



Sun™ Management Center 3.0 Software Installation Guide

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Preface

The *Sun Management Center 3.0 Software Installation Guide* provides instructions on how to install and start the Sun™ Management Center system software. Pre-installation requirements and details for online help installation are also covered in this manual. These instructions are designed for a system administrator with networking knowledge, as well as some working knowledge of Sun Management Center system software.

Sun Management Center software may be deployed in two different environments:

- Production Environment
- Developer Environment

The *Production Environment* is an “active” or “real” environment in which you manage and monitor your hardware, including subsystems, components, and peripheral devices.

In contrast, the *Developer Environment* is a “test” or “demonstration” environment in which developers can create and test customized modules designed to work with the Sun Management Center software. While the Developer Environment may appear to be the same as a Production Environment, its sole purpose is to serve as a software development environment to create Sun Management Center modules. For more information on the Developer Environment, refer to the *Sun Management Center Developer Environment Reference Manual*.

Note – The licensing model for Sun Management Center 3.0 has changed from previous Sun Management Center releases. Your particular license may not provide access to all the advanced features documented in the *Sun Management Center Software User’s Guide*. For more information, contact your Sun service representative or authorized Sun service provider.

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:

- *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 P-1 Typographic Conventions

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 Prompts

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	#
MS-DOS Microsoft Windows	c:\

Related Documentation

For a list of documents related to Sun Management Center 3.0, refer to the *Sun Management Center 3.0 Software Release Notes* on the Sun Management Center web site:

<http://www.sun.com/sunmanagementcenter>

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Preparing to Install the Sun Management Center 3.0 Software

This chapter describes the requirements your system must meet prior to installation of the Sun Management Center version 3.0 product.

The following topics are discussed in this chapter:

- System Requirements
- Protecting Customized Scripts
- Sun Management Center Agent Supported Systems
- Supported Operating Environments
- Sun Management Center Compatibility
- Installation Packages for Solaris Environments
- Pre-Install Information
- Uninstalling the Sun Management Center Software

Note – For the latest information about this product, go to the Sun Management Center web site:

<http://www.sun.com/sunmanagementcenter>

System Requirements

Note – You should have at least 128 Mbytes of RAM available to run the Sun Management Center console on your system and 256 Mbytes of RAM available to run the Sun Management Center server on your system. The default maximum heap size for the console and server is 64 Mbytes each. You can customize the maximum heap size for either the console or server as described in “Console and Server Options” on page 42.

The Sun Management Center installation script enables you to install the console layer, the server layer, and the agent layer, either separately or together.

Note – If you are installing all three layers on one machine, you should have a minimum of 512 Mbytes of RAM available.

Because the individual layers share some common packages, the total amount of required available disk space is not necessarily the same as the sum total of disk space requirements for the individual layers. TABLE 1-1 shows the minimum disk space necessary for each layer to install basic functionality:

TABLE 1-1 Minimum Disk Space Required for Basic Functionality

Layer	Minimum Disk Space Required
Server (with Help)	800 Mbytes (300 Mbytes for <code>/opt</code> and 500 Mbytes for <code>/var/opt</code>) ¹
Agent	18 Mbytes
Console (with Help)	62 Mbytes

1. You need at least 110 Mbytes of disk space available under `/var/opt` to perform a setup of the server layer.

TABLE 1-2 shows the minimum disk space necessary for each layer to install Advanced System Monitoring:

TABLE 1-2 Minimum Disk Space Required for Advanced System Monitoring

Layer	Minimum Disk Space Required
Server	3300 Kbytes
Agent	2020 Kbytes
Console	270 Kbytes

TABLE 1-3 shows the minimum disk space necessary for each layer to install Premier Management Applications:

TABLE 1-3 Minimum Disk Space Required for Premier Management Applications

Layer	Minimum Disk Space Required
Server	45 Mbytes
Agent	2 Mbytes
Console	650 Kbytes

Note – Depending upon your system, disk space requirements may be different. Refer to the *Sun Management Center Configuration and Deployment Guide* on the following web site for more information on Sun Management Center disk space requirements:

<http://www.sun.com/sunmanagementcenter>

Protecting Customized Scripts

If you customized the `email.sh` script that Sun Enterprise SyMON™ software uses to send email notification of alarm conditions, that script will be overwritten when you upgrade Sun Management Center software to version 3.0.

To avoid overwriting the modified email script, you should save it to another directory, then move it back after your upgrade is complete.

Sun Management Center Agent Supported Systems

For the latest information on supported hardware platforms, refer to the following web site: <http://www.sun.com/sunmanagementcenter>. The Config-Reader module is required for hardware configuration information.

The Config-Reader and the Dynamic Reconfiguration modules are not supported on all Sun hardware platforms. All the other core Sun Management Center modules are supported on Sun hardware platforms. For more information on core modules, refer to the *Sun Management Center Software User's Guide*. For more information on supported hardware platforms, refer to the Sun Management Center web site and the *Sun Management Center Configuration and Deployment Guide*.

Supported Operating Environments

For supported Sun Management Center 3.0 operating environments, refer to the *Sun Management Center Software Release Notes*.

Sun Management Center Compatibility

Version 3.0 of Sun Management Center software is compatible with:

- Any simple network management protocol SNMP V1, V2c, and V2usec entities, regardless of the operating environment and architecture
- Solstice Enterprise Agents™ of Solaris 2.6 and Solaris 7 software can be converted to subagents of the Sun Management Center agent

Sun Management Center software *does not* offer:

- Backward compatibility with the Solstice SyMON™ 1.x software
- SunVTS™ support in the Sun Management Center 3.0 software

Sun Management Center Component Layer Compatibility

The following combinations of Sun Management Center and Sun Enterprise SyMON component layers are supported:

TABLE 1-4 Supported Combinations of the Sun Management Center and Sun Enterprise SyMON Component Layers¹

Console	Server	Agent
2.0	2.0	2.0
2.0.1	2.0.1	2.0/2.0.1
2.0.1/2.1	2.1	2.0/2.0.1/2.1
2.1.1	2.1.1	2.0/2.0.1/2.1/2.1.1
3.0	3.0	2.0.1/2.1/2.1.1/3.0

1. 2.0 and 2.0.1 refer to Sun Enterprise SyMON software. 2.1, 2.1.1, and 3.0 refer to Sun Management Center software.

Installation Packages for Solaris Environments

By design, Sun Management Center software is an open and extensible system management tool, and the packaging and installing of this product reflects this extensibility. The Sun Management Center product is divided into a basic set of packages and a set of add-on products. Although this distinction exists, the installation and setup of all Sun Management Center software (including add-on products) is done with a single command as described in the following sections.

Note – Sun Management Center software can be installed in any location on your system where the minimum required disk space is available. The default location for package installation is `/opt`.

