

# Solaris Server Intranet Extension 1.0 Installation and Release Notes

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*Solaris 2.6*



THE NETWORK IS THE COMPUTER™

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## Installation Information

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The Solaris™ Server Intranet Extension is a suite of products that offers powerful applications in network services, systems management, and remote connectivity and security. The Solaris Server Intranet Extension™ CD-ROM contains software for both the SPARC™ and x86 platforms.

For a brief description of each product in the Intranet Extension, see Appendix A.

For a brief overview of the software packages and the disk and memory requirements for each product, see Appendix B.

---

## Installation Overview

There are two ways to install a product from the Solaris Server Intranet Extension CD:

- At the same time that you install the Solaris operating system (using Solaris Web Start)
- After you install the Solaris operating system

If you are installing the Solaris operating system, you can install *any or all of* the products from the Solaris Server Intranet Extension CD *at the same time* by using Solaris Web Start. Solaris Web Start is an easy-to-use browser-based installation method.

## Installing Products with Solaris Web Start

If you are ready to install Solaris and the products from the Solaris Server Intranet Extension at the same time, use Solaris Web Start. You are prompted to insert the Solaris Server Intranet Extension CD after the Solaris operating system is installed. Note that you can install all or some of the products on the Solaris Server Intranet Extension CD by using Solaris Web Start.

Before you use Solaris Web Start, see the *Installation Instructions for Solaris 2.6* card labeled START HERE in the Solaris desktop box. This card gives the requirements for using Solaris Web Start.

## Installing Products After You Install Solaris

If you want to install a product after you install Solaris, you need to do a manual installation from the UNIX command line. For full installation instructions for each product, use this document's product-specific chapter *and* the online product documentation. For an overview of disk space and other requirements, see Appendix B.

---

## Getting Product Information from the CD-ROM

The Solaris Server Intranet Extension CD-ROM includes both the software products and their online documentation.

You can browse information about the products and access product manuals by inserting the Solaris Server Intranet Extension CD into your CD drive, starting your web browser, and pointing the browser to this web page:

```
file://localhost/cdrom/cdrom0/1REAMDE.html
```

Here you can read descriptions of the products and click links to go directly to online manuals for each product.

## Online Documentation

The Solaris Server Intranet Extension is a suite of Sun's most popular network and systems software. Most of the software products that are included as part of the Intranet Extension are also standalone products. Thus, most of the online product documentation on the Solaris Server Intranet Extension CD-ROM was written for products that shipped on their own product CDs.

This document, rather than the online product documentation, has the *latest* information about these products as part of the Solaris Server Intranet Extension. Specifically, you need to use this printed document for the current installation path names.

## Solaris Operating System Support

All of the Solaris Server Intranet Extension products (except for Solstice™ NFS™ Client™, which runs on Windows 95 or Windows NT) run on Solaris 2.6 and Solaris 2.5.1. Many of the products also run on earlier versions of Solaris (as mentioned in their online product documentation), but their ability to run on earlier versions of Solaris is not supported as part of the Solaris Server Intranet Extension.

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**Tip** – Even though some of the software installation packages are in directories named `Solaris2_5` or `Sol_2.5.1+`, the software will run on Solaris 2.6.

---

## Platform-Specific Information

The Solaris Server Intranet Extension CD-ROM contains software products for both the SPARC and x86 platforms. Except for Solstice AdminSuite™, Solstice AutoClient™ and Java™ IDL, the products have separate directories, named `sparc` or `x86`, `i86`, or `i386`. You need to install the software packages from the appropriate directory for your platform.

To install Solstice AdminSuite and Solstice AutoClient, you use a script that defaults to installing the software for the native platform. However, the script also allows you to install non-native binaries. For example, you can install the i386 binaries on a SPARC NFS server.

Java IDL does not have separate versions of its software for the SPARC and x86 platforms. The software package for this product runs on both platforms.

## ▼ Viewing and Printing Online Documentation

You should be aware of installation and usage requirements for the product you are installing, including:

- User ID of the installer (some products require root user ID; others require sysadmin group user ID)
- Disk space required
- Memory required
- Start-up requirements (some products start by rebooting; others are invoked)

View, print, and carefully read the installation instructions for each individual product before you install the product. The following product-specific chapters provide *brief* instructions for performing a default installation of each product. For *complete* installation and usage information, read the online documentation for each product and this document.

1. **To access online documentation for a product, insert the Solaris Server Intranet Extension CD into your CD-ROM drive, start your web browser, and point your browser to this web page:**

```
file://localhost/cdrom/cdrom0/1README.html
```

If you are using HotJava™, you will see this.



---

**Tip** – Scroll down or enlarge the screen to see all the product names.

---

2. Click the product name link.
3. Click the appropriate link for product manuals.

---

**Note** – Because the installation instructions for most products were written for standalone installation (not as part of the Solaris Server Intranet Extension), make sure you replace the directory given in the online product installation instructions with the correct directory on the Solaris Server Intranet Extension CD given in this document.

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# Licensing

For licensing information, see the *Solaris Server Intranet Extension 1.0 Licensing Guide* and the product chapters in this document.

## Java IDL 1.1 Installation

---

Java IDL is Sun's 100% Pure Java™ Object Request Broker (ORB) system, which provides the software foundation needed to deliver enterprise client/server applications for the Internet. Applications that use Java IDL seamlessly integrate with non-Java programs and programs from other vendors.

### Installation or Usage Information

- To run Java IDL, you need Java Development Kit 1.0.2 or higher.
- To run Java IDL applets, you need either HotJava 1.0 or higher or Netscape™ Navigator™ 3.0.

### Package Names, Default Directory Names, Disk and Memory Requirements

The following table lists the package name, default directory names, and disk and memory requirements for Java IDL 1.1. Note that disk space requirements are *approximate* and vary according to your own system configuration. You also need to allocate disk space for running the product.

---

Product	Packages Available	Default Directories	Disk Space, Memory, Other Requirements
Java IDL 1.1	SUNWOrun	/opt /var	898 KB disk space

---

## Online Product Documentation

The following table lists the product manuals available online.

Manuals Shipped on CD	Path on CD-ROM	pp.	HTML File Name
<i>Java IDL 1.1 README</i>	JavaIDL_1.1/Sol_2.5.1+/common/ Docs/ JavaIDLruntime1.1_README.ps	2	JavaIDL_1.1/Sol_2.5.1+/ common/Docs/ JavaIDLruntime1.1 _README.html
<i>Java IDL Manual Installation Guide</i>	JavaIDL_1.1/Sol_2.5.1+/common/ Docs/JavaIDLruntime 1.1_install.ps	5	JavaIDL_1.1/Sol_2.5.1+/ common/Docs/ JavaIDLruntime1.1_ install.html

---

## Installing Java IDL from the Command Line (pkgadd)

If you want to install Java IDL after you have already installed the Solaris operating system, you need to install the product from the UNIX command line, using `pkgadd`.

### ▼ How to Install Java IDL from the Command Line (pkgadd)

1. Insert the Solaris Server Intranet Extension CD in your drive.
2. If you are using the Common Desktop Environment (CDE), open a terminal or console window. If you are using OpenWindows, open a command tool or shell tool window.
3. Become root by typing `su` at the prompt:

```
%su  
Password:
```

**4. Type your password and press Return. The root prompt (#) appears:**

```
#
```

**5. Change to the directory of the CD drive by typing `cd /cdrom/cdrom0`:**

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

**6. List the contents of the CD by typing the `ls` command:**

```
# ls
1README.html                Solstice_Internet_Mail_Server
AdminSuite_2.3+AutoClient_2.1 Sun_WebServer_1.0
Backup_4.2.6                 Totalnet_Advanced_Server
Copyright                    autorun
DiskSuite_4.1                autorun.inf
JavaIDL_1.1                  html
PPP_3.0.1                    nfsc
Skip_1.1.1
```

**7. Change to the Java IDL directory by typing `cd JavaIDL_1.1`:**

```
# cd JavaIDL_1.1
```

**8. List the contents of the product directory by typing the `ls` command:**

```
# ls
Sol_2.5.1+
```

**9. Change to the `Sol_2.5.1+` directory:**

```
# cd Sol_2.5.1+
```

**10. List the contents of the `Sol_2.5.1+` directory:**

```
# ls
common
```

**11. Change to the `common` directory:**

```
# cd common
```

**12. List the contents of the `common` directory:**

```
# ls
Docs      Product
```

**13. Change to the `Product` directory:**

```
# cd Product
```

**14. List the contents of the `Product` directory:**

```
# ls
SUNWOirun
```

**15. Install the software package from this directory. The following command transfers the contents of the software installation packages from the current directory (designated by `'pwd'`) to the system:**

```
# pkgadd -d 'pwd'
```

The following message appears:

```
The following packages are available:
 1 SUNWOirun      JavaIDL Runtime
                        (all) 1.2
Select package(s) you wish to process (or 'all' to process
all packages). (default: all) [?,??,q]:
```

**16. To select a specific package, type the corresponding number and press Return. To select *all* packages, press Return.**

For help, type a question mark (?) and press Return. For help on Help, type two question marks (??) and press Return. To quit the installation script, type `q` and press Return.

**17. Follow the online directions.**

During the `pkgadd` process, messages are displayed on your screen. You may be prompted to answer questions or provide other information needed for the installation. If you are not sure how to answer these questions, refer to the online documentation.

In general, the online documentation for each individual product has information on starting the product once it is installed. Some products are started after rebooting the system; some are invoked with usage commands.



## Solaris Data Backup Utility 4.2.6 Installation

---

Solaris Data Backup Utility 4.2.6 is the single-server version of Solstice Backup™, a family of products. It provides a tightly integrated backup and storage management solution for distributed enterprise environments.

Solaris Data Backup Utility is also known as Legato Networker and Solstice Single Server Data Backup Utility.

Online documentation includes manuals written for Solaris Data Backup Utility as well as its family of products, Solstice Backup.

---

**Note** – You must remove previous versions of Backup or Networker.

---

### Compatibility

Solaris Data Backup Utility supports non-automated backup devices (single devices) in 4mm, 8mm, and 1/4" formats.

