



Sun Studio 12 Quick Installation



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Preface

The *Sun Studio 12 Quick Installation* guide gives instructions on how to perform the following tasks:

- Install the required prerequisite software on the system on which the English-only release of the Sun Studio 12 software will be run
- Install the English-only Sun Studio 12 software:
 - on a single-user system
 - on a server, for use by clients with the same architecture
 - in one or more zones on a system running the Solaris™ 10 1/06 operating system
- Run the Integrated Development Environment (IDE)
- Uninstall the English-only release of the Sun Studio 12 software

Who Should Use This Book

This book is designed for system administrators who install software and for developers who use software development applications. Experience with the Solaris Operating System (Solaris OS) and UNIX® commands is required.

Typographic Conventions

The following table describes the typographic conventions that are used in this book.

TABLE P-1 Typographic Conventions

Typeface	Meaning	Example
AaBbCc123	The names of commands, files, and directories, and onscreen computer output	Edit your <code>.login</code> file. Use <code>ls -a</code> to list all files. <code>machine_name% you have mail.</code>

TABLE P-1 Typographic Conventions (Continued)

Typeface	Meaning	Example
AaBbCc123	What you type, contrasted with onscreen computer output	machine_name% su Password:
<i>aabbcc123</i>	Placeholder: replace with a real name or value	The command to remove a file is <i>rm filename</i> .
<i>AaBbCc123</i>	Book titles, new terms, and terms to be emphasized	Read Chapter 6 in the <i>User's Guide</i> . A <i>cache</i> is a copy that is stored locally. Do <i>not</i> save the file. Note: Some emphasized items appear bold online.

Shell Prompts in Command Examples

The following table shows the default UNIX system prompt and superuser prompt for the C shell, Bourne shell, and Korn shell.

TABLE P-2 Shell Prompts

Shell	Prompt
C shell	machine_name%
C shell for superuser	machine_name#
Bourne shell and Korn shell	\$
Bourne shell and Korn shell for superuser	#

Supported Platforms

This Sun™ Studio release supports systems that use the SPARC® and x86 families of processor architectures: UltraSPARC®, SPARC64, AMD64, Pentium, and Xeon EM64T. The supported systems for the version of the Solaris Operating System you are running are available in the hardware compatibility lists at <http://www.sun.com/bigadmin/hcl>. These documents cite any implementation differences between the platform types.

In this document, these x86 related terms mean the following:

- “x86” refers to the larger family of 64-bit and 32-bit x86 compatible products.
- “x64” points out specific 64-bit information about AMD64 or EM64T systems.

- “32-bit x86” points out specific 32-bit information about x86 based systems.

For supported systems, see the hardware compatibility lists.

Accessing Sun Studio Documentation

You can access the documentation at the following locations:

- The documentation is available from the documentation index that is installed with the software on your local system or network at `file:/opt/SUNWsp/docs/index.html` on Solaris platforms and at `file:/opt/sun/sunstudio12/docs/index.html` on Linux platforms.

If your software is not installed in the `/opt` directory on a Solaris platform or the `/opt/sun` directory on a Linux platform, ask your system administrator for the equivalent path on your system.

- Most manuals are available from the `docs.sun.com`SM web site. The following titles are available through your installed software on Solaris platforms only:
 - *Standard C++ Library Class Reference*
 - *Standard C++ Library User's Guide*
 - *Tools.h++ Class Library Reference*
 - *Tools.h++ User's Guide*

The release notes are available from the `docs.sun.com` web site.

- Online help for all components of the IDE is available through the Help menu, as well as through Help buttons on many windows and dialog boxes, in the IDE.

The `docs.sun.com` web site (<http://docs.sun.com>) enables you to read, print, and buy Sun Microsystems manuals through the Internet. If you cannot find a manual, see the documentation index that is installed with the software on your local system or network.

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Documentation in Accessible Formats

The documentation is provided in accessible formats that are readable by assistive technologies for users with disabilities. You can find accessible versions of documentation as described in the

following table. If your software is not installed in the /opt directory, ask your system administrator for the equivalent path on your system.

Related Sun Studio Documentation

The following table describes related documentation that is available at `file:/opt/SUNWspro/docs/index.html` and <http://docs.sun.com>. If your software is not installed in the /opt directory, ask your system administrator for the equivalent path on your system.

Document	Description
<i>Sun Studio 12 Installation Reference</i>	Contains instructions for installing the English-only release of the software on a server for use by client systems with different architectures. It also includes detailed descriptions of the batch installer, graphical user interface installer, and command-line installer; troubleshooting information; component and package lists; patch lists; and component version numbers.
<i>Sun Studio 12 Quick Installation (English, Japanese, Simplified Chinese)</i>	Contains instructions on installing the prerequisite software on the system on which the multi-language release of the Sun Studio 12 software will be run; installing the multi-language release of the Sun Studio 12 software on a single-user system, on a server for use by clients with the same architecture, or in one or more zones on a system running the Solaris 10 1/06 operating system; upgrading an installation of the English-only release of the Sun Studio 12 software; running the Integrated Development Environment (IDE); and uninstalling the multi-language release of the Sun Studio 12 software.
<i>Sun Studio 12 Installation Reference (English, Japanese, Simplified Chinese)</i>	Contains instructions for installing the multi-language release of the Sun Studio 12 software on a server for use by client systems with different architectures. It also includes detailed descriptions of the batch installer, graphical user interface installer, and command-line installer; troubleshooting information; component and package lists; patch lists; and component version numbers.

