



Sun StorEdge™ Component Manager 2.2 Installation Guide

For the Solaris Operating Environment

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Preface

The *Sun StorEdge Component Manager Installation Guide For the Solaris Operating Environment* provides instructions for installing the Sun StorEdge™ Component Manager 2.2 software, verifying the installation, starting the software, uninstalling the software, troubleshooting the software

Before You Read This Book

For the latest Component Manager information, please see the *Sun StorEdge Component Manager 2.2 Release Notes*.

How This Book Is Organized

Chapter 1 describes the steps needed to install the software, as well as how to stop and restart the software.

Chapter 2 addresses potential error messages that may require troubleshooting.

Appendix A discusses installation issues with the Sun Management Center.

Using UNIX Commands

This document may 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:

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

Typographic Conventions

TABLE P-1

Typeface	Meaning	Examples
AaBbCc123	The names of commands, files, and directories; on-screen computer output	Edit your <code>.login</code> file. Use <code>ls -a</code> to list all files. % You have mail.
AaBbCc123	What you type, when contrasted with on-screen computer output	% su Password:
<i>AaBbCc123</i>	Book titles, new words or terms, words to be emphasized	Read Chapter 6 in the <i>User's Guide</i> . These are called <i>class</i> options. You <i>must</i> be superuser to do this.
	Command-line variable; replace with a real name or value	To delete a file, type <code>rm filename</code> .

Shell Prompts

TABLE P-2

Shell	Prompt
C shell	<i>machine_name</i> %
C shell superuser	<i>machine_name</i> #
Bourne shell and Korn shell	\$
Bourne shell and Korn shell superuser	#

Related Documentation

Table P-3

Application	Title	Part Number
Install	<i>Sun StorEdge Component Manager 2.2 Installation Guide: For the Microsoft Windows NT Operating Environment</i>	806-6646
User	<i>Sun StorEdge Component Manager 2.2 User's Guide</i>	806-6647
Release	<i>Sun StorEdge Component Manager 2.2 Release Notes</i>	806-6648
Help	Sun StorEdge Component Manager 2.2 Online Help	
Install/User	<i>Switch Management Installer's/User's Manual</i>	875-1890
User	<i>SANbox-8 Fibre Channel Switch User's Manual</i>	875-1881

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Installing Component Manager

This document describes how to install the Sun StorEdge™ Component Manager 2.2 software. You should read this document before attempting to install or operate Sun StorEdge Component Manager 2.2 on a Sun StorEdge A5000, A5100, A5200 or T3 disk array. (Unless uniquely identified, all supported disk arrays referred to as “A5x00” within this document.)

The following topics are covered in this chapter:

- “Component Manager 2.2 Requirements” on page 1
- “Upgrading to Component Manager 2.2” on page 4
- “Installing the Software” on page 7
- “Configuring Component Manager with the Sun StorEdge T3 Array” on page 14
- “Starting Component Manager” on page 19

Component Manager 2.2 Requirements

This section describes the following Component Manager 2.2 requirements:

- “Disk Space” on page 2
- “Memory” on page 2
- “Operating Environment” on page 3
- “Firmware and Patches” on page 3

Disk Space

Component Manager requires you the minimum following disk allocation:

TABLE 1-1 Component Manager Disk Space Requirements

Directory	Minimum Requirement
/etc	2 Mbytes
/opt	15 Mbytes
/usr	45 Mbytes
/var	8 Mbytes

Memory

TABLE 1-2 Component Manager Memory Requirements

Memory Type	Basic Requirement	Additional Required per Disk Array or Enclosure
Virtual Memory	174 Mbytes	0.5 MBytes
CPU Capacity Available	8%	

As a guideline, you should have approximately 50 Mbytes of available physical memory. (Use the `vmstat` command to check the Memory/Free space.)

If Component Manager performance is an issue due to system resource requirements, move the Component Manager application to another server with a lesser load and monitor the disk arrays from that server. Sun StorEdge T3 disk arrays are monitored through an ethernet; so Component Manager does not have to run on the same host to which the Sun StorEdge T3 disk arrays are attached.

If you have a mixed environment of Sun StorEdge T3 disk arrays and Sun StorEdge A5x00 enclosures, you can partition the monitoring by using another host for monitoring the disk arrays while monitoring the enclosures from the initial host. You can monitor Sun StorEdge A5x00 enclosures from any host on the same FC loop.

