

Sun Storage Common Array Manager

Software Release Notes, Release 6.7.0



Part No.: E21042-01
February 2011

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Sun Storage Common Array Manager Software Release Notes

Use this document for instructions about how to download Oracle's Sun Storage Common Array Manager software and learn about new features, related documentation, system requirements, notable bug fixes, and known issues for the 6.7.0 product release.

For installation, configuration, and other instructions, see ["Documentation" on page 7](#).

These Release Notes include the following sections:

- ["About the Software" on page 2](#)
- ["How to Get the Software" on page 2](#)
- ["What You Get with the Software" on page 3](#)
- ["What's New in This Release" on page 4](#)
- ["Documentation" on page 7](#)
- ["System Requirements" on page 8](#)
- ["Firmware" on page 12](#)
- ["Supported Expansion Modules" on page 13](#)
- ["Notable Fixes" on page 14](#)
- ["Known Issues" on page 18](#)
- ["Contacting Support" on page 38](#)

About the Software

Sun Storage Common Array Manager software provides an easy-to-use interface from which you can configure, manage, and monitor storage arrays.

The software includes a distributed architecture enabling you to designate local and remote domains through which you can configure and manage your storage environment for optimal efficiency and productivity.

Sun Storage Common Array Manager includes the following:

- Browser interface
- Local command line interface
- Remote command line interface

The command line interfaces (CLIs) perform the same control and monitoring functions as the browser interface. If you are unfamiliar with the CLI, it will be easier to manage the array using the browser interface.

How to Get the Software

Note – This new procedure is not documented in other 6.7 documentation but will appear in the Common Array Manager 6.8 product documentation set.

1. Go to My Oracle Support:

<https://support.oracle.com>

2. Click Sign In and enter your existing account information, or register as a new user.

3. At the top of the page, click the Patches & Updates tab.

4. Under the Patch Search section: Click the Search tab, and then click the Product or Family (Advanced Search) link.

5. Check Include all products in a family.

6. In the Product field, start typing Sun Storage Common Array Manager (CAM), and select it when it appears.

7. In the Release field, expand Sun Storage Common Array Manager (CAM), check the release and patches you want to download, and then click Close.
8. Click Search.
Available patches for the release you selected are displayed.
9. Select a patch for your operating system.
10. Click ReadMe for a patch description and installation instructions.
11. Click Download for a single patch, or Add to Plan to download a group of patches.

What to do next...

See [“Documentation” on page 7](#) to find information about installation, configuration, and more.

See [“Patches” on page 10](#) for information about the latest software updates.

What You Get with the Software

[TABLE 1](#) lists the version information for the software included in this release.

TABLE 1 Sun Storage Common Array Manager Contents

Type	Version
Sun Storage Common Array Manager	6.7.0
Oracle Java Web Console software	3.1
Oracle Java 2 Software Development Kit	1.6 u20
Firmware files	See “Firmware” on page 12
Remote scripting CLI client	2.1.4

Licensing Optional Premium Features

There are a variety of premium features for which you can purchase licenses. When you order licenses, they are sent to you with instructions on how to activate the features. For more information, search the online help pages for these topics:

- About Licensed Features
- Adding a License
- Managing Licenses

Note – You must name arrays before adding licenses.

What's New in This Release

This release introduces the following features:

- Oracle rebranding of graphical user interface (GUI)
- Updated Sun Blade 6000 Disk Module and Network Expander Module (NEM) firmware
- Oracle VMware management host
- Updated Sun Storage 6000 array firmware versions 7.60.36.13 and 7.60.53.10
- Updated Sun Storage F5100 Flash Array FMod firmware version D11B
- Windows Server 2008 R2 platform support
- Sun Storage 6Gb SAS HBA (EXT and EM) support for Sun Storage F5100 Flash Array. This new feature requires patches to CAM 6.7.0. See [“Patches” on page 10](#).

Part numbers for these HBAs are:

- SG-SAS6-EXT-Z = SAS-2 External low profile HBA
- SG-SAS6-EM-Z = SAS-2 Express Module HBA

Note – Host software upgrades are supported from Sun Storage Common Array Manager release 6.x to 6.7.0.

Selecting Maximum Volume Size Using the CLI

When creating a new volume using the “create volume” command, there are two ways to specify using all available space on a virtual disk (vdisk):

- If creating a new volume and vdisk simultaneously, use the **-F,--fill-vdisk** option. This creates the largest possible vdisk that matches the attributes of the specified pool.
- If creating a new volume on an existing vdisk, specify the “max” value for the **-s,--size** option. Note that the “max” value is valid only for specific syntax variants of the “create volume” command. For example:

```
scs create -a | --array <array-name> -p | --pool <pool-name> -s | --size  
<number<TB|GB|MB|KB|Bytes|BLK>|max> [-v | --vdisk <virtual-disk-name>]  
volume <volume-name>
```

This information is currently not documented in the CLI Guide or man pages. To obtain the most recent list of variants for the “create volume” command, use the **--help** option as instructed in the *Sun Storage Common Array Manager CLI Guide*.

Updated os-type Values in CLI

Starting with release 6.7, the following commands accept updated values for the **-o | --os-type** option:

- scs create initiator
- scs modify initiator
- scs modify array

The os-type option accepts values returned by the “list -a <array> **os-type**” command. For detailed information concerning this command and the above three commands, refer to the *Sun Storage Common Array Manager CLI Guide*.

The os-type option also accepts legacy values (listed in [TABLE 2](#)) to maintain backward compatibility with user-written CLI scripts. Use the new os-type values wherever possible.

TABLE 2 os-type Values

Legacy os-type	New os-type
solaris	SOLARIS_MPXIO
solaris_dmp	SOLAVT
sun_storedge_nas_gateway	SUN_SE5XXX
win2k_non_clustered	WIN2KNETNCL

TABLE 2 os-type Values

Legacy os-type	New os-type
win2k_clustered	W2KNETCL
win2k_non_clustered_dmp	W2KNETNCLDMP
win2k_clustered_dmp	W2KNETCLDMP
aix	AIX
aixavt	AIXAVT
hpux	HPX
linux	LNK
netware_failover	NWRFO

Deleting Volumes/Virtual Disks Enhancement

Beginning with version 6.7, and to improve usability, the Graphical User Interface (GUI)/Browser User Interface (BUI) will retain a virtual disk when deleting the last volume on that virtual disk. It will remind the user to delete the virtual disk manually if they want to remove it.

To maintain compatibility with user scripts, the CLI behavior was not changed. The CLI will automatically delete a virtual disk when its last volume is deleted.

