

IRIX® 6.5.28 Installation Guide

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About This Guide

This guide provides information for installing or upgrading to IRIX® 6.5.28 on SGI® workstations. This is required for running Autodesk® Inferno®, Autodesk Flame®, Autodesk Fire®, Autodesk Smoke®, Autodesk® Backdraft® Conform, and Autodesk Burn™.

Chapter 1, “Introduction” — This introductory chapter describes the structure of this guide.

Chapter 2, “Installing IRIX 6.5.28” — This chapter includes the necessary procedures to install IRIX 6.5.28 on your SGI workstation.

If your SGI workstation is currently operating with an IRIX version earlier than 6.5.19, or if you want to wipe and rebuild your system disk, perform a full IRIX installation.

Chapter 3, “Upgrading to IRIX 6.5.28” — This chapter includes the necessary procedures to upgrade your SGI workstation to IRIX 6.5.28.

If your SGI workstation is currently operating with IRIX version 6.5.19 or later, there is no need to do a full installation. You can simply upgrade to IRIX 6.5.28.

Notation Conventions

A number of style conventions are used throughout this guide. These conventions and examples of their use are shown as follows.

Convention	Example
Text that you enter in a command line or shell appears in Courier bold. You must press the Enter key after each command.	rpm -qa
Variable names appear in Courier, enclosed in angle brackets. No spaces are allowed in variable names	<variable_name>
Variables that appear enclosed in square brackets are optional.	[<filename>]
Feedback from the command line or shell appears in Courier.	limit coredumpsize
Directory names, filenames, URLs, and command line utilities appear in italics.	<i>/usr/discreet</i>

Related Documentation

The following tables list the documentation associated with the current release. For details on each of these documents, as well as help for obtaining them, refer to your application's release notes.

User and Reference Guides	Description
<i>User's Guide</i>	Detailed instructions on using the software
<i>What's New Guide</i>	A complete list of the new features for this release
<i>Online Help</i>	All of the information in the User's Guide along with powerful search functionality
<i>Hot Keys Reference Guide</i>	A complete list of hot keys for commonly used functions
<i>Hot Keys Card</i>	A list of the most frequently used hot keys
<i>Release Notes</i>	A complete list of documentation and information on late breaking features
<i>Fixed and Known Bug List</i>	A complete list of fixed and known bugs for this release

Installation and Configuration Guides	Description
<i>Hardware Setup Guide</i> (for your workstation)	Information on how to set up your workstation's video I/O components and other peripherals
<i>Installation and Configuration Guide</i> (for your operating system)	Information on how to install and configure the Linux® or IRIX® operating system on your workstation, should you require to do so

Installation and Configuration Guides	Description
<i>Stone and Wire Filesystem and Networking Guide</i> (for this release)	Procedures for configuring your Autodesk Stone® filesystem, Autodesk Wire® networking, and Autodesk Wiretap™ services
<i>Stone Direct Configuration Guide</i> (for this release)	Detailed connectivity diagrams and configuration procedures for you Stone storage arrays
<i>Software Installation Guide</i> (for Linux or IRIX workstations)	Information about installing and licensing your Autodesk Editing or Effects software and installing and configuring Autodesk Cleaner® XL
<i>Configuration File Reference Guide</i> (for Linux or IRIX workstations)	Information on how to modify the initialization and project configuration files associated with your Autodesk application

Other Guides	Description
<i>Autodesk Cleaner XL User's Guide</i>	Information on how to use Cleaner XL
<i>Autodesk Cleaner XL Troubleshooting Guide</i>	Troubleshooting information for Cleaner XL
<i>Using QuickTime with Linux Workstations Guide</i>	Information on how to use Cleaner XL to convert QuickTime® files for use on Linux workstations
<i>Autodesk Burn Installation and User's Guide</i>	Information on how to install, set up, and use Autodesk Burn™
<i>Autodesk Backburner Installation and User's Guide</i>	Information on how to install, set up, and use Autodesk Backburner™
<i>Autodesk Wiretap Web Installation and User's Guide</i>	Information on how to install, set up, and use Autodesk Wiretap Web

Consult the Autodesk Web site at www.autodesk.com/discreet-documentation for the latest version of all documents.

Contacting Customer Support

You can contact Autodesk Media and Entertainment Customer Support at www.autodesk.com/support or through one of the following ways:

Location:	Contact Information:
Within the Americas:	Hotline (North America): 1-800-925-6442 Direct dial: 415-507-5256 (Country code = 1) 8 AM to 8 PM EST Monday to Friday, excluding holidays me.support@autodesk.com

Within Europe, Middle-East and Africa:	Hotline (from London, UK): +44-207-851-8080 9 AM to 5:30 PM (local time) Monday to Friday, excluding holidays <i>me.emea.support@autodesk.com</i>
Within Asia Pacific: (Excluding India, China, Australia, New Zealand and Japan)	Hotline (from Singapore): +65-6555-0399 9 AM to 6 PM (local time) Monday to Friday, excluding holidays <i>me.support.singapore@autodesk.com</i>
Within India:	Hotline (from Mumbai): +91-22-6695-2244 9:30 AM to 6:30 PM (local time) Monday to Friday, excluding holidays <i>me.support.india@autodesk.com</i>
Within Japan:	Hotline (from Tokyo): 0120-107-290 Direct dial: +81-3-6221-1810 10 AM to 6 PM (local time) Monday to Friday, excluding holidays <i>me-sys-support@autodesk.jp</i>
Within China:	Direct dial: +86-10-6505-6848 9 AM to 6 PM (local time) Monday to Friday, excluding holidays <i>me.support.china@autodesk.com</i>
Within Australia and New Zealand:	Hotline (from Melbourne): +1-300-36-8355 Direct dial: +61-3-9876-8355 8 AM to 6 PM AEST Monday to Friday, excluding holidays <i>me.support.anz@autodesk.com</i>

Customer support is also available through your Autodesk reseller. To find a reseller near you, consult the reseller look-up database on the Autodesk web site at www.autodesk.com/resellers.

Installing IRIX 6.5.28



Summary

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When to Install IRIX 6.5.28

This chapter provides the instructions for performing a full installation of IRIX 6.5.28. Installing IRIX 6.5.28—as opposed to upgrading to IRIX 6.5.28—is only required under the following circumstances:

- if you are upgrading from a version of IRIX prior to 6.5.19
- if you are installing IRIX on a clean disk
- if you are installing IRIX after fixing a damaged disk



WARNING: The procedures for performing a full installation are destructive to the files currently on your system disk. Procedures for backing up files on the system disk are included in this document.