Operating Environment

Component Manager 2.2 supports the Solaris™ 2.6, Solaris 7, and Solaris 8 operating environments.

Required Solaris 2.6 Package

If you are running the Solaris 2.6 operating environment, you must install the SUNWses package from the Solaris 2.6 software CD by typing:

```
# pkgadd -d . SUNWses
```

Firmware and Patches

Use the Advanced Search link on the following web site for the latest Sun StorEdge A5x00 or Sun StorEdge T3 firmware:

<http://sunsolve.sun.com>

Upgrading to Component Manager 2.2

If you are upgrading from Component Manager 1.0, 2.0 or 2.1 to Component Manager 2.2, follow the procedures in this section. If you are installing Component Manager software for the first time, go to “Installing the Software” on page 7.

Checking for the Sun Management Center Agent Module

If you are using the Sun Management Center, you must remove the Sun Management Center agent module before uninstalling Component Manager with the following procedure.

- “To Check for the Sun Management Center Agent Module” on page 4

▼ To Check for the Sun Management Center Agent Module

1. **To determine whether Sun Management Center agent module is present, enter the following script:**

```
# pkginfo -l SUNWesagt
```

To remove the Sun Management Center, please refer to the documentation accompanying the Sun Management Center.

Uninstalling an Earlier Version of Component Manager

Before installing Component Manager 2.2, you must remove any earlier versions you have already installed with one of the following procedures:

- “To Uninstall Component Manager Using a Script” on page 5
- “To Uninstall Component Manager Without Using a Script” on page 5

▼ To Uninstall Component Manager Using a Script

Use one of the following procedures if the appropriate uninstall script is available on your system.

- To uninstall Component Manager 1.0, type

```
# cd /var/tmp/  
# ./uninstall_cm.ksh
```

- To uninstall Component Manager 2.0, 2.1 or 2.2, type

```
# cd /var/tmp/  
# ./uninstall_cm
```

- i. When uninstalling Component Manager 2.0, remove the persistence files by typing:

```
# cd /var/opt/SUNWesm/mc/persistence  
# rm *.grf  
# cd /var/opt/SUNWesm/mo/persistence  
# rm *.grf
```

▼ To Uninstall Component Manager Without Using a Script

Use this procedure to uninstall Component Manager *only* if the `uninstall_cm` script is unavailable on your system.

1. Remove the Component Manager packages in the following order:

```
# pkgrm SUNWencr SUNWencmr SUNWencu SUNWecc SUNWencm SUNWenc1
```

2. Remove the other platform packages in the following order:

```
# pkgrm SUNWesmru SUNWmjhlp SUNWmjmai SUNWmjacf SUNWesmrt SUNWdaert SUNWesm
```

3. Remove the Component Manager Java Runtime Environment.

```
# pkgrm -R /usr/opt/SUNWesm SUNWj2rt
```

The following uninstallation session is an example of the output you see and the questions you are asked when running the `uninstall_cm` script.

CODE EXAMPLE 1-1 Uninstallation Example

```
# ./uninstall_cm

An uninstall log can be found at /var/tmp/cm_uninstall.log.13Apr01-19:01:34

Do you want to remove Sun StorEdge Component Manager? [yes or no]
y
Removal of <SUNWencr> was successful.
Removal of <SUNWencmr> was successful.
Removal of <SUNWencu> was successful.
Removal of <SUNWencc> was successful.
Removal of <SUNWencm> was successful.
Removal of <SUNWencl> was successful.

Removal of <SUNWesmru> was successful.
Removal of <SUNWmjhlp> was successful.
Removal of <SUNWmjmai> was successful.
Removal of <SUNWmjacf> was successful.
Removal of <SUNWesmrt> was successful.
Removal of <SUNWdaert> was successful.
Removal of <SUNWesm> was successful.
Removal of <SUNWj2rt> was successful.
The uninstallation of the Component Manager is successful.
#
```

You can verify the uninstallation by looking at the log file from the `uninstall_cm` script, which is located in `/var/tmp`:

```
# vi /var/tmp/Component_Manager_uninstall.log.date-time
```

Note – The uninstallation procedure does not remove Sun StorEdge T3 array and IP addresses in the `/etc/opt/SUNWesm/mo/hosts` file. Use an editor to remove these entries.