Resources for Developers

Visit <http://developers.sun.com/sunstudio> to find these frequently updated resources:

- Articles on programming techniques and best practices
- Documentation of the software, as well as corrections to the documentation that is installed with your software
- Information on support levels
- User forums
- Downloadable code samples
- New technology previews

The Sun Studio portal is one of a number of additional resources for developers at the Sun Developer Network web site, <http://developers.sun.com>.

Contacting Technical Support

If you have technical questions about this product that are not answered in this document, go to <http://www.sun.com/service/contacting>

Sun Welcomes Your Comments

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

Please include the part number of the document in the subject line of your email. For example, the part number for this document is 820-0273-10.

Preparing for Installation

This chapter includes information about the following:

- “Software Installation Overview” on page 11
- “System Requirements” on page 12
- “Choosing Local or Remote Display of the Installer” on page 13
- “Installing to an NFS-Mounted Filesystem” on page 14
- “Supporting Previous Sun Studio Releases” on page 15
- “Checking For and Installing Software Prerequisites” on page 16
- “Choosing an Installation Method” on page 16

Software Installation Overview

The following steps outline the general process you follow to install the Sun Studio 12 software, product serial number, and supporting software.

Step	Task	Description	For Instructions
1.	Verify that the system on which you are installing the Sun Studio 12 software meets the minimum hardware and operating system requirements for this release.	Using a system that meets the system requirements is recommended for proper performance.	See “System Requirements” on page 12
2.	Determine whether you are going to display the installer locally or remotely.	You can install the Sun Studio software using a remote display or local display.	See “Choosing Local or Remote Display of the Installer” on page 13

- | | | | |
|----|--|--|---|
| 3. | Choose single-user or client/server installation. | You can install the Sun Studio 12 software and the required additional software on a single-user system, or you can install the Sun Studio 12 software on a server and the additional software on client systems that will run the Sun Studio 12 software. | See “ Installing on a Single-User System ” on page 19 and “ Installing on a Server For Use by Clients With the Same Architecture ” on page 22 |
| 4. | Verify that the system on which you are going to run the Sun Studio 12 software has access to the required additional software, and install any needed software. | The Sun Studio 12 software requires the J2SE Development Kit (JDK) 5.0, NetBeans IDE 5.5.1 and NetBeans C/C++ Development Pack 5.5.1, operating system patches, and special versions of operating system libraries. | See “ Checking For and Installing Software Prerequisites ” on page 16 |
| 5. | Choose an installation method. | There are four ways to install the Sun Studio software. | See “ Choosing an Installation Method ” on page 16 |
| 6. | Install the Sun Studio 12 software. | Step through the installation information. | See Chapter 2 , “ Installing the Sun Studio 12 Software ” |

System Requirements

Sun Studio 12 software supports the hardware and operating system requirements shown in [Table 1-1](#).

Note – For further disk space requirements and important last minute information about this release, see the release notes at http://developers.sun.com/sunstudio/documentation/ss12/release_notes.html.

TABLE 1-1 System Requirements

	Solaris OS on SPARC based systems	Solaris OS on x86 based systems	Linux OS on x86 based systems
Operating system	Solaris 9 or Solaris10 1/06		SuSE Linux Enterprise Server 9 with Service Pack 3 RedHat Enterprise Linux 4

TABLE 1-1 System Requirements (Continued)

	Solaris OS on SPARC based systems	Solaris OS on x86 based systems	Linux OS on x86 based systems
CPU	SPARC architecture: Recommended: Sun Ultra 45 Workstation (two 1.6 GHz UltraSPARC IIIi processors) Minimum: Sun Ultra 60 (450 MHz, UltraSPARC II processor) or Sun Blade 2500 (one 1.6 GHz UltraSPARC IIIi processor) for better IDE performance	x86 architecture (32-bit): Minimum: Pentium III 500-MHz Workstation x64 architecture (64-bit): Recommended: Sun Ultra 40 Workstation (two AMD/Opteron 200/2000 series processors) Minimum: Sun Fire v20x Server	
Memory	Recommended: 1 to 2 GB Minimum: 512 MB (more may be needed for working with large projects in the IDE)		
Disk space (Use the <code>df -k</code> command to check your disk space.)	1.5 GB	1.1 GB	1 GB
Swap space	Recommended: 2 to 4 GB Minimum: 1 GB To add swap space to your system, see “Adding Swap Space” on page 35		
Operating system configuration	Entire Solaris Software Group Plus OEM Support, Entire Solaris Software Group, or Developer Solaris Software Group (To determine your operating system configuration, you need to verify the installed packages. Specific packages are installed for each configuration. See the Solaris OS installation documentation for more details.)	Must include the Development/Libraries Package Group.	