Workflow for Installing IRIX 6.5.28

If your system disk is brand new, is currently unpartitioned, and no system software has been installed, or if you are currently running a version of IRIX prior to 6.5.19, you must fully install IRIX 6.5.28. You should back up system disk directories that you will want to restore following IRIX installation. Perform the following procedures:

- [“Verifying Installation Requirements”](#) on page 6
- [“Backing Up Your System Disk”](#) on page 8
- [“Repartitioning the System Disk”](#) on page 10
- [“Installing IRIX 6.5.28 and Required Software”](#) on page 15
- [“Installing the NFS/NIS Software”](#) on page 19
- [“Completing the Installation Process”](#) on page 20
- [“Restoring Backed Up Directories and Files”](#) on page 23

Verifying Installation Requirements

To install IRIX 6.5.28, you require root access. If you do not have root access, contact your system administrator. Consult the following lists to determine the software installation resources you require.

IRIX CDs

To install IRIX 6.5.28, you require the following SGI CDs:

- *IRIX 6.5.28 Installation Tools and Overlays (1 of 3) August 2005*—P/N 812-0818-028
- *IRIX 6.5.28 Overlays (2 of 3) August 2005*—P/N 812-0819-028
- *IRIX 6.5.28 Overlays (3 of 3) August 2005*—P/N 812-0817-028
- *IRIX 6.5 Applications August 2005*—P/N 812-0877-028
- *IRIX 6.5 Foundation 1*—P/N 812-0759-002
- *IRIX 6.5 Foundation 2*—P/N 812-0760-002
- *ONC3/NFS version 3, for IRIX 6.2, 6.3, 6.4, and 6.5*—P/N 812-0774-002

Make sure that your CDs match the ones in this list precisely. If you do not have the correct CDs, contact your SGI Customer Support representative.

Video Board Drivers

Consult the following list to determine the video board driver CD that you require.

Onyx2® with the DIVO Video board — *Digital Video Option 1.2 for IRIX 6.5*—
P/N 812-0645-003.

Onyx2 with the XTHD board — *HD I/O 1.2*—P/N 812-0958-004.

Octane2™, Tezro™, Onyx® 3200 or Onyx350 with the DM2, DM3, or DM5 Video board — *DMediapro™ DM2 and DMediapro DM3 Software 1.1.2*—P/N 812-1083-005.

HIPPI Drivers

If your system has a HIPPI board, you must upgrade the drivers. To do this, use the CDs provided by the HIPPI board manufacturer, or download the drivers from the Web.

Octane2, Tezro, or Onyx350 — You must install the PCI driver from the corresponding CD. If you do not have the CD to install your PCI board driver, after installing IRIX download the driver from the SBS Technologies FTP site.

NOTE: The SBS Technologies PCI board is formerly known as the Essential PCI board.

To download the SBS Technologies HIPPI driver:

1. Connect to one of the following sites using an FTP client or Web browser:
 - **Tezro or Onyx 350**—ftp://ftp.sbse.com/esscom/release/nic/sgi/hippi/irix65/origin300/H_IP35_6.5_2.0.6.tar
 - **Octane2**—ftp://ftp.sbse.com/esscom/release/nic/sgi/hippi/irix65/octane/driver/H_IP27IP30_6.5_2.0.3.tar
2. When prompted, enter *anonymous* as the user name and your email address as the password.
3. Download the tar file containing the drivers for your HIPPI board.

Onyx2, Onyx 3200 with the SGI XIO HIPPI board — The drivers for the SGI XIO HIPPI board can be installed from the following CD: *HIPPI 4.0*—P/N 812-0786-006.

Backing Up Your System Disk

Back up the information on your system disk that you want to keep before you install IRIX 6.5.28. Installing IRIX 6.5.28 removes all information currently stored on the disk. It is recommended that you back up the following directories:

- */usr/discreet* (for software setups and configuration files)
- */etc* (for IRIX configuration files, including network configuration)
- */usr/lib/DPS/* (for fonts)
- */usr/local/flexlm/licenses* (for license files)
- Any other directories where font files are stored

This section provides three methods for backing up information on your system disk:

- Using the *Backup* command to back up your entire system to tape, if you have a tape drive available.
- Using the *tar* command to archive a backup of specified directories and files to tape, if you have a tape drive available.
- Using the *tar* command to archive a backup of specified directories and files to a file. This file may then be stored somewhere else, such as a network location.

To use the *Backup* command to back up your entire system disk to tape:

1. Log in as root.
2. Determine the SCSI controller number and device unit number of the tape drive from the hardware inventory. Type:

```
hinv -c tape
```

The hardware inventory *hinv* line for the tape drive appears. For example:

```
Tape drive: unit 2 on SCSI controller 0: DAT
```

3. To back up the entire system disk, type:

```
Backup -t /dev/mt/tps<controller#>d<device#>ns -i /
```

Where *<controller#>* and *<device#>* are the SCSI controller and device unit numbers appearing in the *hinv* line for the tape drive. The *Backup* command takes all new files since your last backup specified in the */etc/lastbackup* file and copies them to the specified tape device.

A confirmation message appears when your backup is complete.

To use the *tar* command to archive a backup of specified directories and files to tape:

1. Log in as root.
2. Determine the SCSI controller number and device unit number of the tape drive from the hardware inventory. Type:

```
hinv -c tape
```

The hardware inventory line for the tape drive appears. For example,

```
Tape drive: unit 2 on SCSI controller 0: DAT
```

3. Use the *tar* command to back up files. Type:

```
tar -cvf /dev/rmt/tps<controller#>d<device#>ns <filelist>
```

where *<controller#>* and *<device#>* are the SCSI controller and device unit numbers you obtained using the *hinv* command, and *<filelist>* is a list of directories you want to back up. You can specify multiple directories by separating each directory path with a space.

For example, to back up the directories */etc* and */usr/discreet* to tape, type:

```
tar -cvf /dev/rmt/sc0d2ns /usr/discreet /etc
```

NOTE: It is important to determine the files you want to back up prior to using the *tar* command. Each time the *tar* command is executed, the archive on the tape is overwritten, even if you specify different directories for archiving. For assistance, see your system administrator or type **man tar** in a UNIX shell.