Basic Packages

The basic packages provide the fundamental layers of Sun Management Center, such as the console, server, and agent. TABLE 1-5 describes the basic packages provided with the Sun Management Center 3.0 software.

TABLE 1-5 Sun Management Center 3.0 Basic Packages

Package Name	Description
SUNWescon	Console package
SUNWesmsg	Console properties
SUNWesagt	Agents package
SUNWesmod	Agent modules
SUNWesaem	Agent components for handling events
SUNWesdb	Database
SUNWescom	Common components
SUNWesmdr	Files needed to MDR enable all basic modules
SUNWesclt	Client API
SUNWesjrm	Client API support classes
SUNWmeta	Metadata agent
SUNWenesh	English help
SUNWfresh	French help
SUNWdeesh	German help
SUNWitesh	Italian help
SUNWesesh	Spanish help
SUNWjaesh	Japanese help
SUNWkoesh	Korean help
SUNWhesh	Traditional Chinese help
SUNWcesh	Simplified Chinese help
SUNWesjp	Additional components
SUNWessrv	Server
SUNWessa	Server/Agent
SUNWesae	/etc files needed by the Agent
SUNWesse	/etc files needed by the Server

These packages are located on the Sun Management Center 3.0 Software CD and also at the Sun Management Center web site:

<http://www.sun.com/sunmanagementcenter>

To install these packages, see “Pre-Install Information” on page 9 and “Installing the Software on Your System” on page 18.

Add-on Products

Depending upon the hardware platform on which you are installing Sun Management Center software, your system may require additional add-on platform-specific products. These add-on products (described in the Sun Management Center Supplement for your hardware platform) provide additional functionality, such as support for other Sun hardware architectures or new agent management.

Note – Always read your Sun Management Center Supplement for architecture-specific installation instructions before installing Sun Management Center software on a particular hardware platform. Refer to the Sun Management Center 3.0 CD or click on the Documentation link at the following web site:

<http://www.sun.com/sunmanagementcenter>

Add-on products are released in one of two ways:

- As part of the Sun Management Center distribution (CD or web download image)
- Separately (add-on product only)

If the add-on products are part of the Sun Management Center distribution, the add-on products are installed during the installation process. The basic components are installed first, followed by installation of the add-on products that are part of the distribution.

Many add-on products offer architecture-specific support. Because of this, the installation checks your hardware. For example, if an add-on product package supports workstation systems, the workstation package is automatically added when Sun Management Center is installed on a workstation host. In some cases, user confirmation is required prior to installing an add-on product package.

If the add-on product is released separately, the add-on product will include installation instructions. Refer to your supplement for more information.

Pre-Install Information

The following table lists some of the prerequisite information that you should review before installing version 3.0 of Sun Management Center software.

Note – Sun Management Center software can be installed in any location on your system where the minimum required disk space is available. The default location for package installation is `/opt`.

TABLE 1-6 Issues to Consider Before Installing Sun Management Center Software

Issue	Description
Removing old packages	Be sure to remove all the Solstice SyMON 1.x packages. For example, the following packages must be removed: <code>SUNWsyse</code> , <code>SUNWsym</code> , <code>SUNWsyrt</code> , <code>SUNWsys</code> , <code>SUNWsyu</code> , <code>SUNWsyua</code> , <code>SUNWsyub</code> , <code>SUNWsyuc</code> , <code>SUNWsyud</code> , <code>SUNWsyue</code> , and <code>SUNWsyuf</code> . For more information, see “Uninstalling the Sun Management Center Software” on page 12.
Component layers you want to install	Determine which component layers you want to install, that is, Server, Agent, and/or Console.
Add-on products you want to install	Determine which features you want to install (for example, basic, Advanced System Monitoring, and/or Premier Management Applications), and whether you are licensed for advanced functionality.
Licensing for advanced functionality	For details, go to the Sun Management Center web site and contact your Sun service representative or authorized Sun service provider.
Space needed in <code>/opt</code>	Make sure you have enough space available in <code>/opt</code> . If not, make more space or create a soft link to an area with more space from <code>/opt/SUNWsymon</code> . For more information, see “Where to Install Sun Management Center Software” on page 19.
Permissions	Make sure you have permissions to write into the <code>/var/opt</code> (or <code>/opt/SUNWsymon</code>) directory as superuser. You also need privileges to run commands, such as <code>chmod</code> , in that directory.
Information needed for server	Note that when you install the server, you do not need to have the console on the same machine. Also, it is helpful to have information on the following items: license key for the software, ports to be used, and password to be used (referred to as a <i>seed</i>).

TABLE 1-6 Issues to Consider Before Installing Sun Management Center Software
(Continued)

Issue	Description
Information needed for agent	Seed (password) to be used. The Sun Management Center server host, if the server is not installed on the agent machine.
Information needed for console	None.
Information needed for add-on platform-specific products	Add-on dependent data. For more information, refer to your supplement.
Online help	Determine whether to set up Sun Management Center online help on a remote machine.

Port Conflicts With SNMP Legacy Agents

Sun Management Center software may conflict with port numbers that are used by legacy subagents. Systems with Solaris 2.6 or Solaris 7 Operating Environments have two potential conflicting processes in the following areas: `snmpdx` and `mibiisa`.

If you install the software using standard defaults, you may encounter port conflicts with these processes and be unable to start the agent. The setup process notifies you if there is a problem. Here is an example:

```
----- WARNING -----
It appears that agent.snmpPort 161 is already is use.
Sun Management Center agent may not be able to run due to this
conflict.
There are two ways to correct this conflict:
1. Reconfigure the port that Sun Management Center uses.
2. Stop the process that is using the port.
You are currently running snmpdx, which may be causing the
conflict.
Do you want to use a different port number for agent.snmpPort?
[y|n|q]
```

If you choose to use a different port number, the following prompt is displayed:

```
Please enter any port greater or equal to 1100: x
Updating /var/opt/SUNWsymon/cfg/domain-config.x with new port
number.
```



Caution – If you choose to correct the port conflict by stopping the process that is using the port, remember to do so before the Sun Management Center agent is started. If the Sun Management Center agent fails to start correctly, refer to the `agent.log` file to see if there is a port conflict.

