L'ABSENCE DE CONTREFAÇON.

TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L'APTITUDE A UNE UTILISATION PARTICULIERE OU A
OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISEE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT
LA DOCUMENTATION EST FOURNIE "EN L'ÉTAT" ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES
OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISEE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT
TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L'APTITUDE A UNE UTILISATION PARTICULIERE OU A
L'ABSENCE DE CONTREFAÇON.

Copyright 2004 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.

Sun Microsystems, Inc. has intellectual property rights relating to technology embodied in the product that is described in this document. In
particular, and without limitation, these intellectual property rights may include one or more of the U.S. patents listed at
http://www.sun.com/patents and one or more additional patents or pending patent applications in the U.S. and in other countries.

This document and the product to which it pertains are distributed under licenses restricting their use, copying, distribution, and
decompilation. No part of the product or of this document may be reproduced in any form by any means without prior written authorization of
Sun and its licensors, if any.

Third-party software, including font technology, is copyrighted and licensed from Sun suppliers.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in
the U.S. and in other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, AnswerBook2, docs.sun.com, Sun StorEdge, Java, and Solaris are trademarks or registered trademarks of
Sun Microsystems, Inc. in the U.S. and in other countries.

All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and in other
countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc.

Netscape Navigator is a trademark or registered trademark of Netscape Communications Corporation in the United States and other countries.
The OPEN LOOK and Sun™ Graphical User Interface was developed by Sun Microsystems, Inc. for its users and licensees. Sun acknowledges the
pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun
holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun’s licensees who implement OPEN
LOOK GUIs and otherwise comply with Sun’s written license agreements.

U.S. Government Rights—Commercial use. Government users are subject to the Sun Microsystems, Inc. standard license agreement and
applicable provisions of the FAR and its supplements.

DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES,
INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT,
ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

Copyright 2004 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, Etats-Unis. Tous droits réservés.

Sun Microsystems, Inc. a les droits de propriété intellectuels relatants à la technologie incorporée dans le produit qui est décrit dans ce
document. En particulier, et sans la limitation, ces droits de propriété intellectuels peuvent inclure un ou plus des brevets américains énumérés à
http://www.sun.com/patents et un ou les brevets plus supplémentaires ou les applications de brevet en attente dans les Etats-Unis et dans les
autres pays.

Ce produit ou document est protégé par un copyright et distribué avec des licences qui en restreignent l’utilisation, la copie, la distribution, et la
décompilation. Aucune partie de ce produit ou document ne peut être reproduite sous aucune forme, par quelque moyen que ce soit, sans
l’autorisation préalable et écrite de Sun et de ses bailleurs de licence, s’il y ena.

Le logiciel détenu par des tiers, et qui comprend la technologie relative aux polices de caractères, est protégé par un copyright et licencié par des
fournisseurs de Sun.

Des parties de ce produit pourront être dérivées des systèmes Berkeley BSD licenciés par l’Université de Californie. UNIX est une marque
déposée aux Etats-Unis et dans d’autres pays et licencée exclusivement par X/Open Company, Ltd.

Sun, Sun Microsystems, le logo Sun, AnswerBook2, docs.sun.com, Sun StorEdge, Sun StorEdge, Java, et Solaris sont des marques de fabrique ou
des marques déposées de Sun Microsystems, Inc. aux Etats-Unis et dans d’autres pays.

Toutes les marques SPARC sont utilisées sous licence et sont des marques de fabrique ou des marques déposées de SPARC International, Inc.
aux Etats-Unis et dans d’autres pays. Les produits protant les marques SPARC sont basés sur l’architecture développée par Sun
Microsystems, Inc.

Netscape Navigator est une marque de Netscape Communications Corporation aux Etats-Unis et dans d’autres pays.

L’interface d’utilisation graphique OPEN LOOK et Sun™ a été développée par Sun Microsystems, Inc. pour ses utilisateurs et licenciés. Sun
reconnaît les efforts de pionniers de Xerox pour la recherche et le développement du concept des interfaces d’utilisation visuelle ou graphique
pour l’industrie de l’informatique. Sun détient une licence non exclusive du Xerox sur l’interface d’utilisation graphique Xerox, cette licence
couvrant également les licences de Sun qui mettent en place l’interface d’utilisation graphique OPEN LOOK et qui en outre se conforment aux
 licences écrites de Sun.