### Installation or Usage Information

To get information on the other Solstice Data Backup products, see the following web site:

`http://www.sun.com/solstice/em-products/system/  
prod\_brief\_backup.html`

## Package Names, Default Directory Names, Disk and Memory Requirements

The following table lists the package names, default directory names, and disk and memory requirements for Solaris Data Backup Utility. Note that disk space requirements are *approximate* and vary according to your own system configuration. You will also need to allocate disk space for running the product.

Product	Packages Available	Default Directories	Disk Space, Memory, Other Requirements
Solaris Data Backup Utility 4.2.6	SUNWsbuc SUNWsbum SUNWsbu1 SUNWsbu2	prompts for default directory	64 MB disk space

## Online Product Documentation

The following table lists the product manuals available online.

Manuals Shipped on CD	Path on CD-ROM	pp.	HTML File Name
<i>Solaris Data Backup Utility Installation and Product Notes</i>	Backup_4.2.6/Manuals/ PostScript/ReleaseNotes.ps	33	Backup_4.2.6/ Manuals/html/ index.html
<i>Solstice Backup 4.2.6 Quick Installation Guide</i>	Backup_4.2.6/Manuals/ PostScript/ReleaseNotes.ps	33	
<i>Solstice Backup 4.2.6 Administration Update</i>	Backup_4.2.6/Manuals/ PostScript/qstart.ps	45	
<i>Solstice Backup 4.2 Installation and Maintenance Guide</i>	Backup_4.2.6/Manuals/ PostScript/update.ps	87	
<i>Solstice Backup 4.2 Administration Guide</i>	Backup_4.2.6/Manuals/ PostScript/admin.ps	190	
<i>Solstice Backup 4.2 User's Guide</i>	Backup_4.2.6/Manuals/ PostScript/users.ps	312	

## Online Installation Documentation

For detailed installation instructions, see the following online documents:

- *Solaris Data Backup Utility Installation and Product Notes*

This online document describes how to install the Solaris Data Backup Utility (SDBU), a subset of the Solstice Data Backup Utility. Follow the instructions in the document, but note these exceptions.

---

Replace this	With this
<code>/cdrom/cdrom0/products/backup/sbu/ Image</code>	<code>/cdrom/cdrom0/Backup_4.2.6</code>
<code>/cdrom/cdrom0/sbu_4_2</code>	<code>/cdrom/cdrom0/Backup_4.2.6</code>

---

- *Solstice Backup 4.2 Installation and Maintenance Guide*

This online document explains how to install Backup's network storage management system on a UNIX server and UNIX clients. Follow the instructions in the document, but note this exception.

---

Replace this	With this
<code>/cdrom/sbu_4_2</code>	<code>/cdrom/cdrom0/Backup_4.2.6</code>

---

- *Solstice Backup 4.2.6 Quick Installation Guide*

This online document explains the evaluation period of the product and the features new to 4.2.6. It also helps you to perform a basic installation.

---

## Installing Backup from the Command Line (pkgadd)

If you want to install Backup after you have already installed the Solaris operating system, you need to install the product from the UNIX command line, using `pkgadd`.

### ▼ How to Install Backup from the Command Line (pkgadd)

1. Insert the Solaris Server Intranet Extension CD in your drive.
2. If you are using the Common Desktop Environment (CDE), open a terminal or console window. If you are using OpenWindows, open a command tool or shell tool window.
3. Become root by typing `su` at the prompt:

```
% su
Password:
```

4. Type your password and press Return. The root prompt (`#`) appears:

```
#
```

5. Change to the directory of the CD drive by typing `cd /cdrom/cdrom0`:

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

**6. List the contents of the CD by typing the `ls` command:**

```
# ls
lREADME.html                Solstice_Internet_Mail_Server
AdminSuite_2.3+AutoClient_2.1 Sun_WebServer_1.0
Backup_4.2.6                 Totalnet_Advanced_Server
Copyright                   autorun
DiskSuite_4.1               autorun.inf
JavaIDL_1.1                 html
PPP_3.0.1                   nfsc
Skip_1.1.1
```

**7. Change to the Backup\_4.2.6 directory by typing `cd Backup_4.2.6`:**

```
# cd Backup_4.2.6
```

**8. List the contents of the product directory by typing the `ls` command:**

```
# ls
Copyright      Manuals      SunOS
Copyright.fr   Solaris     silo_support
```

**9. Locate the directory for your platform, for example, `Solaris`.**

**10. Change to the Solaris directory:**

```
# cd Solaris
```

**11. List the contents of the Solaris directory:**

```
# ls
ppc      sparc  x86
```

**12. Change to the directory for your platform. For example, if you are running Solaris from a SPARC station, type `cd sparc`. If you are running Solaris from an x86 machine, type `cd x86`. This example shows a SPARC installation:**

```
# cd sparc
```

13. Verify that the software installation packages are in the directory by listing the contents of the directory with the `ls` command, for example:

```
# ls
SUNWsbuc  SUNWsbum  SUNWsbus1  SUNWsbus2
```

14. Install the software packages from this directory. The following command transfers the contents of the software installation packages from the current directory (designated by `'pwd'`) to the system:

```
# pkgadd -d 'pwd'
```

The following message appears:

```
The following packages are available:
1  SUNWsbuc      Solstice Backup (Backup/Recover) Client
   (sparc) 4.2.6.a
2  SUNWsbum      Solstice Backup (Backup/Recover) Man
   (sparc) 4.2.6.a
3  SUNWsbus1     Solstice Backup (Backup/Recover) Server
   (sparc) 4.2.6.a
4  SUNWsbus2     Solstice Backup (Backup/Recover) Device Drivers
   (sparc) 4.2.6.a
Select package(s) you wish to process (or 'all' to process
all packages). (default: all) [?,??,q]:
```

15. To select a specific package, type the corresponding number and press Return. To select *all* packages, press Return.

For help, type a question mark (?) and press Return. For help on Help, type two question marks (??) and press Return. To quit the installation script, type `q` and press Return.

16. Follow the online directions.

During the `pkgadd` process, messages are displayed on your screen. You may be prompted to answer questions or provide other information needed for the installation. If you are not sure how to answer these questions, refer to the online documentation.

In general, the online documentation for each product has information on starting the product once it is installed. Some products are started after rebooting the system; some are invoked with usage commands.

## Solstice AdminSuite 2.3 Installation

---

Solstice AdminSuite is a unified suite of tools for administering distributed systems and managing such functions as user accounts, hosts, groups, administrative data, printers, file systems, disks, and serial ports.

Solstice AdminSuite and Solstice AutoClient are installed at the same time.

---

**Note** – You must remove previous version of Solstice AdminSuite before installing the product.

---

### Solstice AdminSuite Interaction with Solstice PPP

Using Solstice AdminSuite after installing Solstice PPP 3.0.1 might cause an error in some cases. For more information on using Solstice AdminSuite and Solstice PPP, see Chapter 9, “Solstice PPP 3.0.1 Installation.”

### Y2000 Patches

Solstice AdminSuite requires a software patch to be year 2000 compliant (Y2000). The following patches correct the Y2000 problem by setting the password expiration in the User Account Manager, a user interface tool in Solstice AdminSuite.

- **SPARC platform:** AdminSuite\_2.3+AutoClient\_2.1/Patches/sparc/104468-06

For instructions on installing the patch, see the files README.104468-06 and Install.info in the 10446806 directory.

- **i386 platform:** AdminSuite\_2.3+AutoClient\_2.1/Patches/i386/104469-06

For instructions on installing the patch, see the files `README.104469-06` and `Install.info`.

## Installation or Usage Information

The email address for documentation comments in the *Solstice AdminSuite 2.3 Installation and Product Notes* is no longer valid.

## Package Names, Default Directory Names, Disk and Memory Requirements

The following table lists the package names, default directory names, and disk and memory requirements for Solstice AdminSuite and AutoClient. Note that disk space requirements are *approximate* and vary according to your own system configuration. You will also need to allocate disk space for running the product.

Product	Packages Available	Default Directories	Disk Space, Memory, Other Requirements
Solstice AdminSuite 2.3 and Solstice AutoClient 2.1 (installed together)	SUNWsadm SUNWsadm SUNWsacb SUNWsaco SUNWadms SUNWsadm SUNWsadm SUNWspapp SUNWsadm SUNWsacd SUNWsadmp	/opt	AdminSuite: 35 MB plus 15 MB disk space for each architecture (SPARC and x86). 32 MB of memory recommended.  AutoClient: 20 to 25 MB disk space per client recommended and 32 MB memory recommended.

## Online Product Documentation

The following table lists the product manuals available online.

Manuals Shipped on CD	Path on CD-ROM	pp.	HTML File Name
<i>Solstice AdminSuite 2.3 Administration Guide</i>	AdminSuite_2.3+AutoClient_2.1/ Manuals/postscript/Sol_AS2.3_ Admin_Guide.ps	344	AdminSuite_2.3+ AutoClient_2.1/ Manuals/html/ docs.html
<i>Solstice AdminSuite Print Administration Guide</i>	AdminSuite_2.3+AutoClient_2.1/ Manuals/postscript/ Sol_ASPrint_ Admin_Guide.ps	72	
<i>Solstice AdminSuite 2.3 Installation and Product Notes</i>	AdminSuite_2.3+AutoClient_2.1/ Manuals/postscript/Sol_AS2.3_ Install.ps	78	
<i>Solstice AdminSuite Domain-Based License Installation Notes</i>	AdminSuite_2.3+AutoClient_2.1/ Manuals/postscript/ ScholarPASS.ps	14	

## Online Installation Documentation

For detailed information about installing Solstice AdminSuite, see the online document, *Solstice AdminSuite 2.3 Installation and Product Notes*. Follow the instructions in the document, but note these exceptions.

Replace this	With this
/cdrom/cdrom0	/cdrom/cdrom0/ AdminSuite_2.3+AutoClient_2.1
/cdrom/ solstice_sysmgt_2_3	/cdrom/cdrom0/ AdminSuite_2.3+AutoClient_2.1

---

## Installing Solstice AdminSuite from the Command Line (`admin_install`)

If you want to install Solstice AdminSuite after you have already installed the Solaris operating system, you need to install the product from the UNIX command line, using `admin_install`.