Installing the Software

This section contains the following topics:

- “To Mount the CD-ROM and Run the Installation Script” on page 7
- “To Verify the Installation” on page 12
- “To Change Browser Version Web-Server Configuration” on page 12
- “To Change Browser Version Web-Server Configuration” on page 12
- “To Add the Sun Management Center Agent Module” on page 13

▼ To Mount the CD-ROM and Run the Installation Script

A sample installation script example can be found in:

- “Installation Script Example” on page 9

1. Place the Component Manager 2.2 CD-ROM in the CD-ROM drive.

2. Mount the CD-ROM drive as follows:

- **If the Solaris Volume Manager daemon (`vold`) is running, the CD-ROM drive should be available at the `/cdrom/cdrom0` mount point; proceed to Step 3. To check if `vold` is running, type:**

```
# ps -elf | grep vold
```

- **If `vold` is not running, create the following mount point and mount the CD-ROM drive by typing:**

```
# mkdir -p /cdrom/cdrom0
# mount -F hsfs -o ro /dev/dsk/cxtxdxsx/cdrom/cdrom0
```

The `cxtxdxsx` portion of the path is the device node of the CD-ROM (for example, `c0t6d0s0`) and `/cdrom` is the mount point.

3. Run the `install_cm` script and answer the questions when prompted.

```
# cd /cdrom/cdrom0
# ./install_cm
```

Note – When configuring administrator password for the browser (web-server) version, do not use a `$` or a `#` in the password.

a. For the browser (web-server) version, enter a valid port number between 2 and 65535.

Entering 0 will disable listening on the non-secure or secure port ID. The recommended port range is from 1024 to 65535.

Note – Do not use a reserved system port. Check the `/etc/services` file for reserved ports.

You can make modifications to the non-secure or secure port ID configuration after installation is complete using the `esm_configweb` utility (see “To Change Browser Version Web-Server Configuration” on page 12).

Installation Script Example

Code Example 1-2 is an example of the output you will see and the questions you will be asked when running the `install_cm` script under the Solaris 8 operating environment.

CODE EXAMPLE 1-2 Installation Script Example

```
# ./install_cm

                               Sun StorEdge(TM) Component Manager

This product provides a graphical interface to the monitoring and configuring
of Component Manager.  It is assumed that you agree to the legal terms
explained in:

    http://www.sun.com/share/text/SMICopyright.html

DO YOU AGREE TO THE ABOVE TERMS AND WISH TO INSTALL THIS ON TO YOUR SYSTEM
[y,n] (y)? y

Would you like to configure the StorEdge(TM) Management Console Web Server
during this installation? (Default: y) [y,n,?,q] y

Select the type of Web Server you would like to configure from the following
list:

    1. esm_detached
    2. esm_embedded

Which type Web Server would you like to configure (Default: 1) [1,2,?,q]? ?
Enter 1 to select and configure the esm_detached (detached) Web
Server or 2 to select and configure the esm_embedded (embedded) Web
Server. The detached Web Server will run in a separate JVM and is the
recommended Web Server. The detached Web Server provides improved
response time and allows you to shutdown or restart the Web Server
without effecting the MC layer. The embedded Web Server runs in the
same JVM as the MC layer. The embedded Web Server provides a smaller
memory footprint but requires that the MC layer be shutdown to stop
or restart the Web Server.

Which type Web Server would you like to configure (Default: 1) [1,2,?,q]? 1

For security you must enter a password for use on your initial login
as administrator.

New Password:
Re-enter new password:
```