LA DOCUMENTATION EST FOURNIE "EN L’ÉTAT" ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES
OU TACITES SONT FORMELLEMENT EXCLUÉES, DANS LA MESURE AUTORISÉE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT
TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L’APTITUDE A UNE UTILISATION PARTICULIERE OU À
L’ABSENCE DE CONTREFAÇON.

Adobe PostScript
Contents

Preface vii

1. Planning for the Installation 1
   Overview of the Sun StorEdge 6920 System Host Installation Software 2
   System Requirements 4
       Hardware and Software Requirements 4
       SAN vs. DAS Configurations 4
   Suggested Installation Strategies 5
       Management Station 5
       Data Host Stations 5

2. Installing the Software 7
   Installation Task Summary 8
   Pre-existing Versions of the Host Software 9
       Storage Automated Diagnostic Environment Software 9
       Java Environment 9
   Downloading from the Sun Download Center 10
       ▼ To Download and Install the Package 10
   Installing the Software 11
       Install the Software as the Superuser (root) 11
3. **Logging In to the Software**  

- User Accounts for the Remote Configuration CLI (**sscs**)  18
- Logging In Using the Remote Configuration CLI (**sscs**)  18
  - To Log In Using the CLI  19
  - To Log Out Using the CLI  19
- Logging In to the Storage Automated Diagnostic Environment  20
  - To Log In  20
  - To Log Out  21
Tables

TABLE 1-1 Components of the Sun StorEdge 6920 System Host Installation Software  2
TABLE 1-2 Software for Additional Operating Systems  3
TABLE 1-3 Required Hardware and Software  4
TABLE 2-1 Installation Task Summary  8
TABLE 2-2 Installation Script Menu Choices  13
TABLE 3-1 User Accounts  18
TABLE 3-2 sscs login Command-Line Optional Arguments  19
Preface

This document describes the installation considerations, requirements, and procedures for the Sun StorEdge 6920 System Host Installation and supporting software. The intended audience for this document includes Sun service and support engineers, SAN administrators, and storage system administrators.

How This Book Is Organized

Chapter 1 describes the requirements and preparation procedures for the software installation.

Chapter 2 describes how to install and remove the software.

Chapter 3 describes how to log in to the software using the command-line interface (CLI).
Using UNIX Commands

This document might not contain information on basic UNIX® commands and procedures such as shutting down the system, booting the system, and configuring devices.

See one or more of the following for this information:

- Solaris Handbook for Sun Peripherals
- AnswerBook2™ online documentation for the Solaris™ operating environment
- Other software documentation that you received with your system

Typographic Conventions

<table>
<thead>
<tr>
<th>Typeface</th>
<th>Meaning</th>
<th>Examples</th>
</tr>
</thead>
</table>
| AaBbCc123  | The names of commands, files, and directories; on-screen computer output| Edit your .login file.  
Use ls -a to list all files.  
% You have mail.                   |
| AaBbCc123  | What you type, when contrasted with on-screen computer output           | % su  
Password:                                                                 |
| AaBbCc123  | Book titles, new words or terms, words to be emphasized. Replace command-line variables with real names or values. | Read Chapter 6 in the User’s Guide.  
These are called class options.  
You must be superuser to do this.  
To delete a file, type rm filename. |
| [ ]        | In syntax, brackets indicate that an argument is optional.             | scmadm [-d sec] [-r n][n]... [-z]                                       |
| [arg | arg]    | In syntax, braces and pipes indicate that one of the arguments must be specified. | sndradm -R b (p | s)                                                    |
| \          | At the end of a command line, the backslash (\) indicates that the command continues on the next line. | atm90 /dev/md/rdsk/d5 \  
/dev/md/rdsk/d1 atm89 \  
/dev/md/rdsk/d5 /bit-maps/map2 \  
ip sync |
# Shell Prompts

<table>
<thead>
<tr>
<th>Shell</th>
<th>Prompt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bourne shell and Korn shell</td>
<td>$</td>
</tr>
<tr>
<td>Bourne shell and Korn shell superuser</td>
<td>#</td>
</tr>
<tr>
<td>C shell</td>
<td>machine-name%</td>
</tr>
<tr>
<td>C shell superuser</td>
<td>machine-name#</td>
</tr>
</tbody>
</table>

