



Introduction

Before you get going...

Learn about obtaining product licences, conventions used within this document and how to contact Discreet for assistance.

Summary

In this installation guide, you learn how to:

- Upgrade to IRIX 6.5.7f
- Install and start **flame**® 7.0
- Network a Macintosh or PC to your SGI
- Edit the configuration file
- Mount a CD-ROM and install the **flame** 7.0 licence after the software is already installed
- Install IRIX from scratch
- Install a JL Cooper device

It is recommended that you read this chapter before starting the installation procedure. The following sections contain information regarding product licences, notation conventions used in this document, and how to get assistance during the installation procedure should you require it.

NOTE: **flame** 7.0 runs on the Octane MXI, and MXE platforms.

Licence Information

Make sure that you have valid licences before starting the installation procedure. You can install **flame** without a licence, but you will not be able to run the software. The same situation applies to the Discreet Filesystem and **wire**®. The following sections explain how to obtain the licences you require.

You can obtain software licences from Monday to Friday, 9 am to 5 pm, Eastern Standard Time. To contact Discreet for licence information, see “Contacting Discreet” on page 4.

Get Your flame Licence

Include your computer System ID number when you contact the Discreet Licence department. Your System ID number is the unique number of your SGI computer set by Silicon Graphics, and is used to confirm your software licence.

To get your System ID number, type **sysinfo** in a UNIX shell. Your System ID number looks similar to this sample:

```
69 18 62 19 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
```

Get Your Discreet Filesystem Licence

To use the Discreet Filesystem, you must have Discreet Storage with a valid licence.

Include disk-summary information when you contact the Discreet Licence department. You obtain this information by running the *disk-summary* command. The *disk-summary* command displays all disks connected to your system, and lists their serial numbers and descriptions.

To use the *disk-summary* command:

1. Log in as root.
2. Go to the disk array configuration directory by typing:
cd /usr/discreet/sw
3. Display the disk-summary information by typing:
./disk-summary

The *disk-summary* command lists your SGI disks as well as your Discreet disks. Write down the adapter numbers and their corresponding disks.

Get Your wire Licence

You need a valid **wire** licence to run the **wire** network. This licence is separate from the **flame** licence. Use the same procedure to request a **wire** licence as you would when requesting a new **flame** licence; submit the SGI System ID number for each computer on which you will install **wire**. To get your System ID number, type **sysinfo** in a UNIX shell. Contact the Discreet Licence Department with the required information.

Notation Conventions

A number of style conventions are used throughout this document. The following chart lists examples and descriptions of these conventions.

Convention:	Description:
<i>/var/adm/SYSLOG</i>	Names of directories and files in the text are in italics.
Video, Serial1	Examples of configuration file lines are written in Courier regular.
cd /dist	Commands you type in the UNIX shell are written in Courier bold.
<account_name>	Variable names are enclosed in angle brackets and written in Courier regular.
[<system_file>]	Optional variables are enclosed in square brackets.

Commands

The IRIX operating system is case sensitive. You must type commands, file names, and pathnames exactly as they appear in this document.

Further information about the IRIX commands used in the installation procedure can be found in the online operating system documentation. In a UNIX shell, type **man** followed by the name of the command. For example, type **man cp** to display information on copying files.

You can also type **insight** to bring up the online book browser.

Variables

The commands used in the installation procedure and the keywords used in the configuration file use a number of variables. Variable names are always enclosed in angle brackets or, if optional, square brackets. When you enter the command, replace the variable name and the angle brackets with the correct value for your system.

Contacting Discreet

For assistance with installation or licencing issues, contact:

Discreet Customer Support

North America:	1-800-925-6442
Global:	(514) 954-7199 (Country code = 1)
Fax:	(514) 954-7254 (Country code = 1)
E-mail:	discreet.support@autodesk.com
WWW:	www.discreet.com

Discreet Licencing Assistance

Global and North America:	(514) 393-1616 (Country code = 1)
E-mail:	license@discreet.com
Fax:	(514) 393-0810

Upgrading IRIX

Getting up to speed

*Learn how to upgrade your version of IRIX to 6.5.7f before you install **flame**.*

Upgrading IRIX

Before you install **flame**, you need to upgrade your version of IRIX to IRIX 6.5.7f.

This section provides instructions for upgrading to IRIX 6.5.7f, and explains how to modify IRIX configuration files after the installation. If there are IRIX patches included with **flame** 7.0, they will be installed automatically.

If you need to build a system disk from scratch or if your current version of IRIX is older than 6.5.x, refer to Appendix C, “Installing IRIX 6.5.7f.”



WARNING: With IRIX 6.5.7f, file corruptions have been found to occur when transferring large files on NFS3 (Network File System protocol 3). If you are using NFS3, it is highly recommended to change your NFS configuration to use NFS2 by default when upgrading to this version of IRIX.