Note – View the log file with the command:

```
/opt/SUNWsymon/sbin/es-run ccat /var/opt/SUNWsymon/log/agent.log.
```

The log file displays error messages similar to the following:

```
error    Nov 05 13:24:59 agent parsing error in base-agent.x(132):
error creating interface: inet://:161/udp: address already in use
error    Nov 05 13:24:59 agent          *** aborting execution ***
```

▼ To Resolve the SNMP Port Conflict

- **Make one of the following changes.**

- Change the port numbers used by the Sun Management Center software, as described in “Port Conflicts With SNMP Legacy Agents” on page 10 and in the appendices of the *Sun Management Center Software User’s Guide*.
- Turn off `snmpdx` and `mibiisa` by completing the following two steps:

- a. **Become superuser (`su -`), then turn off `snmpdx` and `mibiisa` by using the following command:**

```
# /etc/rc3.d/S76snmpdx stop
```

- b. **Prevent `snmpdx` and `mibiisa` from starting the next time the machine is booted to avoid conflicts. Rename the start-up script with the following command to prevent the `snmpdx` and `mibiisa` daemons from starting the next time the machine is rebooted:**

```
# mv /etc/rc3.d/S76snmpdx /etc/rc3.d/s76snmpdx
```

In addition to these two processes (`snmpdx` and `mibiisa`), your system may have other legacy SNMP agents utilizing port 161. Therefore, you need to take action to resolve this port conflict with the Sun Management Center agent.

Note – For more information, refer to the appendices of the *Sun Management Center Software User's Guide*.

Uninstalling the Sun Management Center Software

You should uninstall previous versions of Sun Management Center software from your system before you install a newer version on the same server. In some cases, previous versions are uninstalled for you. Refer to the following table to see how this might affect your site:

TABLE 1-7 How to Uninstall Sun Management Center Software

Current version of software	Method of installation	How to uninstall previous versions
Solstice SyMON 1.x	Any	See your Solstice SyMON 1.0 documentation for information on uninstalling Solstice SyMON 1.0 software
Sun Enterprise SyMON 2.x	Installation script from the CD or the web	Sun Management Center 3.0 software uninstalls the previous version
Sun Management Center 2.x	Installation script from the CD or the web	Sun Management Center 3.0 software uninstalls the previous version

If you need to manually uninstall previous versions, the uninstall program (`es-uninst`) removes all packages that are part of the Sun Management Center software, including the add-on packages.

▼ To Uninstall Sun Management Center Software From a Solaris Environment

Note – Sun Management Center software can be installed in any location on your system where the minimum required disk space is available. The following procedure reflects the default location for package installation in `/opt`.

1. Become superuser with the `su -` command.
2. Type the following command:

```
# /opt/SUNWsymon/sbin/es-uninst
```

After confirming that you want to uninstall the Sun Management Center packages, determine whether you want to preserve your existing data before the uninstallation process begins.

- If you answer yes (y):

The contents of the `/var/opt/SUNWsymon` directory remain and are unaltered by the `uninstall` script. The administrative domain configuration, custom alarm settings, and event data are retained for subsequent installations or upgrades.

- If you answer no (n):

You are prompted again to confirm the removal of existing data. The contents of the `/var/opt/SUNWsymon` directory are removed.



Caution – This utility does not enable you to uninstall packages selectively. The `es-uninst` script uninstalls all the Sun Management Center packages at once. There is no additional warning before package removal begins.

Note – To verify all Sun Management Center packages have been uninstalled, type the following command: `pkginfo -c symon`

▼ To Uninstall Sun Management Center Software From a Microsoft Windows Environment

1. From the Start menu, select Settings ► Control Panel.
2. Select Add/Remove Programs.
3. Select Sun Management Center.
4. Click the Add/Remove button.

Installing the Sun Management Center 3.0 Software

This chapter explains how to install the Sun Management Center 3.0 product on your system.

The following topics are discussed in this chapter:

- Upgrading to Sun Management Center 3.0 Software
- Installing the Software on Your System
- Creating Agent-Only Products from the CD
- Installing Separately Released Add-on Products
- Sun Management Center Online Help
- Setting Up Sun Management Center Component Layers and Add-on Products
- Database Backup and Recovery
- Sun Management Center Groups
- Security Seeds
- Sun Management Center Licensing
- Sun Management Center Users
- Starting the Sun Management Center Software
- Exiting and Stopping the Sun Management Center Software
- Sun Management Center Web Interface

Note – For the latest information about this product, go to the Sun Management Center web site:

<http://www.sun.com/sunmanagementcenter>

Upgrading to Sun Management Center 3.0 Software

The following procedures describe how to upgrade from Sun Management Center 2.x to Sun Management Center 3.0 software. You can upgrade by either:

- Letting the Sun Management Center 3.0 `es-inst` installation script prompt you for uninstallation of Sun Management Center 2.x packages, *or*
- Running the `es-uninst` script of the Sun Management Center 2.x installation before you run the Sun Management Center 3.0 installation script.

Note – If you are upgrading from Sun Enterprise SyMON 2.x, you must first upgrade to Sun Management Center 2.1 or 2.1.1 before attempting to upgrade to Sun Management Center 3.0.

Note – During the setup of an upgrade, you are asked if you would like to perform a SyMON data import. You must answer yes (y) to complete the upgrade from Sun Management Center 2.x to Sun Management Center 3.0.

During the upgrade, you must also specify the same Sun Management Center 2.x security seed that is used by the Sun Management Center 2.x server as part of the setup for metadata.

If you rerun a setup at a later time after an upgrade, your security keys will be overwritten and you will need to run setup on all the agents for them to work properly.

▼ To Upgrade By Uninstalling Existing Packages With Sun Management Center 3.0 `es-inst`

1. Start the Sun Management Center 3.0 `es-inst` script as described in either:

- “Installing the Sun Management Center Packages From the CD” on page 21
- “Installing the Sun Management Center Packages From the Web” on page 24

The script will detect the presence of Sun Management Center 2.x packages and data.

2. Confirm that you want to uninstall the packages, then answer the questions when prompted.

- If you answer yes (y) when asked if you would like to migrate your Sun Management Center 2.x data:

Your data will be exported and restored at the end of the Sun Management Center 3.0 setup.

- If you answer no (n) when asked if you would like to migrate your Sun Management Center 2.x data:

You are asked to confirm your choice. The contents of `/var/opt/SUNWsymon` will be deleted. A fresh Sun Management Center 3.0 installation will proceed without retaining any of your previous Sun Management Center 2.x data.

Note – If you answer no (n), your security keys will be overwritten. You will also need to run setup on all the agents for the agents to work properly.

▼ To Upgrade By Uninstalling Existing Packages With Sun Management Center 2.x `es-uninst`

1. Become superuser with the `su -` command.

2. Type the following command:

```
# /opt/SUNWsymon/sbin/es-uninst
```

The script will remove the Sun Management Center 2.x packages, but the contents of the `/var/opt/SUNWsymon` directory remain unaltered.

3. Start the Sun Management Center 3.0 `es-inst` script as described in either:

- “Installing the Sun Management Center Packages From the CD” on page 21
- “Installing the Sun Management Center Packages From the Web” on page 24

The script will detect the presence of Sun Management Center 2.x data.

4. Answer the questions when prompted.

- If you answer yes (y) when asked if you would like to migrate your Sun Management Center 2.x data:

Your data will be exported and restored at the end of the Sun Management Center 3.0 setup.