### ▼ How to Install Solstice AdminSuite from the Command Line (`admin_install`)

To install the product, you must be either be root or a non-root member of the `sysadmin` group. Additionally, you can set up remote systems only as a non-root user of the `sysadmin` group on each of the remote systems.

1. **Insert the Solaris Server Intranet Extension CD in your drive.**
2. **If you are using the Common Desktop Environment (CDE), open a terminal or console window. If you are using OpenWindows, open a command tool or shell tool window.**
3. **Become root by typing `su` at the prompt:**

```
% su
Password:
```

4. **Type your password and press Return. The root prompt (`#`) appears:**

```
#
```

5. **Change to the directory of the CD drive by typing `cd /cdrom/cdrom0`:**

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

**6. List the contents of the CD by typing the `ls` command:**

```
# ls
1README.html                Solstice_Internet_Mail_Server
AdminSuite_2.3+AutoClient_2.1 Sun_WebServer_1.0
Backup_4.2.6                 Totalnet_Advanced_Server
Copyright                    autorun
DiskSuite_4.1                autorun.inf
JavaIDL_1.1                  html
PPP_3.0.1                    nfsc
Skip_1.1.1
```

**7. Change to the AdminSuite directory by typing `cd AdminSuite_2.3+AutoClient_2.1`, for example:**

```
# cd AdminSuite_2.3+AutoClient_2.1
```

**8. List the contents of the product directory by typing the `ls` command:**

```
# ls
4.x           Examples    README      lic_install
Copyright    License_forms Solaris      rm_admin
Demo         Manuals     admin_install
```

**9. Install the software packages from this directory by invoking the installation script, `admin_install`, from the current directory designated by a period (.):**

```
# ./admin_install
```

---

**Note** – The `admin_install` script defaults to installing the software for the platform from which you are installing (SPARC or x86); however, it also allows you to install non-native binaries. For example, you can install the i386 binaries on a SPARC NFS server.

---

The following message appears:

```
Welcome to the Solstice AdminSuite Installation Program ...

To exit the installation process at any time, type 0 and press the
Return key.
  1. Install AdminSuite 2.3 and AutoClient 2.1
  2. Install SunSoft Print Client (Solaris 2.3 - 2.5.1 only)
  3. Install Software Usage Monitoring Toolkit
  4. Set up systems to use AdminSuite and AutoClient
  5. Installation Help
Enter the number for one or more choices, separated by a space, and
then press the Return key.
[default: 1]>>>
```

#### 10. Follow the online directions.

During the `admin_install` process, messages are displayed on your screen. You may be prompted to answer questions or provide other information needed for the installation. If you are not sure how to answer these questions, refer to the online documentation.

In general, the online documentation for the each product has information on starting the product once it is installed. Some products are started after rebooting the system; some are invoked with usage commands.

## Solstice AutoClient 2.1 Installation

---

Solstice AutoClient is a desktop management application that centralizes administration, makes the desktop a field replaceable unit (FRU), eliminates software installation on desktops, and eliminates desktop backups.

Solstice AdminSuite and Solstice AutoClient are installed at the same time.

---

**Note** – You must remove previous versions of Solstice AutoClient before installing the product.

---

### License Information

You are licensed to use Solstice AutoClient for up to 500 clients as indicated in the actual printed license in your media pack. The *Solaris Server Intranet Extension 1.0 Licensing Guide*, part number 805-1623, contains incorrect information that you are licensed for a single client.

### Installation or Usage Information

The email address for documentation comments in the *Solstice AutoClient 2.1 Installation and Product Notes* is no longer valid.

## Package Names, Default Directory Names, Disk and Memory Requirements

The following table lists the package names, default directory names, and disk and memory requirements for Solstice AdminSuite and AutoClient. Note that disk space requirements are *approximate* and vary according to your own system configuration. You also need to allocate disk space for running the product.

Product	Packages Available	Default Directories	Disk Space, Memory, Other Requirements
Solstice AdminSuite 2.3 and Solstice AutoClient 2.1 (installed together)	SUNWsadm	/opt	AdminSuite: 35 MB plus 15 MB disk space for each architecture (SPARC and x86). 32 MB of memory recommended.  AutoClient: 20 to 25 MB disk space per client recommended and 32 MB memory recommended.
	SUNWsadm		
	SUNWsadb		
	SUNWsaco		
	SUNWadmsm		
	SUNWsadmm		
	SUNWsadma		
	SUNWspapp		
	SUNWsadb		
	SUNWsacd		
SUNWsadmp			

## Online Product Documentation

The following table lists the product manuals available online

Manuals Shipped on CD	Path on CD-ROM	pp.	HTML File Name
<i>Solstice AutoClient 2.1 Administration Guide</i>	AdminSuite_2.3+AutoClient_2.1/ Manuals/postscript/ Sol_AC2.1_Admin_Guide.ps	172	AdminSuite_2.3+ AutoClient_2.1/ Manuals/ html/docs.html
<i>Solstice AutoClient 2.1 Installation and Product Notes</i>	AdminSuite_2.3+AutoClient_2.1/ Manuals/postscript/ Sol_AC2.1_Install.ps	76	

## Online Installation Documentation

For detailed information about installing Solstice AutoClient, see the online document, *Solstice AutoClient 2.1 Installation and Product Notes*. Follow the instructions in the document, but note these exceptions.

Replace this	With this
/cdrom/cdrom0	/cdrom/cdrom0/ AdminSuite_2.3+AutoClient_2.1
/cdrom/solstice_sysmgt_2_3	/cdrom/cdrom0/ AdminSuite_2.3+AutoClient_2.1

---

## Installing Solstice AutoClient from the Command Line (`admin_install`)

If you want to install Solstice AutoClient after you have already installed the Solaris operating system, you need to install the product from the Unix command line, using `admin_install`.

### ▼ How to Install Solstice AutoClient from the Command Line (`admin_install`)

To install the product, you must be either be root or a non-root member of the `sysadmin` group. Additionally, you can set up remote systems only as a non-root user of the `sysadmin` group on each of the remote systems.

1. **Insert the Solaris Server Intranet Extension CD in your drive.**
2. **If you are using the Common Desktop Environment (CDE), open a terminal or console window. If you are using OpenWindows, open a command tool or shell tool window.**
3. **Become root by typing `su` at the prompt:**

```
% su
Password:
```

4. **Type your password and press Return. The root prompt (`#`) appears:**

```
#
```

5. **Change to the directory of the CD drive by typing `cd /cdrom/cdrom0`:**

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

**6. List the contents of the CD by typing the `ls` command:**

```
# ls
1README.html                Solstice_Internet_Mail_Server
AdminSuite_2.3+AutoClient_2.1 Sun_WebServer_1.0
Backup_4.2.6                 Totalnet_Advanced_Server
Copyright                    autorun
DiskSuite_4.1               autorun.inf
JavaIDL_1.1                 html
PPP_3.0.1                   nfsc
Skip_1.1.1
```

**7. Change to the AutoClient directory by typing `cd` AdminSuite\_2.3+AutoClient\_2.1, for example:**

```
# cd AdminSuite_2.3+AutoClient_2.1
```

**8. List the contents of the product directory by typing the `ls` command:**

```
# ls
4.x           Examples    README      lic_install
Copyright     License_forms Solaris      rm_admin
Demo          Manuals     admin_install
```

**9. Install the software packages from this directory by invoking the installation script, `admin_install`, from the current directory designated by a period (.):**

```
# ./admin_install
```

---

**Note** – The `admin_install` script defaults to installing the software for the platform from which you are installing (SPARC or x86); however, it also allows you to install non-native binaries. For example, you can install the i386 binaries on a SPARC NFS server.

---

The following message appears:

```
Welcome to the Solstice AdminSuite Installation Program ...

To exit the installation process at any time, type 0 and press the
Return key.
  1. Install AdminSuite 2.3 and AutoClient 2.1
  2. Install SunSoft Print Client (Solaris 2.3 - 2.5.1 only)
  3. Install Software Usage Monitoring Toolkit
  4. Set up systems to use AdminSuite and AutoClient
  5. Installation Help
Enter the number for one or more choices, separated by a space, and
then press the Return key.
[default: 1]>>>
```

#### 10. Follow the online directions.

During the `admin_install` process, messages are displayed on your screen. You may be prompted to answer questions or provide other information needed for the installation. If you are not sure how to answer these questions, refer to the online documentation.

In general, the online documentation for the each product has information on starting the product once it is installed. Some products are started after rebooting the system; some are invoked with usage commands.

## Solstice DiskSuite 4.1 Installation

---

Solstice DiskSuite™ is a volume management solution designed to meet the demands of mission-critical business applications.



---

**Caution** – If you have installed or intend to install Solstice AdminSuite 2.3 (also included in the Solaris Server Intranet Extension), do not install the following packages included with DiskSuite: SUNWadmsm, SUNWadmc, SUNWadmo, SUNWadm5u, SUNWadm5r, and SUNWsadm1). These packages are versions shipped with AdminSuite 2.2 and are not compatible with AdminSuite 2.3.

---

### DiskSuite Bug

#### *Solstice DiskSuite 4.1: Changes `/etc` mode to 775 from 755 4057456*

For security reasons, Solaris 2.6 changes the permission mode on the directory `/etc` from 0775 (read, write, and execute by owner and group; read and execute by others) to 0755 (read, write, and execute by owner; read and execute by group and others). Installing Solstice DiskSuite 4.1 changes the mode on `/etc` back to 0775. This occurs regardless of whether you use Solaris WebStart, `pkgadd`, or AdminTool to install the product.

If you use `pkgadd` or AdminTool to install DiskSuite 4.1, the following message appears:

```
-----  
The following files are already installed on the system and are being  
used by another package:  
/etc <attribute change only>  
  
Do you want to install these conflicting files [y,n,?,q]  
-----
```

Answering either `y` or `n` changes the permission mode on `/etc` to `0775`.