Choosing Local or Remote Display of the Installer

You can display the installer either locally or remotely while you are installing the Sun Studio 12 software with the graphical user interface installer or the command-line installer:

- *Local display.* The source computer and the display computer are the same computer. The installer window or command-line installer is displayed on the same computer that contains the product DVD or downloaded files and runs the installer.
- *Remote display.* The source computer and the display computer are different computers. The source computer contains the product DVD or downloaded files and runs the installer. The display computer displays the installer window or command-line installer. To install using a remote display, follow the instructions in the remainder of this section.

▼ Preparing for Installation Using a Remote Display

- 1 On the display computer, enable client access to the X server by typing the following on the command line:

```
xhost + source-computer-name
```

Replace *source-computer-name* with the output of the `/usr/bin/hostname` command entered on the source computer, which is the computer that contains the product DVD or downloaded files.

- 2 Log in to the source computer and become a superuser (root).

```
rlogin source-computer-name -l rootname  
Password: root-password
```

- 3 On the source computer, set the display to the monitor that is attached to the display computer.

If you use the C shell, type:

```
setenv DISPLAY display-computer-name:n.n
```

If you use the Bourne shell, type:

```
DISPLAY=display-computer-name:n.n  
export DISPLAY
```

If you use the Korn shell, type:

```
export DISPLAY=display-computer-name:n.n
```

Replace *display-computer-name* with the output of the `/usr/bin/hostname` entered on the display computer.

Installing to an NFS-Mounted Filesystem

To install the Sun Studio software on an NFS-mounted filesystem, you must run the installer on a supported system regardless of where the NFS partition is mounted. In the following procedure, the server is the machine with the physical disk on which the installed software will reside, and the client is the machine on which you run the installer and which NFS-mounts the filesystem from the server.

Note – The best way to share the product image as an NFS-mounted filesystem is to export it from a supported system. Run the installer on the server and share the directory in which the software is installed. Use the following NFS install procedure only if your NFS server is not a supported platform for the product.

After mounting the filesystem you can install the Sun Studio product on the server by running the graphical user interface installer, command-line installer, or batch installer on the client machine. You would specify the directory on which you mounted the filesystem as the installation directory for the Sun Studio 12 software.

After you have installed the software, any machine that is running version 9, or 10 1/06 of the Solaris OS can mount the filesystem from the server on which you installed the software, and run the software. Each client machine that runs the software must have the correct prerequisite software installed (see [“Checking For and Installing Software Prerequisites”](#) on page 16).

To uninstall Sun Studio software installed on an NFS-mounted filesystem, you must run the uninstaller on the same client machine you used to install the software, and you must mount the filesystem prior to running the uninstaller.

▼ To Prepare for Installing the Sun Studio Software on an NFS-mounted Filesystem

- 1 On the server machine, share the filesystem with the appropriate options. It is essential that root on the client machine on which the installer will be run have full access to the NFS filesystem:

```
share -F nfs -o root=client-machine,rw filesystem
```

- 2 On the client machine, mount the shared filesystem with read/write access:

```
mount server-machine:filesystem installation-directory
```

Supporting Previous Sun Studio Releases

If you installed any other release of Sun Studio software on your system, then you must install uninstall it, or install the Sun Studio 12 software in a different directory.

If you installed the Early Access release of Sun Studio 12 software, you must uninstall it before you can install the final release.

If you installed Sun Studio 10 software or Sun Studio 11 software on a Solaris 10 system, you can install Sun Studio 12 software on that system only if you specify the correct zones option when you run the Sun Studio 12 installer.

- To install Sun Studio 12 software on a Solaris 10 system that has Sun Studio 10 software installed, you must install it in all zones.
- To install Sun Studio 12 software on a Solaris 10 system that has Sun Studio 11 software installed, you must install it only in the zone in which you are running the installer. For more information, see [“Installing on a Solaris 10 1/06 OS Server With Zones”](#) on page 26

Checking For and Installing Software Prerequisites

The system preparation tool lets you check the system on which you are going to run the Sun Studio 12 software for the prerequisite software, and install any missing software. You can run the system preparation tool from the command line before you run the installer or as an option of the `batch_installer` command. The system preparation tool is run automatically by the graphical user interface installer and the command-line installer. For a complete description of the system preparation tool, see the `prepare_system(1)` man page or the *Sun Studio 12 Installation Reference Guide*.

