



# Sun StorageTek™ Common Array Manager Software Release Notes

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Release 5.0

Sun Microsystems, Inc.  
www.sun.com

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# Contents

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<b>Sun StorageTek Common Array Manager Release Notes</b>	<b>1</b>
Features in This Release	1
Common Array Manager Software Features	2
Supported Arrays	2
Supported Platforms	3
Release Contents	3
System Requirements	3
Management Host System Requirements	4
Supported Platforms for the Remote Scripting CLI Client	5
Supported Web Browsers	5
Supported Languages	6
Installing Packages and Patches	6
Before You Begin	6
File Space Requirements	7
Installing and Upgrading Common Array Manager Software	7
▼ To Upgrade the Array Firmware	8
Known Issues	8
Common Array Manager-Specific Issues	9
Installation Issues	13

Solaris OS 10 Issues	14
Storage Configuration Issues	15
▼ Remove and Replace a Power-Fan Assembly	15
Documentation Issues	17
Localization Issues	17
Operational Information	18
Release Documentation	18
Firmware Files	18
Service Contact Information	21
Third-Party Web Sites	22
<b>A. Adding User Roles to Windows</b>	<b>23</b>
Adding a Administrator User	23
Adding New Users	26

# Tables

---

<a href="#">TABLE 1</a>	Management Host Platforms	3
<a href="#">TABLE 2</a>	Host CD Contents	3
<a href="#">TABLE 3</a>	Management Host System Requirements	4
<a href="#">TABLE 4</a>	Remote CLI Client Platforms	5
<a href="#">TABLE 5</a>	Supported Web Browsers	5
<a href="#">TABLE 6</a>	6130 Array and Disk Firmware	19
<a href="#">TABLE 7</a>	6140 Array and Disk Firmware	20
<a href="#">TABLE 8</a>	6540 Array and Disk Firmware	21



# Sun StorageTek Common Array Manager Software Release Notes

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This document contains important information about release 5.0 of the Sun StorageTek™ Common Array Manager software or information that was not available at the time the product documentation was published. Read this document so that you are aware of issues or requirements that can affect the installation and operation of the Common Array Manager software.

These release notes cover the software released on the Sun StorageTek Common Array Manager Software 5.0 CD.

The Release Notes consist of the following sections:

- [“Features in This Release” on page 1](#)
- [“System Requirements” on page 3](#)
- [“Installing Packages and Patches” on page 6](#)
- [“Known Issues” on page 8](#)
- [“Operational Information” on page 18](#)
- [“Release Documentation” on page 18](#)
- [“Firmware Files” on page 18](#)
- [“Service Contact Information” on page 21](#)
- [“Third-Party Web Sites” on page 22](#)

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## Features in This Release

This section describes the main features of the Sun StorageTek Common Array Manager Software in the following sections:

- [“Common Array Manager Software Features” on page 2](#)
- [“Supported Arrays” on page 2](#)
- [“Release Contents” on page 3](#)

## Common Array Manager Software Features

The Sun StorageTek Common Array Manager software provides you with an easy-to-use interface to configure, manage, and monitor Sun StorageTek storage arrays. The Common Array Manager software includes the following functions:

- Graphical User Interface (GUI) for array management
- Command Line Interface (CLI) for scripting and non-GUI configuration management
- Storage pools
- Storage profiles
- Storage domains
- Mapping between physical and logical
- Device configuration
- Health monitoring and fault management
- Predictive failure analysis
- Proactive monitoring
- Problem notification
- Component diagnostics
- Troubleshooting and recovery procedures
- System level verification
- Service guidance

## Supported Arrays

Common Array Manager software supports the following Sun storage systems:

- Sun StorageTek 6130 Array
- Sun StorageTek 6140 Array
- Sun StorageTek 6540 Array



# Supported Platforms

The management software runs on the platforms described in [TABLE 1](#).

**TABLE 1** Management Host Platforms

Platform	Operating System
SPARC server or workstation, or Solaris x86	Solaris 8 OS 4/01
	Solaris 9 OS 8/03
	Solaris OS 10
Windows Servers	Windows 2000 with Service Pack 4 or higher
	Windows 2003 with Service Pack 1 or higher
	Windows XP with Service Pack 2 or higher

## Release Contents

[TABLE 2](#) lists the version information for the software included in this release.

**TABLE 2** Host CD Contents

Type	Version
Common Array Manager	5.0
Remote scripting CLI client	2.1.4
Java Web Console software	2.2.5
Java2 Software Development Kit	1.4.2
Firmware files, as listed in <a href="#">“Firmware Files”</a> <a href="#">on page 18</a>	

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## System Requirements

The software and hardware products that have been tested and qualified to work with the Sun StorageTek Common Array Manager software are described in the following sections:

- [“Management Host System Requirements”](#) on page 4
- [“Supported Platforms for the Remote Scripting CLI Client”](#) on page 5
- [“Supported Web Browsers”](#) on page 5

- [“Supported Languages” on page 6](#)

## Management Host System Requirements

The management host on which the management software resides must meet the system requirements described in [TABLE 3](#).