**Workaround:** After installing DiskSuite 4.1, change the permission mode on `/etc` back to `0755`. As root, enter this command:

```
# chmod 755 /etc
```

## Installation or Usage Information

If you have Online: DiskSuite 2.0.1 or 3.0, you need to convert to DiskSuite 4.1. For instructions, see the online document, *Solstice DiskSuite 4.1 Installation and Product Notes*.

## Package Names, Default Directory Names, Disk and Memory Requirements

The following table lists the package names, default directory names, and disk and memory requirements for Solstice DiskSuite. Note that disk space requirements are *approximate* and vary according to your own system configuration. You also need to allocate disk space for running the product.

Product	Packages Available	Default Directories	Disk Space, Memory, Other Requirements
Solstice DiskSuite 4.1	SUNWmd SUNWmdg SUNWmdn SUNWadm <sup>s</sup> SUNW <sup>s</sup> adm <sup>c</sup> SunW <sup>s</sup> adm <sup>o</sup> SUNWadm5 <sup>r</sup> SUNWadm5 <sup>u</sup> SUNW <sup>s</sup> adm1 <sup>*</sup>	/opt /usr	20 MB disk space with at least two drives  *Do <i>not</i> install these packages if you install Solstice AdminSuite 2.3.

## Online Product Documentation

The following table lists the product manuals available online

Manuals Shipped on CD	Path on CD-ROM	pp.	HTML File Name
<i>Solstice DiskSuite 4.1 User's Guide</i>	DiskSuite_4.1/Manuals/ postscript/sds4.1.ps	429	DiskSuite_4.1/ Manuals/html/ docs.html
<i>Solstice DiskSuite 4.1 Reference</i>	DiskSuite_4.1/Manuals/ postscript/sds4.1_ref.ps	247	
<i>Solstice DiskSuite 4.1 Installation and Product Notes</i>	DiskSuite_4.1/Manuals/ postscript/sds4.1_install.ps	45	

## Online Installation Documentation

For detailed installation instructions, see the online document, *Solstice DiskSuite 4.1 Installation and Product Notes*. Follow the instructions in the document, but note this exception.

Replace this	With this
/cdrom/cdrom0	cdrom/cdrom0/DiskSuite_4.1

---

## Installing Solstice DiskSuite from the Command Line (pkgadd)

If you want to install Solstice DiskSuite after you have already installed the Solaris operating system, you need to install the product from the UNIX command line, using `pkgadd`.

### ▼ How to Install Solstice DiskSuite from the Command Line (pkgadd)

1. Insert the Solaris Server Intranet Extension CD in your drive.
2. If you are using the Common Desktop Environment (CDE), open a terminal or console window. If you are using OpenWindows, open a command tool or shell tool window.
3. Become root by typing `su` at the prompt:

```
% su
Password:
```

4. Type your password and press Return. The root prompt (`#`) appears:

```
#
```

5. Change to the directory of the CD drive by typing `cd /cdrom/cdrom0`:

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

**6. List the contents of the CD by typing the `ls` command:**

```
# ls
lREADME.html                Solstice_Internet_Mail_Server
AdminSuite_2.3+AutoClient_2.1 Sun_WebServer_1.0
Backup_4.2.6                Totalnet_Advanced_Server
Copyright                   autorun
DiskSuite_4.1               autorun.inf
JavaIDL_1.1                 html
PPP_3.0.1                   nfsc
Skip_1.1.1
```

**7. Change to the `DiskSuite_4.1` directory by typing `cd DiskSuite_4.1`:**

```
# cd DiskSuite_4.1
```

**8. List the contents of the product directory by typing the `ls` command:**

```
# ls
Manuals          copyright          i386          scripts
README          copyright.francais run_demo      sparc
```

**9. Locate the directory for your platform and change to that directory. For example, if you are running Solaris on a SPARC station, change to the `sparc` directory. If you are running Solaris on an x86 machine, change to the `i386` directory. This example shows a SPARC installation.**

```
# cd sparc
```

**10. Verify that the software installation packages are in the directory by listing the contents of the directory with the `ls` command, for example:**

```
# ls
SUNWadm5r  SUNWadmsm  SUNWmdg  SUNWsadm  SUNWsdmo
SUNWadm5u  SUNWmd     SUNWmdn  SUNWsdml  patches
```

## 11. Choose the appropriate packages.

In addition to the DiskSuite packages, you can install the packages for Solstice AdminSuite Storage Manager, a graphical tool for administering file systems and disks.

If AdminSuite 2.2 or a later version is already installed on your system, do not install any of the AdminSuite packages included with DiskSuite.

You must install packages in the order shown in Table 6-1 for the software to function correctly.

**TABLE 6-1** Choosing DiskSuite Packages

<b>Package</b>	<b>Contains ...</b>	<b>Required or Optional</b>
SUNWadm5u SUNWadm5r	Additional support for AdminSuite 2.2 and Solaris 2.4	Required for AdminSuite 2.2 Storage Manager. If you installed AdminSuite 2.3 or intend to install AdminSuite 2.3, do not install these packages.
SUNWsadmc SUNWsadmo SUNWsadml SUNWadmsm	Support for AdminSuite 2.2 and Storage Manager	Required for AdminSuite 2.2 Storage Manager. If you installed AdminSuite 2.3 or intend to install AdminSuite 2.3, do not install these packages.
SUNWmd	The base DiskSuite product	Required
SUNWmdg	DiskSuite Tool graphical user interface	Optional, but recommended
SUNWmdn	DiskSuite SNMP log daemon	Optional

12. Install the software packages from the product package directory. The following command transfers the contents of the software installation packages from the current directory (designated by 'pwd') to the system:

```
# pkgadd -d 'pwd'
```

The following message appears:

```
The following packages are available:
 1 SUNWadm5r      Solstice AdminSuite root supplement for Solaris 2.3 and 2.4
                   (sparc) 6.5,REV=95.10.26.00.11
 2 SUNWadm5u      Solstice AdminSuite supplement for Solaris 2.3 and 2.4
                   (sparc) 6.5,REV=95.10.26.00.11
 3 SUNWadmsm      Solstice AdminSuite Storage Manager Application
                   (sparc) 6.5,REV=96.04.18.16.52
 4 SUNWmd         Solstice DiskSuite
                   (sparc) 4.1-FCS,REV=6.0
 5 SUNWmdg        Solstice DiskSuite Tool
                   (sparc) 4.1-FCS,REV=6.0
 6 SUNWmdn        Solstice DiskSuite Log Daemon
                   (sparc) 4.1-FCS,REV=6.0
 7 SUNWsadm       Solstice AdminSuite Core Methods
                   (sparc) 6.5,REV=96.04.18.16.51
 8 SUNWsdm        Solstice Admintool Launcher.
                   (sparc) 6.5,REV=95.10.26.23.04
 9 SUNWsdmo       Solstice AdminSuite Object Libraries
                   (sparc) 6.5,REV=96.04.18.16.51

Select package(s) you wish to process (or 'all' to process
all packages). (default: all) [?,??,q]:
```

13. To select a specific package, type the corresponding number and press Return. To select *all* packages, press Return.

---

**Note** – If you intend to install or installed Solstice AdminSuite 2.3, do not install SUNWadmsm, SUNWadm5r, SUNWadm5u, SUNWadm5r, and SUNWsdm1.

---

For help, type a question mark (?) and press Return. For help on Help, type two question marks (??) and press Return. To quit the installation script, type q and press Return.

14. Follow the online directions.

During the pkgadd process, messages are displayed on your screen. You may be prompted to answer questions or provide other information needed for the installation. If you are not sure how to answer these questions, refer to the online documentation.

In general online documentation for each product has information on starting the product once it is installed. Some products are started after rebooting the system; some are invoked with usage commands.

## Solstice Internet Mail Server 2.0 Installation

---

Solstice™ Internet Mail Server™ is an advanced mail solution for Solaris workgroups that provides open, Internet mail, based on standards such as IMAP4, POP3, SMTP, and MIME. Solstice Internet Mail Server supports disconnected computing for mobile or remote users.

---

**Note** – You must remove previous versions of Solstice Internet Mail Server packages, SUNWimap and SUNWipop.

---

### Package Names, Default Directory Names, Disk and Memory Requirements

The following table lists the package names, default directory names, and disk and memory requirements for Solstice Internet Mail Server. Note that disk space requirements are *approximate* and vary according to your own system configuration. You will also need to allocate disk space for running the product.

---

Product	Packages Available	Default Directories	Disk Space, Memory, Other Requirements
Solstice Internet Mail Server 2.0	SUNWimap SUNWipop	/opt /usr	3.5 MB disk space

---

## Online Product Documentation

The following table lists the product manuals available online.

Manuals Shipped on CD	Path on CD-ROM	pp.	HTML File Name
<i>Solstice Internet Mail 2.0 Release Notes</i>	Solstice_Internet_Mail_Server/ docs/SIMS2_release_notes.ps	8	N/A
<i>Solstice Internet Mail 2.0 Installation and Configuration Guide</i>	Solstice_Internet_Mail_Server/ docs/SIMS.ps	28	

## Online Installation Documentation

For detailed installation instructions, see the online document, *Solstice Internet Mail 2.0 Installation and Configuration Guide*. Follow the instructions in the document, but note this exception.

Replace this	With this
/cdrom/ solstice_internet_mail_2_0	cdrom/cdrom0/ Solstice_Internet_Mail_Server

---

## Installing Solstice Internet Mail Server (SIMS) from the Command Line (pkgadd)

If you want to install SIMS after you have already installed the Solaris operating system, you need to install the product from the UNIX command line, using `pkgadd`.