The CLI has been enhanced to provide a new “-k” option to retain (keep) a virtual disk when its last volume is deleted. The command syntax is: `sscs delete -a <array> -k volume <volname>`.

Documentation

For hardware information, refer to the array's release notes and hardware installation guide.

Online help and man pages are incorporated into the software. The following table lists other documentation related to Sun Storage Common Array Management software.

You can search for documentation at:

<http://www.oracle.com/technetwork/indexes/documentation>

TABLE 3 Sun Storage Common Array Manager - Related Documentation

Documents Related To Sun Storage Common Array Manager
<i>Sun Storage Common Array Manager Quick Start Guide</i>
<i>Sun Storage Common Array Manager Software Installation and Setup Guide</i>
<i>Sun Storage Common Array Manager CLI Guide</i>
<i>Sun Storage Array Baseline Firmware</i>
<i>Sun Storage F5100 Flash Array Documentation including Release Notes</i>
<i>Sun Storage J4200 Array Documentation including Release Notes</i>
<i>Sun Storage J4400 Array Documentation including Release Notes</i>
<i>Sun Storage J4500 Array Documentation including Release Notes</i>
<i>SAS-1/SAS-2 Compatibility Upgrade Guide</i>
<i>Sun Blade 6000 Disk Module Documentation including Release Notes</i>
<i>Sun StorageTek 2500 Arrays Getting Started Guide</i>
<i>Sun StorageTek 2500 Arrays Release Notes</i>
<i>Sun StorageTek 2500 Arrays Firmware Upgrade Guide</i>
<i>Sun Storage 6x80 Array Release Notes</i>
<i>Sun Storage 6580/6780 Hardware Installation Guide</i>
<i>Getting Started Guide for Sun Storage 6580/6780 Rack Mounted Arrays</i>
<i>Sun StorageTek MPIO Device Specific Module Installation Guide for Microsoft Windows OS Platform</i>
<i>Sun StorageTek RDAC Failover Driver Installation Guide for Linux OS</i>

System Requirements

System requirements for Sun Storage Common Array Manager software are described in the following sections:

- [“Supported Arrays” on page 8](#)
- [“Supported Web Browsers” on page 9](#)
- [“Supported Languages” on page 9](#)
- [“Patches” on page 10](#)
- [“Supported Platforms” on page 11](#)

Supported Arrays

Sun Storage Common Array Management software supports the following Sun storage systems:

- Sun Storage 6180 array
- Sun Storage 6580 array
- Sun Storage 6780 array
- StorEdge 6130 array
- StorageTek 6540 array
- StorageTek 6140 array
- StorageTek 2510 array
- StorageTek 2530 array
- StorageTek 2540 array
- StorageTek FLX380 array
- StorageTek FLX280 array
- StorageTek FLX240 array
- Sun Storage F5100 Flash array
- Sun Storage J4200 array
- Sun Storage J4400 array
- Sun Storage J4500 array
- Sun Blade 6000 Disk Module
- Sun Blade 6000 Multi-Fabric Network Express Module
- Sun Blade 6000 10GbE Multi-Fabric Network Express Module
- Sun Blade 6000 Virtualized Multi-Fabric 10GbE Network Express Module

Supported Web Browsers

TABLE 4 Supported Web Browsers

Browser	Supported Version
Firefox	3.0 and higher
Microsoft Internet Explorer	6.0

Best Practices for Browser Performance

For best web browser performance:

- Enable pop-up windows.
- Specify No Proxy for the Sun Storage Common Array Manager host to avoid situations where your browser might hang, time out, or generate error messages. From Preferences > Advanced > Proxies (or a similar path, depending on your browser), add the Sun Storage Common Array Manager management host name to the “No Proxy for” section.
- Recent Firefox versions might require you to accept and add a security certificate prior to bringing up the authentication page.

Supported Languages

Because locales are part of the installation, there is no need to download additional software other than appropriate patches.

For Solaris, Linux, and Windows, the Browser User Interface (BUI) is available in:

- English
- French
- Japanese
- Simplified Chinese

Command-line interface (CLI) is available in:

- English

Online help is available in:

- English
- Simplified Chinese
- Japanese

Man pages are available in:

- English
- Japanese

Patches

See “[How to Get the Software](#)” on page 2 for instructions on downloading patches.

Oracle’s Sun Storage Common Array Manager 6.7 patches include a new Fishwrap library for Windows systems, new Sun Storage F5100 Flash Array expander firmware version 5.04.05 for all applications, firmware updates, and updates appropriate for your OS and configuration.

To obtain patches using Solaris, install Solaris 10 Update 8 or 9.

The mpt_sas driver requires these patches:

- Oracle Solaris 10 10/09 plus patch 142676-02
- Oracle Solaris 10 10/09 plus patch 143523-02

The mpt_sas driver also requires this Solaris 10 update:

- Oracle Solaris 10 09/10 Update 9

See <http://www.lsi.com/support/sun> for information about LSI HBA packages.

Notes

For CAM 6.7, a mismatch alarm is generated when the different platform types are registered. See “[Datahost RevisionDeltaEvent Mismatch alarm](#)” on page 33.

CAM patch 6.7.0.13 provides a firmware fix for three severe bugs. See “[Drives that have Mechanical Positioning Errors may Cause a RAID Controller to Reboot when the Controllers Attempt to Fail that Drive](#)” on page 19.

Supported Platforms

TABLE 5 Supported Platforms

Platform	Operating System
SPARC server or workstation	Solaris 9 OS
	Solaris 10 OS
	OpenSolaris 2009.06
Windows Servers	Windows 2003 SP2
	Windows XP Professional SP3
	Windows Server 2008 SP2
	Windows Server 2008 R2
x64 computer	Red Hat Linux 4.7
	Red Hat Linux 5.4
	SuSE Linux Enterprise Server 11
	SuSE Linux Enterprise Server 10 SP3
	Oracle Enterprise Linux 5.4
x86 computer	Oracle VM 2.2
	Solaris 10 OS
	OpenSolaris 2009.06

Firmware

Firmware delivered with Sun Storage Common Array Manager software can be installed using the Install Firmware Baseline feature. However, moving from one major firmware release to another might require special procedures.

If you attempt an upgrade and it fails, contact Support at:

<https://support.oracle.com>

For baseline firmware information, such as controller, NVSRAM, IOM, disk drive, version, and firmware file, see *Sun Storage Array Baseline Firmware*, part number 821-0136.

2500 arrays

For the 25xx arrays, upgrading from a 06.xx.xx.xx version to 07.xx.xx.xx requires a special utility. Consult the *Sun StorageTek 2500 Array Series Firmware Upgrade Utility Guide* (820-6362).

