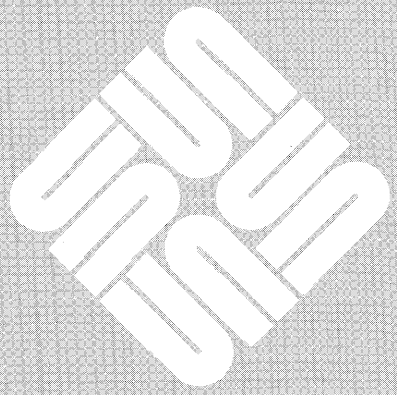
sun microsystems

STAGE™ Installation Guide for SunWrite™ SunPaint™ SunDraw™

Part No: 800-2228-10
Revision A of 27 January 1989

sun microsystems

STAGE™ Installation Guide for SunWrite™ SunPaint™ SunDraw™



Part No: 800-2228-10
Revision A of 27 January 1989

STAGE™, SunWrite™, SunPaint™, SunDraw™ software and documentation is proprietary to Sun Microsystems, Inc. Portions of the software copyright 1986, 1987, 1988 Island Graphics Corporation, copyright 1984 Proximity Technology Inc., and copyright 1984 Merriam-Webster Inc.

Sun Microsystems, Sun Workstation, and the Sun logo are registered trademarks of Sun Microsystems, Inc.

STAGE, SunView, SunOS, and the combination of Sun with a numeric suffix are trademarks of Sun Microsystems, Inc.

UNIX is a registered trademark of AT&T.

PostScript™ is a trademark of Adobe Systems, Incorporated.

Copyright © 1988 Sun Microsystems, Inc. – Printed in U.S.A.

All rights reserved. No part of this work covered by copyright hereon may be reproduced in any form or by any means – graphic, electronic, or mechanical – including photocopying, recording, taping, or storage in an information retrieval system, without the prior written permission of the copyright owner.

Restricted rights legend: use, duplication, or disclosure by the U.S. government is subject to restrictions set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 52.227-7013 and in similar clauses in the FAR and NASA FAR Supplement.

The Sun Graphical User Interface was developed by Sun Microsystems Inc. for its users and licensees. Sun acknowledges the pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun's licensees.

Contents

Preface v

Chapter 1 Introduction **3**

1.1. Software Overview 3

1.2. Contents of the Distribution Tape 3

1.3. Overview of the Installation Procedure 4

1.4. Installation Check List 5

Chapter 2 Installation Procedure **9**

2.1. Determining Space Requirements 9

2.2. Getting Started 10

2.3. Extracting the Installation Script 10

Using a Local Tape Drive 11

Local ¼-inch Drive 11

Local ½-inch Drive 11

Using a Remote Tape Drive 11

Remote ¼-inch Drive 12

Remote ½-inch Drive 12

Run the Installation Script 12

2.4. Install the Other Two Products 14

2.5. Installation Script Problems and What To Do About Them 14

Chapter 3 Client Setup Procedure **19**

3.1. Mount the Software 19

3.2. Install the Password 19

3.3. Choose an Installation Strategy 19
3.4. Create Links 20
3.5. Create `/etc/sundesk` 20

Chapter 4 Installing a User **23**
4.1. User Installation Summary 23
4.2. Changing Your Path 23
4.3. Setting the `SUNDESK` Environment Variable 23

Chapter 5 Administration and User Options **27**
5.1. System Swap Space 27
5.2. User-Defined Options 27
Copying the Default Startup Files 27
5.3. Starting Up SunWrite, SunPaint, or SunDraw 28
Customizing Your `.rootmenu` 28
Starting STAGE Programs from a Shell Window 28

Chapter 6 Installing the STAGE Password **31**
6.1. Who Needs a Password? 31
Displaying Your Host ID 31
6.2. Installing A Password 32
6.3. Gather the Necessary Information 32
Sales Order Number 32
Right-to-Use License 32
6.4. Run the Installation Program 32
6.5. Password Installation Problems and What To Do 34
6.6. Installing Passwords 'by Hand' 35

Appendix A SunWrite "dot" File **39**

Appendix B SunPaint "dot" File **49**

Appendix C SunDraw "dot" File **53**

Appendix D SunWrite Printer Script **59**

Appendix E SunDraw Printer Script **63**

Appendix F SunPaint Printer Script **67**

Index **71**

Preface

This document describes how to install STAGE (Structured Text and Graphics Editor) applications—SunWrite, SunPaint and SunDraw—on Sun systems currently running SunOS Release 3.4, 3.5, or 4.0.

Purpose and Audience

This manual helps you install STAGE software from the distribution tapes. You should be able to start using the STAGE products after *following the instructions* contained in this manual.

Summary of Contents

Chapter 1 — *Introduction* — briefly outlines the STAGE product line and describes the contents of the distribution tapes.

Chapter 2 — *Installation Procedure* — contains the instructions for installing the software onto a server.

Chapter 3 — *Client Setup Procedure* — describes the procedure for installing the STAGE products for each client machine.

Chapter 4 — *Installing a User* — contains instructions for setting up the end user's environment.

Chapter 5 — *Administration and User Options* — describes swap space requirements and startup file options the user can change.

Chapter 6 — *Installing the STAGE Password* — contains the STAGE password installation instructions.

Appendix A — *SunWrite "dot" File* — the system default start-up file "`.sunwrite`".

Appendix B — *SunPaint "dot" File* — the system default start-up file "`.sunpaint`".

Appendix C — *SunDraw "dot" File* — the system default start-up file "`.sundraw`".

Appendices D, E, and F contain listings of Shell scripts that the STAGE products use to spool output to the printer system. These scripts can be changed to reflect local differences in spooler software.

Assumptions

This manual is written on the assumption that you use the C Shell as your standard Shell. Where there are clear differences, instructions for using the Bourne

Shell are provided.

Conventions Used in This Manual

Throughout this manual we use several conventions to make the directions clear, general enough for all configurations, and consistent. Some of these conventions are UNIX† conventions, such as device names; others are Sun documentation conventions. Please familiarize yourself with them before continuing.

System Prompt Symbols

- The symbols:

  `%` *percent sign*

  or

  `#` *hash sign or octothorpe*

  are used as the prompt to which you type system commands. The `%` prompt indicates you can type the command from your own login[1]. The # prompt indicates you must be the superuser (**root**) to type the command.

Font Conventions

- **`Bold face typewriter font`** indicates commands that you type exactly as printed on the page of this manual.
- `Regular typewriter font` represents what the system displays to your screen. Typewriter font also specifies Sun system program names and file listings.
- *Italics* indicates general arguments or parameters that you should replace with a specific word or string. Italics are used occasionally to emphasize important terms.
- Text in `typewriter font` representing source code listings is surrounded by a box with rounded-off corners. Commands shown in a box with gray (simulated screen) background represent interactive workstation sessions.

Other Documentation

- *STAGE Software RTF (Read This First).*
- *SunView 1 Beginner's Guide*
- *SunWrite Tutorial* and *User's Guide*
- *SunPaint Tutorial, User's Guide,* and *Quick Start Guide*
- *SunDraw Tutorial, User's Guide,* and *Quick Start Guide*

† UNIX is a registered trademark of AT&T.

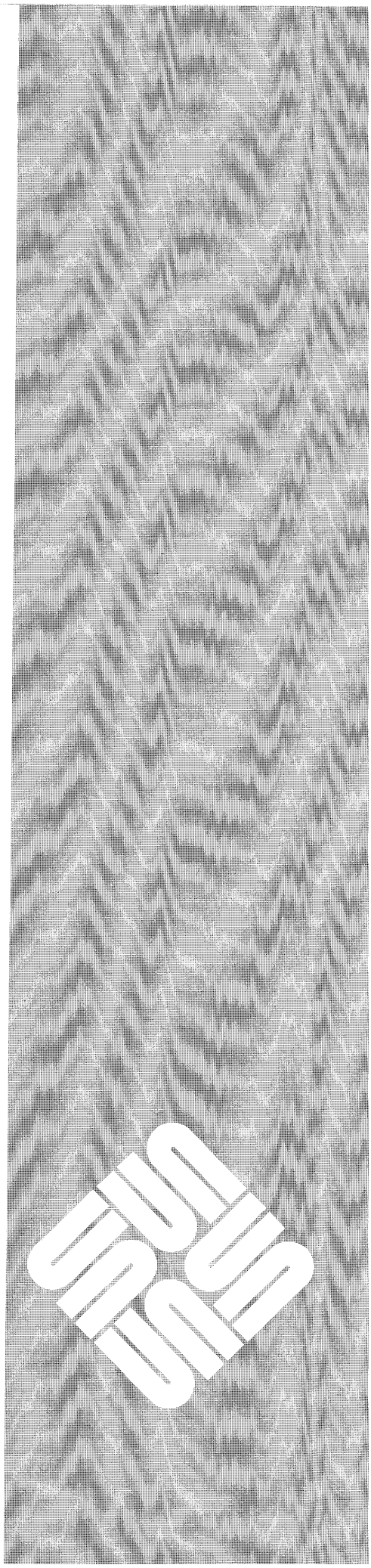
[1] If you use the Bourne Shell on your system, the user prompt will probably be a dollar ($) sign.

1

Introduction

Introduction 3

1.1. Software Overview 3
1.2. Contents of the Distribution Tape 3
1.3. Overview of the Installation Procedure 4
1.4. Installation Check List 5



1

Introduction

This introduction briefly describes STAGE software, lists the contents of the distribution tapes, and summarizes the installation steps. This introductory chapter is followed by detailed installation instructions and then by an explanation of the various application files.

1.1. Software Overview

SunWrite, SunPaint, and SunDraw are SunView window programs. You use SunWrite to produce *documents*. You use SunPaint to create and edit *raster images*. You use SunDraw to create vector-based *drawings*.

All STAGE products are intended for use with the Sun three-button mouse.

STAGE applications generate PostScript™ destined for Sun LaserWriter printers or other PostScript-compatible devices.

PostScript files are dispatched to the printing devices through the use of Shell scripts in the application-specific directories, rather than directly executing the printer spooler software. Although the applications were written assuming that the TranScript™ suit of software is available for driving the output devices, these assumptions can be changed by altering the appropriate Shell scripts.

1.2. Contents of the Distribution Tape

STAGE software is shipped on three (3) ¼-inch tape cartridges, or three (3) ½-inch tapes, one tape per product. The first and last `tar` files on each tape are copyright marks. Each tape also contains five other `tar` files.

NOTE *Each tape is complete and independent from the others so that you may install one or more of the products in any combination.*

† PostScript and TranScript are trademarks of Adobe Systems, Incorporated.

Table 1-1 *Contents of SunWrite Distribution Tape*

File Number	*Contents*
1	Copyright mark
2	Installation script, `install_unbundled`
3	Product identification
4	SunWrite executables and support files
5	SunView fonts
6	STAGE product fonts
7	Copyright mark

Table 1-2 *Contents of SunPaint Distribution Tape*

File Number	*Contents*
1	Copyright mark
2	Installation script, `install_unbundled`
3	Product identification
4	SunPaint executables and support files
5	SunView fonts
6	SunPaint fonts
7	Copyright mark

Table 1-3 *Contents of SunDraw Distribution Tape*

File Number	*Contents*
1	Copyright mark
2	Installation script, `install_unbundled`
3	Product identification
4	SunDraw executables and support files
5	SunView fonts
6	STAGE product fonts
7	Copyright mark

1.3. Overview of the Installation Procedure

The summary steps required to install the STAGE products are:

1. Before you start, familiarize yourself with each section of this manual, and the **Read This First** document.
2. If you have a network of workstations, decide on which machine you'd like to load the software. This machine should be NFS mountable by other

machines and have enough disk space for the STAGE software.