To use the *tar* command to archive a backup of specified directories and files to a file:

1. Log in as root.
2. Use the *tar* command to back up files. Type:

```
tar -cvf <tarfile_name>.tar <filelist>
```

where *<tarfile_name>* is the name you give to the tar file and *<filelist>* is a list of directories you want to back up. You can specify multiple directories by separating each directory path with a space.

For example, to back up the directories */etc* and */usr/discreet* to tape, type:

```
tar -cvf backup.tar /usr/discreet /etc
```

3. Compress the file for easier storage. Type:

```
gzip <tarfile_name>.tar
```

Then copy the file somewhere on the network or on a secondary disk.

Repartitioning the System Disk

This process ensures that the disk is clean and without bad blocks. Depending on the size of your system disk, it may take several hours to execute.



WARNING: This procedure erases the contents of your system disk.

To repartition the system disk:

1. Log in as root.

2. Shut down the computer. Type:

```
halt
```

The following message appears:

```
Okay to power off the system now. Press any key to restart.
```

3. Click **RESTART**.

A startup dialog appears.

4. Click **STOP FOR MAINTENANCE**.

The PROM monitor menus appear.

NOTE: If your system does not display the Stop For Maintenance button and the system begins to start up, press **ESC** to interrupt the startup process.

5. Select **ENTER COMMAND MONITOR**.

The Command monitor appears.

6. Determine the unit and controller numbers for the CD-ROM drive. In the Command monitor, type:

```
hinv
```

7. In the hardware inventory that appears, there is a line for the CD-ROM drive that looks like one of the following samples:

```
• SCSI CDROM: scsi (X) cdrom (Y)
```

```
• CDROM: unit (Y) on SCSI controller (X)
```

Write down the SCSI controller (X) and CD-ROM unit (Y) numbers.

8. Insert the *IRIX 6.5.28 Installation Tools and Overlays (1 of 3)* disk in your CD-ROM drive.

9. Launch the *FX* utility:

- If the CD-ROM hardware inventory line looked like the first sample in step 7, use the syntax appropriate for your platform (where X is the controller number and Y is the unit number of your CD-ROM drive). Type:

```
boot -f dksc(X,Y,8)sash64 dksc(X,Y,7)stand/fx.64 --x
```

- If the CD-ROM hardware inventory line looked like the second sample in step 7, type:

```
boot -f cdrom(X,Y,8)sash64 cdrom(X,Y,7)stand/fx.64 --x
```

The *FX* utility launches.

10. Specify your system disk. When the following prompt appears:

```
SGI Versions 6.5 ARCS
fx :device-name = (dksc)
```

Press **ENTER**.

11. When the following prompt appears:

```
fx:ctlr# = (0)
```

Specify your system disk's SCSI controller:

- If your system disk is on SCSI controller 0, press **ENTER**.
- If your system disk is on another SCSI controller, type the corresponding number and then press **ENTER**.

HINT: To verify your system disk's SCSI controller and unit device, use the *hinv* command in a UNIX shell or in the PROM monitor.

12. When the following prompt appears:

```
fx:drive# = (1)
```

Specify your system disk's drive unit number:

- If your system disk is unit 1, press **ENTER**.
- If your system disk has another unit number, then type the corresponding number and press **ENTER**.

NOTE: System disks are usually located at controller 0 drive number 1. If you are running the Autodesk Effects or Editing application on an SGI workstation whose system disk is NOT on controller 0, unit 1, type the correct drive unit and controller numbers at the prompt.

13. The following prompt may or may not appear:

```
fx:lun# = (0)
```

Press **ENTER**.

The system disk is opened and the FX menus are displayed.

NOTE: Steps 14 to step 17 take some time. For instance, it will take approximately 2.5 hours to execute these steps for a 36-GB hard disk.

14. Exercise the drive and remap bad blocks. At the *fx>* prompt, type:

```
exe
```

15. Choose sequential as the type of exercise to run. At the *fx/exercise>* prompt, type:

```
seq
```

The sequential test options appear.

16. When the following prompt appears:

```
fx/exercise/sequential:modifier = (rd-only)
```

Type **wr-c**

17. When the following prompt appears:

```
fx/exercise/sequential:starting block# = (0)
```

Press **ENTER**.

18. When the following prompt appears:

```
fx/exercise/sequential:nblocks = (8887848)
```

Press **ENTER**.

NOTE: The number appearing in the prompt may be different on your system.

19. When the following prompt appears:

```
fx/exercise/sequential:nscans = (1)
```

Press **ENTER**.

20. When the following prompt appears:

```
* * * * * WARNING * * * * *
```

```
sequential pass 1:scanning [0, 8887848]
```

```
about to destroy data on disk dksc(0,1,0) ! ok?
```

Type **yes**

The sequential test begins. You can monitor its progress.

```
0%..10%..20%..30%..40%...50%...60%...70%...80%...90%...done
```

21. Once the sequential test is done, exit the exercise menu and go to the repartition menu. At the *fx/exercise*> prompt, type:

```
/rep
```

22. Partition the drive as a root drive. At the *fx/repartition*> prompt, type:

```
ro
```

23. When the following prompt appears:

```
fx/repartition/rootdrive: type of data partition = (xfs)
```

Press **ENTER**.

24. When the following message appears:

```
Warning: You will need to re-install all software and restore  
user data from backups after changing the partition layout.  
Changing partitions will cause all data on the drive to be  
lost. Be sure you have the drive backed up if it contains user  
data. Continue?
```

Type **yes**

25. Resize the swap partition. At the *fx/repartition*> prompt, type:

```
re
```

26. Select the swap partition as the partition to be resized. When the following prompt appears:

```
fx/repartition/resize: partition to change = (swap)
```

Press **ENTER**.

27. Select megabytes as the partitioning method. When the following prompt appears:

```
fx/repartition/resize: partitioning method = (megabytes(2^20))
```

Press **ENTER**.

28. Set the size of the swap partition to 256 megabytes. When the following prompt appears:

```
fx/repartition/resize: size in megabytes (max 8601)= (128)
```

Type **256**

NOTE: To run Autodesk Effects or Editing applications, 256 MB of swap space is recommended. This requires a 4-GB system disk. If you have a system disk smaller than 4 GB, use 128 MB of swap space instead.