## Related Documentation

<table>
<thead>
<tr>
<th>Application</th>
<th>Title</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Man pages</strong></td>
<td><strong>sscs (1M)</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Release and product</strong></td>
<td><strong>Sun StorEdge SAN Foundation Software 4.4 Release</strong></td>
<td>817-3673-nn</td>
</tr>
<tr>
<td></td>
<td><strong>Notes</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Storage Automated Diagnostic Environment 2.3 Getting</strong></td>
<td>817-3284-10</td>
</tr>
<tr>
<td></td>
<td><strong>Started Guide</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sun StorEdge 6920 System 1.0 Release</strong></td>
<td>817-5229-nn</td>
</tr>
<tr>
<td><strong>Installation</strong></td>
<td><strong>Sun StorEdge SAN Foundation Software 4.4 Installation</strong></td>
<td>817-3671-nn</td>
</tr>
<tr>
<td></td>
<td><strong>Guide</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sun StorEdge SAN Foundation Software 4.4 Configuration</strong></td>
<td>817-3672-nn</td>
</tr>
<tr>
<td></td>
<td><strong>Guide</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Best Practices for Deploying the Storage Automated</strong></td>
<td>817-5205-10</td>
</tr>
<tr>
<td></td>
<td><strong>Diagnostic Environment to Monitor</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Storage</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sun StorEdge 6920 System Getting Started</strong></td>
<td>817-5227-nn</td>
</tr>
<tr>
<td><strong>User and diagnostic</strong></td>
<td><strong>Sun StorEdge 6920 System Regulatory and Safety</strong></td>
<td>817-5230-nn</td>
</tr>
<tr>
<td></td>
<td><strong>Compliance Manual</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sun StorEdge 6920 System Site Preparation</strong></td>
<td>817-5224-nn</td>
</tr>
</tbody>
</table>
Accessing Sun Documentation

You can view, print, or purchase a broad selection of Sun documentation, including localized versions, at:

http://www.sun.com/documentation

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.

Contacting Sun Technical Support

If you have technical questions about this product that are not answered in this document, go to:

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

Sun Welcomes Your Comments

Sun is interested in improving its documentation and welcomes your comments and suggestions. You can submit your comments by going to:

http://www.sun.com/hwdocs/feedback

Please include the title and part number of your document with your feedback:

Sun StorEdge 6920 System Host Installation Software Guide, part number 817-5831-10
Planning for the Installation

This chapter describes requirements and preparation procedures for installing the StorEdge 6920 System Host Installation Software.

The topics described in this chapter include the following:

- “Overview of the Sun StorEdge 6920 System Host Installation Software” on page 2
- “Hardware and Software Requirements” on page 5
- “Required Hardware and Software” on page 5
- “Suggested Installation Strategies” on page 6
Overview of the Sun StorEdge 6920 System Host Installation Software

The Sun StorEdge 6920 System Host Installation Software enables you to manage, monitor and transfer data for all storage systems in a storage area network (SAN) environment. The system arrives with the following management software on the internal Storage Service Processor. The Sun StorEdge 6920 Host Installation Software CD also contains the following software as listed in TABLE 1-1.

<table>
<thead>
<tr>
<th>Software</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sun StorEdge Remote Configuration CLI (sscs)</td>
<td>The Sun StorEdge Remote Configuration (sscs) software provides the ability to perform remote configuration from a command-line interface. Also known as the thin-scripting client software, the software provides access to storage array configuration and management services through a client on an external host.</td>
</tr>
<tr>
<td>Sun Storage Automated Diagnostic Environment Software - Device Edition</td>
<td>This software is a distributed online health and diagnostic monitoring tool for SAN devices. It can be configured to monitor on a 24-hour basis, collecting information that enhances the reliability, availability, and servicability (RAS) of the storage devices. This software provides the following features: • A web-based user interface for device monitoring and diagnostics • Distributed test invocation by means of lists or topologies. • Remote notification through Sun Remote Services, (SRS Net Connect), HTTP and SNMP providers or email. Though the Storage Automated Diagnostic Environment may already be installed on your system, the software is also on the Sun StorEdge 6920 Host Installation Software CD, and online at: <a href="http://www.sun.com/software/download">http://www.sun.com/software/download</a> Patches are required from: <a href="http://sunsolve.sun.com/">http://sunsolve.sun.com/</a></td>
</tr>
<tr>
<td>Sun StorEdge SAN Foundation Software 4.4</td>
<td>This software incorporates kernel drivers and utilities that enable the host to connect to, monitor and transfer data on a SAN. Though the Sun StorEdge SAN Foundation Software 4.4 may already be installed on your system, the base software package is on the Sun StorEdge 6920 Host Installation Software CD, and is also online at: <a href="http://www.sun.com/software/download">http://www.sun.com/software/download</a> Patches are available from: <a href="http://sunsolve.sun.com/">http://sunsolve.sun.com/</a></td>
</tr>
</tbody>
</table>
The Sun StorEdge Remote Configuration CLI (sscs) for operating systems other than Solaris is not available on the Sun StorEdge 6920 Host Installation Software CD, but is available for download. Additionally, the Sun StorEdge Traffic Manager