3. Place any one of the distribution tapes in your tape drive. *You can install STAGE products in any order.*
4. Use `tar` to load the installation script from the tape.
5. Use the installation script to load the release from the tape.
6. Repeat the previous step for the remaining two (2) tapes, using the same installation script.
7. Set up each licensed machine with the software.
8. Install a password on each licensed machine. Passwords are for domestic (U.S.A.) users only. *You need three passwords per machine since SunWrite, SunPaint, and SunDraw each have their own password.*

NOTE *If you do not install a password on each machine, STAGE products will run as demonstration products only and you will be unable to save your work! Each product will display a warning message when starting up if your machine has no password installed.*

1.4. Installation Check List

Use this list to mark your progress as you proceed through the installation.

- ☐ Read the **Read This First**. *This is an important step as the* **Read This First** *may contain references to the installation procedure.*
- ☐ Read this manual—the Installation Guide.
- ☐ Log in to the server machine.
- ☐ Log in as super user.
- ☐ Create the installation directory and change to it.
- ☐ Put the first tape in the tape drive.
- ☐ Tar installation script from tape.
- ☐ For each tape...
  - ☐ execute the `install_unbundled` script, and
  - ☐ replace the tape with the next tape.
- ☐ For each client machine...
  - ☐ mount the software from the server,
  - ☐ install the password—if passwords are required,
  - ☐ create `/etc/sundesk`, and
  - ☐ create the appropriate links.
- ☐ If you didn't create `/etc/sundesk` in the previous step, then for each user you must...
  - ☐ modify the user's search path, and

- set an environment variable.
- Start up each product, under SunView.

2

Installation Procedure

Installation Procedure **9**

2.1. Determining Space Requirements 9
2.2. Getting Started 10
2.3. Extracting the Installation Script 10
Using a Local Tape Drive 11
Local ¼-inch Drive 11
Local ½-inch Drive 11
Using a Remote Tape Drive 11
Remote ¼-inch Drive 12
Remote ½-inch Drive 12
Run the Installation Script 12
2.4. Install the Other Two Products 14
2.5. Installation Script Problems and What To Do About Them 14

2

Installation Procedure

This chapter takes you through the product installation step-by-step. You will need either a ¼-inch tape drive or a ½-inch tape drive, and a machine that has enough disk space and is NFS mountable.

2.1. Determining Space Requirements

SunWrite, SunPaint, and SunDraw can be installed on any Sun-2 or Sun-3 workstation that has enough disk space.

All of the programs associated with SunWrite, SunPaint, and SunDraw are 68010 binaries, so you don't need to worry about heterogeneous differences between Sun-2 and Sun-3 workstations.

The entire STAGE suite occupies about *12 megabytes* of disk space. The space requirements broken down by product, including support files, are listed in Table 2-1—*STAGE Disk Space Requirements*.

Note that the SunView fonts are shared by all three products, and are installed only once. STAGE fonts are shared by SunWrite and SunDraw, and are also installed only once.

Table 2-1 *STAGE Disk Space Requirements*

Product	*Disk Space*
SunWrite	1.6 Mbytes
SunPaint	0.9 Mbytes
SunDraw	1.4 Mbytes
STAGE font set	7 Mbytes
SunView font set	0.5 Mbytes

You can use the `df`(1) command to check your available space. For example:

```
# df
Filesystem     kbytes    used   avail capacity  Mounted on
/dev/xy0a       10964    7628    2239    77%    /
/dev/xy0g      230681  174855   32757    84%    /usr
/dev/xy1c      260874  121123  113663    52%    /usr/blort
#
```

Choose a filesystem that has enough space for the products you plan to install.

2.2. Getting Started

Log in as Super-User

Log in as super-user, **root.**

```
% su root
Password:
#
```

Create Installation Directory

Create the directory into which you will install the products. For Sun-2 or Sun-3 machines we recommend that you create the directory `/usr/sundesk`, and install the products there. To create `/usr/sundesk`:

```
# cd /usr
# mkdir sundesk
# cd sundesk
#
```

NOTE *Do NOT use the root directory.*

Use the same installation directory for all three products.

Do NOT create subdirectories for each product—the installation script does that for you. .

2.3. Extracting the Installation Script

This section steps through the procedure for retrieving the installation script from the release tape.

First, insert one of the release tapes into your tape drive. If you have any questions about how to load a tape on your tape drive, see the subsystems chapter in the *Hardware Installation Manual* for your machine.

Tape Devices

Where you see the word *tape* in the subsequent illustrations of typing commands to the system, substitute one of **st0**, **mt0**, or **ar0**, for *tape*, depending on the format of the tape. Table 2-2 below shows you which tape name to use for *tape*.

Table 2-2 *Tape Device Names*

Name	*Device*
st0	SCSI ¼-inch tape controller
ar0	Archive ¼-inch tape (older systems)
mt0	Nine-track ½-inch magnetic tape (1600 bpi)

If you are using a remote tape drive, skip to the section *Using a Remote Tape Drive.*

Using a Local Tape Drive

Skip to the section that matches your tape configuration: *Local ¼-inch Drive* or *Local ½-inch Drive.*

Local ¼-inch Drive

Rewind the tape and skip over the copyright mark by typing the following two commands:

```
# mt -f /dev/nrtape rew
# mt -f /dev/nrtape fsf 1
#
```

Use `tar`(1) to extract the install script from the tape:

```
# tar xvbpf 126 /dev/nrtape
    (...message from tar...)
#
```

Skip to the section entitled *Run the Installation Script* below, to start the installation.

Local ½-inch Drive

Rewind the tape and skip over the copyright mark by typing the following two commands:

```
# mt -f /dev/nrtape rew
# mt -f /dev/nrtape fsf 1
#
```

Use `tar`(1) to extract the install script from the tape:

```
# tar xvpf /dev/nrtape
    (...message from tar...)
#
```

Skip to the section entitled *Run the Installation Script* below, to start the installation.

Using a Remote Tape Drive

You must be superuser (root) to run these commands, so, note that the hostname of the local machine (where you are typing commands) must be in the remote machine's `/.rhosts` file to avoid permission problems. In addition, if you are not running the yellow pages (YP), each machine must have an entry (name and Internet address) for the other in its `/etc/hosts` file.

Device abbreviations are **st0**, **mt0**, or **ar0**, for *tape*, depending on the format of the tape. See table 2-2—*Tape Device Names* for details.

In the following machine dialogs, remember to replace *tape* with the appropriate device abbreviation for the remote tape drive you are using.

You must also replace *remote_host* with the hostname of the machine to which this tape drive is attached.

Skip to the section that matches your tape configuration: *Remote ¼-inch Drive* or *Remote ½-inch Drive.*

Remote ¼-inch Drive

Rewind the tape and skip over the copyright mark by typing the following two commands:

```
# rsh remote_host "mt -f /dev/nrtape rew"
# rsh remote_host "mt -f /dev/nrtape fsf 1"
#
```

Use `tar`(1) to extract the install script from the tape:

```
# rsh remote_host "dd if=/dev/nrtape bs=20b" | tar xvpBf -
    (...message from tar...)
#
```

Skip to the section entitled *Run the Installation Script* below, to start the installation.

Remote ½-inch Drive

Rewind the tape and skip over the copyright mark by typing the following two commands:

```
# rsh remote_host "mt -f /dev/nrtape rew"
# rsh remote_host "mt -f /dev/nrtape fsf 1"
#
```

Use `tar`(1) to extract the install script from the tape:

```
# rsh remote_host "dd if=/dev/nrtape bs=20b" | tar xvpBf -
    (...message from tar...)
#
```

Run the Installation Script

Product files will be installed in the installation directory that you created if you followed the instructions in section 2.2—*Getting Started*—previously.

Use the `pwd` (print working directory) command and make sure that you are still in the correct directory.

Use the install script to install the release files. Type the command `install_unbundled`. You will see the following greeting:

```
# install_unbundled

Welcome to the STAGE installation script!
When responding to questions, please type one
of the available options exactly as given.
```

The installation script asks you for the information that it needs to proceed.

Remote or Local Installation

Tell the script whether you are doing a local or remote installation.

```
Are you doing a local or remote installation [l,r]?
```

Remote machine name

If you are doing a *local* installation, the script will skip this step.

If you are doing a *remote* installation, enter the name of the remote machine.

```
Please enter remote host name: remote_host
```

Enter the Name of the Tape Drive

The next request is for the name of your tape drive. The script will display three options.

```
Please enter the tape device name [st0,ar0,mt0]: tape
```

Enter the name of your tape drive in the format shown in the prompt line. If it is not exactly one of the options shown, the script will continue to ask you until you type in one of the three valid choices.

Confirming the Installation

Once the script has all the information from you that it needs to complete the install it will ask you to confirm the installation with a message similar to this one:

```
Remotely installing productname from host_name in
directoryname from tape.  OK? [y,n]
```

If you type '**y**', the script will then extract the product files from the tape.

After all of the product binaries and fonts are extracted from the release tape, the script will check for the existence of major directories as a quick verification of the installation. Here is an example of what you will see on the screen:

```
Checking disk space availability...

Installing productname files from the tape...

    (...messages from tar...)

Installing sunview font set...

    (...messages from tar...)

Installing productname fonts...

    (...messages from tar...)

Verifying the installation...
```

Completing the Installation

The script displays the following message when the installation is complete.

```
Installation of productname complete.
```

2.4. Install the Other Two Products

Run `install_unbundled` again for the other two product tapes, *without changing directories.*

The installation script places the release files in several different directories, as you can see by typing the `ls` command in the directory where you installed the STAGE products. Here is an example of a directory listing where all three products have been installed.

```
# ls -F
bin/    fonts/  sundraw/    sunwrite/
demo/   install_unbundled*  sunpaint/
#
```

2.5. Installation Script Problems and What To Do About Them

This section lists possible error messages from the installation script, and what to do when they occur.

Table 2-3 *Error Messages from Installation Script*

`You must be root to install productname.`
`Please log in as root and try again.`
`Exiting....`
	Occurs if you did not log in as the super-user. Run the UNIX command `su`, and restart the installation script.

`Assuming local installation.`	This message will appear if you do not type an '**l**', or an '**r**', when the script asks you about remote or local installations. The script will proceed to do a local installation.
`Invalid device name tape.`	Appears if you mistype the tape drive device name. The script will continue to prompt you for the device name until you type in a valid response. The valid choices are listed in Table 2-2, *Tape Device Names.*
`The device tape does not exit on hostname.` `Try again. Exiting....`	You will see this message if the tape device does not live on your system. Verify the name of your tape drive, and make sure that you are logged in to the machine that owns the device (this is most likely the server for your network). Start the script again.