**TABLE 3** Management Host System Requirements

Host System Feature	Requirement
Platform and Operating system (OS)	SPARC server or workstation or Solaris x86 running one of the following: <ul style="list-style-type: none"> <li>• Solaris 8 OS 4/01</li> <li>• Solaris 9 OS 8/03</li> <li>• Solaris OS 10</li> </ul> Windows servers with 800 MBytes on system drive running one of the following: <ul style="list-style-type: none"> <li>• Windows 2000 with Service Pack 4 or higher</li> <li>• Windows 2003 with Service Pack 1 or higher</li> <li>• Windows XP with Service Pack 2 or higher</li> </ul>
Disk space	930 Mbytes (Solaris); 800 Mbytes (Windows) (see complete list of disk space requirements in <a href="#">“File Space Requirements” on page 7</a> ).
CPU	Solaris: UltraSPARC 3 or better (750 Mhz) Windows: 1.5 Ghz PC
Minimum memory (2 arrays, 2 users)	512 MB shared memory

# Supported Platforms for the Remote Scripting CLI Client

The remote scripting CLI client sends commands to a management host, which in turn sends the commands to the array. [TABLE 4](#) lists remote platforms that can run the CLI client.

**TABLE 4** Remote CLI Client Platforms

<b>OS</b>	<b>Version</b>
Solaris 8 SPARC	4/01
Solaris 9 SPARC	8/03
Solaris 10 SPARC	
Solaris 10 x86	
Windows 2000 Server	Server (SP4) and Advanced Server (SP4)
Windows Server 2003	Standard/Web/ Enterprise Edition
Windows XP	
Red Hat Linux	3.0, 4.0
SuSE Linux	8.0, 9.0
IBM AIX	5.2, 5.3
HP-UX	B.11.23, B.11.11

## Supported Web Browsers

The Sun StorageTek Common Array Manager software supports the web browsers listed in [TABLE 5](#).

**TABLE 5** Supported Web Browsers

<b>Browser</b>	<b>Minimum Version</b>
Netscape Navigator	6.2
Mozilla	1.4
Firefox	1.0
Microsoft Internet Explorer	5.5

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**Note** – The software requires that you enable pop-up windows in your web browser.

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**Note** – On some browser configurations, if the Proxy setting is not disabled, the browser may appear to hang, time out, or generate incorrect error messages. To avoid these potential problems, specify No Proxy for the Common Array Manager host. On some browsers, you do this by going to Preferences>Advanced>Proxies and add the CAM management host hostname to the “No Proxy for:” section.

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## Supported Languages

Documentation for the Sun StorageTek Common Array Manager is available only in English.

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# Installing Packages and Patches

The array installation procedures are described in the *Sun StorageTek Common Array Manager Software Installation Guide* (part number 819-7035-nn). This section describes release-specific steps for firmware and management software patch upgrades that you must perform:

- [“Before You Begin” on page 6](#)
- [“File Space Requirements” on page 7](#)
- [“Installing and Upgrading Common Array Manager Software” on page 7](#)

## Before You Begin

The Sun management software is distributed on the Sun StorageTek Common Array Manager Software CD. The installation script on that CD verifies host requirements. In particular, it ensures that there are at least 800 Mbytes of disk space available before starting the installation script. Be sure to do the following before performing the upgrade:

- Read the upgrade instructions completely.

- Use the upgrade program on the Sun StorageTek Common Array Manager Software CD or downloaded from the Sun Download Center:  
<http://www.sun.com/software/download/>
- Log in as root (Solaris) or as an administrator (Windows) on the management host.

Should a failure occur, be sure to check the available disk space again. Then consult the system log `/var/sadm/install/se6000/se6000_Host_SW.log` for more information.

If a requirement is not met, the script informs you and then cleans up afterward, where appropriate. The script prompts you for input or fails and exits if it detects any of the following in the system:

- Pre-installed versions of the Sun Storage Automated Diagnostic Environment, or the `sscs` CLI
- Unsupported versions of operating systems or software
- Insufficient disk space

## File Space Requirements

The total size of the installation files is approximately 800 Mbytes when the files are extracted from the CD or download file. The management host software requires 800 MBytes on a Windows platform or the following available space for successful installation on Solaris:

- `root` – 10 Mbytes
- `/tmp` – 100 Mbytes
- `/usr` – 20 Mbytes
- `/var` – 500 Mbytes
- `/opt` – 300 Mbytes

## Installing and Upgrading Common Array Manager Software

If you are installing the array and the management software, follow the entire installation and configuration procedure described in the *Sun StorageTek Common Array Manager Software Installation Guide*.