Support for VMware ESX 4.1 with Firmware 07.35.55.10

VMware ESX 4.1 is supported as a data host platform for StorageTek 2540 arrays with firmware version 07.35.55.10 installed. The corresponding ESXi version 4.1 is also supported by this firmware version. Note that this support is not mentioned in the latest *Sun StorageTek 2500 Series Array Release Notes, Release 1.4* (Sun part number 820-6247-13).

6540, 6140, and FLX380 arrays

Upgrading from a 06.xx.xx.xx version to 07.xx.xx.xx requires a special utility. Consult the *6000 Series Array Firmware Upgrade Guide* (820-7197).

J4000 arrays

It is best practice to upgrade HBAs to Phase 14 firmware (1.26.03) or later before upgrading JBOD installations to Sun Storage Common Array Manager version 6.6 and above. This helps avoid issues in discovering JBODs with the firmware (J4200/J4400 - 3A53/3R53) if the HBA has not been upgraded.

Sun Blade 6000 Disk Module

Before beginning the firmware upgrade process, review this document: *SAS-1/SAS-2 Compatibility Upgrade Guide* (part number 821-1800). This guide contains information required for a successful firmware upgrade. Service Advisor does not include this information.

Sun Storage F5100 Flash array

The FMod firmware upgrade process requires a manual enclosure power cycle.

Onsite upgrade to 5.04.05 firmware baseline with the CAM 6.7 patch is not possible. The motherboards must be shipped from manufacturing with 5.04.05 installed to support SAS2 HBAs connectivity. See [“Patches” on page 10](#).

Supported Expansion Modules

To add expansion modules to an array configuration, follow the procedures documented in Service Advisor.

The following tables list supported expansion modules that can be attached to an array configuration:

TABLE 6 Supported Expansion Modules: 6000 Series arrays

Array Controller	Supported Expansion Modules
Sun Storage 6180	CSM200
Sun Storage 6580	CSM100, CSM200, FLA300, FLC200
Sun Storage 6780	CSM100, CSM200, FLA300, FLC200
Sun Storage 6540	CSM100, CSM200, FLA200, FLC200, FLA300
Sun Storage 6140	CSM100, CSM200, FLA200, FLC200, FLA300
StorEdge 6130	CSM100, CSM200

TABLE 7 Supported Expansion Module: 2500 Series arrays

Array Controller	Supported Expansion Module
StorageTek 2510. 2530. 2540	2501 Note: Only Simplex 2501 expansion modules may be attached to a Simplex 2500 series controller tray.

TABLE 8 Supported Expansion Modules: FLX240, FLX280, and FLX380 arrays

Array Controller	Supported Expansion Modules
StorageTek FLX240	CSM200, FLA200, FLC200, FLA300
StorageTek FLX280	CSM200, FLA200, FLC200, FLA300
StorageTek FLX380	CSM200, FLA200, FLC200, FLA300

For baseline firmware information, such as controller, NVSRAM, IOM, disk drive, version, and firmware file, see *Sun Storage Array Baseline Firmware* (part number 821-0136).

Notable Fixes

Sun Storage Common Array Manager Software

6605647 -CAM incorrectly reports storage pool capacities.

6620849 -Installing Sun Storage Common Array Manager software on solaris 10 causes the ZFS admin console application to disappear from the launch page.

6637189 -Wrong expansion tray cabling instructions in Service Advisor.

6697677 -sscs modify date command requires a value.

6751318 -6.2.0.11: Extra special character with Disks static value in Step 1.1:Select Storage -CreatePool page.

6751334 -6.2.0.11: Extra Static(Max Volume Size) value in Step1.1:Select Storage - Create Pool page.

6804689 -Change volumes/vdisk deletion process. See [“Deleting Volumes/Virtual Disks Enhancement”](#) on page 6.

6833055 -Volume creation fails when the profile uses a finite number of disks.

6910817 -6.5.0.10: OS Type specified is not valid, even though it is described in man page.

6932431 -6.5.0 sscs list commands sometimes fail with “Unauthorized client connection” message.

6935284 -Host Type selected in the GUI does not match the correct host region used by the array.

6941548 -Unable to upgrade Sun Blade 6000 Disk Module firmware.

6943674/6933921 -CAM 6.6.0.11 set “health as Lost Communication” a just discovered J4400 array.

6950805 -CAM 6.6: Sun Storage F5100 ASR does not use the chassis serial number.

6954082 -Cannot select a maximum size from CLI during volume creation.

6958969 -6.7.0.9:Guest user is able to change access configuration details in GUI.

6959052/6946811 -Disk firmware upgrade failed on J4400/key fields in RW2 enclosure are missing.

Sun Storage F5100 array FMod (D11B firmware)

6906542 -Added max 200 grown defect limit SMART threshold.

6946828 -FMODE becomes unresponsive after large number of random data transfers with greater than 2MB block size. Fix prevents buffer resources from becoming over-allocated which would result in FMODE becoming a zombie rendering data unrecoverable.

6951420 -FMODE becomes unresponsive with 8MB or greater data transfer block sizes with thread counts of 32 or greater (32+ queued commands). Fix prevents exceeding NAND controller block addressing limit which would result in FMODE becoming a zombie rendering data unrecoverable.

6951584 -FMODE becomes unresponsive after hundreds of power cycles (800+) with cache flush in rapid succession. Failing scenario is tight loop of power cycle-write-power cycle, preventing resource cleanup during normal operation, eventually becoming a zombie rendering data unrecoverable. Fix allows resources in the FMODE to be freed up during power up of the device.

6959533 -FMODE becomes unresponsive after hundreds of power cycles (900+) with cache flush. Every power cycle preceded by at least one write or SMART query will deplete resources. Amount of run time between power cycles is not relevant. Performance will degrade and ultimately FMODE will become unresponsive (zombie), rendering data unrecoverable. Fix allows resources to be recovered during power up of the device.

6000 Series arrays (7.60.53.10 firmware)

6791783 -Crystal: FailureTypeEntry contains an invalid reference to an expired battery.

6893454 -PANIC: Assertion failed: file vdmExopReconfigProxyVolume.cc.

6934384 -Management port link down/up triggering connected data hosts seeing SCSI Unit Attention messages.

6949075 -6000: IP address cannot be changed through GUI or CLI.

6953204 -Data on Primary and Secondary mirrors does not match- RVM In-Flight Log not being played during SOD.

6954678 -6180Battery replacement issue; cache failed message; need to re-seat battery to let charge finish.

6978250 -MEL reported incomplete battery learn cycle.

6978258 -Seagate drive failure may also cause controller reboots.

6979484 -Assertion failed: base ! 0, file /home/symsm/ccm_wa/symbios/... on 49xx while array was idle.