- If you answer no (n) when asked if you would like to migrate your Sun Management Center 2.x data:

You are asked to confirm your choice. The contents of `/var/opt/SUNWsymon` will be removed. A fresh Sun Management Center 3.0 installation will proceed without retaining any of your previous Sun Management Center 2.x data.

Note – If you answer no (n), your security keys will be overwritten. You will also need to run setup on all the agents for the agents to work properly.

Installing the Software on Your System

This section describes how to install and run your Sun Management Center 3.0 software. Read this section for general information about your Sun Management Center installation, and then follow the steps in the appropriate procedure, based on your delivery method (CD or web).

You can install Sun Management Center software by using the `es-inst` script. During installation, you may install the console, server, and agent layers either separately or in combination. You may also choose the specific add-on product(s) (for example, Advanced System Monitoring and/or Premier Management Applications) for the features that you would like to install.

Note – No license is required for basic functionality. However, advanced functionality may require a specific number of *license units* for your particular configuration of hardware devices. For more information on the Sun Management Center licensing model, contact your Sun service representative or authorized Sun service provider.

Note – The coexistence of the Solstice SyMON 1.x and Sun Management Center 3.0 software is not supported on the same server. In addition, you may have Sun Management Center sessions running on different servers or server contexts. For more information on server context, refer to the *Sun Management Center Software User's Guide*.

Files and Component Layers From Earlier Versions of Solstice SyMON Software

If you have Solstice SyMON 1.x packages installed on your system, the installation script fails. You must remove all Solstice SyMON 1.x packages before installing Sun Management Center 3.0 software.



Caution – The Sun Management Center 3.0 installation script may overwrite Solstice SyMON 1.x files. Consequently, you may lose your customized event rules. If you have modified Solstice SyMON 1.x rules, then you *must back up* these rules before installing Sun Management Center 3.0 software. Depending on where you modified your event rules, back up the `/etc/opt/SUNWsymon` directory or the `/opt/SUNWsymon/etc` directory.

Where to Install Sun Management Center Software

Sun Management Center software can be installed in any location on your system where the minimum required disk space is available. The default location for package installation is `/opt`.

Note – Install the Sun Management Center agent on every monitored or managed host. When the server is installed, the Sun Management Center agent is installed, as well.

Note – You can display a listing of all currently installed packages related to Sun Management Center software with the following command:

```
pkginfo -c symon.
```

es-inst Installation Script

The Sun Management Center `es-inst` installation script is applicable to either the Production Environment or the Developer Environment. The script provides an interactive list of questions that guides you through the installation procedure. TABLE 2-1 describes options that are available when running `es-inst`.

TABLE 2-1 `es-inst` Options

Option	Description
<code>-R directory</code>	Specify a relocated root directory.
<code>-S directory</code>	Specify the source directory.
<code>-T directory</code>	Specify the target directory.
<code>-C filename</code>	Specify a configuration file in which to store configuration details of the installation for future automated installation. This option supercedes the <code>-A</code> option.
<code>-A filename</code>	Perform an automated installation based on the specified configuration file. This option will be ignored if the <code>-C</code> option is used.
<code>-a</code>	Perform an agent-only product installation (see “To Create an Agent-only Product in a Solaris Environment” on page 28).
<code>-v</code>	Verbose mode.

The `-R` option for the `es-inst` script can be used to install Sun Management Center software on a remote boot partition. Typically, this type of installation is useful when either:

- Installing Sun Management Center on an NFS-mounted root file system of another machine, *or*
- Installing Sun Management Center on a local disk that is used to boot a different Solaris version on your machine.

For example, assume that the root partition of a disk (the bootable disk) is mounted on `/disk` of the current file system. You would type the following command:

```
# ./es-inst -R /disk
```

Sun Management Center would then be installed on `/disk/opt/SUNWsymon`. The disk you specify must be a bootable disk. When you use the `-R` option, you are prompted for the operating environment type and machine architecture. You need to specify the operating environment for that disk and the architecture of the machine that will be booted with that bootable disk.

For more information on using the `-R` option for installing packages, refer to the `pkgadd(1M)` man page.

Installing the Sun Management Center Packages From the CD

Note – Familiarize yourself with the `README` file from the CD before beginning your Sun Management Center software installation. For Solaris Operating Environments, review the `INSTALL.README` file.

Any late-breaking news or issues concerning this software installation procedure is documented at the Sun Management Center web site:

`http://www.sun.com/sunmanagementcenter`

Note – Sun Management Center 3.0 software is released on a set of two CDs.

▼ To Install the Sun Management Center Packages From the CD in a Solaris Environment

1. Place the Sun Management Center 3.0 CD (1 of 2) in the CD-ROM drive.
2. Open a command window and (if you are not already superuser) become superuser by using the `su -` command.
3. If you are running the Sun Management Center server for the first time, edit the `/etc/nsswitch.conf` file. Be sure the `groups` entry has `files` as the first token.

```
groups: files nis
```

4. Change to the CD-ROM directory.
 - If you are using the Volume Manager (`vold`), type:

```
# cd /cdrom/sun_management_center_3_0
```

- If the CD-ROM drive is not already mounted, mount the drive by typing:

```
# mkdir /cdrom/sun_management_center_3_0
# mount -o ro -F hsfs /dev/dsk/cXtYdZs0 /cdrom/sun_management_center_3_0
# cd /cdrom/sun_management_center_3_0
```

5. **List the files in the `sun_management_center_3_0` directory and read the README file(s) in the `sbin` directory appropriate for your hardware platform.**

6. **Launch the Sun Management Center installation script from the `sbin` directory.**

The `es-inst` script is applicable to either the Production Environment or the Developer Environment, and it presents an interactive list of questions that guides you through the installation procedure. The script also enables you to set up the Sun Management Center component layers. For available options to use with `es-inst`, see TABLE 2-1.

```
# ./es-inst
```

If you have Sun Management Center 2.x component layers already installed on your system, the install script prompts you to uninstall the previously installed packages. You can either:

- Uninstall immediately and proceed with a fresh installation, or
- Quit the current session and uninstall the necessary packages automatically by using the `es-uninst` command, and then proceed with the installation.



Caution – When uninstalling packages with the `es-uninst` command, be aware that if you answer `n` at the prompt for preserving your existing data, your current Sun Enterprise SyMON 2.x or Sun Management Center 2.x packages will be uninstalled and the contents of `/var/opt/SUNWsymon` will be removed. In addition, your security keys will be overwritten and you will need to set up all agents for the agents to work properly. Answer `y` at the prompt if you want to retain your administrative domain configuration and custom alarm settings in `/var/opt/SUNWsymon` (for subsequent installations or upgrades).