29. Confirm that you want to use the new partition layout. When the following prompt appears:

```
Use the new partition layout? (no)
```

Type **yes**

30. Exit the repartition menu. At the *fx/repartition*> prompt, type:

```
..
```

31. Exit the *FX* utility. At the *fx*> prompt, type:

```
/exi
```

32. The following message may or may not appear:

```
label info has changed for disk dksc(0,1,0). write out changes?  
(yes)
```

- If the message appears, press **ENTER** to write your changes. Once you press **ENTER**, the screen turns black and you are returned to the PROM monitor.
- If the message does not appear, the screen turns black and you are returned to the PROM monitor.

You are now ready to install IRIX 6.5.28.

Installing IRIX 6.5.28 and Required Software

Once you have repartitioned your system disk, you are ready to install IRIX 6.5.28. This section describes the following procedures:

- Installing the IRIX 6.5.28 overlays and 6.5 foundation distributions
- Installing video software for the Onyx2
- Installing video software for the Octane2 or Onyx 3200
- Installing HIPPI software
- Completing the software distribution loading

Perform the procedures that correspond to your SGI workstation's configuration.

NOTE: If your SGI workstation uses a HIPPI board and/or an XTHD board and you do not have the distribution CDs for the corresponding software, you can install the drivers using a Web browser after IRIX is installed. For information on installing HIPPI or XTHD boards, see "[Verifying Installation Requirements](#)" on page 6. If you do install the HIPPI drivers from the Web make sure you do not install any versions later than 4.0.2.

To install IRIX 6.5.28:

1. Select Install System Software from the PROM monitor.
2. Select Local CD-ROM and click Install.

The following message appears:

```
Insert the installation CD-ROM now.
```

3. Insert the *IRIX 6.5.28 Installation Tools and Overlays (1 of 3)* CD in the CD-ROM drive. Wait until the LED indicator on the CD-ROM drive stops blinking. If your CD-ROM drive does not have an LED indicator, wait approximately 10 seconds before continuing to the next step.
4. Click **CONTINUE**.
The installation files are copied to disk.
5. Create a filesystem on your system disk. The following message appears:

```
Make new filesystem on /dev/dsk/realroot [yes/no/sh/help]:
```

 Type **yes** and press **ENTER**

6. The following message appears:

```
About to remake (mkfs) filesystem on: /dev/dsk/realroot. This
will destroy all data on disk partition: /dev/dsk/realroot. Are
you sure? [y/n]: (n)
```

Type **y**

7. The installation may stop on the following lines (otherwise, go to step 10):

```
Unable to mount partition: /dev/dsk/dkscXdYs0 on /root:
Press Enter to display the C shell (csh#)
```

If this occurs, press **ENTER** to open a UNIX shell, and then create a filesystem. Type:

```
mkfs /dev/rdisk/dks<X>d<Y>s0
```

where <X> is the SCSI controller that your system disk is on and <Y> is the unit number of your system disk.

8. Once the *Inst>* or *Admin>* prompt returns, type **exit**.
9. If you are currently in the *Admin>* utility, type **..** to return to the *Inst>* prompt. Otherwise, continue with the next step.
10. Specify a 4096-byte block size. When the following line appears:

```
Block size of filesystem 512 or 4096 bytes?
```

Type **4096**

11. At the *Inst>* prompt, type:

```
from /CDROM/dist
```

NOTE: This command reads the software distribution located in the */CDROM/dist* directory on the CD and displays information pertinent to the installation. Press **SPACEBAR** to scroll through this information or **q** to return to the procedure.

12. Choose to be placed on the Feature stream. The following lines appear at the end of the outputted information:

1. Place me on the maintenance stream
2. Place me on the feature stream
3. cancel

Autodesk Effects and Editing applications require that the Feature stream be installed. To specify the Feature stream, type **2** and press **ENTER**

Once the Feature stream is installed, the *Inst>* prompt returns.

```
Install software from: [/CDROM/dist]
```

To load the IRIX 6.5.28 overlays (2 of 3) and unbundled distributions:

1. Eject the CD from the CD-ROM drive and load the *IRIX 6.5.28 Overlays (2 of 3)* CD. Wait until the CD-ROM LED light stops flashing or approximately 10 seconds.

In the previous section, you specified `/CDROM/dist` as the directory from which to install software. One of the required distributions on the *IRIX 6.5.28 Installation Tools and Overlays (2 of 3)* CD is located in the same directory.

2. Press **ENTER** to install the distribution from the `/CDROM/dist` directory.
3. Another distribution on the *IRIX 6.5.28 Overlays (2 of 3)* CD that you require is in the `/CDROM/dist/unbundled` directory. To install this distribution, type:

`/CDROM/dist/unbundled`

Once the process is complete, the `Inst>` prompt returns:

```
Install software from: [/CDROM/dist/unbundled]
```

To load the IRIX 6.5.28 overlays (3 of 3):

1. Eject the CD from the CD-ROM drive and load the *IRIX 6.5.28 Overlays (3 of 3)* CD. Wait until the CD-ROM LED light stops flashing or approximately 10 seconds.

2. Type:

`CDROM/dist`

The distribution in the `/CDROM/dist` directory on the *IRIX 6.5.28 Overlays (3 of 3)* CD is installed. The `Inst>` prompt returns:

```
Install software from: [/CDROM/dist]
```

To load the IRIX 6.5.28 applications distribution:

1. Eject the CD from the CD-ROM drive and load the *IRIX 6.5 Applications* CD. Wait until the CD-ROM LED light stops flashing or approximately 10 seconds.

The system reads the software distribution and displays information pertinent to the installation.

2. Press **SPACEBAR** to scroll through this information or **q** to skip to the next step.

Once the process is complete, the `Inst>` prompt returns:

```
Install software from: [/CDROM/dist]
```

To load the IRIX 6.5 Foundation 1 distribution:

1. Eject the CD from the CD-ROM drive and load the *IRIX 6.5 Foundation 1* CD. Wait until the CD-ROM LED light stops flashing or approximately 10 seconds.
2. The distribution is located in the */CDROM/dist* directory. Because the *Inst>* prompt is already cued to this directory, press **ENTER**.

The *Inst>* prompt returns:

```
Install software from: [/CDROM/dist]
```

To load the IRIX 6.5 Foundation 2 distribution:

1. Eject the CD from the CD-ROM drive and load the *IRIX 6.5 Foundation 2* CD. Wait until the CD-ROM LED light stops flashing or approximately 10 seconds.
2. The distribution is located in the */CDROM/dist* directory. Because the *Inst>* prompt is already cued to this directory, press **ENTER**.