6997909 -Collecting support data causes host I/O to hang.

7004514 -Asynchronous mirroring can cause poor host performance.

6000 Series arrays (7.60.36.10 firmware)

6704575 -False "impending failure" alerts related to PFA. Failure alerts are migrating to other drives.

6829399 -Tray failure LED (SAR) on after drive replacement.

6829972 -Controller reboot due to a lack of buffer handling the required reads from the snapshot directory DB.

6868517 -Controller reboot loop "PANIC: OGM:commit EventList backlog queue is full."

6877026 -LSI RFE to dump the stack trace on watchdog timeout.

6891452 -After firmware update to 7.60.18.10, write cache is suspended on one controller.

6892704 -ccmShowState reports incorrect controller in the output.

6897209 -Repeating "ssid <&eq; INVALID_LUN" panics fill MEL.

6899612 -During big block sequential I/O(128k, 256k), the controller might reboot and fail the test.

6899800 -FLX380 multiple and simultaneous controller reboots.

6908242 -Time out on drives due to I/O sent to alternate drive channel during ongoing Target Reset.

6908548 -PANIC: smsInsertIntoTree, attempt to insert duplicate stripe after six minutes of reset with volume defrag.

6909863 -MEL filled with component location: UNDEFINED.

6912295 -PANIC: sasRemoveFromSemMap: semaphore for mf x2a8ee40 not found in sasSendTaskMgmtWaitSems.

6912756 -Communication error ("Error 1000") when attempting automatic volume configuration w/ "suggested con."

6912763 -IAF operations disappear from HSW's Operations in Progress following ctrl reboots.

6912768 -Ancient I/O during sysReboots on 6091.

6916061 -Ancient I/O reboot (with DDC) caused by high queue depth buf_t.

6916064 -Unexpected Controller reset during RVM controller reset test.

6919260 -Controller reboots due to PANIC: getEvents(): invalid MEL (seq 0x117c) signature, skip.

6926863 -Duplex mismatch issue caused by a bug in the Ethernet driver.

6927381 -Network is causing controllers to reboot.

6942168 -getCtlSocErrStats uses static data struct, to gets -> panic.

6944349 -Memory free failure at 0x11b6204c with IPv6 ISNS after sysReboot.

6945475 -Debug Queue (DQ) Data is not persistent.

2500 Series arrays (7.35.55.11 firmware)

7012554 -Seagate drive failure may also cause controller reboots.

2500 Series arrays (7.35.55.10 firmware)

6895450 -Multipathing support on 2510 with VMWARE ESX 3.5 and later.

6925370 -Duplex mismatch issue caused by a bug in the Ethernet driver.

6927505 -2530 when collecting ddc for Ancient IO, only ddcDq logs, trace part not available.

6931813 -Controller reboot due to a lack of buffer handling the required reads from the snapshot directory DB.

6944608 -Controller cache memory recovery failed after power cycle or reset during CFW upgrade.

Known Issues

The following sections describe known issues and recommended workarounds:

- [“Array Issues” on page 19](#)
- [“Configuration Issues” on page 24](#)
- [“Documentation Issues” on page 30](#)
- [“Firmware Update Issues” on page 31](#)
- [“Installation Issues” on page 33](#)
- [“Linux Issues” on page 34](#)
- [“Localization Issues” on page 36](#)
- [“Solaris Issues” on page 37](#)

Array Issues

Drives that have Mechanical Positioning Errors may Cause a RAID Controller to Reboot when the Controllers Attempt to Fail that Drive

Bugs 6978258, 7012554, and 7013681—Drives that have mechanical positioning errors may cause a RAID controller in FLX380, 6140, 6540, 6180, 6540, 6580, or 6780 to reboot when the controllers attempt to fail that drive. The drive will be marked as failed when the controller completes SOD.

Note – Attempting to manually fail an affected drive may cause a lock-down or outage when the rebooting controller is unable to verify the DACstore on the drive that is still reporting optimal to the survivor.

Contributing Factors:

Sun StorageTek 6140 Arrays with Array Firmware 7.10.25.10 or later

Sun StorageTek 6540 Arrays with Array Firmware 7.10.25.10 or later

StorageTek Flexline 380 with Array Firmware 7.10.25.10 or later

Sun Storage 6180 Arrays with Array Firmware 7.60.18.13 or later

Sun Storage 6580 Arrays with Array Firmware 7.30.22.10 or later

Sun Storage 6780 Arrays with Array Firmware 7.30.22.10 or later

Sun StorageTek 2510 Arrays with Array Firmware 7.35.10.10 or later

Sun StorageTek 2530 Arrays with Array Firmware 7.35.10.10.or later

Sun StorageTek 2540 Arrays with Array Firmware 7.35.10.10 or later

The arrays would also have to have one of the following drive models:

ST330055SSUN300G

ST330055FSUN300G

Symptoms:

- The disk drives are failing due to a mechanical positioning error as seen in the array event logs, similar to the following:

B:10/27/10 7:11:30 AM : 4050 : 0/0/0 : 6008 : Internal : Drive : Tray 33, Slot 16 :
Stable storage drive unusable

A:10/27/10 7:10:47 AM : 4051 : 4/15/1 : 100A : Error : Drive : Tray 33, Slot 16 :
Drive returned CHECK CONDITION : Mechanical Positioning Error

A:10/27/10 7:10:49 AM : 4053 : 0/0/0 : 6008 : Internal : Drive : Tray 33, Slot 16 :
Stable storage drive unusable

Sense: 04 HARDWARE ERROR

ASC/ASCQ: 15/01 MECHANICAL POSITIONING ERROR

(The above is a Drive Positioning Mechanical Error.)

Note – Arrays with 6.xx firmware are not affected, as only a single controller will issue the command to fail the controller; thus, no race condition exists.

- The lock-down state may show as LU, 88, or SD on one controller of a 6140, 6540, or Flexline 380.
- The lock-down state may show as a flashing display on a 6180, 6580, or 6780 of OE+ LU+ blank-

Note – Controllers in a lock-down or offline state should be serviced immediately by Oracle support for correction.

- A drive being failed by the system does not usually result in a lock-down or offline controller state.
- After a power cycle or controller reset, the drives often transition to a state of INCOMPATIBLE.

Resolution –Install CAM patch 6.7.0.13. See [“How to Get the Software” on page 2](#).

Battery nears expiration: 06.xx write back cache should not be disabled

Bug 6983826 –With the 06.xx array firmware, the write back cache is incorrectly inactivated when the batteries enter the near-expiration period. Normally, it should in-activate when the batteries expire.