Table 2-3 *Error Messages from Installation Script— Continued*

`Can't find product identification file.` `Enter product name: SunWrite, SunPaint, SunDraw [w, p, d]:`	Occurs, if for some reason the product ID file was not on the tape, or accidentally got removed from the system during the installation process. Type a one-character response to the question and the script will proceed normally.
`Invalid product name` *product_name*.	If you received the previous error message, and if you mistype the product name, you will see this message. The script will continue to prompt you for the product name until you type in a valid response.
`Can't install in /. Exiting.`	Appears if your current working directory is /. Change directories to the installation directory with the `cd` command, and restart the script.
product_name `is already installed. Overwrite [y,n]?`	You will see this message if the product directory already exists. If you type '**y**', the script will overwrite whatever is already there. Otherwise, it will exit.
`Installation stopped by user request. Exiting...`	If at any point the script asks you to confirm the installation and you reply '**n**', it will display this message, and exit without proceeding with the installation.
`You do not have write permissions in the install directory` *directory_name*. `Please change the permissions on this directory (or change the installation directory) and try again.`	Check your directory with the `pwd` command to make sure that you are in the right directory. Also, check the write permissions and make sure that you have not mounted the installation directory on a read-only file system. Once you have a directory in which you can write, restart the script.
productname `requires` *xxxxx* `Mbytes of disk space and there are only` *yyyyy* `Mbytes available in the current filesystem. Please make space, or rerun this script with a new install directory name.` `Exiting....`	Try to find a file system with enough space, or remove some unnecessary files to make space, and start the script again.

Table 2-3 *Error Messages from Installation Script— Continued*

`Tape rewind failed. Exiting...`
 	
`Can't space forward on tape. Exiting...`
 	
`File extraction failed. Exiting...`
	If at any time during the installation, any of the `mt` or `tar` commands fail, you will see one of three error messages listed at left. You should remove any of the files already extracted, and try the procedure again. If it fails again, you may have a bad tape. Call your local support guru (in the U.S. 800-USA-4SUN).

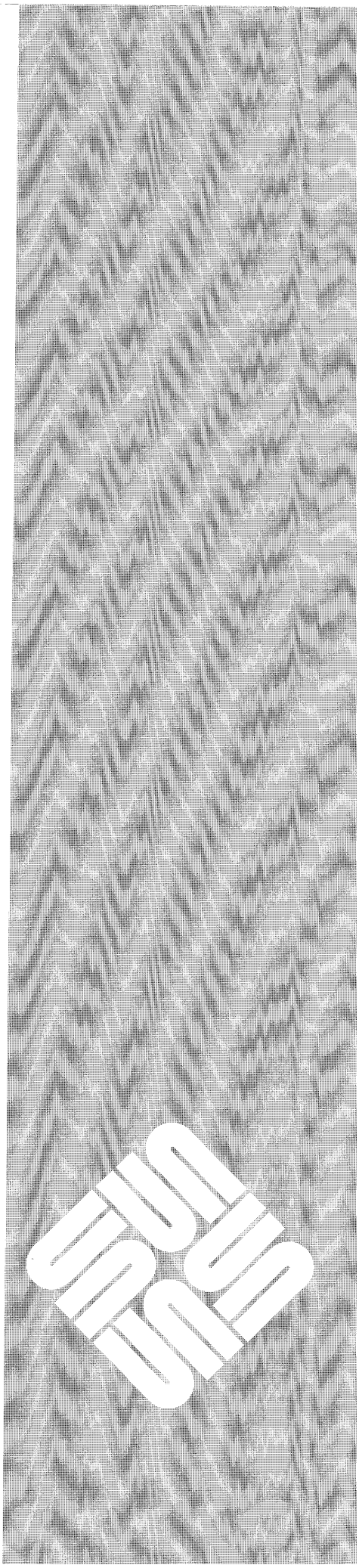
productname `directory not found. Installation failed.`
 	
`fonts/sunview directory not found. Installation failed.`
 	
`fonts/`*productname* `directory not found. Installation failed.`
 	
`bin directory not found. Installation failed.`
 	
`demo/`*productname* `directory not found. Installation failed.`
 	
`Installation failed. Exiting...`
	Any of these messages will appear if for some reason, one of the major installation directories is missing. Remove all the existing directories and try the install procedure again. If it fails again, you may have a bad tape. Call your local support guru (in the U.S. 800-USA-4SUN).

3

Client Setup Procedure

Client Setup Procedure **19**

3.1. Mount the Software 19
3.2. Install the Password 19
3.3. Choose an Installation Strategy 19
3.4. Create Links 20
3.5. Create `/etc/sundesk` 20



3

Client Setup Procedure

This chapter takes you through the client setup procedure step-by-step. Later in this chapter you need to decide on an installation strategy. One way is to set up the client machines so that the end users will have to do nothing but type the name of the desired application. The other strategy requires that the end users modify their shell environment.

3.1. Mount the Software

You must mount the installation directory on the server machine to a mount point on the client. Again, we recommend that you use the mount point `/usr/sundesk`. You will want to edit the client's `/etc/fstab` file and make the mount automatic after every reboot. See the *System and Network Administration* manual for more details about mounting file systems, and the `/etc/fstab` file. But for now, do a fast mount. Here's an example assuming that you are using `/usr/sundesk`. First, create the mount point directory.

Create a Directory for the Mount Point

```
# cd /usr
# mkdir sundesk
#
```

Then, do the mount. Make sure you do a hard mount by using the `-o hard` option as shown.

Mount the Installation Directory

```
# /etc/mount -o hard server_name:/usr/sundesk /usr/sundesk
#
```

3.2. Install the Password

See Chapter 6—*Installing the STAGE Password*—for the full details of this step.

3.3. Choose an Installation Strategy

If you want any user, on any licensed machine to be able to start up the products without modifying their environment, you must follow the next two steps in this chapter for each client machine. However, if your users are capable of modifying their environments, you can skip the remainder of the chapter, and have them follow the instructions in Chapter 4—*Installing a User.*

3.4. Create Links

If you create these links your users may not need to modify their path variables. Create links from the installation's `bin` directory to a more commonly used `bin` directory that most users already have in their default path. `/usr/bin` or `/usr/local/bin` will probably work. For example, you have a directory called `/usr/bin` that every client machine in your company mounts, and you have installed the STAGE products in `/usr/sundesk/bin`. You would make the links like this:

Making Links to the Products

```
# cd /usr/bin
# ln -s ../sundesk/bin/sunwrite sunwrite
# ln -s ../sundesk/bin/sunpaint sunpaint
# ln -s ../sundesk/bin/sundraw sundraw
#
```

NOTE *Make sure that when making the links you use relative pathnames.*

NOTE *If your client users are using the C Shell, they will need to type a* `rehash` *command if they do not wish to log out and log in again.*

3.5. Create `/etc/sundesk`

The installation script creates a file called `/etc/sundesk` on the server machine. It contains one line: the full path name of the installation directory. This file eliminates the need for each user to set a `SUNDESK` environment variable. If the user does not have `SUNDESK` set, then the STAGE products look in this file for a pointer to its start-up files, and its fonts. Look at the file with the `cat` command to view the format:

```
# cat /etc/sundesk
/usr/sundesk
#
```

If the mount point on the client is different than the pathname on the server, create `/etc/sundesk` with your favorite editor and supply the correct directory name.

Copying `/etc/sundesk` *to Clients*

However, if the path names are the same, you can just copy the file from the server to the client machine using the `rcp` command:

```
# rcp servername:/etc/sundesk clientname:/etc/sundesk
#
```

NOTE *If* `rcp` *displays any system errors your* `.rhosts` *file may be set up incorrectly. See the notes about the* `.rhosts` *file in 2.3.2—Using a Remote Tape Drive*

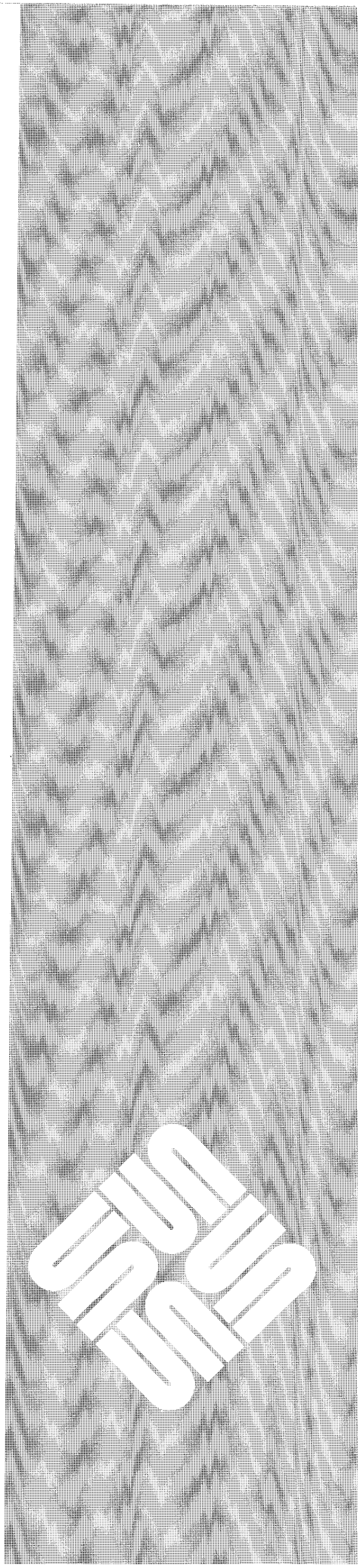
NOTE *On heterogeneous systems be careful when creating the* `/etc/sundesk` *file for your client machines. The path to* `/usr` *on the server machine may really be* `/usr.mc68010`. *Verify the mount point's 'real name' before creating the file.*

4

Installing a User

Installing a User **23**

4.1. User Installation Summary 23
4.2. Changing Your Path 23
4.3. Setting the SUNDESK Environment Variable 23



4

Installing a User

This section describes how to modify your environment to enable you to run the STAGE products.

4.1. User Installation Summary

If the systems administrator did **not** set up the client machines as described in Chapter 3—*Client Setup Procedure*, you should modify your working environment

You can tell if your system administrator has set up the client machine by running one of the three products. If the product can not find its fonts then you **must** set up your own user environment. (Each product will display an error message if it can't locate its fonts.) Otherwise, skip this chapter and go on to the next.

4.2. Changing Your Path

There are only two environment modifications that you must make. The first is to modify your path variable, so that the shell can find the STAGE products.

C Shell Users

```
% set path=($path install_directory/bin)
% rehash
%
```

Bourne Shell Users

```
% PATH=$PATH:install_directory/bin
% export PATH
%
```

4.3. Setting the SUNDESK Environment Variable

Each user must set an environment variable which enables STAGE products to find their fonts and other support files.

C Shell Users

```
% setenv SUNDESK install_directory
%
```

Bourne Shell Users

```
% SUNDESK=install_directory
% export SUNDESK
%
```

NOTE *Both the path modification and the environment variable setup should be added to your* `.login` *file (or* `.profile` *file for the Bourne Shell) so that they are automatically issued during login.*

Read Chapter 5—*Administration and User Options*—for the administration instructions on how to start SunWrite, SunPaint, and SunDraw and specify user options.