The Sun Studio 12 software requires the following additional software, which is included in the product download file and on the product DVD:

- J2SE Development Kit (JDK) 5.0, Update 9. For optimum performance, install the JDK software locally on each machine that will run the Sun Studio 12 software.
- Patches required by the JDK software. These patches are required for correct operation of the JDK software. They are listed in Appendix C, “JDK Software Required Patch Identification Numbers and Descriptions,” in *Sun Studio 12 Installation Reference Guide*
- NetBeans 5.5.1 IDE and NetBeans C/C++ Development Pack 5.5.1. For optimum performance, install these locally on each machine that will run the Sun Studio 12 software.
- Operating system patches required by the Sun Studio 12 software. These patches are required for correct operation of the Sun Studio 12 software and must be installed on the system that will run the software. They are listed in Appendix B, “Patch Identification Numbers and Descriptions,” in *Sun Studio 12 Installation Reference Guide*

Choosing an Installation Method

There are four ways to install the Sun Studio 12 software:

Batch installer

The `batch_installer` command installs all components of the Sun Studio 12 software with minimal user interaction. You specify the installation directory and root path with the command. Once you have invoked the command, the installation proceeds to completion. For a complete description of the `batch_installer` command, see the *Sun Studio 12 Installation Reference Guide*

Graphical user interface installer	The graphical user interface installer is an installation wizard that displays pages for a series of installation steps. On each page, you can quit, go back to the previous step, or go on to the next step. You can choose the installation directory and which components and subcomponents of the Sun Studio 12 software you want to install. For a complete description of the graphical user interface installer, see the <i>Sun Studio 12 Installation Reference Guide</i> .
Command-line installer	The command-line installer offers the same series of interactive steps as the graphical user interface installer in text form. For a complete description of the command-line installer, see the <i>Sun Studio 12 Installation Reference Guide</i> .
Solaris JumpStart™ installer	You can use the JumpStart installer to automate the installation process to install the Sun Studio 12 software on multiple systems. See for an overview of JumpStart installation steps. See the <i>Solaris Installation Guide</i> for complete details of JumpStart installation.

Installing the Sun Studio 12 Software

This chapter includes information about the following:

- “Installing on a Single-User System” on page 19
- “Installing on a Server For Use by Clients With the Same Architecture” on page 22
- “Installing on a Solaris 10 1/06 OS Server With Zones” on page 26
- “Setting Up Access to the Developer Tools and Man Pages” on page 29
- “Starting the Sun Studio 12 IDE” on page 30

Installing on a Single-User System

You can install the Sun Studio 12 software and the prerequisite software on a single-user system.

The simplest way to install the software on a single-user system is to use the batch installer. However, the batch installer installs all components of the Sun Studio 12 software. If you want to choose which components of the software to install, you must use the graphical user interface installer or command-line installer.

▼ Using the Batch Installer

- 1 **If you are not currently superuser (root), become superuser by typing:**

```
su  
Password: root-password
```

- 2 **In the directory that contains the `batch_installer` command, run the command to view the software license agreement:**

```
./batch_installer --show-sla
```

3 Do one of the following:

- **Run the system preparation tool once to check your system for the prerequisite software and again, if necessary, to install any missing software. Then run the batch installer to accept the software license agreement and install the Sun Studio 12 software.**

```
./prepare_system -C  
./prepare_system -s missing_software_name,missing_software_name,...  
./batch_installer --accept-sla
```

To install the Sun Studio 12 software in a directory other than /opt, specify the installation directory with the -d option.

- **Run the batch installer to check for the required prerequisite software and install any missing software, accept the software license agreement, and install the Sun Studio 12 software.**

```
./batch_installer -p all --accept-sla
```

To install the Sun Studio 12 software in a directory other than /opt, specify the installation directory with the -d option.

4 Type the following to determine whether you need to set up your access to the Sun Studio 12 software tools and man pages:

```
/usr/bin/version
```

- a. **If you receive the message /usr/bin/version: not found or the command reports an earlier version of Sun Studio software, see [“Setting Up Access to the Developer Tools and Man Pages” on page 29](#) for information on setting your PATH and MANPATH to point to the Sun Studio 12 software.**
- b. **If the command reports Sun Studio 12 software, you do not need to set your PATH and MANPATH.**

▼ Using the Graphical User Interface Installer

1 If you are not currently superuser (root), become superuser by typing:

```
su  
Password: root-password
```

2 In the directory that contains the installer, start the installer by typing:

```
./installer
```

3 On the Software License Agreement page, click Yes (Accept License).

- 4 On the Select Options page:
 - a. If the Missing prerequisites field lists any missing prerequisite software, install the missing software by clicking the Update button.
 - b. To install the Sun Studio 12 software in a directory other than `/opt`, type the directory name in the Installation directory field. If you have previously installed some components of the Sun Studio 12 software, the Installation directory field displays that installation directory, and the installer will install additional components in the same directory.
- 5 On the Select Components page, click the checkbox for any component you do not want to install. If you want to install only selected subcomponents of the Sun Studio 12 Compilers and Tools component, click the + icon to expand the component, and click the checkbox for any subcomponent you do not want to install.
- 6 Proceed through the remaining pages to complete the installation.
- 7 Type the following to determine whether you need to set up your access to the Sun Studio 12 software tools and man pages:

```
/usr/bin/version
```

 - a. If you receive the message `/usr/bin/version: not found` or the command reports an earlier version of Sun Studio software, see [“Setting Up Access to the Developer Tools and Man Pages” on page 29](#) for information on setting your `PATH` and `MANPATH` to point to the Sun Studio 12 software.
 - b. If the command reports Sun Studio 12 software, you do not need to set your `PATH` and `MANPATH`.