CODE EXAMPLE 1-2 Installation Script Example (Continued)

```
Enter the non-secure port ID for esm_detached to listen on? (Default:
8180) [?,q]

Do you want to configure an additional non-secure port ID? (Default: n)
[y,n,?,q]

Enter the secure port Id for esm_detached to listen on? (Default: 8443)
[?,q]

Do you want to configure an additional secure port ID? (Default: n)
[y,n,?,q]

By default Component Manager and the Sun StorEdge(TM) platform are installed
in /usr/opt.

An install log can be found at /var/tmp/cm_install.log.14Apr01-20:40:15

Starting installation of Java packages.
Installation of SUNWj2rt was successful.

Starting installation of Jiro packages.
A current or later version of SUNWjiror exists on the system
Version: 1.0.1 of SUNWjiror has been installed
Installation of SUNWjiror was skipped: newer version installed

Starting installation of Sun StorEdge(TM) Platform packages.
Installation of SUNWesm was successful.
Installation of SUNWdaert was successful.
Installation of SUNWesmrt was successful.
Installation of SUNWmjacf was successful.
Installation of SUNWmjmai was successful.
Installation of SUNWmjhlp was successful.
Installation of SUNWesmru was successful.

Starting installation of Component Manager Core packages
Installation of SUNWenc1 was successful.

Starting installation of Component Manager packages
Installation of SUNWencm was successful.
Installation of SUNWencc was successful.
Installation of SUNWencu was successful.
```

CODE EXAMPLE 1-2 Installation Script Example (Continued)

```
Installation of SUNWencmr was successful.  
Installation of SUNWencr was successful.
```

```
Installation of Sun StorEdge(TM) Component Manager was successful.
```

```
An un-install script has been generated to aid in the removal of this  
software. The location of the un-install script is:
```

```
    /var/tmp/uninstall_cm
```

```
Do you plan to use Component Manager to manage one or more A5x00? (Default:  
y) [y,n,?] y
```

```
Verifying A5x00 patches are installed and at the minimum revision.  
Please wait...
```

```
Do you plan to use Component Manager to manage one or more T3? (Default:  
y) [y,n,?] y
```

```
Verifying T3 patches are installed and at the minimum revision.  
Please wait...
```

```
You may need to manually install the following patches for Component Manager  
to manage one or more T3:
```

```
    109189-02  
    109460-03
```

```
Please refer to the patch README files to determine which patches apply to  
your configuration and for specific patch installation instructions before  
attempting to install these patches. Each patch and the corresponding README  
file can be found at:
```

```
./Component_Mgr/Solaris_8/Patches/109189-02  
./Component_Mgr/Solaris_8/Patches/109460-03
```

```
Please verify your T3 firmware has been updated to revision 1.16 or greater  
before starting Component Manager.
```

```
#
```

▼ To Verify the Installation

- **Verify the installation by looking at the log file from the `install_cm.ksh` script, which is located in the `/var/tmp` directory:**

```
# vi cm_install.log.date-time
```

If the installation was successful, an uninstallation script named `uninstall.cm` is automatically created and placed in the `/var/tmp` directory.

▼ To Change Browser Version Web-Server Configuration

- **After you've successfully installed the browser (web-server) version of Component Manager, you can change the web-server, port, or administrator password with the `esm_configweb` utility.**

```
# cd /usr/opt/SUNWesm/sbin
# ./esm_configweb -h
esm_configweb: INFO: Usage: esm_configweb [options]
```

Where options can be:

<code>-c</code> or <code>-configure</code>	the WEBSERVER <code>esm_detached</code> or <code>esm_embedded</code>
<code>-p</code> or <code>-port</code>	the PORTVALUE for the non-secure web server to use
<code>-P</code> or <code>-PORT</code>	the PORTVALUE for the secure web server to use
<code>-A</code> or <code>-adminpasswd</code>	initial PASSWD for the web server administrator
<code>-u</code> or <code>-unconfigure</code>	the <code>esm_detached</code> and <code>esm_embedded</code> web server
<code>-s</code> or <code>-status</code>	about the <code>sm_detached</code> and <code>esm_embedded</code> web server
<code>-h</code> or <code>-help</code>	usage

Note – When configuring administrator password for the browser (web-server) version, do not use a `$` or a `#` in the password.

▼ To Add the Sun Management Center Agent Module

- If you plan to use the Sun Management Center with Component Manager, add the Sun Management Center agent module after installing Component Manager by typing:

```
# pkgadd -d /cdrom/cdrom0/Component_Mgr/platform/Packages/SUNWesmon
```

where *platform* is one of the following, depending on the version of Solaris operating environment you are running:

- Solaris_2.6
- Solaris_7
- Solaris_8

Configuring Component Manager with the Sun StorEdge T3 Array

This section contains the procedures required to configure Component Manager to operate with the Sun StorEdge T3 arrays.