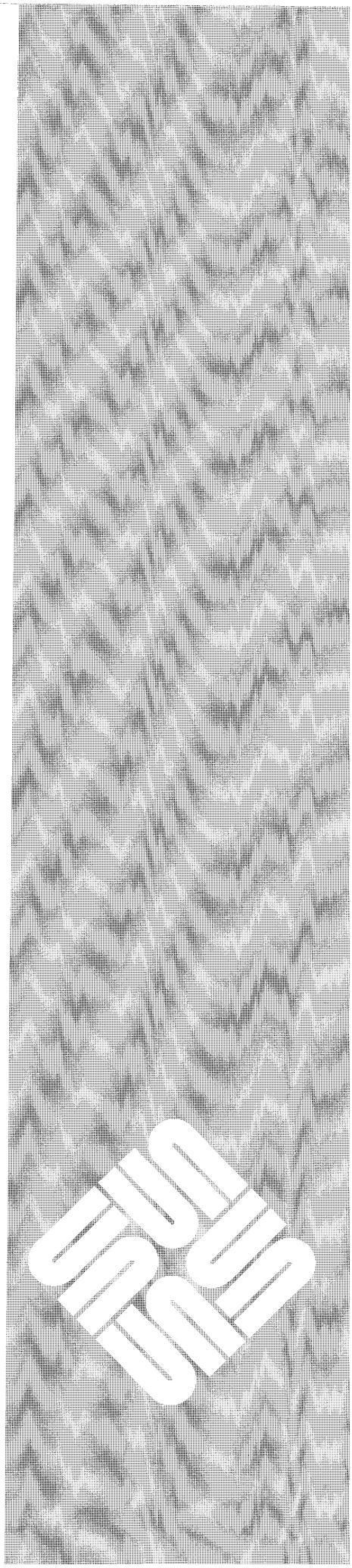
If you require a password see 6—*Installing the STAGE Password.*

5

Administration and User Options

Administration and User Options **27**

5.1. System Swap Space 27
5.2. User-Defined Options 27
Copying the Default Startup Files 27
5.3. Starting Up SunWrite, SunPaint, or SunDraw 28
Customizing Your `.rootmenu` 28
Starting STAGE Programs from a Shell Window 28



5

Administration and User Options

This chapter explains swap space requirements and individual startup file options you can change.

5.1. System Swap Space

SunWrite, SunPaint, and SunDraw are three application programs that run in the Suntools environment.

If you try to run all three applications simultaneously, you will need *at least* four (4) megabytes of swap space more than what you are currently using—SunPaint: 1.0M; SunWrite: 2.0M; SunDraw: 1.0M.

This means that to run the SunView window environment, plus STAGE products, plus actually do any useful work such as creating a complex document using SunWrite or a complex drawing using SunDraw, you should have a minimum of eight megabytes of swap, and 16 megabytes is recommended.

5.2. User-Defined Options

You can customize the startup state of any of STAGE product by editing its startup file.

There are example startup files for each product in the installation directory. These example startup files are also the default files that the STAGE products use, if you have not set one up yourself.

Changes you make to a startup file will not take effect on any running programs. You must quit, and restart the program.

Copying the Default Startup Files

If STAGE was installed in `/usr/sundesk` then you can copy over the three startup files with the following three commands.. Copy them into your home directory.

```
% cd
% cp /usr/sundesk/sunwrite/dot.sunwrite .sunwrite
% cp /usr/sundesk/sunpaint/dot.sunpaint .sunpaint
% cp /usr/sundesk/sundraw/dot.sundraw .sundraw
%
```

5.3. Starting Up SunWrite, SunPaint, or SunDraw

You must have the SunView user interface environment (the window system) running *before* you can use any of the STAGE products.

First, start up the SunView environment by typing `suntools` on your workstation (these tools run in the SunView window environment).

If you are not familiar with the SunView window environment, see the *SunView 1 Beginner's Guide.*

Customizing Your `.rootmenu`

To make STAGE tools more convenient to start up, you can customize your rootmenu and make these products available as a selection from the desktop. To modify your rootmenu, use your favorite editor to add the following entries to the `.rootmenu` file in your home directory. Again, assume an installation directory of `/usr/sundesk`.

```
"SunWrite" /usr/sundesk/bin/sunwrite
"SunPaint" /usr/sundesk/bin/sunpaint
"SunDraw" /usr/sundesk/bin/sundraw
```

Starting STAGE Programs from a Shell Window

To start up SunWrite, type the following command in a shelltool window:

```
% sunwrite &
[1] 4127
%
```

To start up SunPaint, type the following command in a shelltool window:

```
% sunpaint &
[1] 4130
%
```

To start up SunDraw, type the following command in a shelltool window:

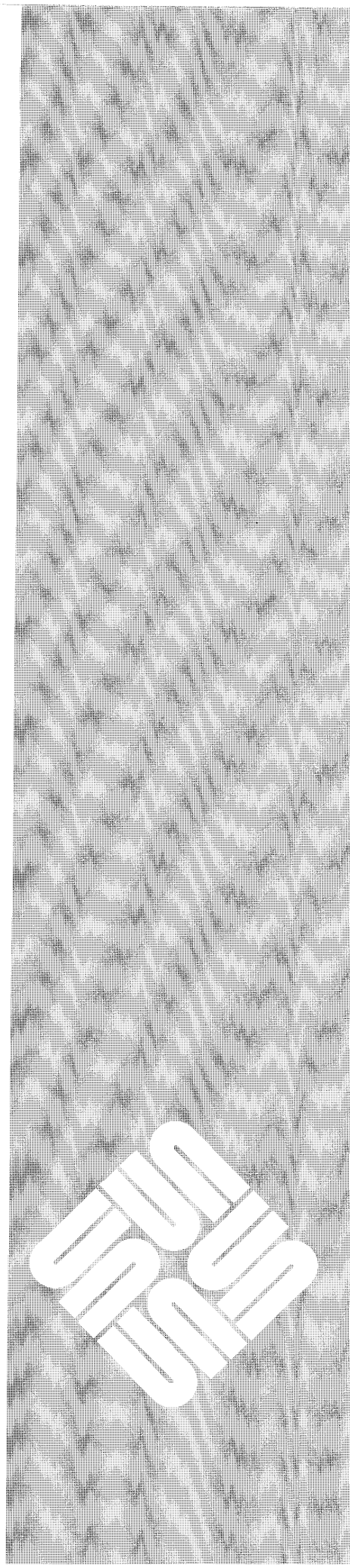
```
% sundraw &
[1] 4133
%
```

6

Installing the STAGE Password

Installing the STAGE Password **31**

6.1. Who Needs a Password? 31
Displaying Your Host ID 31
6.2. Installing A Password 32
6.3. Gather the Necessary Information 32
Sales Order Number 32
Right-to-Use License 32
6.4. Run the Installation Program 32
6.5. Password Installation Problems and What To Do 34
6.6. Installing Passwords 'by Hand' 35



6

Installing the STAGE Password

NOTE *SKIP THIS CHAPTER IF YOU DO NOT REQUIRE PASSWORDS.*

ONLY SITES IN THE UNITED STATES OF AMERICA REQUIRE PASSWORDS. SITES OUTSIDE OF THE UNITED STATES OF AMERICA DO NOT REQUIRE PASSWORDS.

This chapter tells you how to obtain and install the passwords you need to use STAGE products.

Each client machine needs three passwords—one for each product.

NOTE *If you start up one of the STAGE products, and you have not installed the password for that product, it will run as a demonstration application, and you will not be able to save your work!*

You should read this entire section before installing the password.

6.1. Who Needs a Password?

You need a password if:

- You have just installed STAGE for the first time, or,
- If you want to run STAGE on a different machine from the one you have been using.

Note that STAGE products determine the machine's identity by reading its `hostid` number from an integrated circuit (IC) inside the machine. If this IC is changed, STAGE will not recognize the old password. The same thing will happen if the CPU board on which the IC resides has been changed (unless, the IC is removed from the old board and inserted into the new one).

Displaying Your Host ID

You can display your machine's `hostid` with the `hostid`(1) command, as follows:

```
% hostid                    type the hostid command
1200222b                    system displays the host ID for your machine
%
```

If your machine undergoes service and your password no longer works, it is probably because the hostid IC has been changed. Tell your service department that you want the old hostid IC put back into your machine. If this is not possible, contact Sun for a new password.

6.2. Installing A Password

To install the password on your machine, you must execute the `install_password` program. The `install_password` program provides instructions and asks you for information. Before executing the installation program, you must collect some information.

6.3. Gather the Necessary Information

In order to get your password to run STAGE programs, you need to know your sales order number and what licenses you have purchased. Be sure to collect this information *before* calling the Sun hotline. The `install_password` program will tell you when you are ready to place the phone call.

Sales Order Number

The `install_password` program will ask you to enter your sales order number. The Sun hotline operator will need to know this number in order to give you a password.

Right-to-Use License

You may obtain only one password per right-to-use license.

To run STAGE products on more than one machine, you must buy additional licenses from your Sun sales representative and then install a password for each machine.

6.4. Run the Installation Program

On the machine on which you wish to run STAGE products, become superuser (root) and start the `install_password` program. If the software was installed or mounted under `/usr/sundesk`, then the password installation program is in the `/usr/sundesk/bin` directory, and can be executed with the following command. First, run the program for SunWrite.

```
% su root
Password:
# /usr/sundesk/bin/install_sunwrite_password
#
```

The first thing that you will see is the following greeting:

```
This program will help you obtain and install a password for
SunWrite for the machine 'onion'.

If you have not purchased the licenses you need for
SunWrite (as shown on your sales order), contact
your Sun sales rep. to purchase the licenses.

Did you purchase a SunWrite license for this machine? [y/n]
```

You Purchased a STAGE License

Enter a **y** (if you purchased a SunWrite license). This message appears:

```
This program will install a SunWrite password.

When you call Sun to obtain the password, the operator
will ask you for:
    the product name,
    your workstation's hostid,
    your sales order number, and
    your name.
This program will supply the product name and the workstation
hostid.  Your sales order number may be found attached to the
shipment.
Enter your sales order number here:
```

Enter your sales order number and you will see:

```
Call Sun at (800) 872-4786.  When the operator answers, tell
him or her that you wish a password for SunWrite.

Tell the operator:
    Product Name:           SunWrite
    Host id:                your hostid will appear here
    Sales order number:     your sales order number will appear here

Type in the SunWrite password below as the operator reads it
to you.
SunWrite password:
```

Call for Your Password

Call Sun at the number provided. When the operator answers, tell him or her that you want a password for SunWrite and give the operator the rest of the information when asked.

If your telephone is near your workstation, enter the SunWrite password at your workstation as the operator reads it to you.

NOTE *Be sure the password is accepted by the install program before terminating your call to the Sun hotline.*

If your telephone is not near your workstation, be sure to have a paper and pencil ready to record the password as the operator reads it to you. Be sure to verify the password before you hang up.

The password will be a string of letters and numbers that will look something like this:

```
glxi y2wz
```

The letters in the password can be entered as uppercase or lowercase. Spaces are permitted between characters, but are not necessary. Be sure you distinguish between the number zero and the letter o (oh) and between the number one and the letters i and l (ell).

NOTE *Be careful not to enter any extra characters (especially spaces) as the first character of your password.*

When you have typed in the correct password you will see:

```
SunWrite password installed on onion.

Password installation complete.
```

Before terminating your call to the Sun Hotline, run the password installation programs for SunPaint, `install_sunpaint_password`, and for SunDraw, `install_sundraw_password`.