Sun Management Center software can be installed in any location on your system where the minimum required disk space is available. The default location for package installation is `/opt`.

7. **Select either the Production Environment or Developer Environment.**

You should already have a valid license for the Developer Environment prior to a Developer Environment installation.

Note – You should run the Sun Management Center 3.0 Developer Environment and Sun Management Center 3.0 Production Environment on separate servers.

If you are installing the Developer Environment, the component layers are automatically installed by the script. The installation process installs the basic Sun Management Center packages and prompts you for any applicable add-on product packages. Go to Step 9.

8. Select the Sun Management Center component layers (agent, server, and/or console) you want to install.

Be sure to read “Sun Management Center Online Help” on page 29 to complete the installation of online help. After you have installed online help, you can launch and view help in your web browser.



Caution – Whenever you install any specific component layer on top of an *existing* Sun Management Center 3.0 installation, you need to set up the layers again. Be aware that your security keys are overwritten when you rerun the setup and that all agents will need to be set up for the agents to work properly.

The installation process installs the basic Sun Management Center packages and prompts you for any applicable add-on product packages. In some cases, user confirmation is required prior to installing a hardware add-on product. Refer to your hardware platform supplement for more information.

9. Select the Sun Management Center add-on product(s) (for example, Advanced System Monitoring and/or Premier Management Applications) you want to install.

You will be prompted to insert the second CD (2 of 2).

No license is required for basic functionality. However, licensing is required for advanced features. For more information on the Sun Management Center licensing model, contact your Sun service representative or authorized Sun service provider.



Caution – After installing any specific add-on product, you should answer no (n) to the setup prompt if the Sun Management Center core setup has already been done. You must set up only the add-on product(s) as described in “To Set Up Only Add-on Products” on page 33. Otherwise, you will overwrite your security keys and will need to set up all agents for the agents to work properly.

▼ To Install the Sun Management Center Packages From the CD in a Microsoft Windows Environment

1. Place the Sun Management Center 3.0 CD (1 of 2) in the CD-ROM drive.
2. Launch Windows Explorer.
3. Run the `install.bat` file from the installation directory.
4. Follow the instructions in the wizard for installation.

Installing the Sun Management Center Packages From the Web

Before installing Sun Management Center on your system, read the `INSTALL.README` file in the downloaded packages. This file provides additional information that can help you during the installation process.

▼ To Install the Sun Management Center Packages From the Web in a Solaris Environment

1. Using your web browser, go to the Sun Management Center web site.

```
http://www.sun.com/sunmanagementcenter/
```

2. Click on the Download link.
3. Follow the instructions on the web page and download your Sun Management Center packages. Store the software in a location that is accessible by superuser.
4. Open a command window and (if you are not already superuser) become superuser by using the `su -` command.
5. After you have downloaded the Sun Management Center packages, go to the directory where the packages are located:

```
# cd /download_directory
```

6. Extract the Sun Management Center packages:

```
# zcat downloaded_filename | tar xvf -
```

7. If you are running the Sun Management Center server for the first time, edit the `/etc/nsswitch.conf` file. Be sure the `groups` entry has `files` as the first token.

```
groups: files nis
```

8. List the files in the directory and read the `README` file(s) appropriate for your hardware platform.

9. Launch the Sun Management Center installation script.

The `es-inst` script is applicable to either the Production Environment or the Developer Environment, and it presents an interactive list of questions that guides you through the installation procedure. The script also enables you to set up the Sun Management Center component layers. For available options to use with `es-inst`, see TABLE 2-1.

```
# cd /download_directory
# ./es-inst
```

If you have Sun Management Center 2.x component layers already installed on your system, the install script prompts you to uninstall the previously installed packages. You can either:

- Uninstall immediately and proceed with a fresh installation, or
- Quit the current session and uninstall the necessary packages automatically by using the `es-uninst` command, and then proceed with the installation.



Caution – When uninstalling packages with the `es-uninst` command, be aware that if you answer `n` at the prompt for preserving your existing data, your current Sun Enterprise SyMON 2.x or Sun Management Center 2.x packages will be uninstalled and the contents of `/var/opt/SUNWsymon` will be removed. In addition, your security keys will be overwritten and you will need to set up all agents for the agents to work properly. Answer `y` at the prompt if you want to retain your administrative domain configuration and custom alarm settings in `/var/opt/SUNWsymon` (for subsequent installations or upgrades).

Sun Management Center software can be installed in any location on your system where the minimum required disk space is available. The default location for package installation is `/opt`.

10. Select either the Production Environment or Developer Environment.

You should already have a valid license for the Developer Environment prior to a Developer Environment installation.

Note – You should run the Sun Management Center 3.0 Developer Environment and Sun Management Center 3.0 Production Environment on separate servers.

If you are installing the Developer Environment, the component layers are automatically installed by the script. The installation process installs the basic Sun Management Center packages and prompts you for any applicable add-on product packages. Go to Step 12.

11. Select the Sun Management Center component layers (agent, server, and/or console) you want to install.

Be sure to read “Sun Management Center Online Help” on page 29 to complete the installation of online help. After you have installed online help, you can launch and view help in your web browser.



Caution – Whenever you install any specific component layer on top of an *existing* Sun Management Center 3.0 installation, you need to set up the layers again. Be aware that your security keys are overwritten when you rerun the setup and that all agents will need to be set up for the agents to work properly.

The installation process installs the basic Sun Management Center packages and prompts you for any applicable add-on product packages. In some cases, user confirmation is required prior to installing a hardware add-on product. Refer to your hardware platform supplement for more information.

12. Select the Sun Management Center add-on product(s) (for example, Advanced System Monitoring and/or Premier Management Applications) you want to install.

No license is required for basic functionality. However, licensing is required for advanced features. For more information on the Sun Management Center licensing model, contact your Sun service representative or authorized Sun service provider.



Caution – After installing any specific add-on product, you should answer no (n) to the setup prompt if the Sun Management Center core setup has already been done. You must set up only the add-on product(s) as described in “To Set Up Only Add-on Products” on page 33. Otherwise, you will overwrite your security keys and will need to set up all agents for the agents to work properly.

▼ To Install the Sun Management Center Packages From the Web in a Microsoft Windows Environment

1. Using your web browser, go to the Sun Management Center web site.

`http://www.sun.com/sunmanagementcenter/`

2. Click on the Download link.
3. Follow the instructions on the web page and download your Sun Management Center packages.
4. Run the `install.bat` file.

Sun Management Center Directories

After a successful installation and setup, directories are created as shown in the following table.

TABLE 2-2 Sun Management Center Directories

Directory	Description
<code>/opt/SUNWsymon</code>	Root directory or softlink directory that contains the infrastructure and applications of Sun Management Center
<code>/etc/opt/SUNWsymon</code>	Contains the <code>init</code> scripts for Sun Management Center software applications
<code>/var/opt/SUNWsymon</code>	Contains the Sun Management Center configuration and data files for your system

Creating Agent-Only Products from the CD

Sun Management Center 3.0 supports the following procedure for creating an agent-only product. You may find this script useful when managing numerous agent-only installations.