<table>
<thead>
<tr>
<th>Software</th>
<th>Description</th>
</tr>
</thead>
</table>
| Sun StorEdge Traffic Manager Software | In order to enable multipathing functionality, each Solaris data host must have Sun StorEdge Traffic Manager software installed before it can reliably communicate with the systems’ storage.  
To enable Dynamic Multipathing (DMP) you can purchase VERITAS software, as described in “Additional Supported Software” in the Sun StorEdge 6920 System Getting Started Guide.  
Though the Sun StorEdge Traffic Manager software may already be installed on your system, the base software package is on the Sun StorEdge 6920 Host Installation Software CD, and is also online at:  
http://www.sun.com/software/download  
Patches are available from:  
http://sunsolve.sun.com/ |
Software for data hosts that are not Solaris is also available:

### TABLE 1-2  Software Available for Download

<table>
<thead>
<tr>
<th>Software</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sun StorEdge Traffic Manager Software</strong></td>
<td>In order to enable multipathing functionality, each data host must have Sun StorEdge Traffic Manager software installed before it can reliably communicate with the system's storage. This software incorporates kernel drivers and utilities that enable data hosts running operating systems other than Solaris OS to automatically or manually connect to, monitor, and manage transfer data flow on a SAN. Available for download from: <a href="http://www.sun.com/software/download">http://www.sun.com/software/download</a> Patches are available from: <a href="http://sunsolve.sun.com">http://sunsolve.sun.com</a></td>
</tr>
</tbody>
</table>
System Requirements

Hardware and Software Requirements

TABLE 1-3 lists the hardware and software that must be set up and installed before you can install the StorEdge 6920 System Host Installation Software.

TABLE 1-3 Required Hardware and Software

<table>
<thead>
<tr>
<th>Hardware Requirements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Media Drive</td>
<td>A CD-ROM drive connected to the host machine where the software is to be installed.</td>
</tr>
<tr>
<td>Host Machines</td>
<td>The software is supported on host machines that use the Solaris OS.</td>
</tr>
<tr>
<td>Storage Arrays and Systems</td>
<td>Sun StorEdge 6920 system</td>
</tr>
<tr>
<td>Disk and Memory Requirements</td>
<td>1 Gbyte of disk space</td>
</tr>
<tr>
<td></td>
<td>256 Mbytes of system memory (512 Mbytes for best performance)</td>
</tr>
</tbody>
</table>

Software Requirements

| Operating Environment and Supporting Software | Solaris 9 OS with minimum patch number 113277-17 |
|                                             | Solaris 8 10/01 OS with minimum patch number 110934-07 and 108974-37 |
|                                             | Java™ SDK version 1.4.0 |
|                                             | Sun™ Management Center version 3.0 |
|                                             | Perl version 5.005 through 5.6 , which is available at: http://www.perl.com/pub/language/info/software.html |

Web Browser (minimum version) | Netscape Navigator™ minimum version 7.0 or, Microsoft Internet Explorer version 5.0 or, Mozilla 1.2.1 |

SAN vs. DAS Configurations

Both storage area network (SAN) and direct access storage (DAS) configurations are supported with the Sun StorEdge SAN foundation software and the Sun StorEdge 6920 system. The main factor for choosing between a SAN or DAS configuration would be the number of host bus adapter ports required, the number of Sun StorEdge 6920 system ports (16 or 32) and the bandwidth required. All host bus
adapters and software supported in the SAN are also supported in DAS configurations.

For further information on SAN and DAS configurations, refer to the Sun StorEdge 6920 System Getting Started Guide.

Suggested Installation Strategies

Each server is considered a station and can have a different role: as either a management station or a data host station.

For Sun StorEdge 6920 systems, the management and data host stations can be combined on a single server. However, for efficiency, install the Remote Configuration CLI (sccs) software on a server that is not in the data path (that is, a server that is not a data host station).

