be used with the Solaris 8 operating environment.
To Stop the Sun StorEdge Configuration Service Daemons	The <code>/etc/init.d/secs.wbem</code> daemon only needs to be used with the Solaris 8 operating environment.
Logging Into the Web Browser	If using Netscape Navigator, use version 4.76 or greater.
Using the Secure Shell	Use the <code>-c 3des</code> option with the <code>ssh</code> command. See <i>Sun StorEdge Configuration Service 1.0 Administrator's Guide</i> for an example.
To Display Command Sub-command Usage	The <code>configure</code> sub-command should be <code>config</code> .
To Create and Bring a Volume Online	See <i>Sun StorEdge Configuration Service 1.0 Administrator's Guide</i> .

TABLE 4 Online Help Updates

Section Title	Change
To Create a LUN with Volume Slicing Enabled	This is only available on Sun StorEdge T3+ arrays with firmware version 2.1 or greater.
To Configure SNMP Notification	See <i>Sun StorEdge Configuration Service 1.0 Administrator's Guide</i> for minor changes to step 5.
To Add a Volume	See <i>Sun StorEdge Configuration Service 1.0 Administrator's Guide</i> for step 9.
To Store Passwords on Multiple Devices	See <i>Sun StorEdge Configuration Service 1.0 Administrator's Guide</i> for minor changes to step 3.
To Shut Down Multiple Storage Devices	See Bug 4703342 in "Known Issues" on page 9.
To Reset Multiple Storage Devices	See Bug 4703342 in "Known Issues" on page 9.
To Change Passwords on Multiple Devices	See <i>Sun StorEdge Configuration Service 1.0 Administrator's Guide</i> for minor changes to step 3.
To Display Log Information	Omit step 4.