▼ To Create an Agent-only Product in a Solaris Environment

1. Place the Sun Management Center 3.0 CD (1 of 2) in the CD-ROM drive.
2. Open a command window and (if you are not already superuser) become superuser by using the `su -` command.
3. Change to the CD-ROM directory.
 - If you are using the Volume Manager (`vold`), type:

```
# cd /cdrom/sun_management_center_3_0
```

- If the CD-ROM drive is not already mounted, mount the drive by typing:

```
# mkdir /cdrom/sun_management_center_3_0
# mount -o ro -F hsfs /dev/dsk/cXtYdZs0 /cdrom/sun_management_center_3_0
# cd /cdrom/sun_management_center_3_0
```

4. From the `sbin` directory, type:

```
# ./es-makeagent
```

The script will ask for a target directory where it will create the agent-only product.

5. Enter the target directory.

This directory must have write permission for superuser.

6. After the script has completed, change to the target directory.

You will see directories named `disk1` and `disk2`. Go to the `sbin` directory under `disk1` and type:

```
# ./es-inst -a
```

The target directory also contains a `tar` file that you can `ftp` to other agent machines for agent-only installations.

Installing Separately Released Add-on Products

If you have separately released add-on products you want to install, refer to your hardware supplement for platform-specific installation information.

Sun Management Center Online Help

The Sun Management Center online help, based on the *Sun Management Center Software User's Guide*, is designed to be a quick reference for specific topics. Once your software installation is complete, you can use your browser to view the English online help files in the `/opt/SUNWsymon/lib/locale/C/help` directory, where `C` represents the English version.

For heterogeneous console installations (that is, an environment that has the Sun Management Center console component layer installed on both Solaris Operating Environment workstations and personal computers [PCs]), the Sun Management Center help file Uniform Resource Locator (URL) should be of the type `http://`. The console component layer for PCs does not include the online help packages. Instead, the `httpd` daemon should be installed on the Sun Management Center help server where the help packages are loaded.

This help server has the Sun Management Center help packages installed and is `http`-accessible. All consoles can connect to this help server for online help.

Installing Online Help



Caution – Complete the following procedure *only* if you are installing Sun Management Center online help on a remote machine (not on your console host) or if you are running the Sun Management Center console on a PC.

Note – A Netscape® web browser must be installed to access Sun Management Center online help. Be sure to specify the location in your `PATH` environment variable.

▼ To Set Up Sun Management Center Online Help on a Remote Machine

Note – The following example procedure sets up a Sun Management Center help server so that the online help package is web-accessible for the iPlanet™ Web Server 4.1 system. If you are using another type of web server, modify the corresponding configuration file.

1. **If it has not already been installed, install the `httpd` daemon on the web server.**
The web server must be on the machine where the Sun Management Center server is installed.
2. **Modify the file `/usr/netscape/server4/https-hostname/config/obj.conf` to specify `document-root` as `/opt/SUNWsymon/lib/locale/C/help`, where `C` represents the English version.**

For example:

```
# Host Parameters
url {
doc_root                "/opt/SUNWsymon/lib/locale/C/help"
user_doc_enable"yes"
    user_doc_root"public_html"
    cgi_enable"yes"
    cgi_dns_enable"no"
    cgi_suffix_enable"no"
    cgi_user"nobody"
    log_type"clf"
    log_prefix"/var/http/logs/http"
    log_max_files7# number of log files
    log_cycle_time1440# minutes i.e. 1 day
    log_max_file_size1048576# bytes i.e. 1 MB
    ssi_enable"no"
    ssi_exec"no"
}
```

3. Start the `httpd` daemon on the Sun Management Center help server.
4. During the installation and setup of your Sun Management Center server component layer, specify the base URL for Sun Management Center online help.



Caution – Do not click Return. Instead, type `http://online-help-server-host`.

The Sun Management Center base URL is relative to the Sun Management Center Console. The Sun Management Center Console is able to request help documentation via the network. If you have installed Sun Management Center help documentation in an http-accessible location within your network, you may specify this location. If Sun Management Center help is installed on the console host, simply accept the default value.

Please enter base URL to Sun Management Center help [local]:

Note – The word “local” in the last line of the above message refers to the console, and *not* a local server.

Setting Up Sun Management Center Component Layers and Add-on Products

You should set up the Sun Management Center component layers:

- When you change your setup configuration, such as changing the server context
- When asked to do so in your supplement

(If your installation was unsuccessful, see “Uninstalling the Sun Management Center Software” on page 12.)

Note – You may need to complete the following procedure when you change your setup configuration—such as changing the server context or changing the security seed—after you have successfully installed the software. For more information, refer to the chapter on Security in the *Sun Management Center Software User's Guide* and “Security Seeds” on page 36.

Note – If there is a potential conflict for port addresses, refer to the appendices in the *Sun Management Center Software User's Guide* before completing the steps in this section.

▼ To Set Up Sun Management Center Component Layers

1. Open a command window, and (if you are not already superuser) become superuser by using the `su -` command.
2. Change to the directory that contains the Sun Management Center setup script by typing the following command:

```
# cd /opt/SUNWsymon/sbin
```

3. Run the setup script to set up the component layers.

```
# ./es-setup
```

4. The setup script finds the installed component layers on your system with setup requirements and enables you to select the components to set up. A series of questions guides you through the procedure.

▼ To Set Up Only Add-on Products

The Sun Management Center setup script (`es-setup`) also supports the setup of only add-on products. You can set up either a single product or all products at one time.

To set up only *one* add-on product:

1. Open a command window, and (if you are not already superuser) become superuser by using the `su -` command.
2. Change to the directory that contains the Sun Management Center setup script by typing:

```
# cd /opt/SUNWsymon/sbin
```

3. Run the setup script to set up the add-on product.

```
# ./es-setup -p directory_name
```

The *directory_name* is the name for the add-on product under the `/opt/SUNWsymon/addons` directory. For example, to set up the Desktop add-on product, type:

```
# ./es-setup -p dt
```

To set up *all* add-on products:

1. Open a command window, and (if you are not already superuser) become superuser by using the `su -` command.

2. Change to the directory that contains the Sun Management Center setup script by typing:

```
# cd /opt/SUNWsymon/sbin
```

3. Run the setup script to set up all the add-on products.

```
# ./es-setup -a
```

Database Backup and Recovery

To prevent loss of data (for example, before a hardware or operating environment upgrade), you can run a backup script in *either* of the following two modes to back up your database:

- The following script will run in interactive mode and enable you to specify the location where the database files should be saved. First, become superuser with the `su -` command, then type:

```
# /opt/SUNWsymon/sbin/es-backup
```

- If you prefer to run `es-backup` in silent mode (with default answers to the script questions), become superuser with the `su -` command, then type:

```
# /opt/SUNWsymon/sbin/es-backup -y
```

The database files will automatically be saved in the directory
`/var/opt/SUNWsymon/backup`.