After the initial installation and configuration, you will be able to upgrade the management software and firmware with each release.

When you run the RunMe wizard, it will search for earlier versions and determine if a new installation or an upgrade is necessary. If the script detects that there is no earlier version installed, it will perform a complete new installation. The procedures for upgrading the array manager software are the same as those for installing the software, as described in the Sun StorageTek Common Array Manager Software Installation Guide. When performing an upgrade, it is not necessary to uninstall the existing software. The installer also installs the firmware update bundle on the host server. To upgrade the firmware on the array, see [“To Upgrade the Array Firmware” on page 8](#).

## ▼ To Upgrade the Array Firmware

This procedure downloads the firmware binary on the management host to the array and upgrades the firmware running in the array. It is not necessary to uninstall the existing firmware. You can also upgrade firmware from the management software.

1. On the Java Web Console page, click Sun StorageTek Common Array Manager.
2. Go to the Storage System Summary page and select the arrays to be upgraded.
3. Click the Upgrade Firmware button.
4. Follow the prompts.

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**Note** – The array will remain in a degraded state until all alarms are deleted.

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## Known Issues

The following sections provide information about known issues and bugs filed against this product release:

- [“Common Array Manager-Specific Issues” on page 9](#)
- [“Installation Issues” on page 13](#)
- [“Solaris OS 10 Issues” on page 14](#)
- [“Storage Configuration Issues” on page 15](#)
- [“Documentation Issues” on page 17](#)
- [“Localization Issues” on page 17](#)

If a recommended workaround is available for a bug, it follows the bug description.

# Common Array Manager-Specific Issues

## *Pool Page Reports Wrong Available Capacity for SATA Pools*

**Bug 6453816** - Using the Volume Creation wizard, if a pool that should have adequate space does not appear in the list, then you are no longer able to create volumes in that pool using the browser interface wizard. This only applies when you are creating volumes from SATA drives.

To determine the maximum volume size, go to the Vdisk Summary screen. Review the Total Capacity, Configured Capacity, and Max Volume Size for each virtual disk. Since you can create a volume from one virtual disk only, the maximum volume size indicates the largest volume that can be created on a virtual disk. You must match up virtual disks to the profile of the pool you want to use to determine if there is adequate space.

**Workaround** - Use the SSCS CLI to create volumes in a pool that did not show up in the wizard even though it has adequate space.

## *Final Build Number Display*

**Bug 6444212** – The Version display in the Sun StorageTek Common Array Manager GUI and the `sscs list mgmt-sw` both show the correct Version number for the initial release: 5.0.0.0, However, they show the final build number as seven when it is eight.

**Workaround** – Verify the release using the build date: June 26, 2006.

## *Service Advisor Procedure For Resetting Controllers Errors*

**Bug 644210** – The Service Advisor procedure for Resetting Controller Circuit Breakers has the following errors:

- Step 5: Mis-spelled words
- Step 6: “Is” should be “If”
- Step 6: The statement “Left and right are determined when facing the control module from the front.” is confusing, since the left power fan is labeled B and the right is labeled A.
- Steps 10 and 15: Add power cables to these steps.

### *Zh Locale Installation Result Page Shows Garbled Characters*

**Bug 6444324** – In the zh (Chinese) locale, when an installation is finished the results page shows garbled characters.

### *Service Advisor Procedure For Remove And Replace Has Error*

**Bug 6448643** – The Service Advisor procedure for Remove and Replace a Disk Drive Assembly has the following error:

- Step 4a: “View securing the front of the tray illustration”. This step is no longer needed.

### *Repeat Notifications Of Battery Removal/Failure*

**Bug 6419579** – When a battery fails or is removed, the problem is reported multiple times in both alarms and email notifications.

### *Addition and Removal of Initiators From Zones in Fabric Are Not Dynamically Detected*

**Bug 6329784** - When an initiator is added or removed from a zone in a fabric, the Configuration Service software does not dynamically detect the change. The WWNs of initiators newly added to the SAN are not displayed.

**Workaround** – If the WWN of a new initiator is not in the drop-down list on the New initiator page, try creating the initiator by manually entering the new WWN. This will force the page to refresh. When you create another new initiator, the WWN will be in the list.

### *Help Button Interferes With Session*

**Bug 6356119** - The first time the online help window is displayed, the application might log you out.

**Workaround** - Re-enter the application from the main Java Web Console page.

### *Volumes Associated With Bypassed Drives Are Displayed as Missing*

**Bug 6371462** - The switch setting 2 Gbits/sec or 4 Gbits/sec applies to the speed of the internal FC data path to disk drives. When a 2-Gbits/sec drive is set to 4 Gbits/sec, the drive enters a status of Bypassed.