▼ Using the Command-Line Installer

- 1 If you are not currently superuser (root), become superuser by typing:

```
su  
Password: root-password
```
- 2 In the directory that contains the installer, start the installer by typing:

```
./installer -nodisplay
```
- 3 Read the Software License Agreement and accept it by typing `yes`.
- 4 If the installer reports that any prerequisite software is missing, install the missing software by choosing Update All Prerequisites.

- 5 If you have previously installed some components of the Sun Studio 12 software, the installer will install additional components in the same directory. If you have not previously installed any components of the software, and you want to install the Sun Studio 12 software in a directory other than `/opt`, specify the installation directory.
- 6 Select Skip advanced options.
- 7 Deselect any software component or subcomponent you do not want to install.
- 8 Follow the installer instructions to complete the installation.
- 9 If you installed the Sun Studio 12 software on a single-user system, type the following to determine whether you need to set up your access to the Sun Studio 12 software tools and man pages:
`/usr/bin/version`
 - a. If you receive the message `/usr/bin/version: not found` or the command reports an earlier version of Sun Studio software, see [“Setting Up Access to the Developer Tools and Man Pages” on page 29](#) for information on setting your `PATH` and `MANPATH` to point to the Sun Studio 12 software.
 - b. If the command reports Sun Studio 12 software, you do not need to set your `PATH` and `MANPATH`.

Installing on a Server For Use by Clients With the Same Architecture

You can install the Sun Studio 12 software and the prerequisite software on a server for use by client systems with the same architecture. You can also copy the prerequisite software to the server so that the system preparation tool can be used to install it on each client system.

Note – For information on installing on a server for use by clients with a different architecture, see “Installing on a Solaris Server for Use by Clients With a Different Architecture” in *Sun Studio 12 Installation Reference Guide*

The simplest way to install the software on a server is to use the batch installer. However, the batch installer installs all components of the Sun Studio 12 software. If you want to choose which components of the software to install, you must use the graphical user interface installer or command-line installer.

▼ Using the Batch Installer

- 1 If you are not currently superuser (root), become superuser by typing:

```
su
Password: root-password
```

- 2 In the directory that contains the `batch_installer` command, run the command to view the software license agreement:

```
./batch_installer --show-sla
```

- 3 Do one of the following:

- Run the system preparation tool once to check your system for the prerequisite software and again, if necessary, to install any missing software. Then run the batch installer to accept the software license agreement, install the Sun Studio 12 software, and copy the system prerequisite software to the server.

```
./prepare_system -C
./prepare_system -s missing_software_name,missing_software_name,...
./batch_installer --accept-sla --copy-prerequisites
```

To install the Sun Studio 12 software in a directory other than `/opt`, specify the installation directory with the `-d` option.

- Run the batch installer to check for the required prerequisite software and install any missing software, accept the software license agreement, install the Sun Studio 12 software.

```
./batch_installer -p all --accept-sla --copy-prerequisites
```

To install the Sun Studio 12 software in a directory other than `/opt`, specify the installation directory with the `-d` option.

- 4 On each client system, set the `PATH` and `MANPATH` to access the Sun Studio 12 software and man pages on the server (see [“Setting Up Access to the Developer Tools and Man Pages” on page 29](#)).

- 5 On each client system, mount the directory on the server in which you installed the Sun Studio 12 software.

```
mount server:filesystem installation_directory
```

- 6 On each client system, run the system preparation tool on the server to check the client system for the prerequisite software and again, if necessary, to install any missing software.

```
prepare_system -C
prepare_system -s missing_software_name,missing_software_name,...
```

▼ Using the Graphical User Interface Installer

- 1 If you are not currently superuser (root), become superuser by typing:

```
su  
Password: root-password
```

- 2 In the directory that contains the installer, start the installer by typing:

```
./installer
```

- 3 On the Software License Agreement page, click Yes (Accept License).

- 4 On the Select Options page:

- a. If the Missing prerequisites field lists any missing prerequisite software, install the missing software by clicking the Update button.
- b. To install the Sun Studio 12 software in a directory other than /opt, type the directory name in the Installation directory field. If you have previously installed some components of the Sun Studio 12 software, the Installation directory field displays that installation directory, and the installer will install additional components in the same directory.
- c. Click the Advanced options tab, and select the Copy system prerequisites checkbox.

- 5 On the Select Components page, click the checkbox for any component you do not want to install. If you want to install only selected subcomponents of the Sun Studio 12 Compilers and Tools component, click the + icon to expand the component, and click the checkbox for any subcomponent you do not want to install.

- 6 Proceed through the remaining pages to complete the installation on the server.

- 7 On each client system, set the PATH and MANPATH to access the Sun Studio 12 software and man pages on the server (see [“Setting Up Access to the Developer Tools and Man Pages” on page 29](#)).