- “Configuring the hosts File” on page 14
- “Configuring the Sun StorEdge T3 Array syslog for Component Manager” on page 15

Configuring the hosts File

You must add the IP address and the component names of all Sun StorEdge T3 arrays to the `/etc/opt/SUNWesm/mo/hosts` file to enable Component Manager to communicate with them.

▼ To Configure the hosts File

- Use an editor to make an entry on the system where Component Manager is installed.

```
# vi /etc/opt/SUNWesm/mo/hosts
```

The entry format is as follows:

```
# Component Manager 2.2 - Component table
#
# Each component entry is specified by its IP address and name,
# IP address Name
# 123.456.78.90 cafejapan
#
123.456.78.90 ada44
```



Caution – If you will be installing Component Manager on more than one system, do not allow any Sun StorEdge T3 array to be configured more than once in any `/etc/opt/SUNWesm/mo/hosts` file. Multiple Component Manager sessions using identical host file entries might cause arrays to hang under certain operations.

Configuring the Sun StorEdge T3 Array `syslog` for Component Manager

This procedure enables Component Manager to receive `syslog` messages in the Syslog Message Viewer from the Sun StorEdge T3 array. Because you cannot edit files on the array, you must use `FTP` to move them to a host to make the edits and then use `FTP` again to move them back to the array. This procedure consists of the following tasks:

- “To Transfer Sun StorEdge T3 Array Files to the Management Host” on page 15
- “To Edit the Array `/etc/syslog.conf` File on the Disk Array” on page 17
- “To Transfer the Files Back to the Array” on page 17

▼ To Transfer Sun StorEdge T3 Array Files to the Management Host

1. Start an `FTP` session from the server to the array.

For example:

```
server: /:<15>ftp 123.456.789.0
```

2. Log in to the array by typing `root` and your password at the prompts.

```
Name (123.456.789.0:root): root
331 Password required for root.
Password: password
230 User root logged in.
ftp>
```

3. Move to your working director on the server.

For example:

```
ftp> lcd /tmp
Local directory now /tmp
ftp>
```

4. Move to the /etc directory on the array.

```
ftp> cd /etc
250 CWD command successful.
```

5. Set the transfer mode.

```
ftp> binary
```

6. Copy the syslog.conf file from the /etc directory on the array to your working directory.

```
ftp> get syslog.conf
```

7. Exit the FTP session.

```
ftp>
quit
221 Goodbye.
server:/:
```


▼ To Edit the Array `/etc/syslog.conf` File on the Disk Array

1. On the server, use an editor to edit the `syslog.conf` file in the working directory.

```
# vi syslog.conf
```

2. Add `*.info | http_push` to the end of the file:

```
# syslog.conf
# facility.level action
# messages to local syslog file
*.notice /syslog

# messages to syslogd on another host
*.warn @remote-host
*.warn @129.234.56.73

# messages sent as SNMP traps
*.warn | snmp_trap 129.234.56.73

*.info | http_push
```

3. Save your revisions and exit the editor.

▼ To Transfer the Files Back to the Array

After editing the `/etc/syslog.conf` and `/etc/hosts` files, use FTP to transfer the files from the server back to the array.

1. Start an FTP session from the server to the array.

For example:

```
server:/:<15>ftp 123.456.78.90
Connected to 123.456.78.90.
220 chon-ji FTP server (SunOS 5.7) ready.
Name (123.456.78.90:root):
```

2. Log in to the array by typing `root` and your password at the prompts.

```
Name (123.456.78.90:root): root
331 Password required for root.
Password: password
230 User root logged in.
ftp>
```

3. Move to the `/etc` directory on the array.

```
ftp> cd /etc
250 CWD command successful.
ftp>
```

4. Type `binary` to set the transfer mode.

```
ftp> binary
```

5. Copy the edited `syslog.conf` file from your working directory to the `/etc` directory on the array.

```
ftp> put syslog.conf
```

6. Exit the FTP session.

```
ftp>
quit
221 Goodbye.
server:/:
```

See the next section to learn how to start Component Manager.

Starting Component Manager

For Component Manager to start, the Component Manager daemons must be running. If you rebooted your system after installing Component Manager, the daemons will run automatically and you can start Component Manager with the instructions appropriate for your installation.