Management Station

- The management station is the server on which you install the Remote Configuration CLI (sccs), as well as the Sun StorEdge Automated Diagnostic Environment.
- These hosts must be on the same LAN as the Sun StorEdge 6920 systems.

Data Host Stations

The data host stations are hosts that have a Fibre Channel connection to the Sun StorEdge 6920 system. The Sun StorEdge SAN Foundation software should be installed on each data host connected to Sun StorEdge 6920 system. Use the Storage Automated Diagnostic Environment software for monitoring and debugging any data path connectivity issues.

For data hosts running operating systems other than Solaris, install Sun StorEdge Traffic Manager instead of Sun StorEdge SAN Foundation software. The software is available via web download as noted in TABLE 1-2.
CHAPTER 2

Installing the Software

This chapter provides instructions on the steps required to install and configure the Sun StorEdge 6920 System Host Installation Software.

**Note** – Perform the procedures in this chapter as the superuser (root).

This chapter describes the following topics:

- “Installation Task Summary” on page 8
- “Installing the Software” on page 11
- “Post Installation Procedures” on page 15
- “Removing the Software” on page 16
# Installation Task Summary

TABLE 2-2 provides a high-level overview of the tasks required to install the Sun StorEdge 6920 System Host Installation Software and its location in this document.

## TABLE 2-1  
### Planning for the Installation

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Learn about the software components.</td>
</tr>
<tr>
<td>2.</td>
<td>Make sure your system meets the hardware and SAN requirements.</td>
</tr>
<tr>
<td>3.</td>
<td>Determine your installation strategy.</td>
</tr>
<tr>
<td>4.</td>
<td>Remove Storage Automated Diagnostic Environment Software 2.2 or earlier if necessary.</td>
</tr>
</tbody>
</table>

### Installation Steps

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Install the software.</td>
</tr>
</tbody>
</table>

### Post-Installation Step

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>Configure the Storage Automated Diagnostic Environment software (if installed with the <code>install.sh</code> script).</td>
</tr>
<tr>
<td>7.</td>
<td>Configure the Sun Storage SAN Foundation software (if installed with the <code>install.sh</code> script)</td>
</tr>
<tr>
<td>8.</td>
<td>Check the log files for messages related to the installation.</td>
</tr>
<tr>
<td>9.</td>
<td>Log in using <code>sscs(1M)</code> or a web browser.</td>
</tr>
</tbody>
</table>

Before you install the software, read the following sections:

- “Overview of the Sun StorEdge 6920 System Host Installation Software” on page 2 in Chapter 1
- “The Sun StorEdge 6920 System Host Installation Software enables you to manage, monitor and transfer data for all storage systems in a storage area network (SAN) environment. The system arrives with the following management software on the internal Storage Service Processor. The Sun StorEdge 6920 Host Installation Software CD also contains the following software as listed in TABLE 1-1.” on page 2 in Chapter 1
- “Suggested Installation Strategies” on page 6 in Chapter 1
- “Pre-existing Versions of the Host Software” on page 9
- “Installing the Software” on page 11
- “Storage Automated Diagnostic Environment Software” on page 15
- “Sun StorEdge SAN Foundation Software” on page 15
- “To Check Log Files After the Installation” on page 16
- “User Accounts for the Remote Configuration CLI (sscs)” on page 18 in Chapter 3
Pre-existing Versions of the Host Software

In some instances, you may have pre-existing versions of the host software on your system. In order to ensure that the new host software works correctly, it may be necessary to remove old versions of software, as outlined below.

Storage Automated Diagnostic Environment Software

If Storage Automated Diagnostic Environment software 2.2 or earlier is already installed on the system, it must be removed before installing the version contained on the Host CD. Removing the previous version will not affect the contents of the existing database. However, if there are any pending alarms or events, they may be lost. Therefore, it is recommended that all alarms and events be addressed prior to removing the software.

Java Environment

The Remote Configuration CLI (sscs) requires Java 1.4.0 or higher. The default versions for Solaris 8 are 1.1, 1.2 and 1.3. As a result, Java 1.4 may not be installed. Since 1.3 and 1.4 are installed in the same location, 1.3 must be removed prior to 1.4 installation.