If you want to periodically run the `es-backup` script with the `-y` option, you can set your own `cron` program for the script to be run on a routine basis. As part of your program, you may also want to copy the contents of `/var/opt/SUNWsymon` to an alternate directory.

Note – To both minimize and prevent data loss, you should run `es-backup` on a routine basis to enable recovery of your most-current data in the event of a system failure.

If your Sun Management Center database has been inadvertently corrupted due to a system failure (such as a file system problem), you can run the following interactive script to *restore* your database. First, become superuser with the `su -` command, then type:

```
# /opt/SUNWsymon/sbin/es-restore
```

The `es-restore` script uses the output data provided by `es-backup` to recover your data.

Note – Both scripts shut down the Sun Management Center processes before starting the backup or restore, and restart the processes once the backup or recovery has been completed.

Sun Management Center Groups

Sun Management Center assigns users to groups. Three groups are created by default during the installation process. They are:

- esops
- esadm
- esdomadm

Refer to the chapter on Security in the *Sun Management Center Software User's Guide* for more information.

Security Seeds

Sun Management Center software generates a security key used for communications between processes. A seed (or password) must be provided to initialize the keys. You can choose your own seed, an alphanumeric string of up to eight characters, or use the standard Sun Management Center default (`maplesyr`). If you choose your own seed, that same seed must be used in all server and agent setups within a given server context. Here is the prompt from the setup script:

```
Do you want to generate these keys using the Sun Management Center
default seed?
[y|n|q]
```

The seed can be changed at a later time by using the procedure described in the appendices of the *Sun Management Center Software User's Guide*.

Note – If you choose to enter a seed of your own rather than accept the default, be sure to keep a record of the seed for use at a later time.

Sun Management Center Licensing

Features for Sun Management Center 3.0 include both *basic* functionality and add-on products for different levels of *advanced* functionality. No license is necessary for basic functionality. However, licensing is required for advanced functionality. For more information on the Sun Management Center licensing model, contact your Sun service representative or authorized Sun service provider.

Note – Your particular license may not provide access to all the features documented in the *Sun Management Center Software User's Guide*.

For information on purchasing a license, contact your Sun service representative or authorized Sun service provider and refer to the following web site:

<http://www.sun.com/sunmanagementcenter>

If you should exceed the time period allowed for your demonstration license, a message is displayed during login to alert you that you have exceeded the limits of your license.

```
License expired
Please purchase your license!
```

If you do not have a license and attempt to access the Sun Management Center software, you may see the following message:

```
Missing License!!
Please purchase your license!!
```

During the installation of the server component, you are given the opportunity to specify a license token.

- If you have a license token, you may enter it during the install process.

- If you do not have a license token, you may run the software without one as described above. When you get a license token, you can install it using the `es-lic` script for advanced functionality. For example:

```
# cd /opt/SUNWsymon/sbin
# ./es-lic advanced_system_monitoring

-----
Sun Management Center License Program
-----

<Enter license key:>
```

Sun Management Center Users

Sun Management Center users are valid UNIX users on the Sun Management Center server. As such, the system administrator needs to add valid users into the following file: `/var/opt/SUNWsymon/cfg/esusers`.

If a user's name is not in this file, that user cannot log into Sun Management Center software. (See the following section for more information.)

Public and Private Users

During the Sun Management Center server setup, the following file is created:

```
/var/opt/SUNWsymon/cfg/esusers
```

and the following users are added to the file automatically:

- `espublic`
`espublic` is comparable to logging into a UNIX system as `guest`. It enables users to have “general” privileges. For example, when a user tries to access information from a session running in a different Sun Management Center server from their own, they are given access as `espublic` and are able to view the information as a `guest` only.
- `esmaster`
`esmaster` is comparable to being superuser in UNIX. It automatically gives “admin” access privileges to users logging into the software.

The administrator must add the additional list of user IDs for all other users who need to log into Sun Management Center software. All users in this file have “general” access privileges, by default, unless they are given additional privileges using the procedures described in the chapter on Security in the *Sun Management Center Software User’s Guide*.

Note – The user names `espublic` and `esmaster` are not configurable during installation. They must specifically be defined as `espublic` and `esmaster`.

▼ To Add Sun Management Center Users

1. **Become superuser by using the `su -` command (on the Sun Management Center server host).**
2. **Edit the file `/var/opt/SUNWsymon/cfg/esusers`. Make sure that the user name is a valid UNIX user.**
3. **Add the user name on a new line.**
4. **Save the file and exit the editor.**

Note – By adding a user to the users list, the user has default privileges. Refer to the chapter on Security in the *Sun Management Center Software User’s Guide* for more information.

▼ To Grant a User `esadm`, `esops`, or `esdomadm` Privileges

1. **Become superuser by using the `su -` command.**
2. **Make sure that the user is a valid Sun Management Center user.**
You may do this by adding the user to the `/var/opt/SUNWsymon/cfg/esusers` file.
3. **Edit the `/etc/group` file.**
Add the user to one of the following lines as applicable: `esadm`, `esops`, or `esdomadm`.
4. **Save the file and exit the editor.**

Starting the Sun Management Center Software

Sun Management Center components are started with the `es-start` utility. The syntax for this utility is as follows:

```
# /opt/SUNWsymon/sbin/es-start -option(s)
```

Note – Except for the console, you must be superuser to start any of the Sun Management Center components.

The Sun Management Center processes are generally started in the background unless you specify the `-i` option (valid for only one process in the interactive mode). The console process is run in the foreground so that it can be killed easily using Control-C.

The options for `es-start` are listed in TABLE 2-3.

TABLE 2-3 Options for `es-start`

Option	Definition
a	Starts agent
c	Starts console
e	Starts Event manager
f	Starts Configuration manager
g	Starts Grouping services
h	Lists the options for the <code>es-start</code> utility
i	Starts agent in interactive mode; valid only for one of the a, t, f, l, p, and e options
l	Starts Platform agent
m	Starts Metadata Repository
p	Starts Topology manager
q	Starts quiet mode
r	Starts Hardware Diagnostic Suite service

TABLE 2-3 Options for `es-start` (*Continued*)

Option	Definition
s	Starts server
t	Starts Trap handler
w	Starts web server
x	Starts CST service
y	Starts new instance of platform agent
A	Starts all components except the console. Equivalent to: <code>es-start -aefgmprstxw</code>
S	Starts server and all the server subcomponents. Equivalent to: <code>es-start -efgmprstxw</code>

For example, to start the agents and server, use the `es-start -A` option. To start the agent on a monitored host, use the `es-start -a` option.