### ▼ How to Install SIMS from the Command Line (pkgadd)

1. Insert the Solaris Server Intranet Extension CD in your drive.
2. If you are using the Common Desktop Environment (CDE), open a terminal or console window. If you are using OpenWindows, open a command tool or shell tool window.
3. Become root by typing `su` at the prompt:

```
% su
Password:
```

4. Type your password and press Return. The root prompt (`#`) appears:

```
#
```

5. Change to the directory of the CD drive by typing `cd /cdrom/cdrom0`:

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

**6. List the contents of the CD by typing the `ls` command:**

```
# ls
1README.html                Solstice_Internet_Mail_Server
AdminSuite_2.3+AutoClient_2.1 Sun_WebServer_1.0
Backup_4.2.6                Totalnet_Advanced_Server
Copyright                   autorun
DiskSuite_4.1              autorun.inf
JavaIDL_1.1                 html
PPP_3.0.1                   nfsc
Skip_1.1.1
```

**7. Change to the SIMS directory by typing `cd Solstice_Internet_Mail_Server`:**

```
# cd Solstice_Internet_Mail_Server
```

**8. List the contents of the product directory by typing the `ls` command:**

```
# ls
docs    server
```

**9. Change to the `server` directory:**

```
# cd server
```

**10. List the contents of the `server` directory:**

```
# ls
i386    sparc
```

**11. Change to the directory for your platform. For example, if you are running Solaris from a SPARC station, type `cd sparc`. If you are running Solaris from an x86 machine, type `cd i386`. This example shows a SPARC installation:**

```
# cd sparc
```

12. Verify that the software installation packages are in the directory by listing the contents of the directory with the `ls` command:

```
# ls
SUNWimap SUNWipop
```

13. Install the software packages from this directory. The following command transfers the contents of the software installation packages from the current directory (designated by `'pwd'`) to the system:

```
# pkgadd -d 'pwd'
```

The following message appears:

```
The following packages are available:
 1 SUNWimap      Solstice Internet Mail IMAP4 Server
                   (sparc) 2.0
 2 SUNWipop      Solstice Internet Mail POP3 Server (NL)
                   (sparc) 2.0
Select package(s) you wish to process (or 'all' to process
all packages). (default: all) [?,??,q]:
```

14. To select a specific package, type the corresponding number and press Return. To select *all* packages, press Return.

For help, type a question mark (?) and press Return. For help on Help, type two question marks (??) and press Return. To quit the installation script, type `q` and press Return.

15. Follow the online directions.

During the `pkgadd` process, messages are displayed on your screen. You may be prompted to answer questions or provide other information needed for the installation. If you are not sure how to answer these questions, refer to the online documentation.

In general the online documentation for each product has information on starting the product once it is installed. Some products are started after rebooting the system; some are invoked with usage commands.



---

## Solstice NFS Client 3.1 Installation

---

Solstice NFS Client is an affordable solution for Microsoft Windows 95 and Windows NT users, giving transparent access to files and data on UNIX and other TCP/IP networks. Solstice NFS Client has two parts:

- Solstice NFS Client is installed on a Windows 95 or Windows NT machine.
- PCNFSD, the authentication server daemon, is installed on a UNIX server in your network.

### Installation or Usage Information

Do not use Custom as the setup type during installation. Solstice NFS Client as part of the Solaris Server Intranet Extension does not include a license server.

### Package Names, Default Directory Names, Disk and Memory Requirements

The following table lists the disk and memory requirements for Solstice NFS Client. Note that disk space requirements are *approximate* and vary according to your own system configuration. You also need to allocate disk space for running the product.

---

Product	Packages Available	Default Directories	Disk Space, Memory, Other Requirements
Solstice NFS Client 3.1	SUNWpcnfd	/opt	16 MB memory for Windows 95 and Windows NT. 4 to 30 MB disk space. PC-CacheFS caching software requires 30 MB disk space.

---

## Online Product Documentation

The following table lists the product manuals available online

Manuals Shipped on CD	Path on CD-ROM	pp.	HTML File Name
<i>Solstice NFS Client Release Notes for Windows 95 and Windows NT 4.0</i>	<code>nfsc/docs/readmenfsc.txt</code>	6	
<i>Solstice NFS Client 3.1 Users Guide</i>	<code>nfsc/docs/nfsc1nt.ps</code>	152	<code>nfsc/docs/lite/nfs_1.htm</code>

## Online Installation Documentation

For detailed installation instructions, see the online document *NFS Client 3.1 User's Guide*. Follow the instructions in the document, but note the following exceptions:

- To install Solstice NFS Client, do not follow the installation instructions in Chapter 1 of the *Solstice NFS Client 3.1 User's Guide*. Instead follow the installation instructions in this chapter.
- The *Solstice Network Client Installation and Licensing Guide* is not included as part of the Solaris Server Intranet Extension.
- To install PCNFSD, the authentication server daemon for Unix servers, do not follow the instructions in Appendix B of the *Solstice NFS Client 3.1 User's Guide*. Instead follow the instructions in this chapter.

---

## Installing Solstice NFS Client

Solstice NFS Client has two parts:

- Solstice NFS Client is installed on a Windows 95 or Windows NT machine.
- PCNFSD, the authentication server daemon, is installed on a UNIX server in your network.

## ▼ How to Install Solstice NFS Client on a Windows 95 or Windows NT Workstation

1. **Insert the Solaris Server Intranet Extension CD in your Windows 95 or Windows NT CD-ROM drive.**

The `setup.exe` program runs automatically.

2. **Click the 'Install NFS Client' button.**
3. **Click Next to step through the installation screens, answering the questions.**
4. **Restart your computer.**

When you finish installing the software, restart your system to include the new configuration information. Restarting Microsoft Windows is not enough.

---

## Installing PCNFSD

PCNFSD daemon, `rpc.pcnfsd`, provides user authentication services that allow Solstice NFS Client to access files on any NFS server in the network. The daemon also provides PCNFSD-based printing. Using these services requires you to install `rpc.pfnfsd` on at least one server in your network. For more information about PCNFSD, see Appendix B of the online document, *Solstice NFS Client Users Guide*.

## ▼ How to Install PCNFSD

1. **Insert the Solaris Server Intranet Extension CD in your drive.**
2. **If you are using the Common Desktop Environment (CDE), open a terminal or console window. If you are using OpenWindows, open a command tool or shell tool window.**
3. **Become root by typing `su` at the prompt:**

```
% su
Password:
```

4. Type your password and press Return. The root prompt (#) appears:

```
#
```

5. Change to the directory of the CD drive by typing `cd /cdrom/cdrom0`:

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

6. List the contents of the CD by typing the `ls` command:

```
# ls
1README.html                Solstice_Internet_Mail_Server
AdminSuite_2.3+AutoClient_2.1 Sun_WebServer_1.0
Backup_4.2.6                Totalnet_Advanced_Server
Copyright                   autorun
DiskSuite_4.1              autorun.inf
JavaIDL_1.1                 html
PPP_3.0.1                   nfsc
Skip_1.1.1
```

7. Change to the Solstice NFS Client directory by typing `cd nfsc`:

```
# cd nfsc
```

8. List the contents of the `nfsc` directory by typing the `ls` command:

```
# ls
_inst16.ex_  _setup32.dll  filent.z      pktdrvrs      setup.pkg
_inst32i.ex_ _setup32.lib  i386          readme.txt    shared32.z
_isdel.exe   cache95.z    lpd95.z      setup.exe     shared95.z
_setup.dll   docs         ndis         setup.ini     sharednt.z
_setup.lib   file95.z    nfsd32.z     setup.ins     sparc
```

9. Change to the directory for your platform. For example, if you are running Solaris from a SPARC station, type `cd sparc`. If you are running Solaris from an x86 machine, type `cd i386`. This example shows a SPARC installation.

```
# cd sparc
```

10. Verify that the software installation packages are in the directory by listing the contents of the directory with the `ls` command, for example:

```
# ls
SUNWpcnfd
```

11. Install the software package from this directory. The following command transfers the contents of the software installation packages from the current directory (designated by `'pwd'`) to the system:

```
# pkgadd -d 'pwd'
```

The following message appears:

```
The following packages are available:
1 SUNWpcnfd PC-NFSpro Daemons
  (sparc) 1.1
Select package(s) you wish to process (or 'all' to process
all packages). (default: all) [?,??,q]:
```

12. To select a specific package, type the corresponding number and press Return. To select *all* packages, press Return.

For help, type a question mark (?) and press Return. For help on Help, type two question marks (??) and press Return. To quit the installation script, type `q` and press Return.

13. Follow the online directions.

During the `pkgadd` process, messages are displayed on your screen. You may be prompted to answer questions or provide other information needed for the installation. If you are not sure how to answer these questions, refer to the online documentation.

In general, the online documentation for each product contains information on starting the product once it is installed. Some products are started after rebooting the system; some are invoked with usage commands.



## Solstice PPP 3.0.1 Installation

---

Solstice PPP is a standard implementation of the Point-to-Point Protocol (PPP) and the Internet Protocol Control Protocol (IPCP), giving extended Internet connectivity for Solaris systems.

---

**Note** – You must remove previous versions of Solstice PPP packages: SUNWpppk, SUNWpppr, and SUNWpppu.

---

### Solstice PPP Interaction with Solstice AdminSuite

#### *Solstice PPP: Adding OS Services with AdminSuite Hostmanager Fails After Installing Solstice PPP 3.0.1* **4039044**

The supported method for adding support for diskless clients to a server is to use Solstice AdminSuite's Admintool Hostmanager to add OS services for the architecture of the diskless clients and then to create the diskless clients.

However, because of a version number conflict in SUNWpppk packages (one installed as part of Solaris and another as part of Solstice PPP), you cannot add OS services with Admintool Hostmanager after Solstice PPP is installed on the server. Admintool Hostmanager fails with an error message:

```
Error: Error adding OS service Solaris 2.6 i386 i86pc:
inconsistent revision, installed package SUNWpppk revision 3.0.1
does not match revision 11.5.1,REV=97.02.18.05.04 for i386
architecture
```

---

**Note** – This problem occurs only when the server and the client that you are adding OS services for are on the same platform (that is, both are x86 or both are SPARC), but not necessarily having the same architecture (for instance, sun4c, sun4m, sun4u).

---

**Workarounds:**

If Solstice PPP is already installed and configured on the server, do the following:

- Save any previously entered PPP configuration information.
- Use `pkgrm` to remove the Solstice PPP `SUNWpppk` package from the server.
- Use Admintool Hostmanager to add all appropriate OS services.
- Use `pkgadd` to reinstall the Solstice PPP `SUNWpppk` package from the Solaris Server Intranet Extension on the server.
- Then you can use Admintool Hostmanager to create, remove, and administer diskless clients.

If you need to add OS services later for another diskless client architecture, you must repeat this workaround.