Resolution –Upgrade the array firmware to 07.xx. See [“Firmware” on page 12](#).

Note – There is no redundancy for failover in a simplex 2500 configuration or *any duplex configuration* where a controller is already offline for any reason.

Both RAID controllers reboot after 828.5 days --2500/6000 arrays

Bugs 6872995, 6949589 –Both RAID controllers reboot after 828.5 days of continuous operation. A timer in the firmware (vxWorks) called “vxAbsTicks” is a 32-bit (double word) integer that keeps count in the 0x0000 0000 format. When this timer rolls over from 0xffffffff to 0x00000000 (after approximately 828.5 days), if there is host I/O to volumes, the associated drives fail with a write failure.

Original Resolution –Every 24 hours, firmware spawns a task--cfgMonitorTask--that checks the value of the vxworks kernel timing counter. For controllers with 03.xx-06.60 firmware (6000 series) and 03.xx-6.70 firmware (2500 series): Both controllers reboot if counter is greater than 825 days.

Final Resolution –Every 24 hours, firmware spawns a task--cfgMonitorTask--that checks the value of the vxworks kernel timing counter.

This fix staggers the reboots of the controllers for approximately five days so the only impact is a small performance degradation while the reboot occurs.

For controllers with firmware 07.15.11.12 or later (6000 series) and firmware 07.35.10.10 or later (2500 series): Controller A reboots if counter is greater than 820 days. Controller B reboots if counter is greater than 825 days.

Note – There is no redundancy for failover in a simplex 2500 configuration or *any duplex configuration* where a controller is already offline for any reason.

Controller resetting issues - in-band managed array

Bug 6603978 –The controller for an in-band managed array cannot be reset even when physical connectivity between the array and the management host has been verified.

Workaround –Ensure both controllers are connected during configuration. Un-register and then re-register the array.

Oracle Java Web Console 3.0.2 goes into maintenance mode

Bug 6657309 –After several minutes of inactivity, the Oracle Java Web Console Version 3.0.2 goes into maintenance mode and yields errors similar to the following:

```
m4000 gconfd (noaccess-2277): I can't write to '/var/tmp/orbit-noaccess', ORB init failed
```

Reason: Method failed.

See: `man -M /usr/share/man -s 1M smcwebserver`

See: `/var/svc/log/system-webconsole:console.log`

Impact: This service is not running.

Workaround –For Unix hosts, set the directory permission to 777 (i.e., `chmod 777 /var/tmp`) and restart the Oracle Java Web Console.

Oracle Java Web Console service fails -- InstallShield gives wrong switch

Bugs 6792599 and 6753860 –InstallShield provides wrong switch (should be -c) in error message.

- Invalid switch option is given on GUI-based install failure.
- Oracle Java Web Console Service Default is 40bit SSL keys fail FIPS/Fed audits.
- When attempting to install Sun Storage Common Array Manager via text-based install, the installer is unable to run in graphical mode unless the correct switch is added.

Workaround –Run the installer with:

-c flag

```
root@sx-dimen-a04# ./RunMe.bin -c
```

Note – Contact Support at <https://support.oracle.com> for instructions on how to modify the default ciphers for JVM or modify Tomcat configuration files.

Out of Compliance array yields errors

When an array is out of compliance due to an invalid or missing license, a number of operations might not occur, such as:

- Standard RAID volume creation
- Automatic configuration

- Creation of storage partitions mappings
- Hot spare assignments
- Snapshot volume creation

Performance Monitoring page does not display in-band statistics

Bug 6681582 –Performance Monitoring page lists the Performance statistics as Unavailable.

Workaround –Check the physical connectivity from the management host to the array. If the connectivity is good, try un-registering and then re-registering this array.

Reboots occur due to ancient I/O being aborted in large configurations

Bug 6931169 Workaround –In configurations where vdisks are comprised of more than 32 volumes, it is a best practice to quiesce host I/O when performing vdisk re-configuration (i.e.: Dynamic Capacity Expansion (DCE), Dynamic Volume Expansion (DVE), etc.). This helps avoid host I/O errors or internal controller reboots that might occur before setup operations complete.

Volume copy instances while volume copy license is removed

Bug 6826242 –Unable to activate replication set license if installed volume copy license is removed.

Works as designed –Arrays must be compliant with volume copy license. Otherwise, you cannot perform the following operations:

- Standard RAID Volume Creation
- Automatic Configuration
- Creation of Storage Partition Mappings
- Hot Spare Assignment
- Dynamic Segment Sizing (DSS) and Dynamic RAID Migration (DRM)
- Dynamic Capacity Expansion (DCE) and Dynamic Volume Expansion (DVE)
- Snapshot Volume Creation
- Remote Volume Mirror (RVM) Activation and Mirrored-Pair Establishment Volume Copy
- Establishment and “Start Copy” Operations

If the storage array supports multiple performance tiers, performance will suffer after the next storage array reboot unless the condition is resolved and the array is brought into compliance.

Solution —See [“Licensing Optional Premium Features”](#) on page 4 for general information.

Configuration Issues

Access Configuration: cascaded J4400 issues

Bugs 6924446, 6924428, 6925163, 6925341—Auto-save zone template does not import; cascaded J4400s return incorrect PHY port data; hosts connected to ports with no zones see all disks in J4400.

Workaround —Use only the “HostOrSimLinkIn” port to cascade J4400 arrays.

Access Configuration: HBA - Sun Storage 6Gb SAS HBA- OS hangs

Bug 6948920 —When both 6Gb SAS ports are connected to a single expander, a X8 wide port results. The OS hangs with dual ports in single-zoned domain. This configuration is invalid.

Workaround —Disable X8 wide port configurations in Access Configuration Zoning.

Access Configuration fails with error: java.util.HashMap cannot be cast to java.util.Properties

Bug 6928490 —This error has been observed in a configuration of cascaded J4200 and J4400 arrays with dual-path to the host (one HBA connected to SIM0 domain and another HBA of the same host connected to SIM1).

Workaround —Retry the operation.

Access Configuration: localhost SAS domain and fmods disappear

Bug 6965605 –When the local (not remote) data host is registered, FMS removes the host report from the localhost.

Workaround –Re-register the array using the localhost address. This second re-adds the missing SAS domain, HBA and disks. To prevent removal of host reports, register the remote data hosts first and register the localhost last.

Access Configuration: non-zoned SAS2 wide port aggregation FRU Report display - F5100 + 6Gb/sec HBA

Bug 6960746 –Report for configuration with both HBA ports into single SAS Domain with Zoning disabled yields FRU Report issues such as:

- Chassis.00 FRU reports - One of the two connected Expander 1 Port 0 Cable Status fields is dropped from the report.
- Chassis.00 FRU reports - The second connected port Expander 1 Port 1 Cable Status displayed is Degraded.
- Access Configuration pages are missing port 0.