CDs Required for the Upgrade

The CD-based installation requires the following CDs:

- *IRIX 6.5.7 Installation Tools and Overlays (1 of 2)* – P/N 812-0818-007
- *IRIX 6.5.7 Overlays (2 of 2)* – P/N 812-0819-007
- *IRIX 6.5 Applications (Feb. 2000)* – P/N 812-0877-006

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

For Octane:

- OCTANE/IMPACT Video for IRIX 6.5 - P/N 812-0787-001

All platforms:

- *ONC3/NFS version 3, for IRIX 6.2, 6.3, 6.4, and 6.5* - P/N 812-0774-001

Upgrading from IRIX Version 6.5.4f to 6.5.7f

To upgrade your SGI system from IRIX 6.5.4f to IRIX 6.5.7f, you will require root access. If you do not have root access, contact your system administrator. Also, make sure the CD-ROM drive is mounted properly. See “Mount the CD-ROM Drive” on page 57.

To perform the upgrade:

1. Log in as root and open a new shell.
2. Insert the *IRIX 6.5.7 Disk 1 of 2* CD into your CD-ROM drive.
3. In the shell window, type:

```
inst
```

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

```
from /CDROM/dist
```

The installation program (*Inst*) displays information regarding your IRIX upgrade. Use the spacebar to scroll through the information.

Inst reads the CD, and then prompts you with
Install software from: [/CDROM/dist].

5. Insert the *IRIX 6.5.7 Disk 2 of 2* into your CD-ROM drive.

HINT: To eject a CD, open a new shell and type **eject /CDROM**

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

```
/CDROM/dist
```

Inst reads the CD and then prompts you with
Install software from: [/CDROM/dist]

7. Without changing the CD, type:

```
/CDROM/dist/unbundled
```

Inst reads the CD and then prompts you with

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

8. Insert the *IRIX 6.5 Applications (Feb 2000)* CD into your CD-ROM drive, and then type:

```
/CDROM/dist
```

Inst reads the CD and then prompts you with

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

9. Insert the *IRIX 6.5 Foundation 1* CD into your CD-ROM drive, and then type:

```
/CDROM/dist
```

Inst reads the CD and then prompts you with

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

10. Insert the *IRIX 6.5 Foundation 2* CD into your CD-ROM drive, and then type:

```
/CDROM/dist
```

Inst reads the CD and prompts you with

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

11. Type **done**

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

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

```
install eoe.sw.spell
```

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

```
install ftn_eoe
```

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

```
install Upgrades
```

16. Insert the *IRIX 6.5.7 Disk 1 of 2* CD into your CD-ROM, and at the *Inst>* prompt type **go**

Inst starts to install the subsystems. A few minutes later, *Inst* asks for other CDs; Insert the requested CD into your CD-ROM drive, but do not press any keys on your keyboard. *Inst* detects the new CD automatically. When the installation is complete, *Inst* brings you back to the *Inst>* prompt.

17. Type **quit**

Exiting *Inst* takes about 3 minutes (ELF files are quick started again).

18. To complete the installation, type **reboot**
19. Once your system has rebooted, log in and open a UNIX shell.
20. Enter the following command to verify that you are now running IRIX 6.5.7f:

```
uname -R
```

Modifying IRIX Configuration Files

Once you have finished installing IRIX, you will probably 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. Depending on the contents of the file, IRIX may use either the old or new file by default. File usage is indicated by the extension, as shown in the following table.

Extension	Usage
None	Version of file being used by IRIX.
.N	New version of file (not being used).
.O	Old version of file (not being used).

IRIX does not automatically use the new version of some files as they may not function properly without first being modified in some way. For example, you might want to copy and paste a new functionality from a .N file into its equivalent used file (without an extension). Similarly, you may need to port specific information tailored for your system from a .O file to its equivalent used file.

To determine which files need to be merged or updated:

1. In a UNIX shell, type:

```
versions changed
```

This lists all the configuration files that have been modified by the IRIX installation.

Comparing Old and New Configuration Files

You can use the *xdiff* utility to compare old and new configuration files.

To use *xdiff* to compare files, type the following in a UNIX shell:

```
xdiff <pathname of file A> <pathname of file B>
```


Where < pathname of file A> and <pathname of file B> are the two files that you want to compare. For example:

```
xdiff /etc/group /etc/group.O
```

Getting Additional Information

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

To access InSight books:

1. In a UNIX shell, type **insight**

The IRIX InSight library window appears.

2. In the pink search box, type:

```
merging configuration files
```

The system shows you a list of insight entries.