NOTE *A password that works on your machine will not work on another machine.*

You are now ready to run all three STAGE products!

6.5. Password Installation Problems and What To Do

This section lists possible error messages from the password installation program, and what to do when they occur.

Table 6-1 *Error Messages from Password Installation*

`*** Can't open password file: /etc/licenses: Permission denied Run this program as root.`	Occurs if you forgot to log in as the superuser. Run the UNIX command `su`, and restart the password installation program.
`Password for SunWrite is already installed on` *onion.*	This message will be displayed if your machine is already authorized to run SunWrite. If you get this message, you do not need to install a password. Go ahead and start using the SunWrite.
`Contact your Sun sales rep. to purchase a SunWrite license.`	This message is displayed if you enter an '**n**' when the installation program asks you if you have purchased a license. If you do not have the licenses to run the STAGE products, the program will terminate. You must obtain the appropriate licenses before you can install the password.

Table 6-1 *Error Messages from Password Installation— Continued*

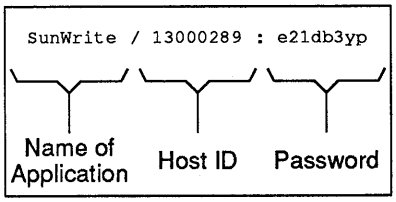
`***Invalid password, try again.`	Retype the password to make sure that you did not make a typographical error. If it is still incorrect and you are still on the telephone, ask the Sun operator to repeat the password. Otherwise, you must call again to get the correct password.

`Tell the operator:`
`Product Name: SunWrite`
`Host id:` *your hostid will appear here*
`Sales order number:` *your sales order number will appear here*
 	
`Type in the SunWrite password below as the operator reads it to you.`
 	
`SunWrite password:`	

6.6. Installing Passwords 'by Hand'

If you have many machines on which you wish to install these products, installing the passwords 'by hand' would certainly prove to be less time consuming. Before calling the Sun operator, have all of the machines' hostids, and their corresponding licenses ready to read to the operator.

Create a file on the server machine called `/etc/licenses`. This file is actually used by many other programs as well, so it may already exist on your system. If this is the case, simply edit the file that's already there, being careful not to destroy or lose any of its contents.



Each line in the `/etc/licenses` file represents one product's license. Each of these lines contain the product name, the hostid of the machine for which it is licensed, and the password. Use the '**/**' character to separate the product name and the hostid, and the '**:**' character between the hostid and the password. Here is an example `/etc/licenses` file.

```
# cat /etc/licenses
SunWrite/13000289:e21db3yp
SunTrac-1.0/13000289:8s86tmtv
SunSimplify-1.0/13000289:cbaw 15kjo389lmfl
#
```

Once you have created the `/etc/licenses` file on the server, and it contains the passwords for all of your machines, you can download this file to all of the clients. The products can then find the password for the client machine in the `/etc/licenses` file when executed. You can, logged in as root, use `rcp` to copy the file to all of the clients. In the following command substitute the server machine's name for *server_name*, and each of the client machines' names in turn for *client_name*.

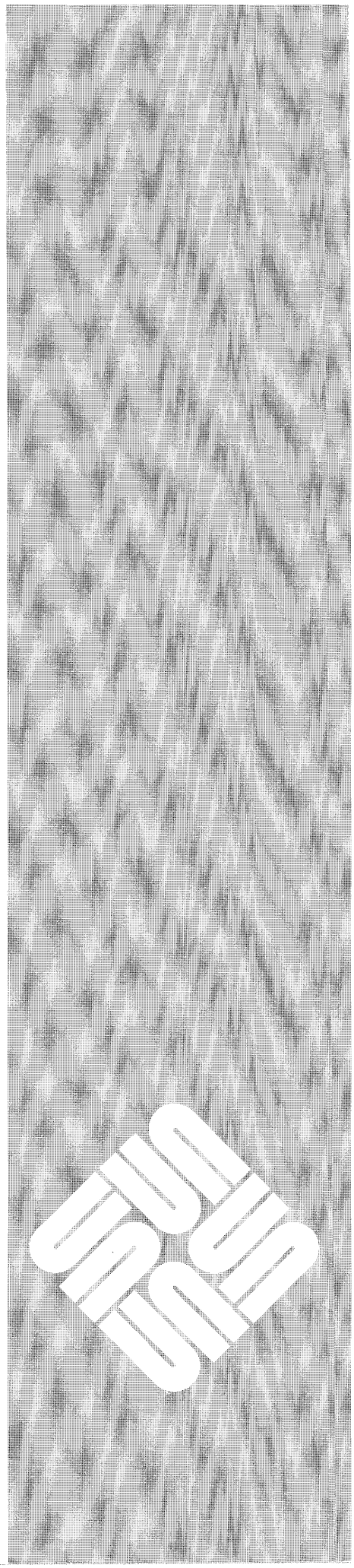
```
# rcp server_name:/etc/licenses client_name:/etc/licenses
#
```

NOTE *If* `rcp` *displays any system errors your* `.rhosts` *file may be set up incorrectly. See the notes about the* `.rhosts` *file in 2.3.2—Using a Remote Tape Drive*

A

SunWrite "dot" File

SunWrite "dot" File 39



A

SunWrite "dot" File

This file, `.sunwrite`, is part of the SunWrite distribution tape. You can edit it to customize your SunWrite environment. This file is read each time you start SunWrite, therefore, the changes you make to `.sunwrite`, will not affect any running copies of SunWrite. You must quit SunWrite and start it again.

If your system administrator installed the STAGE products in `/usr/sundesk`, the default file can be found in `/usr/sundesk/sunwrite/dot.sunwrite`.

```
#
##
## SunWrite environment variables.
##
#
#  This file is read by SunWrite at program startup.
#  It contains user defaults to SunWrite parameters.
#
#  The keyword can be either in upper case or lower
#  case characters.
#
#  The general format for setting a SunWrite variable
#  is...
#
#  ZOOM 100
#
#  where 'ZOOM' is the keyword, and
#  '100' is its value.
#
#  Comment lines contain a '#' character in the first
#  character position on that line and is ignored by
#  SunWrite.
#
#  DO NOT use tabs in this file.
#
# Key Word            Arguments Default     Description
#                      (if any)  value
# ========            ========= ======= ================================
#
# ZOOM                  int      0       ZOOM controls the zoom factor in View.
#                                          valid values are one of the following:
#                                          0 - for "fit to window"
#                                          100 - for "Actual Size"
```

```
#                                          200 - for "Twice Actual Size"
# DEFAULTRES            int      300      DEFAULTRES controls the default
#                                           resolution of the graphics that are
#                                           imported into frames. This value is
#                                           indicated in the "Resolution" field
#                                           in the Frame Properties window.
#                                           DEFAULTRES can range from 10 through
#                                           9999.
# UNITS                 string   INCHES   UNITS controls the default display unit
#                                          for rulers and Grids in SunWrite. UNITS
#                                           is also reflected in the units used in
#                                           the "New Document Settings" window.
#                                           Valid values are one of the following:
#                                           INCHES
#                                          DECIMALINCHES
#                                         CENTIMETERS
#                                           MILLIMETERS
#                                           PICAS
#                                         POINTS
# XGRIDDIVISIONS        float    0.25     XGRIDDIVISIONS controls the default
#                                           Horizontal grid mark spacing in current
#                                           units (see UNITS).  The default value
#                                           appears in the "Grid/Ruler Setting"
#                                           window.
# YGRIDDIVISIONS        float    0.25     YGRIDDIVISIONS controls the default
#                                           Vertical grid mark spacing in current
#                                           units (see UNITS).  The default value
#                                           appears in the "Grid/Ruler Setting"
#                                           window.
# PRINTER               string   lw       PRINTER controls the default printer
#                                           name where all SunWrite documents
#                                           are routed to.  The default value
#                                           appears in the "Printer Setting" window.
# HEIGHT                float   11.0      HEIGHT controls the height of the
#                                           default SunWrite page  (in UNITS) .
#                                           Values (in inches) for some standard
#                                           page types are:
#                                           U.S Letter - 11.0
#                                           U.S. Legal - 14.0
#                                           International A4 - 11.69
#                                           International B5 - 9.84
#                                           Notes - 8.5
# WIDTH                 float    8.5      WIDTH controls the width of the default
#                                           SunWrite page (in UNITS).
#                                           Values (in inches) for some standard
#                                           page types are:
#                                           U.S Letter - 8.5
#                                           U.S. Legal - 8.5
#                                           International A4 - 8.27
#                                           International B5 - 6.93
#                                           Notes - 7.0
#
# TOPMARGIN             float    0.75     TOPMARGIN controls the blank space
```

```
#                                        from the top of the page to where
#                                        first line of text can be typed
#                                        (in UNITS).  This value is reflected
#                                        in the Top Margin field in New Document
#                                        Settings window
# OUTSIDEMARGIN          float   0.75    OUTSIDEMARGIN controls the blank space
#                                        from the last character on a line to the
#                                       outside boundary of a page (in UNITS).
#                                        This value is reflected in the
#                                        Outside Margin field in New Document
#                                        Settings window
# INSIDEMARGIN           float   1.0     INSIDEMARGIN controls the blank space
#                                        from the inside boundary of a page to
#                                        the first character of text (in UNITS).
#                                        This value is reflected in the
#                                        Inside Margin field in New Document
#                                        Settings window
# BOTTOMMARGIN           float   0.75    BOTTOMMARGIN controls the blank space
#                                        from the last line of text to the
#                                        bottom of the page (in UNITS). This
#                                        value is reflected in the Bottom Margin
#                                        field in  New Document Settings window.
#
# MIDDLEWHITESPACE       float   0.25    Middle White Space (in UNITS)
# TOPWHITESPACE          float   0.25    Top White Space (in UNITS)
# BOTTOMWHITESPACE       float   0.25    Bottom White Space (in UNITS)
# LEFTWHITESPACE         float   0.25    Left White Space (in UNITS)
# RIGHTWHITESPACE        float   0.25    Right White Space (UNITS)
#                                        These five keywords control the amount
#                                        of white space between the edge of a
#                                        SunWrite page and the SunWrite canvas
#
# STARTINGPAGE           int     1       STARTINGPAGE controls the first page
#                                        number of a default SunWrite document.
#                                        This value is reflected in the
#                                        "First Page" field in the New Document
#                                        Settings window.
# NUMBEROFCOLUMNS        int     1       NUMBEROFCOLUMNS controls the number
#                                        of columns in a default SunWrite
#                                        page.  This value is reflected in
#                                        the Column Properties window.
# FONTNAME        string  timesroman
#                                        FONTNAME controls the font style of the
#                                        default SunWrite text.  This value
#                                        is reflected in the "Font" field in
#                                        the Text Properties window.
# FONTSIZE               int     12      FONTSIZE controls the  pointsize of
#                                        the default SunWrite text.  This value
#                                        is reflected in the "Size" field in the
#                                        Text Properties window
# FONTCOLOR              int     0       FONTCOLOR controls the text color of
#                                        the default SunWrite text. FONTCOLOR
#                                        value can range from 0 (for white)
```

```
#                                        to 100 (black).  This value is reflected
#                                        in the "Text Color" field in the Extra
#                                        Text Properties window.
# FONTSTYLE              string  MEDIUM  FONTSTYLE controls the font face of the
#                                        default SunWrite text. This value is
#                                        reflected in the "Face" field in
#                                        Text Properties window.
#                                        Valid values are:
#                                        MEDIUM
#                                        ITALIC
#                                        BOLD
#                                        BOLDITALIC
# FONTSCRIPT             string  NORMAL  FONTSCRIPT controls the position of the
#                                        default SunWrite text.  This value is
#                                        reflected in the "Position" field
#                                        in Text Properties window. Valid values
#                                        are:
#                                        SUPERSCRIPT
#                                        SUBSCRIPT
#                                       NORMAL
# FONTUNDERLINE          string  NORMAL  FONTUNDERLINE controls the underlining
#                                        of the default SunWrite text.  This
#                                        value is reflected in the "Position"
#                                        field in Text Properties window.  Valid
#                                        values are:
#                                        NORMAL - for no underline
#                                        UNDERLINE
#                                        DOUBLEUNDERLINE
# FONTCASE               string  NORMAL  FONTCASE controls the case type of the
#                                        default SunWrite text.  This is
#                                        reflected in the "Case" field in Text
#                                        Properties Window.  Valid values are:
#                                        NORMAL - for Mixed Case
#                                        LOWERCASE
#                                        UPPERCASE
#                                       SMALLCAPS
# JUSTIFICATION          string  RAGGEDRIGHT
#                                       JUSTIFICATION controls the justification
#                                        of a default text paragraph.  This is
#                                        reflected in the "Justify" field within
#                                        the Paragraph Options of the Text
#                                        Properties window.  Valid values are:
#                                        RAGGEDRIGHT - for Right Justification
#                                       RAGGEDLEFT - for Left Justification
#                                        CENTER - for Center justification
#                                        JUSTIFY- for Full Justification
# LEADING                int     120     LEADING controls the % leading factor
#                                        used in SunWrite paragraphs.  This is
#                                        reflected in the "Leading Expansion"
#                                        field in the Extra Text Properties
#                                        window
# LINEWIDTH              float           LINEWIDTH controls the width of the
#                                        lines  (in UNITS) that are used to
```