The installation script will recognize and report that Java 1.3 must be removed before the installation of the Remote Configuration CLI (sscs) can be installed. However, this may cause problems for some earlier Java applications that have not been tested with 1.4. Refer to the online compatibility documentation for information about incompatibilities between Java 2 SDK 1.4 and earlier releases prior to the removal of 1.3 at http://java.sun.com/j2se/1.4.2/compatibility.html
Downloading from the Sun Download Center

The software is delivered on Sun StorEdge 6920 Host Installation Software CD-ROM, but it is also available from the Sun Download Center (SDLC).

▼ To Download and Install the Package

1. Download the latest version of the software from the Sun Download Center by going to the following URL:
   http://www.sun.com/software/download/

2. Click the link for the Sun StorEdge 6920 Host Installation software.

3. Log in.
   If you have not already registered, do so and then log in.

4. Click Accept and Continue on the Legal/License Agreement page.

5. Click the link for the SE6920_host_sw.tar.Z package.

6. Save the SE6920_host_sw.tar.Z package to a temporary working directory after you download it.
   For example:
   
   ```
   # cp SE6920_host_sw.tar.Z /directory
   
   # cd /directory
   
   # uncompress SE6920_host_sw.tar.Z
   ```

   where /directory is a directory name in which to copy the package.

7. Change to the directory in which you saved the SE6920_host_sw.tar.Z file.

8. Uncompress the SE6920_host_sw.tar.Z package.
9. Extract the SE6920_host_sw.tar package.

```bash
# tar -xvf SE6920_host_sw.tar
```

10. Go to “Installing the Software” on page 11 to complete the installation.

---

**Installing the Software**

Install the software packages by using the install.sh script.

- “Install the Software as the Superuser (root)” on page 11
- “Installing the Correct Configuration” on page 12
- “To Install the Sun StorEdge 6920 Host Installation Software” on page 14

**Install the Software as the Superuser (root)**

You must install the software packages as superuser (root).

If aliases exist in the superuser environment or profile, the software installation and configuration might have unexpected results. Remove any aliases created for the environment (for example, `cp="cp -i"`) before you install or configure the software.

- Log in as superuser and type the appropriate command in a terminal window.

```bash
# unalias -a
```
Installing the Correct Configuration

An installation script main menu is displayed when you execute the install.sh script. CODE EXAMPLE 2-1 contains the installation script main menu. Once you have begun the installation process, you will have the ability to install one or all of the components that comprise the Sun StorEdge 6920 System Host Installation Software.

**CODE EXAMPLE 2-1  Installation Script Main Menu**

```
Host Software Installation
--------------------------
This script installs software for your Sun StorEdge(tm) 6920 storage system.

Software components included in this distribution:
- Sun StorEdge(tm) SAN Foundation Software
- Storage Automated Diagnostic Environment
- Remote Configuration CLI (sscs)

Do you want to continue? [y/n] : y

Type y to continue the installation process. You will now be presented with the choices for installation.

Do you want to install ....
  Sun StorEdge(tm) SAN Foundation Software [y/n]: n
  Storage Automated Diagnostic Environment [y/n]: y
  Remote Configuration CLI (sscs) [y/n]: y

You have chosen to install the following components:
  Storage Automated Diagnostic Environment
  Remote Configuration CLI (sscs)

Is this correct? [y/n] y
```

This is where you indicate which components of the management software should be installed. For example, to install the Remote Configuration CLI (sscs) and Storage Automated Diagnostic Environment software on the management station and the SAN Foundation and Storage Automated Diagnostic Environment software on the data host station for a Sun StorEdge 6920 system, install the software as follows:
- **On the management station:** To install the Remote Configuration CLI (sscs), and Storage Automated Diagnostic Environment software on the management station, type y next to the Remote Configuration CLI (sscs), and Storage Automated Diagnostic Environment Software choices and n next to the other choices, as displayed in the above example.

- **On each data host station:** To install the Sun StorEdge SAN Foundation software and Storage Automated Diagnostic Environment on a data host station, type y next to those two menu choices and n next to the other choices.

- For further information, refer to the *Storage Automated Diagnostic Environment Software Best Practices Guide.*

TABLE 2-2 describes the menu choices.