3. Double-click the entry entitled:

```
IA_InstLicns:Merging Configuration Files
```

[illegible]

Installing flame 7.0

Getting up and running

*Check your system date, install **flame** , edit your configuration file,
and start your software.*

Check the System Date

Before you install **flame** for the first time, check that the system date matches the current calendar date. To run **flame**, the system date must match the current calendar date.

To check the date:

1. Log in as root.
2. In a UNIX shell, type:

date

The system date and time appear, for example:

```
Mon Jul 10 09:00:00 EDT 2000
```

If the system date matches, and your computer is a stand-alone (not connected to a network), go to “If Your Computer Is a Stand-alone” on page 13. If your computer is not a stand-alone, start the automatic installation procedure (see “Installation Procedure” on page 13.)

If the system date does not match, go to the next step.

3. Type the current date:

```
date mmddHHMMyyyy.ss
```

Where: Is:

mm	month number
dd	day number in the month
HH	hour number using the 24-hour system
MM	minute number
yyyy	year number
ss	second number

For example, to set the system date to Monday, July 10, 9:00:00 EDT (Eastern Daylight Time), 2000, you would type:

```
date 071009002000.00
```

4. To set the time zone, edit the file `/etc/TIMEZONE` by typing:

```
jot /etc/TIMEZONE
```

Then enter the appropriate time zone code in the file.

For:	Type:
Eastern North America	TZ=EST5EDT
Central North America	TZ=EST6CDT
Pacific North America	TZ=PST8PDT
Western Europe	TZ=GMT-1

For more information, type:

```
man timezone
```

5. Reboot your computer. Type:
reboot
6. Verify that the system date is now correct by typing:
date

The new system date and time appear, for example:

```
Mon July 10 9:00:00 EDT 2000
```

If Your Computer Is a Stand-alone

1. If your machine is a stand-alone (not connected to a network), check the machine configuration to make sure the lines *timed* and *timeslave* are set to off. Type:

```
chkconfig
```

2. If *timed* is set to on, type the following:

```
chkconfig timed off
```

3. If *timeslave* is set to on, type the following:

```
chkconfig timeslave off
```

NOTE: Setting *timed* and *timeslave* to off for a stand-alone system ensures that the time indication remains accurate.

Check the IRIX Version

Before you install **flame**, check the version of IRIX you are currently using. If you are using a version prior to IRIX 6.5.4f, refer to Appendix C, “Installing IRIX 6.5.7f,” to install the upgrade included with your **flame** disks.

To check your IRIX version:

1. In a UNIX shell, type:

```
uname -R
```

The version number appears.

Installation Procedure

It is recommended that you connect all required hardware devices before starting the automatic installation procedure.

The installation process installs the **flame** software, including supporting software such as the Discreet Filesystem, the **wire** network, Sonic Solutions, DL fonts, and a tablet driver.

To start the automatic installation procedure:

1. Log in as root.
2. Make sure the **flame** 7.0 CD is in the CD-ROM drive and that the drive is mounted.
3. To go to the directory containing the install file, type:

```
cd /CDROM/flame70
```
4. Check the contents of your current directory by typing:

ls

Verify that the directory you are in contains the install file.

5. Start the installation script by typing:

./INSTALL

The installation script checks for and automatically upgrades or installs necessary patches.

6. When the Software Manager Installation Startup shell appears, the following question appears:

Do you have a Sonic Solutions board installed? (y/n)

Type **y** and press **ENTER**.

7. Press **ENTER** when the following message appears:

Distribution script completed, press ENTER to continue.

The Software Manager reads the distribution CD, checks your system for previously installed components, and creates directories on your system disk. This procedure takes a moment.

8. If you are upgrading from a beta version of **flame**, the following message appears:

Please select the currently used version of flame.

Select the version you are currently using. You can select None if you would like a clean installation of **flame**. If you select None, go to the next step. If you select a previously installed version, go to step 10.

9. If you are upgrading from a beta version of **flame**, click Yes or No after each of the following messages, based on your preference:

Do you want to carry over your custom resource files?

These include LUTs, custom menus, filters, brushes, palettes, and paint brush setups.

Do you want to carry over your setup files?

10. The following message appears:

Please select your preferred frame resolution.

You can select Pal, NTSC, or Film.

11. Edit your configuration file, save any changes you make and exit the configuration *jot* shell.

For more information, see “Editing the Configuration File” on page 15.

If you are updating from a beta version of **flame**, refer to “Updating the Configuration File” on page 16.

12. After the following message appears, click OK to reboot your system:

Installation complete: You must reboot.

Editing the Configuration File

1. When the following message appears:

Please select your preferred frame resolution.

choose one of three sample configuration files:

Select:	To:
FILM	Run flame at FILM resolution (<i>film.cfg</i>).
PAL	Run flame at PAL resolution (<i>pal.cfg</i>).
NTSC	Run flame at NTSC resolution (<i>ntsc.cfg</i>).