You are now ready to install supporting software that corresponds with your SGI workstation's configuration. The *Inst>* prompt returns:

```
Install software from: [/CDROM/dist]
```

To install the Onyx2 DIVO board software:

1. Eject the CD from the CD-ROM drive and load the *DIVO 1.2* CD. Wait until the CD-ROM LED light stops flashing or approximately 10 seconds.
2. The distribution is located in the */CDROM/dist* directory. Because the *Inst>* prompt is already cued to this directory, press **ENTER**.

To install the Onyx2 XTHD HD I/O 1.2 software:

1. Eject the CD from the CD-ROM drive and load the *XTHD HD I/O 1.2* CD. Wait until the CD-ROM LED light stops flashing or approximately 10 seconds.
2. The distribution is located in the */CDROM/dist* directory. Because the *Inst>* prompt is already cued to this directory, press **ENTER**.

To install the Octane2, Tezro, Onyx 3200, or Onyx350 software:

1. Eject the CD from the CD-ROM drive and load the *DM2/DM3 1.1.2* CD. Wait until the CD-ROM LED light stops flashing or approximately 10 seconds.
2. The distribution is located in the */CDROM/dist* directory. Because the *Inst>* prompt is already cued to this directory, press **ENTER**.

NOTE: When the IRIX 6.5.28 installation is complete, the DM2/DM3 software is upgraded to version 1.1.2.

To install the HIPPI software:

NOTE: If you do not have the CD with your HIPPI drivers, proceed to the next section. You must complete the installation of IRIX first before downloading these drivers from the Web.

1. Eject the CD from the CD-ROM drive and load the CD from which you can install the appropriate HIPPI drivers. Wait until the CD-ROM LED light stops flashing or approximately 10 seconds.
2. The distribution is located in the */CDROM/dist* directory. Because the *Inst>* prompt is already cued to this directory, press **ENTER**.

Installing the NFS/NIS Software

If you are planning to run Autodesk Wire®, install the NFS software for network configurations.

To install the NFS/NIS software:

1. Eject the CD from the CD-ROM drive and load the *ONC3/NFS for IRIX 6.2 6.3 6.4 and 6.5* CD. Wait until the CD-ROM LED light stops flashing or approximately 10 seconds.
2. The distribution is located in the */CDROM/dist* directory. Because the *Inst>* prompt is already cued to this directory, press **ENTER**.

NOTE: The NFS/NIS software distribution for the IRIX 6.5 family is actually in the directory */CDROM/dist/dist6.5*. However, when you load the distribution from the directory */CDROM/dist*, the IRIX family you are installing is detected and the corresponding distribution is loaded.

Completing the Installation Process

In the previous section, you installed the IRIX 6.5.28 feature stream, loaded supplemental distributions for installation, and then completed loading the software distributions required to install IRIX 6.5.28. This section provides the procedure to complete the installation process.

This procedure includes:

- Installing the distributions loaded in the previous section
- Preventing conflicts with AppleTalk® subsystems
- Loading optional subsystems
- Installing the loaded subsystems
- Restarting the SGI workstation
- Verifying that the IRIX 6.5.28 installation was successful

To complete the IRIX 6.5.28 installation process:

1. Type **done** to return to the *Inst>* prompt.
The distribution information is read. Once this process is complete, the *Inst>* prompt reappears.
2. At the *Inst>* prompt, type **keep *** to keep all loaded distributions.
3. Type **install standard**
4. To prevent conflicts with *appletalk.sw.xinet_base* subsystems, type:
keep java2_plugin.sw32.mozilla_freeware
5. To prevent conflicts with *inventor_dev.sw.base*, type the following:
keep inventor_dev.sw.base
keep inventor_dev.sw.lib

6. The following subsystems are recommended for use with Autodesk Effects and Editing applications. At the *Inst>* prompt, do the following .

Type:	To enable:
install eoe.sw.fonttools	Import of PC fonts.
install eoe.sw.uucp	Connection to a modem in terminal mode and troubleshooting of the Wacom® tablet.
install eoe.sw.xlv	Optimum stability with SGI Audio, including systems not using XLV arrays.
install eoe.sw.spell	Spell checking in the Text module.
install ftn_eoe	Standard execution environment with Fortran headers and libraries.
install inventor_eoe.sw64	Inventor 64-bit software.
install ifl_eoe.sw64	Image format executable 64-bit software.
install dmedia_eoe.sw64	Digital Media 64-bit software.

7. If you have an Onyx2 with a DIVO board, load the DIVO diagnostic and troubleshooting tools. Type:
- ```
install divo.sw.diags
```
8. If you have an Onyx2 with an XTHD board, load the XTHD diagnostic and troubleshooting tools. Type:
- ```
install xthd.sw.diags
```
9. At the *Inst>* prompt, type:
- ```
install prereqs
```
- The following message appears:
- ```
No matches for "prereqs" were found
This is a normal message.
```
10. At the *Inst>* prompt, type
- ```
keep incompleteoverlays
```
- If any other messages appear, perform these steps again.
11. At the *Inst>* prompt, type:
- ```
go
```
- You are prompted to insert CDs as required during the installation process. Inserted CDs are automatically detected—you do not have to press any keys to continue. Once installation is complete, you are returned to the *Inst>* prompt.

12. At the *Inst*> prompt, type:

quit

Inst processes the dynamic libraries and, after a few minutes, prompts you to restart the system.

NOTE: If you receive an error message return to instruction 2, and verify that you have not mistyped any of the commands.

13. At the *restart?* prompt, type:

yes

The system reboots with the newly installed IRIX software.

NOTE: If you are using an Octane2 or Tezro with the DM5 board, your monitor may flash on and off. To correct this, open a shell, type *setmon -x 1920x1154_60*, and press **CTRL-SHIFT-F12-/** (forward slash on numeric keypad) to reset your monitor's resolution and refresh rate.

14. To verify that the upgrade was successful, log in as root and in a UNIX shell, type:

uname -R

The current version of IRIX (6 . 5 6 . 5 . 28) is displayed in the shell. You are now ready to do the following:

- Download and install the drivers for your HIPPI board, if necessary. See [“HIPPI Drivers”](#) on page 7.
- Restore backed up directories and files, if necessary.
- Install the Autodesk Effects or Editing application. See the *Software Installation Guide* for your product.

Restoring Backed Up Directories and Files

After you have installed IRIX 6.5.28, restore the files you require by doing one of the following:

- Use the *Restore* command to restore an entire system disk backed up to tape.
- Use the *tar* command to restore specified directories and files archived to tape.
- Use the *tar* command to restore specified directories and files archived to a file.