Volumes on Bypassed drives are marked as Missing and lose their pool assignments. They are displayed on a separate Ghost Volumes list, with minimal info available.

### *When the Tray ID Is Changed Through the GUI, a Misleading Error Notification Follows*

**Bug 6416680** - When you change a tray ID using the Common Array Manager software, the component appears to have been replaced with a new component.

**Workaround** - Avoid changing tray IDs. If you must change the tray ID, expect and delete the resulting alarm.

### *After a Firmware Upgrade, luxadm Shows Incorrect Path Information*

**Bug 6403778** - After a firmware upgrade, the Solaris luxadm display lists two secondary paths instead of one as primary.

**Workaround** - Use the luxadm command to reset a path to primary.

### *Large Number of Operations Causes Times Out, Or Related Anomalies*

**Bug 6443960, 6431092 and 6433655** - Sometimes jobs that are long-running or involve performing a large number of operations will cause a time out in the GUI, forcing the user to log back in. In these cases the operation will still complete even though the GUI times out. Similarly, jobs with a lower priority may be found to be running before jobs with a higher priority. When mapping a large number of volumes at once, while the job is still mapping the volumes the Job Summary may fail to show a pending job.

**Workaround:** All of these cases are anomalies associated with the interface being unable to keep up with the number of operations performed. When the operations are complete, log back in to the interface and check the components related to the operation that was being performed.

### *Degraded Volume Alarm Clears Before Reconstruction Is Complete*

**Bug 6442500** - After replacing a failed drive, the degraded volume alarm is cleared before the volume reconstruction is complete.

**Workaround** - After replacing a failed drive, check the status of the affected volume(s) on the Volume Summary page to determine whether reconstruction is in progress and whether the volume has returned to the Optimal condition.

### *Following Login Timeout, The Login Page Is Redirected Into The Browser Main Frame*

**Bug 6413457** - If two browsers are open and one user logs out, when the other user initiates any action in the browser, the login page is displayed in the browser's main content frame instead of on its own page. This has also been seen to happen with single user login time outs. This requires the user to relaunch the application.

**Workaround:** Click on the Console button in the masthead (the top frame of the browser). The browser redisplay the web console page, where you must click on the management software link to relaunch the application.

### *Duplicate I/O Module Firmware Listed in Current Firmware*

**Bug 6427632** - On the Register Storage System page, the I/O Module firmware is listed twice (duplicated). Array firmware upgrades have completed successfully, despite this unexpected display error.

**Workaround** – Ignore duplicate entries.

### *Right-Clicking To Open A Component Causes Errors*

**Bug 6429827** - Right-clicking on a component to open a new window causes system errors in some cases, and displays the wrong pages for some others. In some cases, the correct page displays.

**Workaround** - Do not use the right-click function.

### *Unmap Events Are Not Written to the Log File*

**Bug 6433654** - Successful unmap events are not written to the management host log file.

**Workaround** - Use the browser interface or the CLI to see whether volumes are mapped.

### *Secondary Volumes Are Not Recognized in a Replication Set*

**Bug 6266943** - After becoming a secondary volume of a replication set, a volume that was previously recognized by a host (through the `format` command) is displayed as `drive type unknown`. This secondary volume should be designated as a read-only device.

**Workaround** - Ensure that the intended secondary volume is a new (unlabeled) volume. Do not use an existing volume.

### *Pool Page Reports Wrong Available Capacity for SATA Pools*

**Bug 6453816** - If you have allocated all or most of the SATA disks as virtual disks, such that the system can no longer create virtual disks because there are not enough disks available, then you will not be able to create volumes through the browser interface in SATA-only pools. This situation occurs even if available space exists on SATA-based virtual disks that had been created. The same situation occurs for pools that allow any disk type if there is no Fibre Channel space available on the system.

**Workaround** - Leave enough disk drives available so that you can create volumes using the existing virtual disks. You can also use the SSCS command-line interface to create volumes when in this state.

## Installation Issues

This section describes issues related to Common Array Manager installation.

### *Additional Windows Installation Step*

At the end of the procedure for Common Array Manager installation on a Windows platform, you need to perform the following registry edit to disable guest users. Without this step, users will not be able to log in.

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**Note** – Regedit should be run only by experienced PC administrators. Please backup the registry before editing.

---

Run Regedit and set the following registry value to 0:

```
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Lsa\  
ForceGuest
```

### *Windows Firewalls*

To set up a firewall on a Windows management host, after the installation is complete you must allow an exception for port 6789. Common Array Manager will not work through a firewall without this. Some firewall programs prompt for your agreement to allow new programs to communicate through the firewall, and set the port for you. Refer to your firewall documentation for instructions on how to open a port through the firewall.

## *Admin Name With Space Characters Causes Error*

**Bug 6458282** – If the installer is run by a Windows admin user with a space character in the user name, when any user tries to log in there will be a system error and the login will fail.