<table>
<thead>
<tr>
<th>If You Want to Install</th>
<th>Type y for These Menu Options</th>
</tr>
</thead>
</table>
| All packages on one machine. | • Sun StorEdge SAN Foundation software  
• Storage Automated Diagnostic Environment  
• Remote Configuration CLI (sscs) |
| Remote Configuration CLI on the Sun StorEdge 6920 system management station. | • Remote Configuration CLI (sscs) |
| Storage Automated Diagnostic Environment on the Sun StorEdge 6920 system management station | • Storage Automated Diagnostic Environment |
| Sun StorEdge SAN Foundation software on each data host station. | • Sun StorEdge SAN Foundation software |
| Storage Automated Diagnostic Environment on each data host station. | • Storage Automated Diagnostic Environment |
To Install the Sun StorEdge 6920 Host Installation Software

1. Log in to your station as superuser.
2. Remove any defined aliases for this user.

```bash
# unalias -a
```

3. With the CD in the CD-ROM drive, start the Volume Manager daemon `vold(1)` (if needed).

If you downloaded the software from the Sun Download Center, and you uncompressed the `SE6920_host_sw.tar` file, go to the directory where you extracted the files, and then skip to step 5. If you are installing the software from the CD, continue with step 4.

```bash
# /etc/init.d/volmgt start
```

4. Change to the root directory. For example,

```bash
# cd /cdrom/cdrom0
```

5. Start the `install.sh` script.

```bash
# ./install.sh
```

The installation menu is displayed.

6. Type `y` next to the menu choices corresponding to the software being installed and `n` next to the other choices, and press Return after each choice.

For example, to install only the Storage Automated Diagnostic Environment software, type `y` next to that menu choice and `n` next to the rest of the menu choices.

```
Do you want to install ....
  Sun StorEdge[tm] SAN Foundation Software [y/n]: n
  Storage Automated Diagnostic Environment [y/n]: y
  Remote Configuration CLI (sscs) [y/n]: n
```
Continue by following the instructions and prompts provided in the script.

7. If you installed the Sun StorEdge SAN Foundation software, you must install the most recent Sun StorEdge SAN Foundation software patches from http://sunsolve.sun.com/

8. Continue on to “Post Installation Procedures” on page 15 to complete any applicable post-installation procedures.

Post Installation Procedures

Follow the post-installation procedures depending on the software you installed.

This section describes the following topics:
- “Sun StorEdge SAN Foundation Software” on page 15
- “Storage Automated Diagnostic Environment Software” on page 15
- “To Check Log Files After the Installation” on page 16

Sun StorEdge SAN Foundation Software

If you installed the Sun StorEdge SAN Foundation software, see the Sun StorEdge SAN Foundation Software Installation Guide (at http://www.sun.com/storage/san) for post-installation procedures to ensure that the product operates correctly.

Storage Automated Diagnostic Environment Software

If you installed the Storage Automated Diagnostic Environment, see the “Getting the Storage Automated Diagnostic Environment Ready” section of the Storage Automated Diagnostic Environment Getting Started Guide – Device Edition (GettingStartedDE.pdf) in the /opt/SUNWstade/docs directory for the correct configuration procedures.
To Check Log Files After the Installation

- Check the following files for messages related to the installation if you encountered installation problems:
  - `/var/sadm/install/se6920/6920_Host_SW_Install.log`
    This log contains installation, removal, configuration, error, or informational messages.
  - `/var/adm/messages`
    This log contains general system error or informational messages.

Removing the Software

To stop and remove the software, perform the following procedure.

To Remove the StorEdge 6920 System Host Installation Software

1. Log in to your machine as superuser.
2. Remove any defined aliases for this user as described in “Install the Software as the Superuser (root)” on page 11.
3. Run the `uninstall.sh` script.

```
# cd /cdrom/cdrom0
#/usr/uninstall.sh
```

Follow any directions presented during the running of the script.
CHAPTER 3

Logging In to the Software

This chapter describes how to log in to the Remote Configuration CLI (sscs) software, as well as the Storage Automated Diagnostic Environment.

- “User Accounts for the Remote Configuration CLI (sscs)” on page 18
- “Logging In Using the Remote Configuration CLI (sscs)” on page 18
- “Logging In to the Storage Automated Diagnostic Environment” on page 20
User Accounts for the Remote Configuration CLI (sscs)

This section describes user accounts in Remote Configuration CLI (sscs).

The following are the User Accounts/IDs and passwords that are used by the software. The Sun StorEdge 6920 system is configured with the three user accounts and their corresponding default passwords shown in TABLE 3-1.