The selected sample configuration file is copied and renamed *init.cfg*. The sample configuration files are located in the directory:

/usr/discreet/flame_7.0OCT/cfg/sample

NOTE: From this point forward, this document will use the abbreviation ~/ to refer to the **flame** 7.0 home directory. For example, the sample configuration files in the previous step are located in the *~/cfg/sample* directory.

2. Click OK when the following message appears:

Get ready to update the init configuration file.

The *init.cfg* file appears in a *jot* text window.

NOTE: If this is a first-time installation or an upgrade installation, proceed with the next step. If you are upgrading from a beta version of **flame**, see “Updating the Configuration File” on page 16.

3. Edit the keyword lines in the *init.cfg* file as necessary. For more information about the different keyword lines, see “Init Configuration File” on page 33.
4. When you have completed making all your editing changes, save the file and exit.
This file is saved as *init.cfg* under the *~/cfg* directory.
5. Click OK to reboot the system after the following message appears:
Installation complete. You must reboot your system.
You can now start **flame**. For more information, see “**flame** Start Up” on page 16.

Updating the Configuration File

NOTE: If you are updating from an earlier version of **flame**, there are likely to be major changes in the structure of the configuration files. This is due in part to the splitting of the configuration file between the *init.cfg* config file and the project-specific config files. You can select the entire contents of the new *init.cfg* config file and then customize it to avoid adding obsolete tokens.

When you update the configuration file, an *xdiff* window appears displaying the current configuration file on the left and the new configuration file on the right.

The differences between the current and new configuration files are highlighted.

1. Scan the two configuration files, looking for custom directories or keywords that you want to copy to the new *init.cfg* file.
2. Find an entry that you want to copy to the new file, and click on the highlighted line(s). The highlighted line(s) changes colour. The file is updated after you save and exit.
3. When you have finished updating, select Save As Right under the File menu. Click OK, and exit *xdiff*.
4. When the following message appears, click OK to reboot the system:

```
Installation complete. You must reboot your system.
```

You can now start **flame**.

NOTE: You should configure the Discreet Filesystem and **wire** before launching the software if they are not already. For more information, do the following procedures.

flame Start Up

There are several startup options for **flame**, in addition to the options presented in this section. For more information, see the ***flame** User's Guide*.

NOTE: If you are using a new disk array, you must initialize it before you can start **flame**.

Initialize the Framestore

You can bypass the following steps if you have already initialized the framestore by running a previous version of **flame**.

1. Log in to the **flame** account by clicking on the **flame** icon.
2. Type **flame -vir** to start the software.



WARNING: All data on your framestore will be destroyed. Back up any data that you want to save prior to using this command.

The Project Management menu is displayed.

3. When you enter the **flame** Project Management menu, you must create a project and create a partition on your framestore. For more information, see the ***flame** User's Guide*.

After you create a project, the **flame** startup procedure is complete. When the yellow cross cursor appears, you are ready to use **flame**.

Start flame

1. Log in to the **flame** user account by clicking on the **flame** icon.
2. In a UNIX shell, type **flame**
to start **flame** if you are not using Discreet Audio.

If you are running Discreet Audio on your system, type **flames**

The Project Management menu is displayed.

3. When you enter the **flame** Project Management menu, you must create a project and create a partition on your framestore. For more information, see the ***flame** User's Guide*.

After you have created a project, the **flame** startup procedure is complete. When the yellow cross cursor appears, you are ready to use **flame**.

Uninstalling flame

To help keep the log in screen organised, you can delete obsolete versions of installed software. Use *versions* to uninstall products. This ensures that product version information is maintained correctly. *Versions* will only remove files that were installed using versions. Any files created after you install **flame** such as setups and config files will not be removed. These files must be removed manually. Additionally, the icon will not be removed from the startup screen when you use *versions* to remove a product. You must remove the icon manually by performing the following procedures.

To uninstall a product:

1. Log in as root.
2. If there are setups that you want to keep, back them up.
3. In a UNIX shell, type:

```
versions |grep Discreet
```

All installed software appears.

NOTE: The following steps use **flame** 7.0 as an example.

4. To delete **flame** 7.0, type:

```
versions remove flame_7.0
```

The software is removed, however, some directories still remain, such as configuration files, and setup directories. You must remove them manually. As well, the icon for the product will still appear on the main IRIX login screen. That also must be removed manually.

To remove remaining flame directories:

1. Type:

```
cd /usr/discreet
```

2. Remove the directory by typing:

```
rm -rf flame_7.0
```

NOTE: If you have not yet backed up your setups, back them up before running this command.

