



Sun StorEdge™ 3900 and 6900 Series 1.1 Release Notes

Storage Service Processor Version 2.1.1

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Sun StorEdge 3900 and 6900 Series

1.1 Release Notes

The Sun StorEdge™ 3900 and 6900 series storage subsystems are complete preconfigured storage solutions. The Sun StorEdge 3900 and 6900 series provide two different configurations for the direct attach storage (DAS) and storage area network (SAN) environment.

This document is organized as follows:

- “General Information” on page 1
- “Sun StorEdge 3900 and 6900 Series Features” on page 2
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General Information

All documentation that accompanies the Sun StorEdge 3900 and 6900 series storage subsystems has been written for Sun support and Sun trained personnel who are already familiar with Sun’s hardware and software products.

Sun StorEdge 3900 and 6900 Series Features

Features of Sun StorEdge 3900 and 6900 series subsystems include:

- Modular storage elements that can be incrementally expanded in a predefined footprint.
- Sun tested, preconfigured storage system optimized for the Solaris™ operating environment
- Supports single or clustered Sun Enterprise™ and Sun Fire™ servers
- Dynamically scales to more than 29 Tbytes in a single system
- Logical unit (LUN) segmenting or carving for storage consolidation.
- LUN security access (masking) for the storage consolidation models.
- Fibre Channel interface
- A high degree of data availability in a unit that reduces cost of ownership

TABLE 1 summarizes Sun StorEdge 3900 and 6900 series features supported with each release of the Storage Service Processor software stack. Each version of the Storage Service Processor software stack is available on CD. Upgrade CDs are also available to upgrade a Sun StorEdge 3900 or 6900 series from one software version to the next. For example, you can upgrade your system from version 2.0.2 to version 2.0.3, and from 2.0.3 to version 2.1.1.

TABLE 1 Features Supported by Storage Service Processor Versions

Features	Version 2.0.2 (Feb. 02, 2002)	Version 2.0.3 (May 07, 2002)	Version 2.1.1 (June 18, 2002)
Sun StorEdge T3+ array firmware version 2.0.1	X		
Virtualization engine firmware version 8.014	X		
Switch firmware version 3.04.62 (FC-switch FLASH 30462)	X	X	X
36 Gbyte and 72 Gbyte disk drive capacities	X	X	X
Solaris 8 operating environment (update 5, 07/01; or update 6, 10/01; or update 7, 02/02 required)	X	X	X

TABLE 1 Features Supported by Storage Service Processor Versions *(Continued)*

Features	Version 2.0.2 (Feb. 02, 2002)	Version 2.0.3 (May 07, 2002)	Version 2.1.1 (June 18, 2002)
Sun StorEdge SM Remote Response ready		X	X
Improved security for Sun StorEdge Remote Response		X	X
Increased disk drive capacity (181 Gbyte drives)		X	X
Sun StorEdge T3+ array firmware version 2.1 (fabric support)		X	X
Virtualization engine firmware version 8.017 supporting: <ul style="list-style-type: none">• Improved performance (8K - 12K)• Failback without halting I/Os		X	X
Sun StorEdge SAN 3.2 support		X	X
Sun Cluster 3.0 support		X	X
Switchless configurations			X
Multiplatform support for Windows 2000, NT and LINUX			X
16 LUN configurations and LUN masking support (Sun StorEdge 3900 series only)			X
Multiple host support for Sun StorEdge 6900 series			X
Four-node cluster support for Sun StorEdge 3900 series			X
Sun StorEdge SAN 4.0 support			X
Solaris 9 operating environment			X

Storage Service Processor Software Update

This release of the Sun StorEdge 3900 and 6900 Series includes an update to the software image on the Storage Service Processor to version 2.1.1. The software revision includes:

- Updates to the configuration utilities and bug fixes to the 2.0.3 Storage Service Processor software. See the *Sun StorEdge 3900 and 6900 Series 1.1 Reference and Service Manual* for details.
- Upgraded Sun StorEdge T3+ array firmware to version 2.1. For more information on new features available in the Sun StorEdge T3+ array version 2.1 firmware, refer to the *Sun StorEdge T3+ Array Release Notes*, part number 816-4771-xx.
- Data aggregation support for Storage Automated Diagnostic Environment software. For more information on data aggregation support and Storage Automated Diagnostic Environment software, contact your SunService representative.