TABLE 3-1 User Accounts

<table>
<thead>
<tr>
<th>User Account/ID</th>
<th>Description</th>
<th>Default Password</th>
</tr>
</thead>
<tbody>
<tr>
<td>admin</td>
<td>An admin user has all administration privileges. Only the admin user can change passwords. The admin user has all administrative privileges, and can modify users and system attributes on the Administration page.</td>
<td>!admin</td>
</tr>
<tr>
<td>storage</td>
<td>A storage user can use the software features related to storage device configuration and array management.</td>
<td>!storage</td>
</tr>
<tr>
<td>guest</td>
<td>A guest user has read-only privileges and can only view information. This user cannot modify any settings or features.</td>
<td>!guest</td>
</tr>
</tbody>
</table>

Logging In Using the Remote Configuration CLI (sscs)

Use the /opt/se6920/cli/bin/sscs command to perform the remote management operations. For further information on remote management operations, see the sscs(1M) man page.
To Log In Using the CLI

- Type the following command in a terminal window:

```
% sscs login -h SE-6920-SPname [-t] [-f] -u user
Password: !password
```

- `SE-6920-SPname` is the Sun StorEdge 6920 system, `user` is one of the accounts (admin, storage, or guest) on the `SE-6920-SPname` system, and `!password` is the default password for the account (!admin, !storage, or !guest).

- The `SE-6920-SPname` is a configuration number ranging from SP0 - SP7. You can also use `localhost` to access the default Storage Service Processor.

**TABLE 3-2** describes the optional arguments associated with the `sscs login` command for the Sun StorEdge 6920:

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>-f</code></td>
<td>Forces a login if another user with the same user name is already logged in. The duplicate user is then logged off.</td>
</tr>
<tr>
<td><code>-t</code></td>
<td>Log in using an HTTP connection.</td>
</tr>
</tbody>
</table>

In this example, we are logging onto the Storage Service Processor named SP2 as `admin`.

```
% sscs login -h SP2 -f -u admin
Password: !admin
```

To Log Out Using the CLI

- Type the following command:

```
# sscs logout
```
Logging In to the Storage Automated Diagnostic Environment

Use the Sun Automated Diagnostic Environment to monitor, detect, and diagnose array failures for Sun storage devices.

If you have successfully installed the software, perform the following procedures to log in to the Storage Automated Diagnostic Environment.

▼ To Log In

1. Open your web browser.
2. Type one of the following URLs in the URL text field.

   **Note** – hostname is the host name where the software is installed

   - For a non-SSL HTTP server.

     http://hostname:7654/

     The default port number for a non-SSL HTTP server is 7654.

   - For an SSL HTTP (secure) server.

     https://hostname:7443/

     The default port number for an SSL HTTP server is 7443.

3. **Log in by typing:**

   User Name: ras
   Password: agent

   The default login is ras. The default password is agent.

4. Click the Log In button.

   The Storage Automated Diagnostic Environment main window is displayed.
To Log Out

- Click Log Out from any page in the Storage Automated Diagnostic Environment.
Index

A
admin
  password, 18
admin user account, 18
aliases
  removing, 11, 16

C
CLI
  log in, 19
  log out, 19
commands
  sscs login, 19
  sscs logout, 19
  unalias, 11, 14

D
DAS, 5
data host station, 6
  installing software on, 12, 13

F
fibre channel and data host station, 6

G
guest
  password, 18
  user account, 18

H
HTTP connection, 20
HTTPS connection, 20

I
install.sh script, 12, 14
installation
  summary, 8

J
Java
  pre-existing versions, 9
  required version, 5

L
log files
  informational, 16
  installation, 16
  system error, 16
  log in
CLI, 19
Storage Automated Diagnostic Environment, 20

log out
CLI, 19
Storage Automated Diagnostic Environment, 20

M
management station, 6
  installing software on, 12, 13
Mozilla, 5
MS Internet Explorer, 5

N
Netscape Navigator, 5

P
package
downloading, 10
password, 18
  admin, 18
  guest, 18
  storage, 18
pre-existing versions of software, 9

R
RAS, 2
removing software, 16

S
SAN, 5
scripts
  install.sh, 12, 14
  uninstall.sh, 16
service processor name, 19
software
downloading, 10
  installing, 11
  removing, 16

sscs login command, 19
sscs logout command, 19
station
data host, 6
  management, 6
storage
password, 18
  user account, 18
Storage Automated Diagnostic Environment
  log in, 20
  log out, 20
  password, 20
  pre-existing versions, 9
  user name, 20
superuser, 11

T
thin-scripting client, 2

U
unalias command, 11, 14
uninstall.sh script, 16
user account, 18
  admin, 18
  guest, 18
  storage, 18
  user IDs, 18