To remove the flame icon:

1. As root, type:

```
cd /etc
```

2. Type:

```
jot passwd
```

3. Remove the entry that corresponds to the software you just removed. For example, delete the following line:

```
flame_7.0::119:20smoke30:/usr/discreet/
```

```
flame_7.0:/bin/tcsh
```

NOTE: Make sure you only delete the correct line from the passwd file.

Additional Network and Hardware Installation

You can also set up Discreet wire and HIPPI networks and configure stones for use with your system. For information on installing and setting up networks and disk arrays, refer to the *Discreet Filesystem and Networking Guide* and the *Stone 1000/2000 Configuration Guide* included with the **flame** software package.

4 Networking a Macintosh or PC to Your SGI

Getting your systems together

Networking provides the ability to transfer files, communicate, and electronically link your SGI to other computers in your shop.

Summary

In this chapter, you learn how to:

- Create an Ethernet network link between a Macintosh or PC and your SGI
- Configure your computers
- Set up your hardware
- Transfer files from a Macintosh or PC to your SGI

For more information on loading EDLs, see the “EDL” chapter in the *flame User's Guide*.

You can perform file transfers of EDLs, fonts, and graphics between a Macintosh or PC and your SGI workstation (SGI) by creating an Ethernet network link and using communications protocols and file transfer software.



WARNING: These procedures assume you are networking computers that are not part of a network already. If your SGI is already part of a network, ask your network administrator for help.

Hardware and Software Checklists

Use the following two tables to make sure you have all the necessary hardware and software for completing the network setup.

Table 1: Hardware Checklists

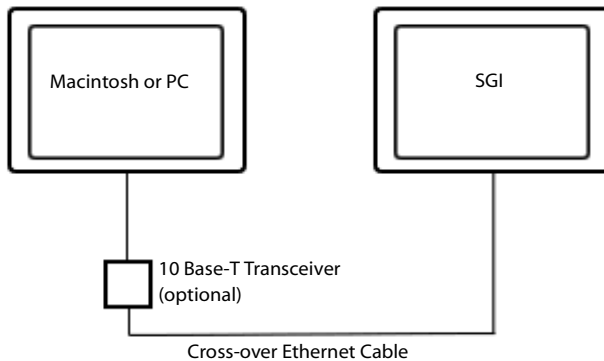
Macintosh Hardware	(✓)	PC Hardware
10 base-T cross-over cable for point-to-point connection, or 10 base-T cable and a 10 base-T hub if you need to hook up more than two machines together.		10 base-T cross-over cable for point-to-point connection, or 10 base-T cable and a 10 base-T hub if you need to hook up more than two machines together.
10 base-T transceiver for your Macintosh if you have an AAUI type Ethernet port. You do not need a transceiver if your Macintosh has a 10 base-T connector.		10 base-T Ethernet card for your PC.

Table 2: Software Checklists

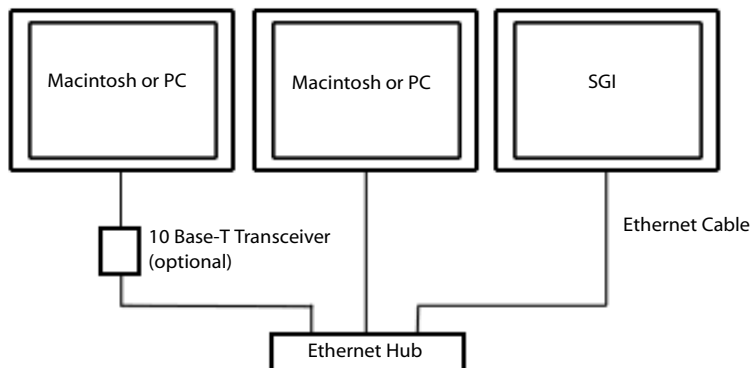
Macintosh Software Installed	(✓)	PC Software Installed
<i>Macintosh System 7.5.5</i> or higher operating system.		<i>Windows 95</i> operating system or higher.
<i>Open Transport version 1.1.2</i> or higher (Download available at: www.dartmouth.edu/pages/softdev/fetch.html).		FTP (file transfer protocol), which is bundled with <i>Windows 95</i> .
Any FTP client software (<i>Fetch</i> version 3.0 or higher is recommended).		TCP/IP driver, which is bundled with <i>Windows 95</i> .
<i>MacTCP Watcher 2.0</i> or higher (optional) (download available at: www.stairways.com).		<i>CuteFTP</i> (optional) (download available at: www.cuteftp.com).

The following diagrams illustrate the necessary hardware to create an Ethernet link between a Macintosh and your SGI.

Connection between an SGI and a Macintosh Or PC



Connection between an SGI and Macintosh Or PC Using an Ethernet Hub



Setting Up Your Hardware

Before you can transfer EDLs or other files from a Macintosh or PC to your SGI, you must set up the Ethernet network hardware.