- 8 On each client system, mount the directory on the server in which you installed the Sun Studio 12 software.

```
mount server:filesystem installation_directory
```

- 9 On each client system, run the system preparation tool on the server to check the client system for the prerequisite software and again, if necessary, to install any missing software.

```
prepare_system -C  
prepare_system -s missing_software_name,missing_software_name,...
```


▼ Using the Command-Line Installer

- 1 If you are not currently superuser (root), become superuser by typing:

```
su
Password: root-password
```

- 2 In the directory that contains the installer, start the installer by typing:

```
./installer -nodisplay
```

- 3 Read the Software License Agreement and accept it by typing `yes`.

- 4 If the installer reports that any prerequisite software is missing, install the missing software by choosing Update All Prerequisites.

- 5 If you have previously installed some components of the Sun Studio 12 software, the installer will install additional components in the same directory. If you have not previously installed any components of the software, and you want to install the Sun Studio 12 software in a directory other than `/opt`, specify the installation directory.

- 6 Select Continue to advanced options, and select Copy system prerequisites.

- 7 Deselect any software component or subcomponent you do not want to install.

- 8 Follow the installer instructions to complete the installation.

- 9 On each client system, set the `PATH` and `MANPATH` to access the Sun Studio 12 software and man pages on the server (see [“Setting Up Access to the Developer Tools and Man Pages” on page 29](#)).

- 10 On each client system, mount the directory on the server in which you installed the Sun Studio 12 software.

```
mount server:filesystem installation_directory
```

- 11 On each client system, run the system preparation tool on the server to check the client system for the prerequisite software and again, if necessary, to install any missing software.

```
prepare_system -C
prepare_system -s missing_software_name,missing_software_name,...
```

Installing on a Solaris 10 1/06 OS Server With Zones

You can install the Sun Studio 12 software in one or more zones on a server running the Solaris 10 1/06 OS for use by client systems. The operating system patches must be installed in the global zone. The remaining prerequisite software can be installed in local zones and must be installed on the client systems.

Note –

- To install Sun Studio 12 software on a Solaris 10 system that has Sun Studio 10 software installed, you must install it in all zones.
 - To install Sun Studio 12 software on a Solaris 10 system that has Sun Studio 11 software installed, you must install it only in the zone in which you are running the installer.
-

▼ Using the Batch Installer

- 1 In the global zone, if you are not currently superuser (root), become superuser by typing:

```
su
Password: root-password
```

- 2 To install in all zones:

- a. Run the system preparation tool to install the prerequisite operating system patches:

```
./prepare_system -s patches
```

- b. In the directory that contains the `batch_installer` command, run the command to view the software license agreement:

```
./batch_installer --show-sla
```

- c. Run the `batch_installer` command to accept the software license agreement, install the Sun Studio 12 software, and copy the prerequisite software to the server.

```
./batch_installer --accept-sla --zone=all --copy-prerequisites
```

To install the Sun Studio 12 software in a directory other than `/opt`, specify the installation directory with the `-d` option.

- 3 To install in the global zone only or in a local zone:

- a. In the global zone, run the system preparation tool to install the prerequisite operating system patches:

```
./prepare_system -s patches
```

- b. In the zone where you want to install the Sun Studio 12 software, run the `batch_installer` command to view the software license agreement:

```
./batch_installer --show-sla
```

- c. In the same zone, run the `batch_installer` command to accept the software license agreement, install the Sun Studio 12 software, and copy the prerequisite software to the server.

```
./batch_installer --accept-sla --zone=this --copy-prerequisites
```

To install the Sun Studio 12 software in a directory other than `/opt`, specify the installation directory with the `-d` option.

- 4 On each client system, set the `PATH` and `MANPATH` to access the Sun Studio 12 software and man pages on the server (see [“Setting Up Access to the Developer Tools and Man Pages” on page 29](#)).

- 5 On each client system, mount the directory on the server in which you installed the Sun Studio 12 software.

```
mount server:filesystem installation_directory
```

- 6 Run the system preparation tool on the server to check the client system for the prerequisite software and again, if necessary, to install any missing software:

```
prepare_system -C
```

```
prepare_system -s missing_software_name,missing_software_name,...
```

▼ Using the Graphical User Interface Installer

- 1 If you are not currently superuser (`root`), become superuser by typing:

```
su
```

```
Password: root-password
```

- 2 In the directory that contains the installer, start the installer by typing:

```
./installer
```

- 3 On the Software License Agreement page, click Yes (Accept License).

- 4 On the Select Options page:

- a. If the Missing prerequisites field lists any missing prerequisite software, install the missing software by clicking the Update button.

b. To install the Sun Studio 12 software in a directory other than `/opt`, type the directory name in the Installation directory field. If you have previously installed some components of the Sun Studio 12 software, the Installation directory field displays that installation directory, and the installer will install additional components in the same directory.

c. Click the Advanced options tab.

If you are running the installer in the global zone, you can select the appropriate radio button to install the software in this zone or in all zones. If you are running the installer in a local zone, the software will be installed only in that zone.

Select the Copy system prerequisites checkbox.