However, there may be situations when you will want to manually stop and start the Component Manager daemons without rebooting your system. Under such circumstances, see “To Manually Start the Component Manager Daemons” on page 19.

This section contains the following topics:

- “To Manually Start the Component Manager Daemons” on page 19
- “To Start the Sun StorEdge Management Console GUI Version” on page 20
- “To Start the Sun StorEdge Management Console Browser Version” on page 20
- “To Restart the Software” on page 21

▼ To Manually Start the Component Manager Daemons

This procedure describes how to start the Component Manager software without rebooting the system. If you have already rebooted the system, see “To Start the Sun StorEdge Management Console GUI Version” on page 20.

1. Manually start the Component Manager daemons:

```
# /usr/opt/SUNWesm/sbin/esm_orderly start
```

This also will start the web server.

Note – After the above command has completed executing on the command line, an additional moment may be required before discovery of the disk trays is completed.

▼ To Start the Sun StorEdge Management Console GUI Version

- After the Component Manager daemons have been started (either manually using the procedure on page 19 or automatically if you rebooted your system), start Component Manager by typing:

```
# /usr/opt/SUNWesm/bin/esm_gui &
```

See the *Sun StorEdge Component Manager 2.2 User's Guide* for more information about using Component Manager.

▼ To Start the Sun StorEdge Management Console Browser Version

1. Determine port number.

You will need the port number you entered during the installation process (see on “Installation Script Example” on page 9). You can determine this with the following:

```
# cd /usr/opt/SUNWesm/sbin
# ./esm_configweb -s
esm_configweb: Status for the esm_detached or esm_embedded web server.
esm_detached is completely configured in the /etc directory.
esm_detached is completely configured in the package contents database.
esm_embedded is not configured in the /etc directory.
esm_embedded is not configured in the package contents database.
/etc/opt/SUNWesm/www/conf/server.xml is configured with non-secure port ID:8180
/etc/opt/SUNWesm/www/conf/server.xml is configured with secure port ID: 8443
```

- ### 2. After the Component Manager daemons have been started (either manually using the procedure on page 19 or automatically—if you rebooted your system), browse Component Manager by one of the two methods below.

- For a secure web server, enter a URL with the following format in a browser:

```
https://nodename.domain:port_number/login
```

An example with the default port number would be:

```
https://happy.japan:8443/login
```

- For a non-secure web server, enter a URL with the following format in a browser:

```
http://nodename.domain:port_number/login
```

An example with the default port number would be:

```
http://happy.japan:8180/login
```

See the *Sun StorEdge Component Manager 2.2 User's Guide* for more information about using Component Manager.

▼ To Restart the Software

Use the following steps to stop and restart the management stations if the software fails to start automatically.

1. Stop any currently running Component Manager daemons:

```
% su
Password:
# /usr/opt/SUNWesm/sbin/esm_orderly stop
```

2. Perform these procedures:

- a. “To Manually Start the Component Manager Daemons” on page 19

- b. Perform one of the following, depending upon your installation.

- “To Start the Sun StorEdge Management Console GUI Version” on page 20.

- “To Start the Sun StorEdge Management Console Browser Version” on page 20

Error Messages

This chapter describes how to troubleshoot the following error messages:

- “InvocationTargetException: Cannot open device” on page 23
- “InvocationTargetException: Inappropriate ioctl for device” on page 24
- “Sorry, access to the port number given has been disabled for security reasons.” on page 25

InvocationTargetException: Cannot open device

Example

```
java.lang.reflect.InvocationTargetException Cannot open device /dev/es/ses**
```

Description

Bad and/or outdated device entries are located in the `/dev/es` directory.

User Action

Clear the `/dev/es` tree by removing old device entries. Reboot the host with *either* of the following commands.