To set up the hardware for point-to-point connection:

1. Make sure you have a 10 base-T Ethernet connector available on your PC or Macintosh. You may need to install an Ethernet card and/or a 10 base-T transceiver in order to get a 10 base-T Ethernet connection on your Mac or PC.
2. Connect your cross-over Ethernet cable between your Macintosh or PC to your SGI. A regular 10 base-T cable will not work; ensure that you are using a cross-over cable.

To set up hardware for a hub connection:

1. Make sure you have a 10 base-T Ethernet connector available on your PC or Macintosh. You may need to install an Ethernet card and/or a 10 base-T transceiver in order to get a 10 base-T Ethernet connection on your Macintosh or PC.
2. Connect the Macintosh or PC to your hub. If you need to have access to more than one Mac or PC, connect all the appropriate machines to your hub.
3. Connect the SGI to your hub.

Configuring Your SGI

Your SGI must have an IP (Internet Protocol) address so it can communicate with a networked Macintosh or PC.

If your SGI is already part of a network, it has an IP address. Ask your network administrator for the IP address, and continue to “Configuring Your Macintosh” on page 24 or “Configuring Your PC” on page 25.

If your SGI is not already networked, you need to give it an IP address.

To create an IP address for your SGI:

1. Log in as super-user. Type:

```
su
```

```
<root password>
```

2. Turn off autoconfig IP address. Type:

```
chkconfig autoconfig_ipaddress off
```

3. Give your workstation a host name by typing:

```
jot /etc/sys_id
```

A *jot* window appears. The default host name for your SGI is IRIS.

4. Edit the file and give your workstation a host name. Save the file and quit *jot*.

NOTE: If the name is different from IRIS, it is already customized and should not need to be edited. Your workstation name must not contain spaces or UNIX meta-characters such as `{*/#!`.

5. Give your workstation an IP address. Type:

```
jot /etc/hosts
```

A *jot* window appears.

6. Give an IP address to your machine by making the following entry in the hosts file:

192.9.200.1 <your_machine_name>

where <your_machine_name> is the name defined in */etc/sys_id*.

NOTE: You can use a different number than the one in the example above for your IP address. If you are not sure how to create an IP address, ask your network administrator for help. Avoid using single zeros when defining the IP address. For example:

Correct usage: 192.9.200.1

Incorrect usage: 192.0.0.1

7. Save the file and select Exit from the File menu to end the *jot* session.

8. Turn on the network daemon by typing:

chkconfig network on

9. Reboot your workstation by typing:

reboot

10. Verify your network settings by typing:

ping <my_machine_name>

where <my_machine_name> is the name defined in */etc/sys_id*.

Ping should report 0.0% packet loss. If not, verify */etc/hosts* and */etc/sys_id* to make sure you have a correct IP address and host name.

11. Stop ping by pressing **CTRL C**.

Configuring Your Macintosh or PC

The procedure for configuring a Macintosh is different than that for a PC. Make sure you follow the correct procedure for your situation.

- If you are transferring files from a Macintosh, see “Configuring Your Macintosh” on page 24 and “Macintosh File Transfers” on page 26.
- If you are transferring files from a PC, see “Configuring Your PC” on page 25 and “PC File Transfers” on page 27.

Configuring Your Macintosh

To configure your Macintosh to access your SGI, it is recommended that you have Mac OS 7.5.5 or later with Open Transport 1.1.2 or higher installed. Updates for Mac OS and Open Transport are available at:

<http://www.apple.com>

To configure your Macintosh:

1. Select the Control Panels in the Apple Menu.
2. Open the TCP/IP control panel.
3. Under the file menu, choose Configurations.
4. Select the Default configuration and click Duplicate.
5. Name your duplicate configuration **Ethernet Network**
6. Click OK.
7. Click Make Active and choose Connect via: Ethernet.
8. Select Configure: Manually.
9. Edit the IP address field. For example, **192.9.200.2**

NOTE: Each workstation on the network must have a unique IP address. In the example above, the SGI has an address of 192.9.200.1 and the Macintosh has an address of 192.9.200.2. Each address on the network must be in the 192.9.200.x format, where x is different for each machine.

10. Edit the subnet mask field. For example, **255.255.255.0**

Leave the other fields blank unless otherwise advised by your network administrator.

11. Reboot your Macintosh to complete the configuration.
12. If you have Mac TCP Watcher, you can launch it at this point.

NOTE: Mac TCP Watcher may give you a Reverse Name Lookup Failed error message. You can ignore it.

13. Under file, select Test ICMP Ping.
14. Enter the IP address of your Macintosh and click OK.

Make sure that 0 packets are lost. If not, there might be some errors in the TCP/IP configuration of your Macintosh.

15. Under File, select Test ICMP Ping.

16. Enter the IP address of your SGI and click OK.

Make sure that 0 packets are lost. If not, there might be errors in the TCP/IP configuration of your Macintosh.