5 On the Select Components page, click the checkbox for any component you do not want to install. If you want to install only selected subcomponents of the Sun Studio 12 Compilers and Tools component, click the + icon to expand the component, and click the checkbox for any subcomponent you do not want to install.

6 On each client system, set the `PATH` and `MANPATH` to access the Sun Studio 12 software and man pages on the server (see [“Setting Up Access to the Developer Tools and Man Pages” on page 29](#)).

7 On each client system, mount the directory on the server in which you installed the Sun Studio 12 software.

```
mount server:filesystem installation_directory
```

8 On each client system, run the system preparation tool on the server to check the client system for the prerequisite software and again, if necessary, to install any missing software:

```
prepare_system -C
prepare_system -s missing_software_name,missing_software_name,...
```

▼ Using the Command-Line Installer

1 If you are not currently superuser (root), become superuser by typing:

```
su
Password: root-password
```

2 In the directory that contains the installer, start the installer by typing:

```
./installer -nodisplay
```

3 Read and accept the Software License Agreement.

4 If the installer reports that any prerequisite software is missing, install the missing software by choosing Update All Prerequisites.

- 5 If you have previously installed some components of the Sun Studio 12 software, the installer will install additional components in the same directory. If you have not previously installed any components of the software, and you want to install the Sun Studio 12 software in a directory other than `/opt`, specify the installation directory.
- 6 **Select Continue to advanced options.**
If you are running the installer in the global zone, you can choose to install the software in this zone or in all zones. If you are running the installer in a local zone, you can install the software only in that zone.
Select Copy system prerequisites.
- 7 **Deselect any software component or subcomponent you do not want to install.**
- 8 **Follow the installer instructions to complete the installation.**
- 9 **On each client system, set the PATH and MANPATH to access the Sun Studio 12 software and man pages on the server (see [“Setting Up Access to the Developer Tools and Man Pages” on page 29](#)).**
- 10 **On each client system, mount the directory on the server in which you installed the Sun Studio 12 software.**
`mount server:filesystem installation_directory`
- 11 **On each client system, run the system preparation tool on the server to check the system for the prerequisite software and again, if necessary, to install any missing software:**
`prepare_system -C`
`prepare_system -s missing_software_name,missing_software_name,...`

Setting Up Access to the Developer Tools and Man Pages

Because the Sun Studio 12 software product components and man pages are not installed into the system directories `/usr/bin/` and `/usr/share/man`, you might need to change your `PATH` and `MANPATH` environment variables to enable use of the Sun Studio 12 software. You do not need to change your paths if:

- You did not previously install Sun Studio 11 software on your system.
- The response to the command `/usr/bin/version` is Sun Studio 12 software.

On Solaris platforms, add the path `/installation_directory/SUNWspro/bin` to your `PATH` environment variable. On Linux platforms, add the path `/installation_directory/sunstudio12/bin` to your `PATH` environment variable. If you have previous versions of Sun Studio, Sun ONE Studio, or Forte Developer software installed, add the path before the paths of the previous installations.

On Solaris platforms, add the path */installation_directory/SUNWspro/man/* to your MANPATH environment variable. On Linux platforms, add the path */installation_directory/sunstudio12/man/* to your MANPATH environment variable.

Starting the Sun Studio 12 IDE

Once you have the Sun Studio 12 software and its software prerequisites installed, and added the software installation directory to your path, you can start using the software. To start the product, type the following:

sunstudio &

Note – The full path to the command is */installation_directory/SUNWspro/bin/sunstudio* on Solaris systems, and */installation_directory/sunstudio12/bin/sunstudio* on Linux platforms.

Uninstalling the Sun Studio 12 Software

This chapter includes information on the following:

- “Uninstalling When Previous Releases of Sun Studio Software Are Installed” on page 31
- “Choosing Local Display or Remote Display of the Uninstaller” on page 31
- “Using the Graphical User Interface Uninstaller” on page 32
- “Using the Command-Line Uninstaller” on page 33

Uninstalling When Previous Releases of Sun Studio Software Are Installed

If you installed the Sun Studio 12 software on a system that has previous Sun Studio software installations, then only the Sun Studio 12 software is removed when you use the uninstaller.

Determining Which Uninstaller Instructions to Follow

If you find an `uninstaller` command in the `bin` directory in the installation directory (for example, in `/opt/SUNWspro/bin`), follow the uninstallation instructions in *Sun Studio 12 Quick Installation (English, Japanese, Simplified Chinese)*. Otherwise, follow the installation instructions in this chapter.

Choosing Local Display or Remote Display of the Uninstaller

You can display an uninstaller either locally or remotely while you are uninstalling Sun Studio 12 software.

▼ Preparing for Uninstallation Using a Remote Display

- 1 On the display computer, enable client access to the X server by typing the following on the command line:

```
xhost + source-computer-name
```

Replace *source-computer-name* with the output of the `/usr/bin/hostname` command entered on the source computer, which is the computer that contains the product CD-ROM or downloaded files.