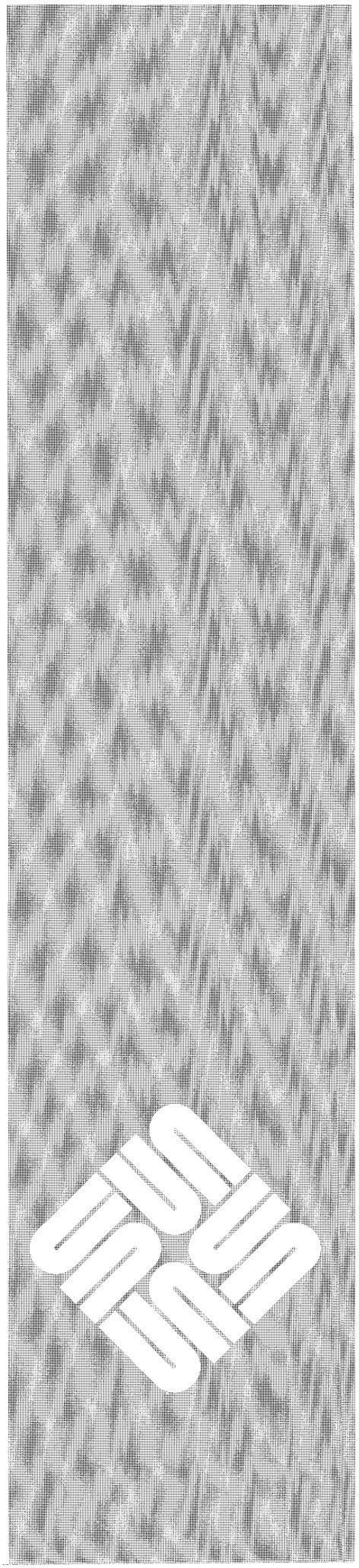
```
#                                        create frames in SunWrite.  This is
#                                        reflected in the "Line Width" field
#                                        in the Frame Properties window.
# HYPHENATION           int     1        HYPHENATION controls the auto-
#                                        hyphenation of SunWrite text.  This is
#                                        reflected in the "Auto Hyphenation"
#                                        field in Extra Text Properties
#                                        window. Valid value are:
#                                        1 -  Auto Hyphenation is ON
#                                        0 -  Auto Hyphenation is OFF
# KERNING               int     0        KERNING controls the Auto Kerning
#                                        of SunWrite text.  This is
#                                        reflected in the "Auto Kerning"
#                                        field in Extra Text Properties
#                                        window. Valid value are:
#                                        1 - Auto Kerning is ON
#                                        0 - Auto Kerning is OFF
# SPREAD                int     0        SPREAD controls the number of pages
#                                        that can be viewed simultaneously
#                                        in SunWrite.  Valid values are:
#                                        1 - View Two Pages
#                                        0 - View One Page
#
# RULERS                int     0        RULERS controls the display of
#                                        horizontal and vertical rulers
#                                        in SunWrite.  Valid values are:
#                                        1 - Display Rulers is ON
#                                        0 - Display Rulers is OFF
# SCALEGRAPHIC          int     0        SCALEGRAPHIC controls the scaling of
#                                        graphics imported into SunWrite. This is
#                                        reflected in the "Graphics Option"
#                                        field in Frame Properties window. Valid
#                                        values are:
#                                        1 - Graphics scaled when imported
#                                            into SunWrite frame
#                                        0 - Graphics not scaled when imported
#                                            into SunWrite frame
# GRIDSVISIBLE          int     0        GRIDVISIBLE controls the display of
#                                        grids on a default SunWrite page.
#                                        Valid values are:
#                                        1 - Grid display is ON
#                                        0 - Grid display is OFF
# TEMPLATEVISIBLE       int     1        TEMPLATEVISIBLE controls the display of
#                                        templates on a default SunWrite page.
#                                        Valid values are:
#                                        1 - Template display is ON
#                                        0 - Template display is OFF
# GUIDESVISIBLE         int     0        GUIDESVISIBLE controls the display of
#                                        guides on a default SunWrite page.
#                                        Valid values are:
#                                        1 - Guides display is ON
#                                        0 - Guides display is OFF
# DOUBLESIDED           int     0        DOUBLESIDED controls the type of
```

```
#                                        the default sunwrite document.
#                                        This value is reflected in the
#                                      "Document" field in New Document
#                                        Settings window. Valid values are:
#                                        1 - Double Sided Document
#                                        0 - Single Sided Document
# SNAPTOGRID            int     1       SNAPTOGRID controls the positioning
#                                        of the graphics imported into SunWrite
#                                        frames. Valid values are:
#                                        1 - Snap to Grid is set to ON.
#                                        0 - Snap to Grid is set to OFF
# SNAPTOGUIDES          int     0       SNAPTOGUIDES controls the positioning
#                                        of the graphics imported into SunWrite
#                                        frames. Valid values are:
#                                        1 - Snap to Guides is set to ON.
#                                        0 - Snap to Guides is set to OFF
# FONTS                 string          FONTS controls the absolute path
#                                        to the directory where SunWrite
#                                        fonts are installed.  The default
#                                        value of FONTS is attached by the
#                                        SunWrite Install Process.
# PAGESTYLE             string  ""      PAGESTYLE controls the default style
#                                        guide for a SunWrite document.
# CONTAINCLIPFILE       string  /tmp/sunwrite.frame.clip
#                                       CONTAINCLIPFILE controls the file that
#                                        is used to place frames when frames
#                                        are cut and pasted.
# PAGECLIPFILE          string  /tmp/sunwrite.page.clip
#                                        PAGECLIPFILE controls the file that
#                                        is used to place pages when pages
#                                        are cut and pasted (using Edit Pages).
# GRAPHICSCLIPFILE      string  /tmp/sundesk_clipboard
#                                        GRAPHICSCLIPFILE controls the file
#                                        that is used to performs the cut,
#                                        paste and other edit operations
#                                        between SunWrite and SunDraw and
#                                        SunPaint.  If this is changed, make
#                                        sure it is changed for SunDraw and
#                                        SunPaint.
#
# Let's set some variables now....
#
fonts $SUNDESK/fonts
fontsize 12
zoom 100
RULERS 1
GRAPHICSCLIPFILE  /tmp/sundesk_clipboard
#
middlewhitespace  .125
topwhitespace  .125
bottomwhitespace  .125
leftwhitespace  .125
rightwhitespace  .125
```

B

SunPaint "dot" File

SunPaint "dot" File 49



B

SunPaint "dot" File

This file, `.sunpaint`, is part of the SunPaint distribution tape. You can edit it to customize your SunPaint environment. This file is read each time you start SunPaint, therefore, the changes you make to `.sunpaint`, will not affect any running copies of SunPaint. You must quit SunPaint and start it again.

If your system administrator installed the STAGE products in `/usr/sundesk`, the default file can be found in `/usr/sundesk/sunpaint/dot.sunpaint`.