WARNING: Files recovered from a backup will overwrite their counterpart files on the system disk. The contents of these files may have changed from your previous operating system to IRIX 6.5.28. Restoring files should be performed with extreme caution.

To use the *Restore* command to restore an entire system disk backed up to tape:

1. Log in as root.

2. Restore the backup. Type:

```
Restore -t /dev/rmt/tps<controller#>d<device#>ns <filelist>
```

To use the *tar* command to restore specified directories and files from tape:

1. Log in as root.

2. Restore the archived directories. Type:

```
tar -xovf /dev/mt/tps<controller#>d<device#>ns <filelist>
```

For example, to load the saved directories */usr/discreet* and */etc*, type:

```
tar -xovf /dev/mt/tps0d6ns /usr/discreet /etc
```

To use the *tar* command to restore specified directories and files from a file:

1. Log in as root.

2. Uncompress the file. Type:

```
gunzip <tarfile_name>.tar.gz
```

3. Restore the archived directories. Type:

```
tar -xovf <tarfile_name>.tar <filelist>
```

For example, to load the saved directories */usr/discreet* and */etc*, type:

```
tar -xovf backup.tar /usr/discreet /etc
```

HINT: You can restore backed up directories and files to a temporary location, and then copy them to the appropriate directories as needed. To do this, use the *cd* command to go to a location for temporary files (for example, */usr/tmp*) and then use the *tar -xovRf* command.



Upgrading to IRIX 6.5.28

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Upgrade Information

This chapter provides procedures for upgrading your SGI workstation from IRIX versions 6.5.19 or later to IRIX 6.5.28.

Verifying the Current IRIX Version

You can upgrade to IRIX 6.5.28 provided you are currently running IRIX version 6.5.19 or later. Use the *uname* command to verify the current version.

To verify the current IRIX version:

1. Log in and open a UNIX shell.
2. To verify the version of IRIX that you are running, type:

```
uname -R
```

The current IRIX version appears in the UNIX shell, for example:

```
6.5 6.5.23f
```

SCSI Terminal Servers

The following applies only to users with a SCSI terminal server (STS).

During the upgrade procedure, all the devices in */dev* for the STS are erased. You need to reinstall the STS driver after upgrading to IRIX 6.5.28. Refer to the documentation that came with your STS.

Before You Install

Before you upgrade to IRIX 6.5.28, you will need to find and remove the *field_diags_sysco* subsystem, if you are on a platform other than an Onyx 3200 or Onyx 350.

Finding and Removing the *field_diags_sysco* Subsystem

If you have subsystem *field_diags_sysco.sw* installed, and you are not using an Onyx 3200 or Onyx 350, you must remove it before you upgrade to IRIX 6.5.28. This subsystem could cause conflicts if it is installed on your system before you perform the IRIX upgrade.

To find and remove *field_diags_sysco*:

1. Log in as root.
2. In an IRIX shell, type:


```
versions -n | grep field_diags_sysco
```
3. If it is found, type:


```
versions remove field_diags_sysco
```

Verifying Upgrade Requirements

To upgrade your SGI workstation you require root access. If you do not have root access, contact your system administrator. Consult the following lists to determine the software installation resources you require.

IRIX CDs from SGI

To upgrade your system to IRIX 6.5.28, you require the following CDs:

- *IRIX 6.5.28 Installation Tools and Overlays (1 of 3) August 2005*—P/N 812-0818-028
- *IRIX 6.5.28 Overlays (2 of 3) August 2005*—P/N 812-0819-028
- *IRIX 6.5.28 Overlays (3 of 3) August 2005*—P/N 812-0817-028
- *IRIX 6.5 Applications August 2005*—P/N 812-0877-028

- *IRIX 6.5 Foundation 1*—P/N 812-0759-002
- *IRIX 6.5 Foundation 2*—P/N 812-0760-002

Make sure that your CDs match the ones in this list precisely. If you do not have the correct CDs, contact Customer Support.

Video Board Drivers

In some cases, video drivers are upgraded automatically when you upgrade to IRIX 6.5.28. In other cases, you must reinstall the drivers.

Onyx2 with the DIVO video board — The DIVO driver upgrade is installed with the IRIX 6.5.28 CDs.

Onyx2 with an XTHD video board — You must install XTHD driver version 1.2. In addition to the *Applications* CD, you should have the following CD from SGI: *HD I/O 1.2*—P/N 812-0958-004.

Octane2, Tezro, Onyx 3200, or Onyx 350 with the DM2, DM3 or DM5 video board — The drivers, patches, and upgrades required for these video boards are installed automatically during installation of the Autodesk Effects or Editing application.

To verify the current video drivers:

1. Log in as root.
2. Type:

```
versions -bn | grep xtdigvid
```

HIPPI Drivers

If your system has a HIPPI board, you may have to upgrade the drivers.

Octane2, Tezro, or Onyx 350 — You must install the PCI driver from the corresponding CD. If you do not have the CD to install your PCI board driver, download the driver from the SBS Technologies FTP site by doing the following.

NOTE: The SBS Technologies PCI board is formerly known as the Essential PCI board.

To download the SBS Technologies HIPPI driver:

1. Connect to the SBS Technologies FTP site (*ftp.sbse.com*) using Anonymous as the user name and your email address as the password.
2. Go to the */esscom/release/nic/sgi/hippi/irix65/<system name>* directory, where *<system name>* corresponds to your SGI workstation.
3. Download the file containing the drivers for your HIPPI board.

Onyx2 or Onyx 3200 with the SGI XIO HIPPI board — Use the following procedure to determine if you must upgrade the drivers.

To verify the current HIPPI driver version for the SGI Parallel or XIO HIPPI board:

1. Log in as root.
2. Open a shell and type the command appropriate to your system and HIPPI board.

System and HIPPI Board	Command
Onyx2 with SGI XIO HIPPI	versions -bn hipp
Onyx 3200 with SGI XIO HIPPI	versions -bn hipp

The HIPPI driver version for your system appears.

3. Compare your system's HIPPI driver version against the required version listed in the following table.

System and HIPPI Board	Required HIPPI Driver Version
Onyx2 with SGI XIO HIPPI	4.0
Onyx 3200 with SGI XIO HIPPI	4.0

4. If necessary, upgrade your system's HIPPI board driver using the CDs provided by the HIPPI board manufacturer.

Onyx2 or Onyx 3200 with an SGI XIO HIPPI board — You may have to install HIPPI driver version 4.0 from the following SGI CD: *HIPPI 4.0*—P/N 812-0786-006.