Attaching both ports from an HBA into the same F5100 expander results in a “wide port” (8 phys). Sun Storage Common Array Manager software models the aggregated connections as a single, logical SAS port. The information displayed in the Access Configuration Summary only lists the connected port with the higher alphanumeric sort. For example, if Ports 0 and 2 are connected into the same expander, only Port 2 is listed.

This issue also occurs in the CLI where Port options list a single entry under the Connector list.

Other forms of addressing the wide port are still in force. The SAS Address of the port is available for use in operations, presenting a single address for all eight PHYS of the two HBA connectors.

Array lock key must be set before configuration files are imported

If the configuration file to be imported contains secure volumes, the array lock key for the array must be set before importing the configuration. The verification step of the import fails if a secure volume is found but the array lock key has not been set. The import job will not be started and no settings on the target array will be changed.

CLI - sscs service locate --off reports a false Success status

Bug 6960316 –Executing sscs service -a <array-name> locate on a Sun Storage F5100 works as expected; however, sscs service locate --off does not turn the F5100 locate LED off even though it reports a Successful status.

Workaround –Use Service Advisor to execute this command.

CLI - sscs service locate with -t option yields error message

Bug 6955577 Workaround–Run the cli command from the host that owns the target or use Service Advisor.

CLI - warning message displays after “sscs add -d registeredarray”

Bug 6796540 –After the “sscs add -d registeredarray” command is issued and associated arrays are registered on the host, this message displays on the GUI: “A script on this page may be busy, or it may have stopped responding. You can stop the script now, or you can continue to see if the script will complete.”

Workaround –Click Continue to allow scripts. Avoid registering arrays with the CLI when the GUI is running.

ComponentInsertEvent not generated for disk drive inserted into J4200

Bug 6953638 –When a disk drive is inserted into the J4200, no ComponentInsertEvent is generated and entered into the Event Log. Only ValueChangeEvent [such as (Status +) from Removed to OK for disk in slot x] are generated.

Controller Summary page ID value incorrect for 6130/FLX240 arrays

Bug 6958256 –This is a formatting issue which will be fixed in a future release.

Current Jobs page can take more than five minutes to display

Bug 6871197 –In a Sun Storage 6180 array with 1023 Volume Copies, it takes over five minutes for the Current Jobs page to display.

Workaround –Click the Current Jobs page a second time to display the page more quickly.

Expander firmware 5.3.73 does not persist a SAS zone group

Bug 6938593 -Sun Storage F5100 Flash array expander firmware 5.3.73 does not persist a SAS zone group in the case where an initiator's SAS address changes. Initiator SAS address change can be caused by a host reboot or when a new initiator is plugged into a previously zoned F5100 port. When a SAS address changes, Sun Storage Common Array Manager will still report the initiator and the devices are associated; however, the F5100 expander has actually disassociated the host from the zoned devices. This results in the host losing access to zoned devices.

Workaround -Re-zone the new initiator address with the existing devices, to ensure the new host initiator is associated with the target devices. This issue is fixed in F5100 expander firmware 5.4.4.

FMS stuck in maintenance mode

Bug 6955139 -When installing Sun Storage Common Array Manager on S10_u8 Sparc, using the Custom > Data Host Agent Install command, FMS remains in maintenance mode.

Workaround -(example uses Solaris 10 10/09 s10s_u8wos_08 SPARC)

```
# ./fmservice.sh status
STATE      STIME    FMRI
maintenance May_21   svc:/system/fmservice:default

# ps -ef | grep fms
root 681    1 0 Oct 21 ?      14:05
/opt/se6000/java_1.6.0/usr/java/bin/java -Xmx128m -DSUNWsefms=
/opt/SUNWsefms -

root 3956 3916 0 18:23:32 pts/1    0:00 grep fms

# kill 681

# ps -ef | grep fms
root 3958 3916 0 18:23:45 pts/1    0:00 grep fms

# ./fmservice.sh status
STATE      STIME    FMRI
disabled   18:23:29 svc:/system/fmservice:default

# ./fmservice.sh start
svc:/system/fmservice:default enabled.

# ./fmservice.sh status
STATE      STIME    FMRI
```

online 18:24:16 svc:/system/fmbservice:default

OR

RunMe.bin -k from CAM image.

Free capacity does not add up

Bug 6800666 – Storage Utilization on Storage System Free Capacity does not add up.

Works as designed –When computing the Storage System free capacity, Sun Storage Common Array Manager sums the precise free capacity of each disk and not the less precise values displayed on the page. This computed value accurately represents the total free capacity, and may differ slightly from a sum of the displayed values.

Jobs checkbox does not display; job does not cancel

Bug 6600387 –When a long job is running, such as large volume creation, the Cancel checkbox does not display on current job status. Some jobs cannot be cancelled once they have started on the array.

Workaround –If the queue includes multiple jobs for the array to perform, the job can be cancelled at the point where the GUI sends the next job to the array.

Replication status incorrect when primary volume fails

Bug 6561709 –When the primary volume in a replication set (6xxx arrays) fails, the management software might incorrectly list the volume as replicating.

SAS domains - clicking links causes tree to collapse

Bug 6819851 Workaround –Re-open the tree to the desired location.

Serial Number property has array WWN value on FLX280 Administration page

Bug 6967325 –The Serial Number value presented on the Administration page of the FLX280 is actually the WWN of the array. The FLX280 has no serial number; Therefore, the Administration page and the License Summary page are in contradiction. For all other arrays these pages/values are in sync.

Service Advisor - replacing failed SIM with dual path configurations

If you have dual paths to hosts in zones with cascaded JBODs and you need to replace a failed SIM, you might encounter a problem when you have to plug in the SAS cables to the new SIM. This is because the new SIM is not zoned and all hosts see all disks until the old zone is restored.

Workaround –Before you replace a failed SIM, be sure to **stop all I/O - even in dual path configurations**. When you insert the new SIM, you have to upgrade the firmware which requires stopping the I/O anyway. Taking this step before replacing a failed SIM enables rezoning the new SIM before attempting further I/O.

Virtual disk name change fails when GHS is in use

Bug 6757428 –Attempting to change the name of a optimal/enabled vdisk fails when GHS is in use.

Volume error-- evShowVol output: Initialization: Not Completed

Bug 6969328 –25xx/6xxx array has a number of volumes with the following in the evfShowVol output: Initialization: Not Completed in the stateCaptureData.dmp file bundled with the supportdata.

This bug leads to performance issues with RAID 5 configurations.