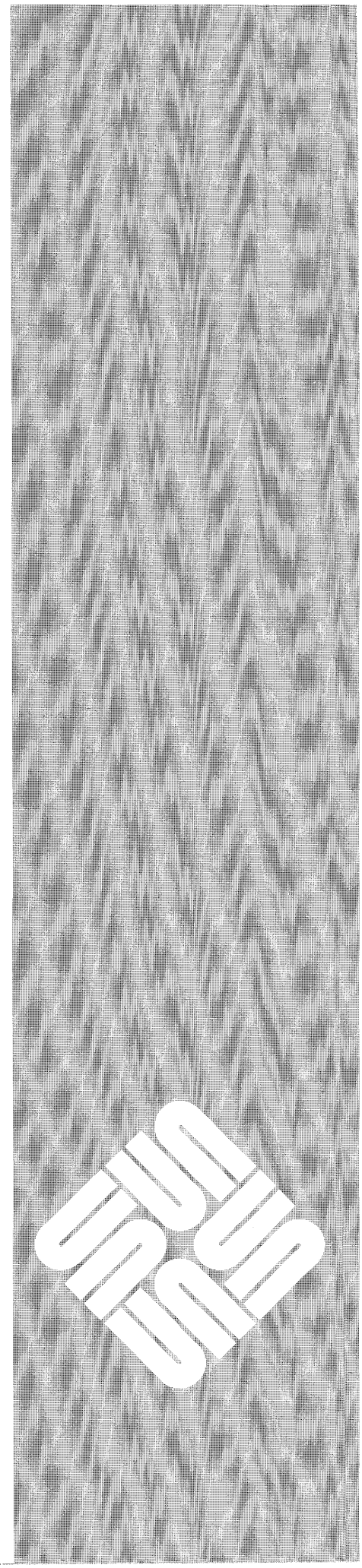
```
#
##
## SunPaint environment variables
##
#
#  This file is read by SunPaint at program startup.
#  It contains user defaults to SunPaint parameters.
#
#  The keyword can be either in upper case or lower
#  case characters.
#
#  The general format for setting a SunPaint variable
#  is...
#
#  CANVAS_LIMIT    1600, 1280
#
#  where 'CANVAS_LIMIT' is the keyword, and
#  '1600, 1280' is its value.
#
#  Comment lines contain a '#' character in the first
#  character position on that line and is ignored by
#  SunPaint.
#
#  DO NOT use tabs in this file.
#
# Key Word          Arguments          Description
#                    (if any)
# ========          =========          ===========
# CANVAS_LIMIT      int, int           CANVAS_LIMIT controls the maximum size
#                                      of the canvas.  It is set as x,y where
#                                      x is the width of the canvas in pixels
#                                      and y is the height of the canvas in
#                                      pixels.
```

```
# CANVAS_SIZE       int, int          CANVAS_SIZE controls the size of the
#                                     default canvas when SunPaint in invoked.
#                                     It is set as x,y where x is the width of
#                                     the canvas in pixels and y is the height
#                                     of the canvas in pixels. CANVAS_SIZE
#                                     value is reflected in the Window Header
#                                     area of SunPaint
# CLIPBOARD         string            CLIPBOARD controls the filename
#                                     which is used for all edit
#                                     operations in SunPaint. The
#                                     filename should be the same
#                                     as  GRAPHICSCLIPFILE in
#                                     .sunwrite file if you want to
#                                     cut and paste across SunPaint and
#                                     and SunWrite.
# FONT_LIST         string            FONT_LIST controls the absolute
#                                     path to the directory where
#                                     SunPaint fonts are installed.
#                                     The default value is attached
#                                     by the SunPaint Install Process.
# MARKERS           int               MARKERS controls a visual guide
#                                     that displays markers on the canvas
#                                     as an aid in drawing geometric
#                                     figures.  Valid values are :
#                                     0 - Markers are off
#                                     1 - Markers are on (Default).
# RASTER_TYPE                         RASTER_TYPE controls the
#                                     type of raster that is rendered
#                                     in SunPaint.  Valid values are:
#                                     1 -  RT_STANDARD (standard raster type)
#                                     2 -  RT_BYTE_ENCODED (byte encoded raster
#                                          type). Default is 2
# PRINTER           string            PRINTER specifies the default printer.
#                                     The default value appears in the printer
#                                     settings window.
#
## Current Values
##
#
CANVAS_LIMIT    1600, 1280
CANVAS_SIZE     640, 480
CLIPBOARD       "/tmp/sundesk_clipboard"
FONT_LIST       "$SUNDESK/fonts/sunpaint/fontlist"
MARKERS          1
RASTER_TYPE     2
```

C

SunDraw "dot" File

SunDraw "dot" File 53



C

SunDraw "dot" File

This file, `.sundraw`, is part of the SunDraw distribution tape. You can edit it to customize your SunDraw environment. This file is read each time you start SunDraw, therefore, the changes you make to `.sundraw`, will not affect any running copies of SunDraw. You must quit SunDraw and start it again.

If your system administrator installed the STAGE products in `/usr/sundesk`, the default file can be found in `/usr/sundesk/sundraw/dot.sundraw`.

```
#
##
## SunDraw environment variables
##
#
#  This file is read by SunDraw at program startup.
#  It contains user defaults to SunDraw parameters.
#
#  The keyword can be either in upper case or lower
#  case characters.
#
#  The general format for setting a SunDraw variable
#  is...
#
#  RASTER_TYPE     2
#
#  where RASTER_TYPE is the keyword, and
#  2 is its value.
#
#  Comment lines contain a '#' character in the first
#  position on that line and is ignored by SunDraw.
#
#  DO NOT use tabs in this file.
#
#Key Word       Arguments  Default         Description
#                (if any)  value
#========       =========  ========      ====================
#
#FONTS           string                  FONTS controls the absolute path to
#                                        the directory where SunDraw fonts are
#                                        installed.
#                                        The default value is attached by the
#                                        SunDraw Install Process.
```

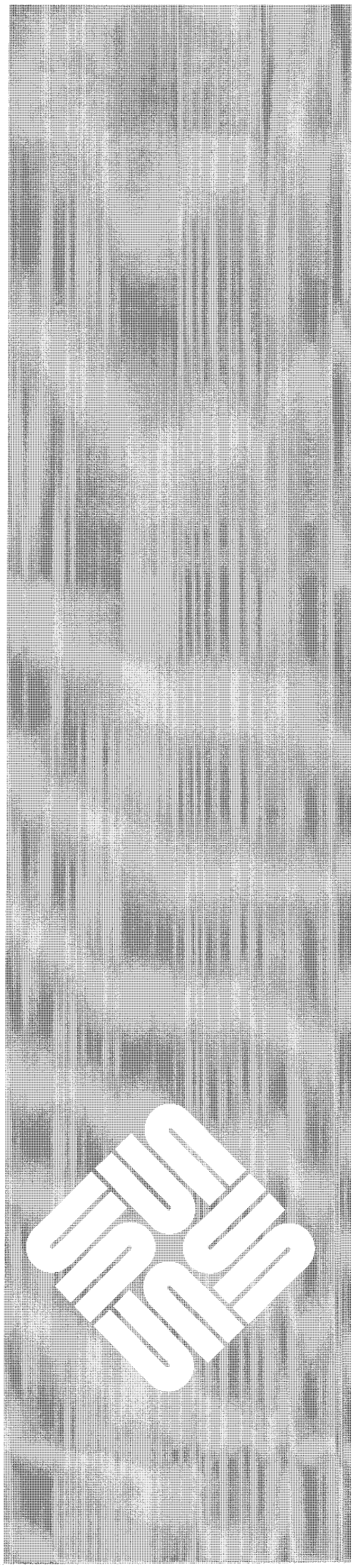
```
#
#SIMPLE_CUT       none                      SIMPLE_CUT controls the type of files
#                                           that are created when performing
#                                           cut/paste operations in SunDraw.
#                                           When SIMPLE_CUT is disabled the
#                                           Encapsulated Postscript file and the
#                                           vector (.vec) files are created.
#                                           If the user anticipates a lot of clip-
#                                           board activity between SunDraw and
#                                           SunWrite/SunPaint, then SIMPLE_CUT
#                                           must be disabled.  On the other hand,
#                                           enabling SIMPLE_CUT will speed up the
#                                           clipboard operations in SunDraw, but
#                                           the user  cannot cut and paste between
#                                           SunDraw and SunWrite/SunPaint.
#
#CLIPBOARD        string   "/tmp/sundesk_clipboard"
#                                           CLIPBOARD controls the filename which
#                                           is used for all edit operations in
#                                           SunDraw. The filename should be the
#                                           same as GRAPHICSCLIPFILE in the
#                                           .sunwrite file and CLIPBOARD in
#                                           the .sunpaint file if the user
#                                           anticipates clipboard operations
#                                           across these applications.
#
#        There will be two (2) files created. One with an extension
#        .vec and the other with no extension.  To cut and paste from
#        SunDraw into SunWrite or SunPaint, both the files are needed.
#        If you do not intend to cut and paste between applications,
#        then enable the variable SIMPLE_CUT at the end of this file.
#        Enabling SIMPLE_CUT will result in files only with the .vec
#        extension. (By default SIMPLE_CUT is disabled)
#
#
#MARKERS          none                      MARKERS enables a visual guide (+) at
#                                           the origin of an object when drawing.
#
#UNIT_TYPE        [0-4]     2               UNIT_TYPE controls the default display
#                                           unit for rulers andgrids in SunDraw.
#                                           Valid values are:
#                                                0 - MILLIMETERS
#                                                1 - CENTIMETERS
#                                                2 - INCHES
#                                                3 - POINTS
#                                                4 - PICAS
#
#PAGE_SIZE        w, h      8.0, 10.75      PAGE_SIZE controls the dimensions of a
#                                           default SunDraw page.  w is the width
#                                           and h is the height of the page, in
#                                           UNIT_TYPE.  To avoid "posterization",
#                                           x should be less than or equal to 8.0
#                                           inches (203.2 mm) and y should be less
```

```
#                                        than or equal to 10.75 inches (273 mm).
#                                        "Posterization" is when the printer
#                                        spreads a large picture out over
#                                        several pages.
#
#RASTER_TYPE       [0-2]      2          RASTER_TYPE controls the type of
#                                        raster that is rendered in SunDraw.
#                                        Valid values are:
#                                        0 -  RT_OLD
#                                        1 -  RT_STANDARD
#                                        2 -  RT_BYTE_ENCODED
#
#
## Current Values
##
#
CLIPBOARD         "/tmp/sundesk_clipboard"
RASTER_TYPE       2
UNIT_TYPE         2
PAGE_SIZE         8.00, 10.75
MARKERS
```

D

SunWrite Printer Script

SunWrite Printer Script 59



D

SunWrite Printer Script

`sunwrite.print` is the Shell script which SunWrite uses to direct output to the printing device.

The script is set up assuming that `/usr/ucb/lpr` is the print spooler in use.

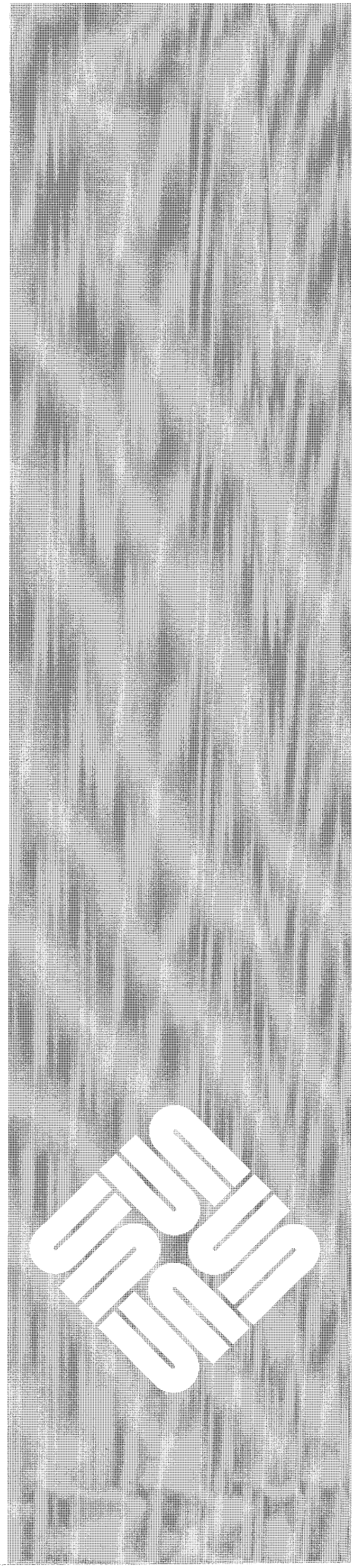
You can change the script to suit your local installation as long as you adhere to the calling convention stated in the script.

```
#! /bin/sh

#
# printer script for sunwrite
#

#
# $1 : name of printer to which to spool
# $2 : name of file to print
#

printcommand=/usr/ucb/lpr

$printcommand  -r  -P$1  -Jsunwrite  $2
```

E

SunDraw Printer Script

SunDraw Printer Script 63



E

SunDraw Printer Script

`sundraw.print` is the Shell script which SunDraw uses to direct output to the printing device.

The script is set up assuming that `/usr/ucb/lpr` is the print spooler in use.