**Workaround** – The installer must be run by an administrative user without space characters in the user name.

## Solaris OS 10 Issues

This section describes issues related to Solaris OS 10 incompatibilities.

### *Fault Management Fails on Solaris 10 In Multi Byte Locale*

**Bug 6450647** – The fault management service in Common Array Manager does not run on Solaris 10 systems running in a multi-byte locale. The service must operate in the default C locale.

**Workaround** – Change the locale of the machine to the default C locale. If this is not possible, execute the following commands:

1. `cd /opt/SUNWsefms/sbin`
2. `ln -s wrapper-solaris-sparc-32 wrapper`
3. `svcadm clear fmservice`
4. `svcadm enable fmservice`

On an x86 Solaris machine, the second step should be:

`ln -s wrapper-solaris-x86-32 wrapper`

### *Java Console Cannot Upgrade on Solaris 10*

**Bug 6442868** - Common Array Manager 5.0 cannot be installed in a non-global zone on Solaris 10 when the Java Console needs to be upgraded, because the Java Console cannot upgrade as part of the CAM installation (Java Console requires installation in a global zone).

**Workaround** - Perform an upgrade of the Java Console to 2.2.5 in a global zone before installing the Common Array Manager. The Java Console 2.2.5 packages can be accessed from the extracted CAM distribution under `/var/opt/CommonArrayManager/Host_Software_5.0.0.xx/components/lockhartSo`

laris. Use the setup script under lockhartSolaris (**not** the Common Array Manager installer setup script) to install the core packages. The localization packages need to be installed manually.

## Storage Configuration Issues

This section describes known issues and bugs related to storage configuration.

### *Modifying the “Disk Scrubbing With Redundancy Enabled” Parameter Does Not Work*

**Bug 6408489** - When you use the software to set the Disk Scrubbing With Redundancy Enabled parameter from True to False while the Disk Scrubbing Enabled parameter is set to False, the page reports success, but the value of Disk Scrubbing Enabled remains False. When you make this change using the CLI, the prompt returns without a message, but the disk scrubbing setting remains the same as it was.

### *Array Locking Is Not Global*

**Bugs 6246249, 6335727** - When multiple management stations are accessing the array, there is no reservation message to inform the users that the array is locked, and there is no notice of reserving a host for maintenance.

**Workaround** - Inform users of other management stations that may be accessing the same array of pending array operations, to prevent attempts at making configuration changes from a different host.

### *The Power Fan Removal/Replacement Procedure In Service Advisor Applies to Controller Module, Not Expansion Modules*

**Bug 6444767** - The power fan removal/replacement procedure in the Service Advisor applies to the Controller module and not the expansion units.

**Workaround** - Use the following procedure to replace a power-fan module in the 6540 array expansion modules:

## ▼ Remove and Replace a Power-Fan Assembly

1. **From the rear, power-fan assembly A is located in the upper right corner of the tray and power-fan assembly B is located in the lower left corner of the of the tray.**

2. Locate the failed power-fan assembly by checking the fault lights. If a fault is detected, the Service Action Required LED (Amber) will be on and the Service Action Allowed (Blue) LED should be on.

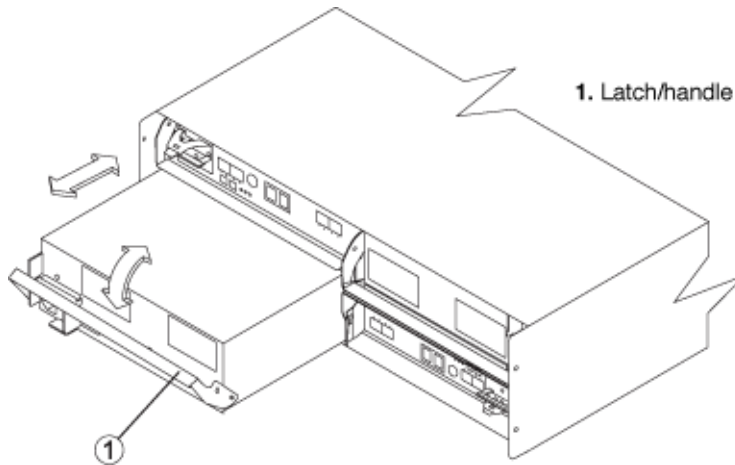


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**Caution** – Potential loss of data access - Never remove a Power-Fan assembly unless the Blue Service Action Allowed LED is in the On position.

---

3. Push the power switch on the failed power-fan assembly to the Off position.
4. Unplug the power cord from the failed power-fan assembly.
5. If you are replacing power-fan assembly A, lift the latch/handle up to unlock the power-fan assembly and pull the power-fan assembly out of the tray. If you are replacing power-fan assembly B, pull the latch/handle down to unlock the power-fan assembly and pull the power-fan assembly out of the tray.