Workaround –Contact Support at <https://support.oracle.com> and reference this Bug number.

Volume name should be 25 or fewer characters

Bug 6809745 –Assigning a large name to a volume and selecting Multiple Volume Creation from the Volume Wizard does not work.

Workaround –When naming a volume, use 25 or fewer characters.

Volume segment size, when changed, requires a new profile with a variable number of disks

Bug 6599933 –Changing a volume to a different segment size requires that you create a new profile with the desired segment size, create a pool using that profile, and apply the new pool to the volume. However, if the original profile was created using a fixed number of disks instead of a variable number of disks, an error is returned.

Workaround –Adjust the new profile so that the number of disks is variable instead of fixed.

Volumes not deleting from the Single Page window

Bug 6807053 –Unable to delete volumes with the Show Data in Single Page” option from the Volume Summary page. After multiple volumes are deleted, the Volume Summary Page still shows the same number of volumes as before.

Workaround –Use paginated view to delete volumes.

Windows “ param=value” --CLI throws exception in Modify Site

Bug 6800989 Workaround –Do not insert a space before the first quotation mark.

Windows 2008 proxy host computer name must match resolved IP address name

Bug 6952686 Workaround –Windows 2008 computer name must match the resolved network IP address name for the software to monitor the proxy host for JBOD arrays. Change the computer name and then restart Windows.

Documentation Issues

2500 Series Release Notes: Simplex vs. Duplex Configurations

The *Sun StorageTek 2500 Series Array Release Notes, Release 1.4* (Sun part number 820-6247-13) document contains contradictory information on pages one and 21 concerning the StorageTek 2501 Expansion Module in simplex and duplex configurations. The correct information is this: **Only Simplex 2501 expansion modules may be attached to a Simplex 2500 series controller tray.**

CLI Guide error --help command example

In Table 1-2 of the *Sun Storage Common Array Manager CLI Guide* for version 6.7.0, incorrect sample output is given for displaying syntax for a command/sub-command pair for a specific array type or array name. Within the sample output for the “list alarm” command, the following --faultdevtype array name specifications are incorrect:

- F5100 should be **f5100**
- B6000 should be **b6000**
- NEM should be **nem**

Workaround –Use the above replacement array names when reading the sample output.

Firmware Update Issues

For notable fixed issues related to firmware, see [“Notable Fixes” on page 14](#).

Firmware upgrade fails with error: FWR_UPGRADE_FAILURE,6 --J4200/J4400

Bugs 6871188, 6919285, 6925388–Upgrading firmware on J4200/J4400 attached to x6250 blade fails, with the following error message:

Error upgrading firmware. Check the following error message and array alarm page for possible problems. - flash firmware image failed - FWR_UPGRADE_FAILURE, 6

The firmware on the JBOD remained at 3R21 and all disks remained at the same FW level.

Workarounds –For this symptom–Suse Linux host, J4400 SIM upgrade failed with return code 6, possibly leading to SIM firmware mismatch–there are two possible workarounds:

- If the upgrade failed without firmware mismatch, do this:
Power cycle the array and rerun the firmware upgrade wizard GUI.
- If the upgrade failed with firmware mismatch, do this:
Power cycle the array and rerun the firmware upgrade using one of the following CLI commands:

scs modify -a <array-name> -f -t sim -o -w firmware

or

csmervice -i -a <array-name> -f -t sim -o -w

Firmware upgrade fails on J4400 SATA drives

Bug 6939824 Workaround –Move affected disks to another slot before upgrading so they do not remain in a degraded state.

Firmware upgrade fails when expander and disks are upgraded together

Bug 6916355 Workaround –Power-cycle the array and re-run the firmware install wizard. Then resume the disk drive firmware upgrade.

Firmware upgrade not recognized by GUI until agent runs

Bug 6873568 Workaround –Wait 5 minutes for the agent to run or run the agent manually.

FWR_DEVICE_ERROR,4 or No such Disk error -during JBOD with HBA upgrade

Bug 6926054 Workaround –Use a non-Adaptec HBA.

Sun Blade 6000 firmware upgrade error: No such expander - 50800200006deabf SIGSEGV in Linux libSTORARC.so

Bug 6952753 Workaround –Use a non-Adaptec HBA (mixed blade environment with LSI SAS controller).

Sun Blade 6000 firmware upgrade fails with down-level expander

Bug 6948014 Workaround–When the Network Expansion Module (NEM) and Sun Blade 6000 Disk Module are flagged for upgrade, execute an upgrade on the NEM first. Then, the upgrade works for the Sun Blade 6000 Disk Module storage. For more information, see the *SAS Compatibility Firmware Guide*.

Sun Blade 6250 and 6270 - upgrading network expansion modules fails

Bug 6965677 Workaround –Retry the upgrade or use a non-Adaptec HBA.

Installation Issues

Datahost RevisionDeltaEvent Mismatch alarm

Bug 6999384 –CAM version mismatch alarm is generated when customers register the different platform types.

- Example alarm scenario:
Linux - CAM Management Host 6.7.0.12
Patched Windows - CAM proxy data host 6.7.0.13
- Description:
Revision mismatch between data host and management host.
The data host agent is at version 6.7.0.13 but the management station is at version 6.7.0.12
- Probable Cause:
A data host agent is running a version of the Sun Storage Common Array Manager software that is different from the management host.

General Password Mismatch error

Bug 6590097, 6592703 –Using an invalid array password might result in configuration error messages.

Workaround –Use the correct array password.

Installation fails due to missing TEMP - Windows platforms only

Bug 6791511 Workaround –Windows users should investigate TEMP, TMP, and USERPROFILE environment variable settings, rather than follow the directions in the pop-up window.

Installation fails when MegaRAID / MegaCLI is present

Bug 6926600 –Install fails when MegaRAID/MegaCLI is present since both use the same library location.

Workaround –Install on MegaCLI version 8.00.23 and MSM 8.00-05 or older.

Installation fails when user account control is On - Windows 2008

Bug 6753949 Workaround –Users with Administrative privileges that are used to install Sun Storage Common Array Manager on Windows 2008 must have User Account Control turned off.

Workaround –From the Control Panel, select User Accounts, and then turn the User Account Control OFF.

Uninstaller -stop applications before running- Windows only

Bug 6769156 –Stop all applications that are running a java.exe or javaw.exe before running the uninstaller.

Upgrading from version 6.2.0.15: arrays must be removed/re-registered

Bug 6871154 Workaround –After upgrading Sun Storage Common Array Manager software on Windows, manually restart fms on Windows using the following commands.