Mounting the CD-ROM Drive

To perform the CD-based installation, you must have access to a mounted CD-ROM drive.

To mount a CD-ROM drive:

1. Insert a CD into the CD-ROM drive.
2. Log in as root.
3. Open a UNIX shell and then type:

```
mediad -k
```

All removable media drives, such as floppies, tapes, and CD-ROMs, are unmounted.

4. Type:

```
mediad
```

All removable media drives are mounted.

5. Wait a few seconds for the command to execute, and then check whether the CD-ROM drive is mounted. In the shell, type:

```
df
```

If the CD-ROM drive is mounted, the command output reports a line that ends with “/CDROM”.

If “/CDROM” does not appear at the output of the command, it is not mounted. Check the following:

- Make sure a CD is in the drive.
- Verify that no UNIX shell on the desktop or no running application is pointing to the *CDROM* directory—this prevents the CD-ROM drive from mounting.

6. If you are still not able to mount the CD-ROM drive using the *mediad* command, try the following procedure. Get the device and controller numbers of the CD-ROM drive using the *hinv* (hardware inventory) command. Type:

```
hinv | grep CDROM
```

The hardware inventory for the CD-ROM drive appears. For example:

```
CDROM: unit 3 on SCSI controller 0
```

In this example, the device number is 3 and the controller number is 0.

7. Mount the CD-ROM drive. Using the controller and device numbers of the CD-ROM drive, type:

```
mount -o ro /dev/dsk/dks<controller#>d<device#>s7 /CDROM
```

Upgrading to IRIX 6.5.28

Once you mount the CD-ROM drive, you are ready to upgrade to IRIX 6.5.28. During the upgrade procedure, you:

- Insert CDs so that the system can read the IRIX 6.5.28 software distributions
- Specify which subsystems are to be kept
- Resolve any outstanding system conflicts
- Perform the upgrade
- Reboot the system and verify the upgrade

Reading Software Distributions from the CDs

Using the *Inst* installation utility, read the software distributions on the 6.5.28 overlay and application CDs as well as the 6.5 foundation CDs. This procedure enables the system to determine the files required to perform the IRIX upgrade.

To install the upgrade:

1. You should have the shell open that you used to mount the CD-ROM drive. Use this shell to eject CDs as needed throughout this procedure.
2. Open a second UNIX shell to run *Inst*. Make sure you are logged in as root in this shell.
3. Load the *IRIX 6.5.28 Installation Tools and Overlays (1 of 3)* CD into your CD-ROM drive. Wait until the CD-ROM LED light stops flashing. If your CD-ROM drive does not have an LED indicator, wait approximately 10 seconds before continuing to the next step.
4. Launch the software installation utility. In the shell that you created in step 2, type:

```
inst
```

The installation utility (*Inst*) displays a menu of commands.

NOTE: You can enter numbers at the *Inst*> prompt to execute corresponding commands. The instructions in this document, however, do not use these shortcuts.

5. At the *Inst>* prompt, type:

from /CDROM/dist

The utility reads the software distribution located in the */CDROM/dist* directory on the CD.

Once this process is complete, a prompt appears:

```
Install software from: [/CDROM/dist]
```

With this prompt you are ready to perform another *install from* command. The prompt is already cued to install from the */CDROM/dist* directory.

6. Using the shell in which you mounted the CD-ROM drive, eject the CD. Type:

eject /CDROM
7. Load the *IRIX 6.5.28 Overlays (2 of 3)* CD.

Wait until the CD-ROM LED light stops flashing or approximately 10 seconds.
8. The *Inst>* prompt indicates that the utility is already cued to read the software distribution located in the */CDROM/dist* directory on the CD. To do this, press **ENTER**.

Once the process is complete, the *Inst>* prompt returns:

```
Install software from: [/CDROM/dist]
```
9. In this step another software distribution is read from a different directory on the *IRIX 6.5.28 Overlays (2 of 3)* CD. Without changing the CD, type:

/CDROM/dist/unbundled

Once the process is complete, the *Inst>* prompt returns:

```
Install software from: [/CDROM/dist/unbundled]
```
10. Eject the CD from the CD-ROM drive and load the *IRIX 6.5.28 Overlays (3 of 3)* CD.

Wait until the CD-ROM LED light stops flashing or approximately 10 seconds.
11. In this step a software distribution is read from a different directory. Type:

/CDROM/dist

Once the process is complete, the *Inst>* prompt returns:

```
Install software from: [/CDROM/dist]
```
12. Eject the CD from the CD-ROM drive and load the *IRIX 6.5 Applications* CD.

Wait until the CD-ROM LED light stops flashing or approximately 10 seconds.
13. In this step a software distribution is read from the same directory on the new CD. Press **ENTER**.

Information pertinent to the installation and the general licensing agreement are displayed.

14. Press **SPACEBAR** to scroll through the displayed information.
Once the process is complete, the *Inst>* prompt returns:
Install software from: [/CDROM/dist]
15. Eject the CD from the CD-ROM drive and load the *IRIX 6.5 Foundation 1 CD*.
Wait until the CD-ROM LED light stops flashing or approximately 10 seconds.
16. In this step a software distribution is read from the same directory on the new CD. Press **ENTER**.
Once the process is complete, the *Inst>* prompt returns:
Install software from: [/CDROM/dist]
17. Eject the CD from the CD-ROM drive and load the *IRIX 6.5 Foundation 2 CD*.
Wait until the CD-ROM LED light stops flashing or approximately 10 seconds.
18. In this step a software distribution is read from the same directory on the new CD. Press **ENTER**.
Once the process is complete, the *Inst>* prompt returns:
Install software from: [/CDROM/dist]
19. If you have an Onyx2 or Onyx 3200 with an SGI XIO HIPPI board, eject the CD from the CD-ROM drive and load the *HIPPI 4.0 CD*.
Wait until the CD-ROM LED light stops flashing or approximately 10 seconds. Read from the same directory on the new CD. Press **ENTER**.

Once the process is complete, the *Inst>* prompt returns:
Install software from: [/CDROM/dist]
20. If you have an Onyx2 with an XTHD board, eject the CD from the CD-ROM drive and load the *HD I/O 1.2 CD*.
Wait until the CD-ROM LED light stops flashing or approximately 10 seconds. Read from the same directory on the new CD. Press **ENTER**.