The following are commonly used start commands:

TABLE 2-4 Common Start Commands

To start:	Command
Server-only	<code>es-start -S</code>
Agent-only	<code>es-start -a</code>
Server + agent	<code>es-start -A</code>
Console	<code>es-start -c</code>

After starting other processes, there may be a delay of several seconds before the console is able to respond.

After starting the server, wait several seconds before starting the console.

Note – You can start more than one process at one time. For example, to start both the console and the server + agent, enter `es-start -Ac`.

Console and Server Options

You can pass certain arguments to the console and server processes being started by listing those arguments after the options. For example:

If you want to start the console and specify the maximum heap size as 100 Mbytes, use the following command.

```
# es-start -c -- -Xmx100m
```

Similarly, if you want to start the server and specify the maximum heap size as 100 Mbytes, use the following command.

```
# es-start -s -- -Xmx100m
```

If you want to start the console and specify a particular port (such as port 2090), use the following command.

```
# es-start -c -- -p 2090
```

Sun Management Center Command Line Interface

The Command Line Interface (CLI) provides an alternative method to the graphical user interface for monitoring and managing your system.

To start the CLI in a Solaris environment, refer to the Command Line Interface chapter in the *Sun Management Center Software User's Guide*.

To start the CLI in a Microsoft Windows environment, go to *install_directory\SunMC3.0\Cli* and execute the *es-cli.bat* file.

▼ To Start the Sun Management Center Software in a Solaris Environment

1. Change directory to the `/opt/SUNWsymon/sbin` directory.

```
# cd /opt/SUNWsymon/sbin
```

2. If applicable, start the Sun Management Center server by typing:

```
# ./es-start -s
```

3. If applicable, start the Sun Management Center agent by typing:

```
# ./es-start -a
```

4. Type `es-start -c` at the prompt to start the console.

```
# ./es-start -c
```

▼ To Start the Sun Management Center Software in a Microsoft Windows Environment

You can start the console by doing *either* of these two procedures:

- Double-click the icon labeled Sun Management Center.
- Go to `install_directory\SunMC3.0\Console` and execute the `es-console.bat` file.

The Sun Management Center login panel (FIGURE 2-1) is displayed. See TABLE 2-5 for more information on the login panel buttons.



FIGURE 2-1 Sun Management Center Login Panel

TABLE 2-5 lists the buttons in the login panel and their corresponding functions.

TABLE 2-5 Sun Management Center Login Panel Buttons

Button	Function
Login	Enables users to open the Sun Management Center application.
Help	Displays the online help for this panel.
Options	Displays a dialog box that enables you to specify the port number of the Sun Management Center server and the security scheme for console-to-Sun Management Center server messages.
Exit	Exits the software.

▼ To Log into the Sun Management Center Application

1. **Log in using a valid UNIX user account. This account must be listed in the `/var/opt/SUNWsymon/cfg/esusers` file in the Sun Management Center server machine.**

Note – The user accounts `espublic` and `esmaster` should not be used.

2. **Type the host name of the Sun Management Center server in the Server Host field.**

If you are not using the Sun Management Center server default port addresses or you want to set the console to Sun Management Center server message security:

- a. **Click the Options button.**
- b. **Type the Sun Management Center server RMI host port number in the Server Port Number field.**

Refer to the appendices in the *Sun Management Center Software User's Guide* for more information.

- c. **Click the circle next to the appropriate security message option (FIGURE 2-2).**



FIGURE 2-2 Sun Management Center Login Options Dialog

These options allow you to choose among the following:

- **No Message Authentication:** Only the user login is authenticated. Messages between the console and the server are not verified for authentication.

- **Console-to-Server Message Authentication:** The server verifies the authenticity of the messages coming from the console. However, the console does not verify the messages from the server.
- **Console-Server-Console Message Authentication:** Both the console and the server authenticate the messages coming from the other.

d. Click the OK button.

3. Check that you typed in all the information correctly in the Sun Management Center Login window (FIGURE 2-1).

4. Click the Login button in the Sun Management Center Login window to log into the Sun Management Center console.

The message is displayed on the current status line:

“Login successful. Launching console.”

The main console window is displayed (FIGURE 2-3).

Note – You may see a warning dialog box before the main console window is displayed if the console software version does not match the server version, or if you have exceeded the limits of your license.



FIGURE 2-3 Sun Management Center Main Console Window

Exiting and Stopping the Sun Management Center Software

Exit the console through the main console window, and you stop the server and agent components through a shell window.

▼ To Exit the Sun Management Center Console

1. Select **File ► Exit** from the menu bar on the main console window.

The Exit Sun Management Center dialog is displayed (FIGURE 2-4).

2. Click the **Exit** button to exit the application.

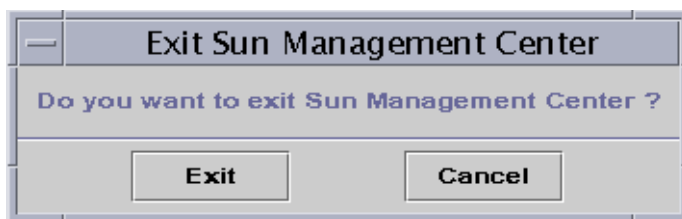


FIGURE 2-4 Exit Sun Management Center Dialog

▼ To Stop the Sun Management Center Server and Agents

Sun Management Center server and agent components are stopped with the `es-stop` utility. The syntax is as follows:

```
# /opt/SUNWsymon/sbin/es-stop -option(s)
```

Note – You must be superuser to stop the Sun Management Center server and agents.

The options for `es-stop` are listed in TABLE 2-6.

TABLE 2-6 Options for `es-stop`

Option	Definition
a	Stops the agent
e	Stops the Event manager
f	Stops the Configuration manager
g	Stops the Grouping services
h	Lists the options for the <code>es-stop</code> utility
l	Stops the Platform agent
m	Stops the Metadata agent
p	Stops the Topology manager
r	Stops the Hardware Diagnostic Suite service
s	Stops the server
t	Stops the Trap handler
w	Stops the web server
x	Stops the CST service
y	Stops instance of platform agent
A	Stops all the components except the console
S	Stops the server and all the server subcomponents (Trap handler, Topology manager, Configuration manager, and Event manager)

Sun Management Center Web Interface

The Sun Management Center Web Interface is an optional Sun Management Center component that provides most of the functionality available in the Sun Management Center Java-based Console. To launch the Sun Management Center Web Interface, first start your web browser, then go to the following web location:

`http://server_name`

For a detailed description of the Sun Management Center Web Interface, refer to the *Sun Management Center Software User's Guide*.

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