- From the boot prompt, type:

```
ok boot -r
```

- From the root prompt, type:

```
# touch /reconfigure; init 6
```

InvocationTargetException: Inappropriate ioctl for device

Example

```
java.lang.reflect.InvocationTargetException
  Inappropriate ioctl for device

java.lang.reflect.InvocationTargetException:
com.sun.esm.library.encl.LibenclException: Inappropriate ioctl for device at
com.sun.esm.library.encl.SESElement.SESElementproxy_get_elements(Native
Method)
    at com.sun.esm.library.encl.SESElement.getElements(Compiled Code)
    at com.sun.esm.mo.a5k.A5kEnclMOImpl.fetchSubelements(Compiled Code)
    at com.sun.esm.mo.ses.SESEnclMOImpl.<init>(Compiled Code)
    at com.sun.esm.mo.a5k.A5kEnclMOImpl.<init>(Compiled Code)
    at com.sun.esm.mo.host.HostMOImpl.discoverEnclosures(Compiled Code)
    at com.sun.esm.mo.host.HostMOImpl.<init>(Compiled Code)
    at java.lang.reflect.Constructor.newInstance(Native Method)
    at com.sun.esm.mo.MOBootstrap.initiateMO(Compiled Code)
    at com.sun.esm.mo.MOBootstrap.instantiateMO(Compiled Code)
    at com.sun.esm.mo.MOBootstrap.<init>(Compiled Code)
    at com.sun.esm.mo.MOBoot.boot(Compiled Code)
    at com.sun.esm.mo.MOBoot.main(Compiled Code)
MOBoot: WARN: problem while instantiating Managed Objects
MOBoot: INFO: invocation target exception on class
com.sun.esm.mo.host.HostMOImpl com.sun.esm.library.encl.LibenclException:
Inappropriate ioctl for device
```

Description

The `Inappropriate ioctl for device` message might be displayed when the Component Manager daemons are started. This message indicates that the SES driver patch is not installed or the SES driver is not loaded into the kernel.

User Action

If you are running the Solaris 2.6 operating environment, ensure that the SES driver patch is installed. Refer to “Firmware and Patches” on page 3. If you are certain the SES driver patch has already been installed, reboot your system to ensure that the driver is loaded into the kernel.

Sorry, access to the port number given has been disabled for security reasons.

Example

You may see the following Netscape error:

```
Sorry, access to the port number given has been disabled for security reasons.
```

Description

When configuring the browser version (web-server), you specified a port that is already in use.

User Action

- Use `esm_configweb` utility with the `-p` or `-P` options to reconfigure the web-server port.

```
# cd /usr/opt/SUNWesm/bin
# ./esm_configweb -h
esm_configweb: INFO: Usage: esm_configweb [options]
```

Where options can be:

```
-c or -configure      the WEBSERVER esm_detached or esm_embedded
-p or -port           the PORTVALUE for the non-secure web server to use
-P or -PORT           the PORTVALUE for the secure web server to use
-A or -adminpasswd   initial PASSWD for the web server administrator
-u or -unconfigure    the esm_detached and esm_embedded web server
-s or -status         about the sm_detached and esm_embedded web server
-h or -help           usage
```

```
# ./esm_configweb -p port_number
```

Enter a valid port number between 2 and 65535.

Entering 0 will disable listening on the non-secure/secure port ID. The recommended port range is from 1024 to 65535.

Note – Do not use a reserved system port. Check the `/etc/services` file for reserved ports.

Configuring Component Manager with the Sun Management Center

Sun Management Center (previously known as Sun Enterprise SyMON™) is the management framework for the Solaris operating environment. *Sun StorEdge Manager* is the management framework for storage systems and for the storage area network (SAN).

This appendix provides the following procedure to ensure inter operability between these two products:

- To Update the Sun Management Center Discovery Module

▼ To Update the Sun Management Center Discovery Module

If you are loading the StorEdge agent module for the first time:

- 1. Load the agent module from the Sun Management Center Tools/Load Module menu.**
- 2. If needed, specify the port number.**

If you have specified a different port number, for example 1101, for the Sun Management Center Agent during the setup of that agent, you have to specify the port number in the discovery panel before you start the discovery process.

- 3. Run the discovery mechanism to discover the StorEdge Agent module.**

Once the discovery request succeeds, icons for Sun StorEdge Group are displayed in the Topology view of the Sun Management Center console. Two icons represent the Sun StorEdge modules in Sun Management Center: a small icon in the Navigation pane on the left side, and a large icon in the Topology View pane on the right side.

- 4. Double-click the Sun StorEdge Group in the Navigation or Topology view so the Sun StorEdge Manager icon appears.**
- 5. Double-click the Sun StorEdge Manager icon to launch the Sun StorEdge Management Console in a separate window.**

Any operation performed with the Sun StorEdge Management Console should be done through this interface only.