If Solstice PPP has not yet been installed on the server, do the following:

- Use Admintool Hostmanager to add all appropriate OS services.
- Use `pkgadd` or Solaris Web Start to install the Solstice PPP from the Solaris Server Intranet Extension on the server.
- Then you can use Admintool Hostmanager to create, remove, and administer diskless clients.

## Installation or Usage Information

The Solstice PPP 3.0.1 software incorporates a floating-license system, which restricts the number of Solstice PPP Servers that can run concurrently. To access all the features of the Solstice PPP Server, you must contact a Sun License Center to get a license password. You do not need a license for the Solstice PPP Client. For more information, see the *Solaris Server Intranet Extension 1.0 Licensing Guide*.

## Package Names, Default Directory Names, Disk and Memory Requirements

The following table lists the package names, default directory names, and disk and memory requirements for Solstice PPP. Note that disk space requirements are *approximate* and vary according to your own system configuration. You also need to allocate disk space for running the product.

Product	Packages Available	Default Directories	Disk Space, Memory, Other Requirements
Solstice PPP 3.0.1	SUNWlicsw SUNWlit SUNWpppk SUNWpppm SUNWpppr SUNWppps SUNWpppu	/opt /usr	1 MB disk space for product; 2 MB for license system for server

## Online Product Documentation

The following table lists the product manuals available online

Manuals Shipped on CD	Path on CD-ROM	pp.
<i>Installing and Licensing Solstice PPP 3.0.1</i>	PPP_3.0.1/docs/Installing_and_Licensing.ps	16
<i>Configuring and Using Solstice PPP 3.0.1 Clients</i>	PPP_3.0.1/docs/PPP3.0.1_Clients.ps	52
<i>Configuring and Using Solstice PPP 3.0.1 Servers and Routers</i>	PPP_3.0.1/docs/Servers_and_Routers.ps	206
<i>Solstice PPP 3.0.1 Important Product Information</i>	PPP_3.0.1/docs/IPI.ppp.ps	8

## Online Installation Documentation

For detailed installation instructions, see the online document, *Installing and Licensing Solstice PPP 3.0.1*. Follow the instructions in the document, but note this exception.

Replace this	With this
<code>/cdrom/ppp_3_0_1</code>	<code>/cdrom/cdrom0/PPP_3.0.1</code>

---

## Installing Solstice PPP from the Command Line (pkgadd)

If you want to install Solstice PPP after you have already installed the Solaris operating system, you need to install the product from the UNIX command line, using `pkgadd`.

### ▼ How to Install Solstice PPP from the Command Line (pkgadd)

1. Insert the Solaris Server Intranet Extension CD in your drive.
2. If you are using the Common Desktop Environment (CDE), open a terminal or console window. If you are using OpenWindows, open a command tool or shell tool window.
3. Become root by typing `su` at the prompt:

```
% su
Password:
```

4. Type your password and press Return. The root prompt (`#`) appears:

```
#
```

5. Change to the directory of the CD drive by typing `cd /cdrom/cdrom0`:

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

6. List the contents of the CD by typing the `ls` command:

```
# ls
1README.html                Solstice_Internet_Mail_Server
AdminSuite_2.3+AutoClient_2.1 Sun_WebServer_1.0
Backup_4.2.6                 Totalnet_Advanced_Server
Copyright                    autorun
DiskSuite_4.1                autorun.inf
JavaIDL_1.1                  html
PPP_3.0.1                    nfsc
Skip_1.1.1
```

7. Change to the Solstice PPP directory by typing `cd PPP_3.0.1`:

```
# cd PPP_3.0.1
```

8. List the contents of the directory by typing the `ls` command:

```
# ls
docs  sparc  x86
```

9. Change to the directory for your platform. For example, if you are running Solaris from a SPARC station, type `cd sparc`. If you are running Solaris from an x86 machine, type `cd x86`. This example shows a SPARC installation:

```
# cd sparc
```

10. Verify that the software installation packages are in the directory by listing the contents of the directory with the `ls` command:

```
# ls
SUNWlicsw  SUNWlit    SUNWpppk  SUNWpppm  SUNWpppr  SUNWppps
SUNWpppu
```

11. Install the software packages from this directory. The following command transfers the contents of the software installation packages from the current directory (designated by 'pwd') to the system:

```
# pkgadd -d 'pwd'
```

The following message appears:

```
The following packages are available:
 1  SUNWlicsw      FlexLM License System
                        (sparc) 4.1
 2  SUNWlit       STE License Installation Tool
                        (sparc) 3.0
 3  SUNWpppk      Solstice PPP Device Drivers
                        (sparc) 3.0.1
 4  SUNWpppm      Solstice PPP Man Pages
                        (sparc) 3.0.1
 5  SUNWpppr      Solstice PPP Configuration Files
                        (sparc) 3.0.1
 6  SUNWppps      Solstice PPP Login Service
                        (sparc) 3.0.1
 7  SUNWpppu      Solstice PPP Daemon and User Programs
                        (sparc) 3.0.1
Select package(s) you wish to process (or 'all' to process
all packages). (default: all) [?,??,q]:
```

12. To select a specific package, type the corresponding number and press Return. To select *all* packages, press Return.

For help, type a question mark (?) and press Return. For help on Help, type two question marks (??) and press Return. To quit the installation script, type q and press Return.

13. Follow the online directions.

During the `pkgadd` process, messages are displayed on your screen. You may be prompted to answer questions or provide other information needed for the installation. If you are not sure how to answer these questions, refer to the online documentation.

In general the online documentation for the each product contains information on starting the product once it is installed. Some products are started after rebooting the system; some are invoked with usage commands.

## SunScreen SKIP 1.1.1 Installation

---

SunScreen™ SKIP is Sun's implementation of Simple Key-Management for Internet Protocols (SKIP), enabling IP-layer encryption. SunScreen SKIP comes in three versions: 512-bit Global, 1024-bit Exportable, and 2048-bit Domestic Use Only. The 512-bit Global version is shipped with the Solaris Server Intranet Extension.

### Compatibility

- Software: Supports international Solaris versions
- Network Interfaces:
  - Any Sun equipped 10/100 Mbps ethernet interface
  - Any Sun supported FDDI interface
  - Solaris PPP 5.4 or later (shipped with Solaris)
  - Solstice PPP 3.0 or later (included in the Solaris Server Intranet Extension)

## Package Names, Default Directory Names, Disk and Memory Requirements

The following table lists the package names, default directory names, and disk and memory requirements for SunScreen SKIP. Note that disk space requirements are *approximate* and vary according to your own system configuration. You also need to allocate disk space for running the product.

Product	Packages Available	Default Directories	Disk Space, Memory, Other Requirements
SunScreen Skip 1.1.1	SICGbdcdr SICGcrc2 SICGcrc4 SICGes SICGkeymg SICGkisup	/opt /usr	10 MB disk space for installation; 7 MB permanently used. 16 MB memory required; 32 MB recommended.

## Online Product Documentation

The following table lists the product manuals available online.

Manuals Shipped on CD	Path on CD-ROM	pp.
<i>SunScreen SKIP Open Issues and Late-Breaking News, Release 1.1.1</i>	Skip_1.1.1/docs/skip-late.ps	7
<i>SunScreen SKIP User's Guide, Release 1.1</i>	Skip_1.1.1/docs/skip-guide.ps	128

## Online Installation Documentation

For detailed installation instructions, see the online document, *SunScreen SKIP User's Guide*. Follow the instructions in the document, but note this exception.

Replace this	With this
/cdrom/cdrom0	/cdrom/cdrom0/SKIP_1.1.1

---

## Installing SunScreen SKIP from the Command Line (pkgadd)

If you want to install SunScreen SKIP after you have already installed the Solaris operating system, you need to install the product from the UNIX command line, using `pkgadd`.

### ▼ How to Install SunScreen SKIP from the Command Line (pkgadd)

1. Insert the Solaris Server Intranet Extension CD in your drive.
2. If you are using the Common Desktop Environment (CDE), open a terminal or console window. If you are using OpenWindows, open a command tool or shell tool window.
3. Become root by typing `su` at the prompt:

```
% su
Password:
```

4. Type your password and press Return. The root prompt (`#`) appears:

```
#
```

5. Change to the directory of the CD drive by typing `cd /cdrom/cdrom0`:

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

6. List the contents of the CD by typing the `ls` command:

```
# ls
1README.html                Solstice_Internet_Mail_Server
AdminSuite_2.3+AutoClient_2.1 Sun_WebServer_1.0
Backup_4.2.6                Totalnet_Advanced_Server
Copyright                   autorun
DiskSuite_4.1              autorun.inf
JavaIDL_1.1                 html
PPP_3.0.1                   nfsc
Skip_1.1.1
```

7. Change to the SunScreen SKIP directory by typing `cd Skip_1.1.1`:

```
# cd skip_1.1.1
```

8. List the contents of the directory by typing the `ls` command:

```
# ls
docs  sparc  x86
```

9. Change to the directory for your platform. For example, if you are running Solaris from a SPARC station, type `cd sparc`. If you are running Solaris from an x86 machine, type `cd x86`. This example shows a SPARC installation:

```
# cd sparc
```

10. Verify that the software installation packages are in the directory by listing the contents of the directory with the `ls` command, for example:

```
# ls
SICGbdcdr  SICGcrc2  SICGcrc4  SICGes  SICGkeymg  SICGkisup
```

11. Install the software packages from this directory. The following command transfers the contents of the software installation packages from the current directory (designated by `'pwd'`) to the system:

```
# pkgadd -d 'pwd'
```

The following message appears:

```
The following packages are available:
 1  SICGbdcdr      SKIP Bulk Data Crypt 1.1-FCS Software
      (sparc) 1.1-FCS
 2  SICGcrc2      SKIP RC2 Crypto Module 1.1-FCS Software
      (sparc) 1.1-FCS
 3  SICGcrc4      SKIP RC4 Crypto Module 1.1-FCS Software
      (sparc) 1.1-FCS
 4  SICGes        SKIP End System 1.1-FCS Software
      (sparc) 1.1-FCS
 5  SICGkeymg     SKIP Key Manager Tools 1.1-FCS Software
      (sparc) 1.1-FCS
 6  SICGkisup     SKIP I-Support module 1.1-FCS Software
      (sparc) 1.1-FCS
Select package(s) you wish to process (or 'all' to process
all packages). (default: all) [?,??,q]:
```

**12. To select a specific package, type the corresponding number and press Return. To select all packages, press Return.**

For help, type a question mark (?) and press Return. For help on Help, type two question marks (??) and press Return. To quit the installation script, type q and press Return.