C:\sc stop Sun_STK_FMS

C:\sc start Sun_STK_FMS

Windows proxy does not run after reboot

Bug 6953143 –Communication lost with Win2k8 SP2 remote data host after OS reboot.

Workaround —Re-execute proxycfg.bat enable.

Linux Issues

Adding or removing SATA drives requires host boot

Bug 6835314 -Linux kernel:mptbase(Abort) occurs when SATA drives are added or removed. This issue has been discovered on both RedHat 5.2 and SuSE 10.

Adding or removing SATA drives to a Linux host yields the following message:

kernel: mptsas: ioc2: removing sata device: fw_channel 0, fw_id 4, phy 4, sas_addr 0x500163600010a390

kernel: mptbase: ioc1: LogInfo(0x31120101): Originator={PL}, Code={Abort}, SubCode(0x0101)

The following message is also common:

multipathd: sdd: checker msg is "tur checker reports path is down"

Normally the (kernel: mptsas) messages are seen for zoning operations but when the (kernel:mptbase) message is also seen, only a reboot will recover the hosts' ability to properly see the drives.

Workaround –Reboot host.

Email notification not working on RH4

Bug 6927445 Workaround –Do not use SMTP required authentication for email notification. To learn how to disable authentication in Sendmail in Red Hat Enterprise Linux 4, go to:

<http://kbase.redhat.com/faq/docs/DOC-4113>

Sun Storage J4000 and F5100 Flash arrays - Linux hot plug issues

Two categories of J4x00/F5100 Hot Plug issues have been identified--those that require a Linux host reboot and those in which the hot plug is not supported. These are separated into two sub-sections:

1. **Linux host reboot is required if the array or any of its components are not recognized after changes such as cable re-configurations, firmware upgrades, etc.**
 - StorageTek SAS RAID HBA hot plug is not supported.
 - Sun StorageTek SAS RAID HBA is inconsistent with reports and missing FRU disk information. This is expected J4x00 registration behavior during SAS bus re-scan.
 - Firmware upgrade failed for Sun Blade 6000 Disk Module.
 - J4x00 - Name issues during registration and upgrade connected to B0/B1 side.
 - J4x00 - Linux J4x00 registration - sg_map -i must be clear of all errors or it fails; leads to host reboot to clear sg_map.
 - Newly added or removed targets (i.e. disks) due to changes in Access Configuration, cable re-configuration, firmware upgrades, or the addition of new storage can potentially cause the host to hang or panic due to known Linux kernel issues.

Bug 6918422 –After Linux hot-plug, the JBOD is no longer monitored by the management software.

Bug 6731595 –J4200/J4400: Sun StorageTek PCI-Express SAS Host Bus Adapter B3: SuSE 9 SP4: Multipath (device mapper): Alternate SIM failure causes host to hang.

Bug 6732411 –J4200/J4400: Sun StorageTek PCI-Express SAS Host Bus Adapter B3: SLES9SP4: Multipath: Lost Communication to JBOD after Sun Storage Common Array Manager software SIM firmware upgrade.

Bug 6741578 –Cannot register J4x00 on Linux until host reboot3.

Bug 6777089 –MPT 3.16.00.00 pandora hba SAS cable insert, expander reset or power cycle hang x86 host until reset.

Bug 6817878 –OS does not see zoning filtering through to proxy server correctly. This issue is specific to Linux hosts.

Bug 6830042 –As a result of JBOD expander firmware upgrade, expander reset might hang Linux OS.

Bug 6833156 –1.26.03.00: linux missing targets, fdisk -l and sg_map -i hangs after JBOD second power cycle.

2. Sun StorageTek SAS RAID HBA hot plug is not supported. Generally, the workaround is to reboot the array between any cable changes etc.

Bug 6723686 –J4x00 failed disk drive (Sun StorageTek SAS RAID HBA) not reported.

Bug 6732704 –J4x00 Windows agent (Sun StorageTek SAS RAID HBA) 0.0 MB reported; drive FRU missing unique identifier.

Localization Issues

Import/export fails with non-ascii configuration file name under localized system

Bug 6829795 Workaround –Do not use non-ascii characters in the configuration file name when importing or exporting.

Solaris Issues

Error--"no execute access to opt/SMgr/agent/notifysmagent.sh"-- occurs during system boot-up

Bug 6934913 –This error occurs when /opt(SMagent install directory) is built on a disk partition other than root partition. Though event notification is lost as a result, there are no adverse effects because the SMagent detects the disk device(UTM volume) during re-scan. The notifysmagent.sh script should be available to the syseventd since the script is located in the same directory of SMagent startup script.

Solaris runtime and RAID array proxy agent packages install on wrong architectures

Bug 6665774 –If you perform installation using the incorrect package, Sun Storage Common Array Manager installs but does not run. For example, if the in-band proxy agent packages are being delivered as architecture-dependent (SPARC and x86 for Solaris), then the SPARC package installation should not succeed on an x86 platform. The risk of this happening is low.

Workaround –Install the correct package. See the *Sun Storage Common Array Manager Software Installation and Setup Guide* for instructions.

Solaris Target Port Group Support (TPGS) not supported

Bug 6872689 –Solaris Target Port Group Support (TPGS) is not a supported host type at this time. Do not select this host type until Solaris provides the necessary support.

Upgrading Solaris to version 10 or higher might disable Oracle Java Web Console connections

After performing the upgrade, open port 6789 for incoming connections:

1. Check current status of port 6789:

```
#netstat -an | grep 6789
```

Typical output is: *.6789 *.* 0 0 49152 0 LISTEN

2. Enable port 6789:

```
# svccfg -s svc:/system/webconsole setprop options/tcp_listen = true
```

```
# smcwebserver restart*
```

UTM LUNs Controlled by “Solaris Traffic Manager” -6000/2500 arrays

After you upgrade to S10U3 (or later), the in-band management UTM LUNs are controlled by Solaris Traffic Manager (MPxIO). In most cases, in-band management will not fail as a result of this; however, it is best practice to ensure that the UTM LUNs are not controlled by MPxIO.

Workaround –Use the `format inquire` command to get the eight-character Vendor (VID) and Product IDs. Follow this procedure

1. Edit the file `/kernel/drv/scsi_vhci.conf`

The following line should read:

```
device-type-scsi-options-list = "SUN Universal Xport",  
"disable-option"; disable-option = 0x70000000
```

2. Run the `stmsboot -u` command.

Respond to the prompts as follows:

```
WARNING: This operation will require a reboot.
```

```
Do you want to continue? [y/n] (default: y) y
```

```
The changes will result when the system is rebooted.
```

```
Reboot the system now? [y/n] (default: y) y
```

Contacting Support

Contact Support at: <https://support.oracle.com>