Known Bugs

The following is a list of the priority 1, 2, and 3 bugs associated with Sun StorEdge 3900 and 6900 series subsystems. The BugID number is followed by the priority and severity of the bugs in parentheses.

- 4671617 (P2/S2) - The virtualization engine daemon cannot be restarted because of a residual status (semaphore with ID 0) that is left behind after a termination sequence. This occurs when using the `sdshutdown` command to initiate the termination sequence. The following is an example of the message that displays on the service processor when this occurs:

```
host# Error initializing semaphore for error logging
      semget: File exists
The semaphore already exists and/or the SLIC daemon 'slicd' is
already running
```

- 4666764 (P2/S3), 4633323 (P3/S3), and 4666199 (P3/S3) - Upgrading virtualization engine firmware using the `sdnld` command can result in the firmware download not completing successfully.
Workaround: Use the instructions in the *Sun StorEdge 3900 and 6900 Series 1.1 Reference and Service Manual* to upgrade the firmware of the virtualization engine.
- 4676641 (P3/S3) and 4699058 (P4/S3) - The Storage Automated Diagnostic Environment Revision Checking feature can report incorrect information when it is used to check Sun StorEdge T3+ array firmware levels. The feature does check

firmware version levels for each array, but the report does not indicate if the array is configured correctly for a Sun StorEdge 3900 or 6900 series system 1.1. There are two possible outputs for the Revision Checking report:

- If the array firmware level is correctly configured in the storage system, the tool reports the firmware as `Uplevel`, which is the expected behavior.
- If the array in the storage system contains down level firmware, the tool reports the firmware as `Passed`, which is expected behavior.

Workaround: Verify the Sun StorEdge T3+ array firmware level to make sure it is the correct version in the Sun StorEdge 3900 and 6900 series 1.1 configuration using the following procedure:

1. Log in to the Storage Service Processor.

2. Use `telnet(1)` to connect to the Sun StorEdge T3+ array.

For example:

```
# /bin/telnet t3b0
login: root
Password: Return

T3B Release 2.01.00 2002/03/22 18:35:03 (192.168.0.40)
Copyright (C) 1997-2001 Sun Microsystems, Inc.
All Rights Reserved.
```

In this example, the firmware version is displayed in the first line of the array login message as `T3B Release 2.01.00`, which is the level of firmware required for full functionality with the Sun StorEdge 3900 and 6900 series, 1.1. If the login message reports a different array firmware level, then upgrade or downgrade the array firmware to this version. The 2.01.00 array firmware is part of the Storage Service Processor software stack, which is available on an the Sun StorEdge 3900 and 6900 Upgrade CD.

- 4691480 (P3/S3) - Using the Storage Automated Diagnostic Environment, some configuration utility sections do not work for the Sun StorEdge 3900SL, 6910SL and 6960SL series switchless models.

Workaround: Change the model numbers under the Storage Automated Diagnostic Environment so that the configuration utilities can recognize the switchless models. To change the model numbers in the Storage Automated Diagnostic Environment:

1. Log in to the Storage Service Processor.

2. Use the `/opt/SUNWstade/bin/config_solution` command to set the model type to 3900SL, 6910SL, or 6960SL.

3. Edit the `/opt/SUNWstade/DATA/rasagent.conf` file as follows:

Change the `solution_model` from:

- 3900SL to 3960 or 3910
- 6910SL to 6910
- 6960SL to 6960
- 4697033 (P3/S3) - In the Storage Automated Diagnostic Environment, if you use the `createvlun -z` command to create multiple VLUNs that specify zones, the command executes without adding the VLUNs to the zone; that is, the `-z` option is ignored.
Workaround: There are three options you can use:
 - Use the CLI to `runsecfg` to create multiple VLUNs, or
 - Use the Storage Automated Diagnostic Environment GUI to create multiple VLUNs without adding them to zones. After creating the VLUNs, use the menu option “Add Components to Virtualization Engine Zone” to add the VLUNs to the appropriate zones, or
 - Use the Storage Automated Diagnostic Environment GUI to create VLUNs in a single disk pool.
- 4666611 (P3/S4) - If you are using a browser such as Netscape in a Sun Ray™ environment to display the SAN topology, an error is displayed and the topology fails to build. The following is an example of this error:

```
#error The certificate issuer for this server is not recognized by Netscape.  
The security certificate may or may not valid.  
Netscape refuses to connect to this server (-8179) java40.tar/ifc11.jar  
java.lang.SecurityException: system classes not signed
```

Workaround: To resolve this error, use the following procedure.

1. Exit Netscape.

Make sure all Netscape windows are closed.

2. Type the following commands as appropriate for your operating environment.

- In a Solaris operating environment:

```
# cd .netscape  
# mv key3.db key3.bad  
# mv cert7.db cert7.bad
```


- In a Windows environment:

```
C:/Program Files/Netscape/Users/username/  
rename key3.db key3.bad  
rename cert7.db cert7.bad
```

3. Restart Netscape.

- 4671151 (P3/S4) - In the Storage Automated Diagnostic Environment, version 2.0.6.010, the Monitor-->Devices section reports the incorrect number of host bus adapters (HBAs) per virtual engine.
Workaround: Ignore this message; the HBAs reported are not connected to the virtual engine.
- 4669397 (P3/S5) - If you use the Storage Automated Diagnostic Environment Command `config_solution` on a Sun StorEdge 6900 series system that is not fully populated with Sun StorEdge T3+ arrays, a warning message is displayed that the system cannot ping an array IP address.
Workaround: This warning message is misleading if the system rack is not fully configured with Sun StorEdge T3+ arrays. If your system displays this message and it is not fully populated with arrays, ignore the message.

Security Notes

- The Sun factory does not set a root password on the Sun StorEdge 3900 and 6900 series.
- You can log in as root only at the console port of the Storage Service Processor. A generic service login has been provided with this version of the software to accommodate logging in through a `telnet(1)` session. The new login is: `cmdadm`, instead of `root`. The password for the `cmdadm` login is `sun1`. Do not alter this password or remote access will be affected. If necessary, you can `su(1M)` to `root` once you have logged on to the Storage Service Processor.
- On the Sun StorEdge 6900 series systems, the virtualization engine can cause a device naming problem when you are using earlier versions of VERITAS VxVM. Because of this, the only supported version of VERITAS is VxVM version 3.2 with patch level 1, which includes patches 111909-04 and 111904-04 or greater.

Accessing the Sun StorEdge 3900 and 6900 Series Documentation

The documentation for Sun StorEdge 3900 and 6900 series systems is provided online. There are also online man(1) pages for all configuration utilities.

To retrieve all the documentation:

1. **Open a browser window.**
2. **Type the following URL:**

`http://docs.sun.com`

3. **Type 3900 or 6900 in the search string field and click on the box next to the “Search book titles only” option.**

You can also search for the documents by part number, using the following list.

Part Number	Title
816-5252-10	<i>Sun StorEdge 3900 and 6900 Series 1.1 Installation Guide</i>
816-5253-10	<i>Sun StorEdge 3900 and 6900 Series 1.1 Reference and Service Manual</i>
816-5256-10	<i>Sun StorEdge 3900 and 6900 Series 1.1 Site Prep Guide</i>
816-5257-10	<i>Sun StorEdge 3900 and 6900 Series 1.1 Regulatory and Compliance Guide</i>
816-3142-10	<i>Storage Automated Diagnostic Environment User's Guide</i>

4. **Click on “Go” to initiate the search.**
The search result displays related book titles as live links.
5. **Click on one of the book title links.**
6. **Click on the “Download PDF” link.**
Book titles and related links to PDF files are displayed.
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Sun StorEdge 3900 and 6900 Series documents are also available at:

[http://www.sun.com/products-n-solutions/hardware/docs/
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