**13. Follow the online directions.**

During the pkgadd process, messages are displayed on your screen. You may be prompted to answer questions or provide other information needed for the installation. If you are not sure how to answer these questions, refer to the online documentation.

In general the online documentation for each product contains information on starting the product once it is installed. Some products are started after rebooting the system; some are invoked with usage commands.



## Sun WebServer 1.0 Installation

---

Sun WebServer™ is a fast expandable web server that supports security (SSL 3.0), access control lists (ACLs), virtual hosting, web-based administration and HTTP 1.0, and partially supports HTTP 1.1.

---

**Note** – You must remove previous versions of Sun WebServer and other web servers from other vendors before installing Sun WebServer.

---

### Installation or Usage Information

To check for any running web servers on your system, enter the following at the UNIX command line:

```
ps -eaf | grep http
```

If the system responds with the process ID of an HTTP server, you must stop and remove the server before installing Sun WebServer.

To check for previous default installations of Sun WebServer, enter the following at the UNIX command line:

```
pkginfo | grep SUNWht
```

```
pkginfo | grep SUNWsk
```

```
pkginfo | grep SUNWssl
```

```
pkginfo | grep SUNWfns
```

---

**Note** – Previous installations of Sun WebServer can be located in non-default directories.

---

If the system responds with information on any of the Sun WebServer packages, you must stop and remove the previous version of Sun WebServer packages before installing this version.

## Package Names, Default Directory Names, Disk and Memory Requirements

The following table lists the package names, default directory names, and disk and memory requirements for Sun Web Server. Note that disk space requirements are *approximate* and vary according to your own system configuration. You also need to allocate disk space for running the product.

Product	Packages Available	Default Directories	Disk Space, Memory, Other Requirements
Sun WebServer 1.0	SUNWfns * SUNWfnsm SUNWhttpr SUNWhttpu SUNWhttpv SUNWski SUNWskicw SUNWskimc SUNWskimu SUNWssle	/opt /usr	24 MB disk space for installation and 32 MB memory. SPARC: 64 MB swap space required; 192 MB recommended. x86: 64 MB swap space required; 96 MB recommended. Web browsers supported: Sun Microsystems HotJava v1.0; Netscape™ Navigator™ 2.0.1 or greater; Microsoft™ Internet Explorer™ 3.0 or greater.  *Do not install this package. The installation process informs you that the package is already installed (because this package is part of Solaris 2.6) and continues installing the rest of the packages.

## Online Product Documentation

The following table lists the product manuals available online

Manuals Shipped on CD	Path on CD-ROM	pp.
<i>Sun WebServer Administration Guide</i>	Sun_WebServer_1.0/Sol_2.5.1+/common/Docs/ADMIN.ps and ADMIN.A4.ps	232
<i>Sun WebServer Release Notes</i>	Sun_WebServer_1.0/Sol_2.5.1+/common/Docs/README.ps	32

## Online Installation Documentation

For detailed installation instructions, see the online document, *Sun WebServer Release Notes (README.ps)*.

## Printed Documentation

If you order the optional printed documentation set for the Solaris Server Intranet Extension, you receive the *Sun WebServer Administration Overview* in place of the online documentation.

---

# Installing Sun WebServer from the Command Line (pkgadd)

If you want to install Sun WebServer after you have already installed the Solaris operating system, you need to install the product from the UNIX command line, using `pkgadd`.

This procedure describes how to install Sun WebServer to the default directories. To install Sun WebServer to non-default directories, see the online document, *Sun WebServer Administration Release Notes*.

## ▼ How to Install Sun WebServer from the Command Line (pkgadd)

1. **Insert the Solaris Server Intranet Extension CD in your drive.**
2. **If you are using the Common Desktop Environment (CDE), open a terminal or console window. If you are using OpenWindows, open a command tool or shell tool window.**
3. **Become root by typing `su` at the prompt:**

```
% su
Password:
```

4. Enter your password and press Return. The root prompt (#) appears:

```
#
```

5. Change to the directory of the CD drive by typing `cd /cdrom/cdrom0`:

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

6. List the contents of the CD by typing the `ls` command:

```
# ls
1README.html                Solstice_Internet_Mail_Server
AdminSuite_2.3+AutoClient_2.1 Sun_WebServer_1.0
Backup_4.2.6                Totalnet_Advanced_Server
Copyright                   autorun
DiskSuite_4.1               autorun.inf
JavaIDL_1.1                 html
PPP_3.0.1                   nfsc
Skip_1.1.1
```

7. Change to the Sun WebServer directory by typing `cd Sun_WebServer_1.0`:

```
# cd Sun_WebServer_1.0
```

8. List the contents of the directory by typing the `ls` command:

```
# ls
Sol_2.5.1+
```

9. Change to the `Sol_2.5.1+` directory:

```
# cd Sol_2.5.1+
```

10. List the contents of the `Sol_2.5.1+` directory:

```
# ls
common  i386    sparc
```

11. Change to the directory for your platform. For example, if you are running Solaris from a SPARC station, type `cd sparc`. If you are running Solaris from an x86 machine, type `cd i386`. This example shows a SPARC installation:

```
# cd sparc
```

12. List the contents of the `sparc` directory:

```
# ls
Product
```

13. Change to the `Product` directory:

```
# cd Product
```

14. Verify that the software installation packages are in the directory by listing the contents of the directory with the `ls` command:

```
# ls
Copyright  SUNWhttpr  SUNWhttpv  SUNWskica  SUNWskimc  SUNWssl
SUNWfns    SUNWhttpu  SUNWski    SUNWskicw  SUNWskimu
```

15. Install the software packages from this directory. The following command transfers the contents of the software installation packages from the current directory (designated by 'pwd') to the system:

```
# pkgadd -d 'pwd'
```

The following message appears:

```
The following packages are available:
 1  SUNWfns      Federated Naming System
      (sparc) 11.5.1,REV=96.06.21.15.38
 2  SUNWfnsm    Federated Naming System Man pages
      (sparc) 11.5.1,REV=96.06.21.17.18
 3  SUNWhttp    HTTP server root package
      (sparc) 1.0
 4  SUNWhttpu   HTTP server user package
      (sparc) 1.0
 5  SUNWhttpv   HTTP server var package
      (sparc) 1.0
 6  SUNWski     SKI 1.0 Software (Sparc User Package)
      (sparc) 1.0
 7  SUNWskicw  SKI 1.0 Software (web server CA Sparc Package)
      (sparc) 1.0
 8  SUNWskimc  SKI 1.0 Software (CA Manual Page Package)
      (sparc) 1.0
 9  SUNWskimu  SKI 1.0 Software (User Manual Page Package)
      (sparc) 1.0
10  SUNWssle   SSL 1.0 Software (Library Sparc Export Version)
      (sparc) 1.0
... 1 more menu choices to follow;

<RETURN> for more choices, <CTRL-D> to stop display:

11  SUNWsslh   SSL 1.0 Software (Header Files)
      (sparc) 1.0
Select package(s) you wish to process (or 'all' to process
all packages). (default: all) [?,??,q]:
```

---

**Note** – During installation on a machine running Solaris 2.6, the installation process informs you that the SUNWfns package is already installed (because this package is part of Solaris 2.6) and continues installing the rest of the packages.

---

**16. To select a specific package, type the corresponding number and press Return. To select *all* packages, press Return.**

For help, type a question mark (?) and press Return. For help on Help, type two question marks (??) and press Return. To quit the installation script, type `q` and press Return.

**17. Follow the online directions.**

During the `pkgadd` process, messages are displayed on your screen. You may be prompted to answer questions or provide other information needed for the installation. If you are not sure how to answer these questions, refer to the online documentation.

This completes the Sun WebServer installation. You need to configure the Sun WebServer for your site as described in the online document, *Sun WebServer Administration Release Notes*.



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## TotalNET 5.0 Installation

---

TotalNET is network operating system software that enables Solaris machines to be scalable file, print, and application servers for multi-platform environments with PC and Macintosh clients, regardless of client software and network protocol.

---

**Note** – If you have earlier versions of TotalNET installed on your system, you must remove them.

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### TotalNET and Remote Printing

If the UNIX print server is on a machine different from the one on which TotalNET resides, printing jobs from clients might fail to print. The job is spooled, but deleted by TotalNET before the job is printed.

To fix this problem, use the TotalAdmin interface of TotalNET to configure the printer definition:

- 1. From the TotalAdmin Main Menu, click Set up and Status.**
- 2. Click Printers and select the printer name.**
- 3. In the Spooler Options field, type `-c`.**
- 4. Click the Update Printer Definition button and then click OK.**

The option, `-c`, is equivalent to the `lp -c` option, which makes a copy of the file before printing. This copy is deleted normally after printing is completed.

## Package Names, Default Directory Names, Disk and Memory Requirements

The following table lists the package names, default directory names, and disk and memory requirements for TotalNET. Note that disk space requirements are *approximate* and vary according to your own system configuration. You will also need to allocate disk space for running the product.

Product	Packages Available	Default Directories	Disk Space, Memory, Other Requirements
TotalNET 5.0	TAS	/opt /usr	37 MB disk space

## Online Product Documentation

The following table lists the product manuals available online

Manuals Shipped on CD	Path on CD-ROM	pp.	HTML File Name
<i>TotalNET Advanced Server 5.0 Release Notes</i>	Totalnet_Advanced_Server/ solaris2_5/docs/50NOTE.PS	42	
<i>TotalNET Advanced Server Version 5.0 White Paper</i>			Totalnet_Advanced_Server/solaris2_5/docs/whtpaper.html
<i>TotalNET Advanced Server 5.0 Reference Guide</i>	Totalnet_Advanced_Server/ solaris2_5/docs/tas50ref1.ps and tas50ref2.ps	120 154	
<i>TotalNET Advanced Server 5.0 Administrator's Guide</i>	Totalnet_Advanced_Server/ solaris2_5/docs/tas50adm.ps	137	
<i>TotalNET Advanced Server 5.0 Getting Started Guide</i>	Totalnet_Advanced_Server/ solaris2_5/docs/tas50gsg.ps	41	

## Online Installation Documentation

For detailed installation instructions, see the online document, *TotalNET Advanced Server Version 5.0 Release Notes*. Follow the instructions in the document, but note this exception.