Configuring Your PC

To configure your PC, you must install the TCP/IP driver and configure it so the PC can access your SGI.

The TCP/IP drivers are bundled with the Windows 95 operating system. If you do not have TCP/IP on your PC, you must load it from the Windows 95 CD-ROM or disks.

To install the TCP/IP driver:

1. Click on Start on your desktop.
2. Under Settings, select Control Panel. Double-click on the Network icon.
The Network dialog box appears.
3. Under the Configurations tab, choose TCP/IP and click Properties.
4. Under IP Address, select Specify an IP address and give a valid IP address to your PC.
For example, **192.9.200.2**

NOTE: Each workstation on the network must have a unique IP address. In the example listed above, the SGI has an IP address of 192.9.200.1 and the PC has an address of 192.9.200.2. Each address on the network must be in the 192.9.200.x format, where x is different for each machine.

5. Give a valid subnet mask to your PC. For example, **255.255.255.0**
6. Click OK and click OK again to close the Network dialog.
You are prompted to reboot your computer.
7. Reboot your PC to complete the configuration.
8. Go into the Start menu. Under Programs, select MS-DOS Prompt.
9. In the MS-DOS prompt, type:

ping <your PC IP address>

where <your PC IP address> is the IP address of your PC. If you see a Request Timed Out error message, your PC TCP/IP setup did not work properly.

10. In the MS-DOS prompt, type:

```
ping <your SGI IP address>
```

where <your SGI IP address> is the IP address of your SGI. If you see a Request Timed Out error message, your PC, SGI or hardware setup did not configure properly.

Transferring Files

Macintosh File Transfers

This section describes how to transfer files to and from your SGI on a Macintosh using *Fetch*. Note that any FTP client software will work as well.

To transfer files:

1. Start *Fetch* on your Macintosh.
2. Under File, select New Connection if you are not already in the New Connection dialog.
3. In the Host field, type the complete IP address of your SGI (use the IP address that you found or created in “Configuring Your SGI” on page 22).
4. In the User ID field, type the user account that you want to log in to. User accounts can be the product account (for example, `flint6_0`) or personal user accounts.

NOTE: The user account you want to log into must have a UNIX password. *Fetch* will not access accounts that do not use passwords.

5. In the Password field, type the password for the user account.

NOTE: You must type the password for the account you want to log in to. Otherwise, *Fetch* will not be able to access the account.

6. In the Directory field, specify the directory you want to access on your SGI. For example, if you want to go to the EDL directory for **flame** 7.0, type:

```
/usr/discreet/flame_7.0/edl
```

7. Choose OK.

The contents of your target directory appear in the *Fetch* window.

8. Choose Binary file transfer format.

NOTE: In general, Binary mode is used to transfer image files, tar files and any type of executable files. Text mode is used to transfer text files such as licences and Read Me files. EDL

files can be transferred in both Text and Binary mode. **flame** will filter the appropriate characters accordingly.

9. To transfer files from your Macintosh to your SGI, click Put File and select the file you want to transfer using the standard Macintosh Open dialog.
10. To transfer files from your SGI to Macintosh, highlight the file you want to transfer in the Fetch window and click Get File.

A standard Macintosh Save dialog appears. Save the file on your local Macintosh hard disk.

PC File Transfers

This section describes how to transfer files to and from your SGI using FTP in a DOS shell. Note that Graphical User Interface (GUI) FTP client software is also available from shareware and commercial sources.

To transfer files from a PC to your SGI:

1. Open the Start menu.
2. Under Programs, select MS-DOS Prompt.
3. At the DOS prompt type:
`ftp <your SGI IP address>`
 where `<your SGI IP address>` is the IP address of your SGI.
4. At the User prompt, type the SGI user account that you want to log into. User accounts can be the product account (for example, **flint6_0**) or personal user accounts.

NOTE: The user account you want to log into must have a UNIX password. FTP will not access accounts that do not use passwords.

5. At the Password prompt, type in the password for the user account you want to log into.
6. Specify which directory on you SGI you want to read from or write to. Type:
`cd <my_directory>`
 where `<my_directory>` is the directory on the SGI you want to access. For example, if you want to access the EDL directory, type:
`cd /usr/discreet/<product name>/edl`
7. Switch the type of transfer to binary mode. Type:
`bin`

NOTE: In general, Binary mode is used to transfer image files, tar files and any type of executable files. Text mode is used to transfer text files like licences and Read Me files. EDL files can be transferred in both Text and Binary mode. **flame** will filter the appropriate characters accordingly.