Once the process is complete, the *Inst>* prompt returns:
Install software from: [/CDROM/dist]
21. You have now prepared all the required software distributions for installation. Type:
done

Specifying Subsystems

Next, set the IRIX upgrade to install subsystems used by Autodesk Effects and Editing applications.

To install subsystems:

1. Keep the software distributions from the previous steps. At the *Inst>* prompt, type:
keep *
2. The following subsystems are recommended for use. At the *Inst>* prompt:

Type:	To enable:
install eoe.sw.fonttools	Import of PC fonts.
install eoe.sw.uucp	Connection to a modem in terminal mode and troubleshooting of the Wacom tablet.
install eoe.sw.xlv	Optimum stability with SGI Audio, including systems not using XLV arrays.
install eoe.sw.spell	Spell checking in the Text module.
install ftn_eoe	Standard execution environment with Fortran headers and libraries.
install inventor_eoe.sw64	Inventor 64-bit software.
install ifl_eoe.sw64	Image format executable 64-bit software.
install dmedia_eoe.sw64	Digital Media 64-bit software.

3. At the *Inst>* prompt, type:
install standard upgrades

Resolving Conflicts

It is possible that the current version of IRIX did not remove patches from earlier upgrades. This will result in conflicts when you upgrade to 6.5.28. You can, however, resolve these conflicts before the actual upgrade.

To resolve conflicts:

1. At the *Inst*> prompt, type:

```
conflicts
```

A list of conflicts appears along with options to resolve each conflict. For example, you might see a conflict message that looks like the following:

```
Cannot replace nfs.sw.nfs (1287459330) (with nfs.sw.nfs
(1287689520)) because it is needed by patchSG0004379.nfs_sw.nfs.
    1a. Do not install nfs.sw.nfs (1287689520)
    1b. Remove patchSG0004379.nfs_sw.nfs (1289999907)
```

If no conflicts are found, perform the upgrade. See [“Performing the Upgrade”](#) on page 35.

NOTE: If you have any of the following subsystems installed, you must remove them before continuing: `java2_dev.sw.base`, `java2_dev.man.base`, or `java2_debug.sw32.binaries`.

2. Resolve all conflicts. Type:

```
conflicts <option>
```

For example, type the following at the *Inst*> prompt to resolve the previous conflict:

```
conflicts 1b
```

Once all conflicts have been resolved, you can perform the upgrade.

HINT: If you have multiple conflicts, enter their options in one command to resolve them simultaneously. For example, if you have three conflicts, type **conflicts 1b 2b 3b** to resolve all conflicts at once.

Performing the Upgrade

The system now has all the information it needs to perform the IRIX upgrade.

To perform the upgrade:

1. At the *Inst*> prompt, type:

go

Inst begins to install software upgrades. A few minutes later, *Inst* asks for another CD.

2. Eject the CD from the CD-ROM drive using the shell that you used to control the CD-ROM drive.
3. Load the appropriate CD as directed, but do not press any keys on your keyboard. *Inst* detects the CDs and resumes the installation automatically.
4. Repeat steps 2 and 3 to continue installing software upgrades.
5. When the installation is complete, *Inst* returns an *Inst*> prompt. To exit the software installation utility, type:

quit

Quitting *Inst* takes several minutes during which time ELF files are quick-started again.

Verifying the Upgrade

Reboot the system and use the *uname* command to verify the upgrade.

To verify the upgrade:

1. To complete the installation, type:

reboot

The system reboots. If you are using an Onyx2 or Onyx 3200 and part of the login dialog appears off-screen, you must edit the Clogin file to reposition the login dialog. See [“Onyx2, Onyx 3200, or Onyx 350—Editing the Clogin File”](#) on page 36.

2. Log in as root and open a UNIX shell.
3. To verify that you are now running IRIX 6.5.28, type:

uname -R

The current IRIX version (6.5 6.5.28) appears in the shell.

Onyx2, Onyx 3200, or Onyx 350—Editing the Clogin File

If you are using an Onyx2, Onyx 3200, or Onyx 350 and the primary SGI monitor display is switched from the default channel 0 to channel 1, part of the login dialog is positioned off-screen. You must edit the Clogin file to re-centre the login dialog.

To edit the Clogin file:

1. Log in as root and open a shell.
2. Change the directory. Type:


```
cd /usr/lib/X11/app-defaults
```
3. Open the Clogin file using the *nedit* editor. Type:


```
nedit Clogin
```
4. In *nedit*, choose Search | Find.
The Find dialog appears.
5. Type “geometry” in the Find dialog and then click Find.
The **Clogin*geometry** line is selected. If it is not found, go to the end of the text in the Clogin file and continue to the next step.
6. Set the new position of the login dialog. Type:


```
Clogin*geometry: +300+200
```

The *geometry* values set the horizontal and vertical position of the login dialog.
7. Choose File | Save to save the Clogin file.
8. Close *nedit*, log out, and then log in again.
The login dialog is re-centred on the monitor. If part of the login dialog is still off-screen, repeat the above procedure, but use the following values:


```
Clogin*geometry: +600+200
```

Modifying IRIX Configuration Files

Once you have installed and updated IRIX 6.5.28, you may have to fine-tune some IRIX configuration files that were updated during the installation. *Inst* saves a backup of all the old configuration files, so for each file there is an old and a new version. The need to modify IRIX configuration files should be assessed and performed by your system administrator.

For more information about modifying IRIX configuration files, consult the InfoSearch book *IRIX Admin Software Installation and Licensing*.

To access InfoSearch books:

1. In a UNIX shell, type **infosearch**
2. If this is the first time you use InfoSearch after the upgrade to IRIX 6.5.28, a prompt appears indicating that the InfoSearch client has been replaced by a Web browser. Click OK.
The InfoSearch Settings & Launch panel appears.
3. In the Go to (URL) list, select InfoSearch on local host, or one of the other selections. For example, if your InfoSearch documents are kept on a particular server on your network, you can select Another InfoSearch-enabled server, and then enter the URL for this server.
4. Click Save & Launch.
The SGI InfoSearch Web page opens.
5. In the keyword search field, type:
merging managing configuration files
The system displays a list of InfoSearch entries.
6. Click the entry entitled:
IRIX Admin: Software Installation and Licensing: Chapter 4.
Using the Main Menu