Replace this	With this
<code>/cdrom/totalnet_advanced_server</code>	<code>/cdrom/cdrom0/ Totalnet_Advanced_Server</code>

- The TotalNET online documentation, including the *Getting Started Guide*, *Reference Guide*, and the *Administrator's Guide*, are not in PDF format as indicated in online references. They are in PostScript™ format.
- Adobe® Acrobat readers are not shipped as part of TotalNET, as indicated in online references. You do not need an Adobe Acrobat reader because you can view the online documents in Image Viewer from Solaris.

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## Installing TotalNET from the Command Line (pkgadd)

If you want to install TotalNET after you have already installed the Solaris operating system, you need to install the product from the UNIX command line, using `pkgadd`.

### ▼ How to Install TotalNET from the Command Line (pkgadd)

1. Insert the Solaris Server Intranet Extension CD in your drive.
2. If you are using the Common Desktop Environment (CDE), open a terminal or console window. If you are using OpenWindows, open a command tool or shell tool window.
3. Become root by typing `su` at the prompt:

```
% su
Password:
```

4. Type your password and press Return. The root prompt (#) appears:

```
#
```

5. Change to the directory of the CD drive by typing `cd /cdrom/cdrom0`:

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

6. List the contents of the CD by typing the `ls` command:

```
# ls
1README.html                Solstice_Internet_Mail_Server
AdminSuite_2.3+AutoClient_2.1 Sun_WebServer_1.0
Backup_4.2.6                 Totalnet_Advanced_Server
Copyright                    autorun
DiskSuite_4.1                autorun.inf
JavaIDL_1.1                  html
PPP_3.0.1                    nfsc
Skip_1.1.1
```

7. Change to the TotalNET directory by typing `cd Totalnet_Advanced_Server`:

```
# cd Totalnet_Advanced_Server
```

8. List the contents of the product directory by typing the `ls` command:

```
# ls
solaris2_5
```

9. Change to the `solaris2_5` directory:

```
# cd solaris2_5
```

10. List the contents of the `solaris2_5` directory:

```
# ls
docs  i386  sparc
```

11. Change to the directory for your platform. For example, if you are running Solaris from a SPARC station, type `cd sparc`. If you are running Solaris from an x86 machine, type `cd i386`. This example shows a SPARC installation:

```
# cd sparc
```

12. List the contents of the `sparc` directory:

```
# ls
TAS          tnconvert
```

13. Install the software packages from this directory. The following command transfers the contents of the software installation packages from the current directory (designated by `'pwd'`) to the system:

```
# pkgadd -d 'pwd'
```

The following appears:

```
The following packages are available:
 1  TAS          TotalNET Advanced Server
                        (sparc) 5.0

Select package(s) you wish to process (or 'all' to process
all packages). (default: all) [?,?,q]:
```

14. To select this package, press Return.

For help, type a question mark (?) and press Return. For help on Help, type two question marks (??) and press Return. To quit the installation script, type `q` and press Return.

15. Follow the online directions.

During the `pkgadd` process, messages are displayed on your screen. You may be prompted to answer questions or provide other information needed for the installation. If you are not sure how to answer these questions, refer to the online documentation.

In general, the online documentation for each product contains information on starting the product once it is installed. Some products are started after rebooting the system; some are invoked with usage commands.



## Product Benefits

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Add the Solaris Server Intranet Extension to Sun's reliable and scalable network computing foundation to create a full-service intranet solution for workgroups and departments. The Solaris Server Intranet Extension CD-ROM contains the software for both the SPARC and x86 platform.

These products provide the core services that workgroup users and administrators need: file and print, email, and network management for almost any client architecture. With the Intranet Extension, PC workgroup users have access to business applications and data anywhere on the network. Powerful Internet publishing and messaging features support the transition from traditional workgroup network operating system (NOS) to intranet computing.

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## Network Services

Solaris seamlessly integrates your Novell, Microsoft Windows, and AppleTalk clients while maintaining their native environments. So you'll find workgroup resources on your NT workstation right where you expect them—in the network neighborhood. In addition to basic file and print services, Solaris adds powerful messaging, web publishing, and Java application support essential to the new webgroup.

The network services products include:

- TotalNET Advanced Server

Network operating system software that enables Solaris machines to be scalable file, print, and application servers for multi-platform environments with PC and Macintosh clients, regardless of client software and network protocol.

- Sun WebServer

A fast expandable web server, supporting HTTP 1.0 and partially supporting 1.1, security (SSL 3.0), access control lists (ACLs), virtual hosting, and web-based administration.

- Solstice Internet Mail Server

An advanced mail solution for Solaris workgroups, providing open, Internet mail, based on standards such as IMAP4, POP3, SMTP, and MIME. Solstice Internet Mail Server supports disconnected computing for mobile or remote users.

- Java IDL (Java Interface Definition Language)

Sun's 100% Pure Java Object Request Broker (ORB) system, providing the software foundation needed to deliver enterprise client/server applications for the Internet. Applications that use Java IDL seamlessly integrate with non-Java programs and programs from other vendors.

- Solstice NFS Client

An affordable solution for Microsoft Windows 95 and Windows NT users, giving transparent access to files and data on UNIX and other TCP/IP networks.

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## Systems Management

System management capabilities are the core of any complete server offering. This product set offers powerful system and network management tools for centralized, simplified management of distributed, heterogeneous environments.

The systems management products include:

- Solstice AdminSuite

A unified suite of tools for administering distributed systems and managing such functions as user accounts, hosts, groups, administrative data, printers, file systems, disks, and serial ports.

- Solstice DiskSuite

A volume management solution designed to meet the demands of mission-critical business applications.

- Solaris Data Backup Utility

A single-server version of Solstice Data Backup Utility 4.2.6 that provides a tightly integrated backup and storage management solution for distributed enterprise environments.

- Solstice AutoClient

A desktop management application that centralizes administration, makes the desktop a field replaceable unit (FRU), eliminates software installation on desktops, and eliminates desktop backups.

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## Remote Connectivity and Security

Whether you need to connect workgroups over leased lines or through the Internet, Solaris meets your most demanding connectivity needs and ensures that your private information stays private.

The remote connectivity and security products include:

- Solstice PPP

A standard implementation of the Point-to-Point Protocol (PPP) and the Internet Protocol Control Protocol (IPCP), giving extended Internet connectivity for Solaris systems.

- SunScreen SKIP

Sun's implementation of Simple Key-Management for Internet Protocols (SKIP), enabling IP-layer encryption.



## Product Packages and Requirements

The following table lists the package names, default directory names, and disk and memory requirements for the Solaris Server Intranet Extension products. Note that disk space requirements are *approximate* and vary according to your own system configuration. You also need to allocate disk space for running the products.

Product	Packages Available	Default Directories	Disk Space, Memory, Other Requirements
Java IDL 1.1	SUNWoirun	/opt /var	898 KB disk space
Solaris Data Backup Utility 4.2.6	SUNWsbuc SUNWsbum SUNWsbus1 SUNWsbus2	prompts for default directory	64 MB disk space
Solstice AdminSuite 2.3 and Solstice AutoClient 2.1 (installed together)	SUNWsadmc SUNWsadmo SUNWsacb SUNWsaco SUNWadmsm SUNWadmm SUNWadma SUNWspapp SUNWsadmb SUNWsacd SUNWsadmp	/opt	AdminSuite: 35 MB plus 15 MB disk space for each architecture (Sparc and x86). 32 MB of memory recommended.  AutoClient: 100 MB minimum disk space and 32 MB memory recommended.

Product	Packages Available	Default Directories	Disk Space, Memory, Other Requirements
Solstice DiskSuite 4.1	SUNWmd SUNWmdg SUNWmdn SUNWadmsm* SUNWsadm* SunWsadm* SUNWadm5r* SUNWadm5u* SUNWsadm1*	/opt /usr	20 MB disk space with at least two drives  *Do <b>not</b> install these packages if you install Solstice AdminSuite 2.3.
Solstice Internet Mail Server 2.0	SUNWimap SUNWipop	/opt /usr	3.5 MB disk space
Solstice NFS Client 3.1	SUNWpcnfd	/opt	16 MB memory for Windows 95 and Windows NT. 4 to 30 MB disk space. PC-CacheFS caching software requires 30 MB disk space.
Solstice PPP 3.0.1	SUNWlicsw SUNWlit SUNWpppk SUNWpppm SUNWpppr SUNWppps SUNWpppu	/opt /usr	1 MB disk space for product; 2 MB for license system for server

Product	Packages Available	Default Directories	Disk Space, Memory, Other Requirements
SunScreen Skip 1.1.1	SICGbdcdr SICGcrc2 SICGcrc4 SICGes SICGkeymg SICGkisup	/opt /usr	10 MB disk space for installation; 7 MB permanently used. 16 MB memory required; 32 MB recommended.
Sun WebServer 1.0	SUNWfns ** SUNWfnsm SUNWhttpr SUNWhttpu SUNWhttpv SUNWski SUNWskicw SUNWskimc SUNWskimu SUNWssle	/opt /usr	24 MB disk space for installation and 32 MB memory. SPARC: 64 MB swap space required; 192 MB recommended. x86: 64 MB swap space required; 96 MB recommended. Web browsers supported: Sun Microsystems HotJava v1.0; Netscape™ Navigator™ 2.0.1 or greater; Microsoft™ Internet Explorer™ 3.0 or greater.  **Do not install this package. The installation process informs you that the package is already installed (because this package is part of Solaris 2.6) and continues installing the rest of the packages.
TotalNET 5.0	TAS	/opt /usr	37 MB disk space