- 2 Log in to the source computer and become a superuser (root).

```
rlogin source-computer-name -l rootname
Password: root-password
```

- 3 On the source computer, set the display to the monitor that is attached to the display computer.

If you use the C shell, type:

```
setenv DISPLAY display-computer-name:n.n
```

If you use the Bourne shell, type:

```
DISPLAY=display-computer-name:n.n
export DISPLAY
```

If you use the Korn shell, type:

```
export DISPLAY=display-computer-name:n.n
```

Replace *display-computer-name* with the output of the `/usr/bin/hostname` entered on the display computer.

Using the Graphical User Interface Uninstaller

You can uninstall any or all of the installed components of the Sun Studio 12 software using the graphical user interface uninstaller.

▼ Using the Graphical User Interface Uninstaller

- 1 If you are not currently superuser (root), become superuser by typing:

```
su
Password: root-password
```

- 2 Go to the installation directory.

- 3 Start the uninstaller by typing:

```
java -cp . uninstall_Sun_Studio_12 &
```
- 4 On the **Select Type of Uninstall** page of the uninstaller, select **Full** if you want to uninstall all of the Sun Studio 12 software you have installed, or **Partial** if you want to uninstall only certain components or subcomponents.
- 5 If you selected a partial uninstallation, then on the **Select Components** page, click the checkbox for any component you do not want to uninstall. If you want to uninstall only selected subcomponents of the Sun Studio 12 Compilers and Tools component, click the + icon to expand the component, and click the checkbox for any subcomponent you do not want to uninstall.
- 6 On the **Ready to Uninstall** page, click **Uninstall Now**.
 The Uninstalling page appears with a progress indicator. When uninstallation is complete, the Uninstallation Summary page appears.
- 7 Click **Exit** to exit the uninstaller

Using the Command-Line Uninstaller

You can uninstall any or all of the installed components of the Sun Studio 12 software using the command-line uninstaller.

▼ Using the Command-Line Uninstaller

- 1 If you are not currently superuser (root), become superuser by typing:

```
su
```

 Password: *root-password*
- 2 Go to the installation directory.
- 3 Start the interactive command-line uninstaller by typing:

```
java -cp . uninstall_Sun_Studio_12 -nodisplay
```

 You can also start the command-line installer as follows to uninstall the software silently:

```
java -cp . uninstall_Sun_Studio_12 -nodisplay -noconsole
```
- 4 Select **Full** if you want to uninstall all of the Sun Studio 12 software you have installed, or **Partial** if you want to uninstall only certain components or subcomponents.

- 5** If you selected partial installation, deselect any software component or subcomponent you do not want to uninstall.
- 6** Follow the uninstaller instructions to complete the uninstallation.

Adding Swap Space

Adding Swap Space

If the system on which you are installing the software does not have the required minimum 1 GB of swap space, add swap space by doing the following.

▼ Adding Swap Space on a Solaris System

- 1 Become a superuser (root) by typing:

```
% su
Password: root-password
```

- 2 Create a file in a selected directory to add swap space by typing:

```
mkfile number[m|k|b] /directory/swap-file-name
```

where *number* is an amount of swap space, followed by either *m* for megabyte, *k* for kilobyte, or *b* for block. The *directory* is a directory in which you have permission to add swap space. The *swap-file-name* is the name of the swap file you are creating.

For example, to create a 16-megabyte swap file named `16mswap` in the `food` directory, type the following:

```
mkfile 16m /foo/16mswap
```

See the `mkfile(1M)` man page for more information.

- 3 Verify that the file was created by typing:

```
ls -l /directory/swap-file-name
```

The new file appears in the directory. For example:

```
ls -l /foo/16mswap
-rw-----T  1 root    other    16777216 Dec 12 14:24 /foo/16mswap
```

4 Run the `swap` command to specify the additional swap space by typing:

```
swap -a /directory/swap-file-name
```

5 Verify that the extra swap space was added by typing:

```
swap -s
```

The output shows the allocated swap space. For example:

```
swap -s
total: 289336k bytes allocated + 27008k reserved = 316344k used, 298336k available
```

▼ Adding Swap Space on a Linux System

1 Become a superuser (root) by typing:

```
% su
Password: root-password
```

2 Create a file in a selected directory to add swap space by typing:

```
dd if=/dev/zero of=/dir/myswapfile bs=1024 count=number_blocks_needed
```

where *dir* is a directory in which you have permission to add swap space. The *myswapfile* is the name of the swap file you are creating. The *number_blocks_needed* is an amount of 1024-byte blocks you want to create. See the `dd(1)` man page for more information.

3 Verify that the file was created by typing:

```
ls -l /dir/myswapfile
```

The new file appears in the directory.

4 Initialize the new swap area by typing:

```
mkswap /dir/myswapfile
```

See the `mkswap(8)` man page for more detailed information.

5 Run the `swapon` command to enable the new swap space for paging and swapping by typing the following:

```
swapon -a /dir/myswapfile
```

6 Verify that the extra swap space was added by typing:**swapon -s**

The output shows the allocated swap space.

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