You can change the script to suit your local installation as long as you adhere to the calling convention stated in the script.

Note that when SunDraw is generating *raster* output, it uses the `pssun` utility which is part of the TranScript software package from Adobe Systems Incorporated. If you have a raster to PostScript conversion utility other than `pssun`, you will need to ensure that the parameter conventions of `pssun` are adhered to by your utility.

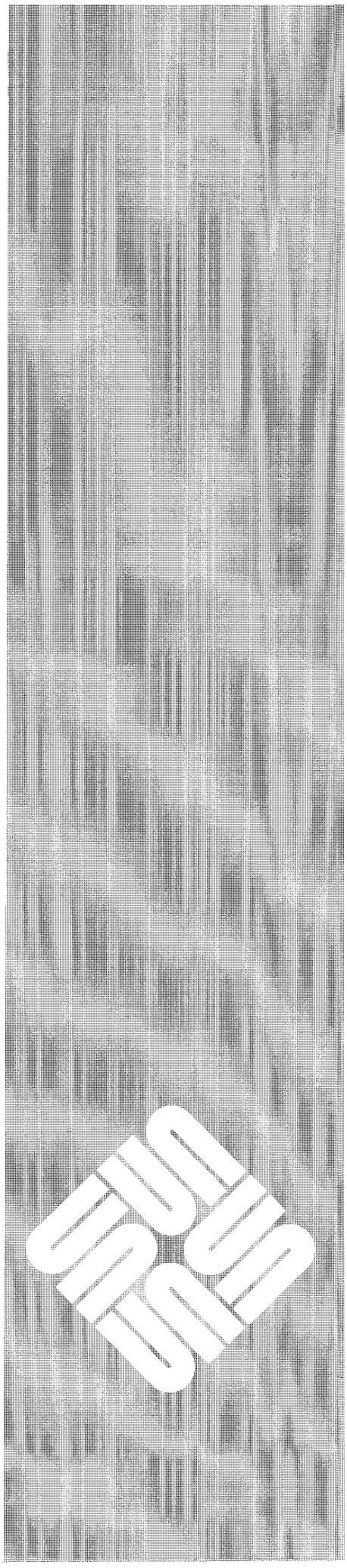
```
#!/bin/sh

#filter=pssun
filter=
printfile=
rotate=
double=
scale=
position=
printer=lw
print_to_file=0
printcommand=/usr/ucb/lpr
file_type=

for i in $*
do case $1 in
    -a)
    filter=pssun
    file_type=raster
    shift ;;
    -o)
    filter=
    file_type=postscript
    shift;;
    -f)
    printfile=$2
    print_to_file=1
```

```
    shift 2 ;;
    -r)
    rotate="-r"
    shift ;;
    -2)
    double="-2"
    shift ;;
    -S)
    scale="-S $2"
    shift 2 ;;
    -s)
    scale="-s $2 $3"
    shift 3 ;;
    -l)
    position="-l $2 $3"
    shift 3 ;;
    -P)
    printer=$2
    shift 2 ;;
    *)
    filename=$1
    break ;;
    esac
done

#printing to a file as raster means we turn off the filter so as to
#save data in raster form
if test $print_to_file -eq 1 -a -n "$filter" ; then
    filter=
fi

if test $print_to_file -eq 1 ; then
    if test "$file_type" = "postscript" ; then
    cp "$filename" "$printfile"
    else
    cat > $printfile
    fi
else
    if test -n "$filter" ; then
    $filter $rotate $double $scale $position < $filename | $printcommand -r -P$printer
    else
    $printcommand -r -P$printer $filename
    fi
fi
```

F

SunPaint Printer Script

SunPaint Printer Script 67



F

SunPaint Printer Script

`sunpaint.print` is the Shell script which SunPaint uses to direct output to the printing device.

The script is set up assuming that `/usr/ucb/lpr` is the print spooler in use.

You can change the script to suit your local installation as long as you adhere to the calling convention stated in the script.

Note that SunPaint uses the `pssun` utility which is part of the TranScript software package from Adobe Systems Incorporated. If you have a raster to PostScript conversion utility other than `pssun`, you will need to ensure that the parameter conventions of `pssun` are adhered to by your utility.

```
#!/bin/sh

filter=pssun
printfile=
rotate=
double=
scale=
position=
printer=lw
print_to_file=0
printcommand=/usr/ucb/lpr

for i in $*
do case $1 in
    -f)
    printfile=$2
    print_to_file=1
    shift 2 ;;
    -r)
    rotate="-r"
    shift ;;
    -2)
    double="-2"
    shift ;;
    -S)
    scale="-S $2"
    shift 2 ;;
    -s)
```

```
    scale="-s $2 $3"
    shift 3 ;;
    -l)
    position="-l $2 $3"
    shift 3 ;;
    -P)
    printer=$2
    shift 2 ;;
    *)
    filename=$1
    break ;;
    esac
done

if test $print_to_file -eq 0
then $filter $rotate $double $scale $position < $filename | $printcommand -r -P$printer
else $filter $rotate $double $scale $position < $filename >$printfile
fi
```

Index

1

½ inch local drives
  for installation procedure, 11
½ inch remote drives
  for installation procedure, 12
¼ inch local drives
  for installation procedure, 11
¼ inch remote drives
  for installation procedure, 12

A

administration
  for installation, 27 *thru* 28
assumptions about Shells in use, v

C

checking
  disk space requirements, 9
checklist
  for installation procedure, 5 *thru* 6
client setup procedure, 19 *thru* 20
  creating `/etc/sundesk`, 20
  creating links, 20
  mount software, 19
completing installation procedure, 14
contents of distribution tape, 3 *thru* 4
conventions, vi
  bold typewriter font, vi
  fonts, vi
  italic font, vi
  prompts, vi
  typewriter font, vi
creating
  installation directory, 10

D

disk space requirements, 9
  checking, 9
distribution tape
  contents, 3 *thru* 4
  SunDraw, 4
  SunPaint, 4
  SunWrite, 4
dot file
  for SunDraw, 53 *thru* 55
  for SunPaint, 49 *thru* 50
  for SunWrite, 39 *thru* 45

E

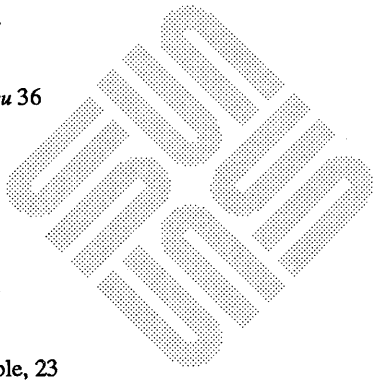
error messages from installation script, 14
error messages from password installation, 34
execute installation script, 12
extracting installation script, 10

H

½ inch local drives
  for installation procedure, 11
½ inch remote drives
  for installation procedure, 12

I

installation directory
  creating, 10
installation procedure, 9 *thru* 16
  administration, 27 *thru* 28
  checklist, 5 *thru* 6
  completing, 14
  disk space requirements, 9
  display host ID, 31
  error messages from script, 14
  execute installation script, 12
  install passwords manually, 35
  installing password, 32
  installing user, 23 *thru* 24
  local ½ inch drives, 11
  local ¼ inch drives, 11
  overview, 4 *thru* 5
  remote ½ inch drives, 12
  remote ¼ inch drives, 12
  right-to-use license, 32
  sales order number, 32
  STAGE password, 31 *thru* 36
  system swap space, 27
  user defined options, 27
  user options, 27 *thru* 28
  verifying, 13
installation script
  extracting, 10
installation script, execute, 12
installing user, 23 *thru* 24
  setting path, 23
  setting `SUNDESK` variable, 23



L

local ½ inch drives
  for installation procedure, 11
local ¼ inch drives
  for installation procedure, 11

M

messages from installation script, 14
messages from password installation, 34

O

options, user
  for installation, 27 *thru* 28
options, user defined, 27
overview
  of installation procedure, 4 *thru* 5
  of software, **3**

P

password
  display host ID, 31
  install manually, 35
  installing, 32
  installing for STAGE, 31 *thru* 36
  right-to-use license, 32
  sales order number, 32
  who needs one, 31
password installation
  error messages from program, 34
path, setting, 23
printer script
  for SunDraw, 63 *thru* 64
  for SunPaint, 67 *thru* 68
  for SunWrite, 59

Q

¼ inch local drives
  for installation procedure, 11
¼ inch remote drives
  for installation procedure, 12

R

remote ½ inch drives
  for installation procedure, 12
remote ¼ inch drives
  for installation procedure, 12
right-to-use license, for password, 32

S

sales order number, for password, 32
setting path, 23
setting SUNDESK variable, 23
software overview, **3**
space requirements, disk, 9
STAGE password
  display host ID, 31
  install passwords manually, 35
  installation, 31 *thru* 36
  installing, 32
  right-to-use license, 32
  sales order number, 32
STAGE password, *continued*
  who needs one, 31
startup file
  for SunDraw, 53 *thru* 55
  for SunPaint, 49 *thru* 50
  for SunWrite, 39 *thru* 45
SUNDESK variable, setting , 23
SunDraw
  distribution tape, **4**
  dot file, 53 *thru* 55
  printer script, 63 *thru* 64
SunPaint
  distribution tape, **4**
  dot file, 49 *thru* 50
  printer script, 67 *thru* 68
SunWrite
  distribution tape, **4**
  dot file, 39 *thru* 45
  printer script, 59
swap space requirements, 27
system swap space requirements, 27

T

tape, distribution
  contents, 3 *thru* 4

U

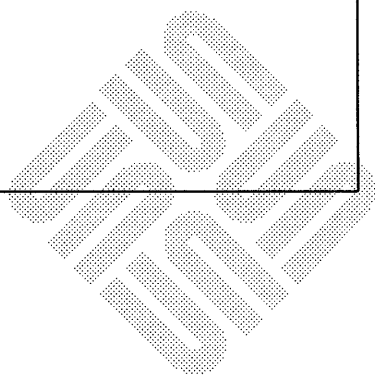
user defined options, 27
user options
  for installation, 27 *thru* 28
user, installing, 23 *thru* 24
  setting path, 23
  setting SUNDESK variable, 23

V

verifying installation procedure, 13

Revision History

Revision	Date	Comments
50	04 Jul 1988	β-1 Release.
52	15 Oct 1988	β-2 Release.
A	25 Dec 1988	First Customer Release of this manual.



Systems for Open Computing™

Corporate Headquarters
Sun Microsystems, Inc.
2550 Garcia Avenue
Mountain View, CA 94043
415 960-1300
TLX 37-29639

For U.S. Sales Office locations, call:
800 821-4643
In CA: 800 821-4642

European Headquarters
Sun Microsystems Europe, Inc.
Bagshot Manor
Green Lane
Bagshot
Surrey, GU19 5NL
England
0276 51440
TLX 859017

Australia: (02) 436 4699
Canada: 416 477-6745
France: (1) 46 30 23 24
Germany: (089) 95094-0
Japan: (03) 221-7021
Nordic Countries: (08) 764 78 10
Switzerland: (1) 82 89 555
The Netherlands: 02155 24888
UK: 0276 62111

Europe, Middle East, and Africa, call European Headquarters:
0276-51440

Elsewhere in the world, call Corporate Headquarters:
415 960-1300
Intercontinental Sales