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**Note** – This illustration shows the removal or replacement of power-fan assembly B. Be sure to remove or replace the correct power-fan assembly.

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6. Unpack the new power-fan assembly and save all of the packing materials for return of the failed power-fan assembly. Use care when handling either the new or the failed power-fan assembly.
7. Ensure the power switch on the new power-fan assembly is in the Off position.
8. Insert the new power-fan assembly until it connects with the midplane connector and push the latch/handle in to the locked position.

9. Plug the power cord into the new power-fan assembly.
10. Push the power switch to the On position.
11. The Green power-fan LEDs should now be on. If this is not the case, please contact your service representative.

## Documentation Issues

The current Getting Started Guides for the 6130 and 6140 arrays contain software installation instructions that are superseded by the *Sun StorageTek Common Array Manager Software Installation Guide*. You can still refer to the guides for the array installation instructions. Refer to the *Sun StorageTek Common Array Manager Software Installation Guide* for information about Common Array Manager software installation and logging into the browser interface and sscs CLI man pages.

### *Profile Segment Size Mentioned in Help Not Available*

**Bug 6442690** – The Common Array Manager online help for creating a profile mentions a segment size option of 8 kb. The 8k segment size is not available, since it was removed from the product due to other issues.

## Localization Issues

This section describes known issues and bugs related to localization.

### *Question Marks In Array or Volume Names*

**Bug 6445930** – Non-ASCII characters used in array name or volume name are displayed as question marks on several pages.

**Workaround** – Use only ASCII characters for array name, volume name or other device/component names.

### *Non-ASCII Characters Not Supported*

**Bug 6448835** – Non-ASCII characters cannot be used in some input fields since they will be displayed as question marks on several pages.

**Workaround** – Use only ASCII characters for site information or other text input fields.

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# Operational Information

This section provides useful operational information not documented elsewhere.

## *When Performing an Array Import Using The CLI, Do Not Modify Management Objects*

If you create management objects while an “import array” job is running, it might interfere with the import. Be sure that everyone who uses the destination array does not modify or create any objects (including volumes, initiators, mappings, and so on) while the import is in progress.

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# Release Documentation

Following is a list of documents related to the Sun StorageTek Common Array Manager. For any document number with *nn* as a version suffix, use the most current version available.

You can search for this documentation online at  
<http://www.sun.com/documentation>.

<b>Application</b>	<b>Title</b>	<b>Part Number</b>
CLI command reference	<i>Sun StorageTek Common Array Manager sscs (1M) CLI Quick Reference</i>	819-7038- <i>nn</i>
Installation and initial configuration instructions	<i>Sun StorageTek Common Array Manager Software Installation Guide</i>	819-7035- <i>nn</i>

In addition, the Common Array Manager software includes online help and man pages for CLI commands.

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# Firmware Files

This section lists the firmware files included in the Common Array Manager 5.0, by array type.



The firmware files are named as follows:

- CRM-F/ contains controller firmware
- CRM-F-NVSRAM/ contains controller non-volatile system random access memory (NVSRAM)
- IOM/ contains the FC switched bunch of disks (SBOD) input/output module (IOM) firmware
- DISK/ contains disk drive firmware

Firmware file directories each contain a link, `image.fw`, that points to the firmware image, as well as a text file, `baseline.txt`, that contains the version of the firmware image. SATA drive firmware is installed at the factory for the Sun StorageTek 6540 and 6140 arrays and is not listed.

[TABLE 6](#) lists the firmware files for the StorEdge 6130 Array included in this release. These files are located in `/var/sadm/swimages/117856-35`.

**TABLE 6** 6130 Array and Disk Firmware

Type	Version
CRM-F-NVSRAM	N2822-612843-008
CRM-F	06.12.27.10
DISK/HDS7240SBSUN400G	KFAOAC7A
DISK/HUS1014FASUN146G	2A08
DISK/HUS1073FASUN72G	2A08
DISK/MAT3073FSUN72G	1203
DISK/MAT3147FSUN146G	1203
DISK/MAT3300FSUN300G	1203
DISK/MAU3073FCSUN72G	1003
DISK/MAU3147FCSUN146G	1003
DISK/ST314680FSUN146G	0407
DISK/ST373307FSUN72G	0407
DISK/ST373453FSUN72G	0449
DISK/ST314670FSUN146G	055A
DISK/ST314685FSUN146G	042D
DISK/ST314695FSUN146G	0409
DISK/ST330000FSUN300G	055A
DISK/ST373207FSUN72G	055A
DISK/ST373454FSUN72G	042D

**TABLE 6** 6130 Array and Disk Firmware (*Continued*)

Type	Version
DISK/ST373554FSUN72G	0409
IOM-F	9631
IOM-S	9726

**TABLE 7** lists the firmware files for the StorageTek 6140 Array included in this release. These files are located in `/var/sadm/swimages/120337-11`.

**TABLE 7** 6140 Array and Disk Firmware

Type	Version
CRM-F-NVSRAM	N399X-616843-010
CRM-F	06.16.81.10
DISK/HUS1014FASUN146G	2A08
DISK/HUS1073FASUN72G	2A08
DISK/MAT3073FSUN72G	1203
DISK/MAT3147FSUN146G	1203
DISK/MAT3300FSUN300G	1203
DISK/MAU3073FCSUN72G	1003
DISK/MAU3147FCSUN146G	1003
DISK/ST314670FSUN146G	055A
DISK/ST314680FSUN146G	0407
DISK/ST314685FSUN146G	042D
DISK/ST314695FSUN146G	0409
DISK/ST330000FSUN300G	055A
DISK/ST373207FSUN72G	055A
DISK/ST373307FSUN72G	0407
DISK/ST373453FSUN72G	0449
DISK/ST373454FSUN72G	042D
DISK/ST373554FSUN72G	0409
IOM	9865

**TABLE 8** lists the firmware files for the StorageTek 6540 Array included in this release. These files are located in `/var/sadm/swimages/121540-02`.

**TABLE 8** 6540 Array and Disk Firmware

Type	Version
CRM-F-NVSRAM	N6091-616843-005
CRM-F	06.16.81.10
DISK/HUS1014FASUN146G	2A08
DISK/HUS1073FASUN72G	2A08
DISK/MAT3073FSUN72G	1203
DISK/MAT3147FSUN146G	1203
DISK/MAT3300FSUN300G	1203
DISK/MAU3073FCSUN72G	1003
DISK/MAU3147FCSUN146G	1003
DISK/ST314670FSUN146G	055A
DISK/ST314680FSUN146G	0407
DISK/ST314685FSUN146G	042D
DISK/ST314695FSUN146G	0409
DISK/ST330000FSUN300G	055A
DISK/ST373207FSUN72G	055A
DISK/ST373307FSUN72G	0407
DISK/ST373453FSUN72G	0449
DISK/ST373454FSUN72G	042D
DISK/ST373554FSUN72G	0409
IOM	9865

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## Service Contact Information

If you need help installing or using this product, go to:

<http://www.sun.com/service/contacting>

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## Third-Party Web Sites

Sun is not responsible for the availability of third-party web sites mentioned in this document. Sun does not endorse and is not responsible or liable for any content, advertising, products, or other materials that are available on or through such sites or resources. Sun will not be responsible or liable for any actual or alleged damage or loss caused by or in connection with the use of or reliance on any such content, goods, or services that are available on or through such sites or resources.

## Adding User Roles to Windows

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This appendix provides the information you need to create users in Windows and assign them to groups for privileges. The created users can sign into the Java Web Console to access the Sun StorageTek Common Array Manager software.

This appendix contains the following section:

- [“Adding a Administrator User” on page 23](#)
- [“Adding New Users” on page 26](#)

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### Adding a Administrator User

The Sun StorageTek Common Array Manager software needs a user with Windows administrative privileges to be available for the initial installation.

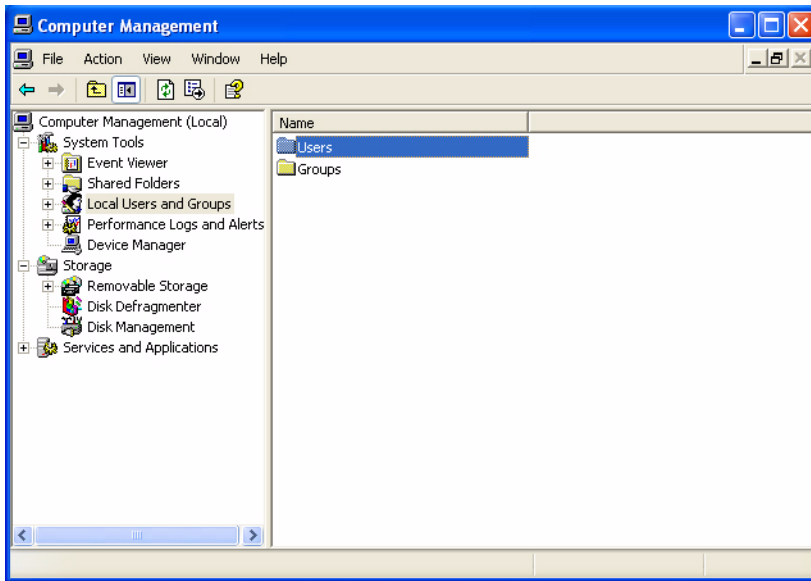
These instructions show you an example of how to configure a administrative user in standard Windows XP. Other versions of Windows software may vary slightly. Consult the Windows documentation.

This example sets up a root user with Windows administrator privileges. Normally root is a role associated with Unix. By using the root user concept with Windows you can have a common storage administrator’s role across platforms.

- 1. Click Start and select Administrative Tools -> Computer Management.**

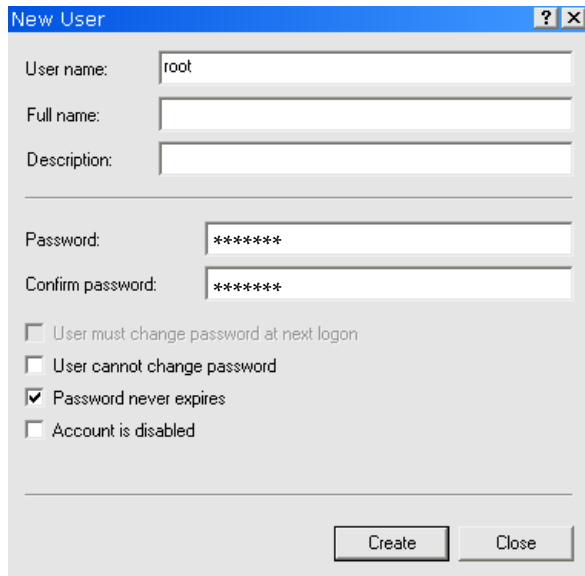
The Computer Management window displays.

2. In the Computer Management window, select Local Users and Groups -> Users.



3. Right click and select New User.

The New User window displays.



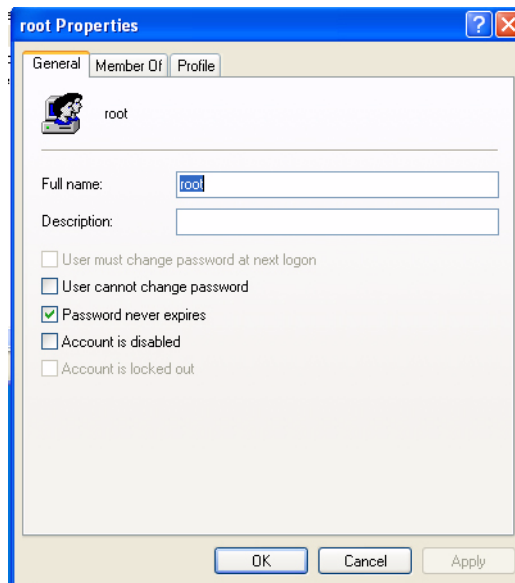
**4. Complete the New User window as follows:**

- a. Enter `root` in the User name box.
- b. Create a password and confirm it.
- c. Uncheck the box labeled **User must change password at next logon**.
- d. Check **Password never expires**.
- e. Click **Create**.

The Computer Management window displays.

- f. Select **Users**, right click on `root`, and select **Properties**.

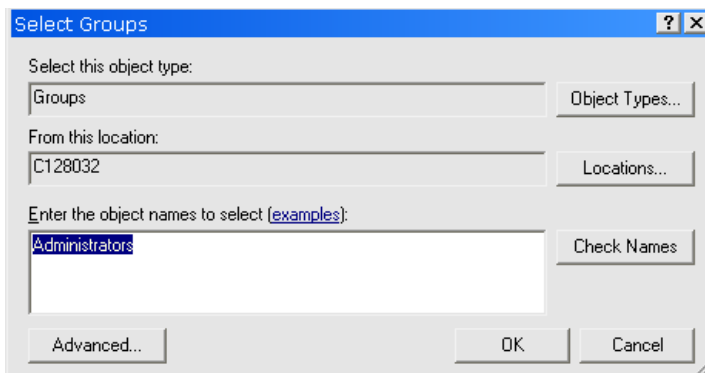
The Root Properties window displays.



**5. Select the Member Of tab.**

**6. Select Add.**

The Select Groups window displays.



7. In the Enter the object names box, type Administrators and click Check Names.

The system displays the *computer-name*\Administrator group in the box labeled "Enter the object names to select".

8. Click OK.

The root Properties window shows that root is a member of the Users and Administrators groups. The root user now has Windows Administrator privileges.

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**Note** – To maintain security on the server running the management host software, only use the root user name and password the first time you log in. After the first login, create at least one user and assign it to the storage group. The storage role can perform all available management functions, including adding or modifying users.

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## Adding New Users

You will need a *storage* user and other users in Windows. To set up subsequent users, follow the same steps as "Adding a Administrator User" on page 23, but substitute a *user name* for *root* and *storage* for the Administrator role.

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**Note** – Do not create Windows administrator users with space characters in the user name. Space characters in Windows admin user names can cause system errors later on.

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When done, check the *user* Properties window and Member of tab to verify that the user is assigned to the Users and storage groups.