8. If you need to switch to text mode, type:

```
ascii
```

9. To transfer files from your PC to your SGI, type:

```
put <drivename>\<pathname>\<filename>
```

where <drivename> is the name of the PC drive where the file is located, <pathname> is the directory path of the file, and <filename> is the name of the file. For example,

```
put c:\edl_file\edl2.txt
```

10. To transfer files from your SGI to your PC, type:

```
get <remote filename> <drivename>\<pathname>\<filename>
```

where <remote filename> is the name of the file you want to get from your SGI. For example,

```
get /usr/tmp/images/explosion.tif c:\docs\images\explosion.tif
```

11. To quit the FTP client software, type:

```
bye
```

Reference Information

Viewing IRIX Man Pages

Man (manual) pages are online documentation provided by SGI about IRIX and IRIX commands. You can find more information about the */etc/host* file and IP addresses by referring to the IRIX *Man* pages.

To open the *man* page for the */etc/hosts* file:

1. Open a UNIX shell.
2. Open the *man* page for the */etc/hosts* file by typing:

```
man hosts
```

Online documentation for the */etc/hosts* file appears. Follow the instructions that appear to view more information or to exit from the *man* pages.

Viewing IRIS InSight Pages

The IRIS InSight Library is an online information retrieval system. This viewer provides an interface to browse through online information distributed from SGI.

To open the InSight library:

1. In a UNIX shell, type:
insight
2. Click on any of the topics that are available, or use a keyword to specify topics. For example, in the Find field type:
setting up a network
and click Search.
3. Double-click on a topic in the Items Found area.

This image shows a full page of white paper with horizontal dashed lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting practice. There are no margins, text, or other markings on the page.

flame 7.0 Configuration Files

Setting up your parameters

Use the configuration files to enable your hardware and to set up **flame** parameters on your system.

Summary

In this appendix, you learn how to:

- Locate configuration files
- Edit configuration files
- Set up project configuration files

During the automatic installation of **flame**, a number of configuration files are installed.

This directory:	Contains these configuration files:
<code>~/cfg</code>	<code>720x486.cfg</code> <code>720x576.cfg</code> <code>default.cfg</code> <code>init.cfg</code>

This directory:	Contains these configuration files:
<code>~/cfg/sample</code>	<i>default_ntsc.cfg</i> <i>default_pal.cfg</i> <i>default_film.cfg</i> <i>init_film.cfg</i> <i>init_ntsc.cfg</i> <i>init_pal.cfg</i>
<code>~/cfg/template</code>	<i>film.cfg</i> <i>1920x1080_SDTI.cfg</i> <i>pal.cfg</i> <i>ntsc.cfg</i> <i>24p.cfg</i> <i>24p_ntsc.cfg</i>

NOTE: `~` represents the home directory for the software installation.

The *init.cfg* file is shared by all projects. It contains configuration lines that affect the entire system setup. You can modify the *init.cfg* file at any time using a text editor such as *jot*. Modifications to this file take effect the next time that you start the application.

The configuration files in the *sample* directory are template files you can use to create other *init.cfg* files. The sample configuration files are never used during startup.

The configuration files in the `template` directory are used as templates for setting up your project configuration files. For example, each time you create a new project, you must select a sample configuration file (such as *ntsc.cfg*, *pal.cfg*, or *film.cfg*). A new project configuration file is created based on the template file you selected. Modifications to a project’s unique configuration file only affect that particular project. In most cases, there should be no need to manually edit the project configuration files.

Project configuration files are only created when you create a new project and are located in:

```
/usr/discreet/project/effects/<projectname>/cfg
```

where `<projectname>` is the name of the project you created.

This appendix describes the keywords in the *init.cfg* file and *project.cfg* files.

Editing Guidelines

To avoid difficulties during startup or while running **flame**, it is important that you edit lines in the configuration file correctly. The following points are some guidelines you should consider before setting up configuration files:

- Number signs (#) at the beginning of a line indicate an inactive comment. To have **flame** read a line, you must remove the number sign so that it is “uncommented”.
- Use commas carefully. If you delete a comma or add a comma that is not required for a specific line, **flame** cannot read the configuration file.
- Exact spacing is not essential. You can substitute a single space whenever you see one or more tabs in the configuration lines.

Init Configuration File

The following device keywords (parameter lines) are located in the *init.cfg* file. Edit the keywords and uncomment lines to indicate which devices are connected to your system.

FrameStore

Defines the framestore and partition to be used for storing clips.

Syntax

Framestore <device path> [,"", <file size>]

Where:	Is:
<device path>	See example below.

Example

Fo:	Keyword Line:
Discreet Filesystem	FrameStore stonefs
System disk, 200 MB	FrameStore /usr/tmp/flame.fs, "", 200
Discreet Storage	FrameStore /dev/swr00

Video

Initializes the video device and specifies the type of video input.

Syntax

Video <video device>, <type of video input>

Where:	Is:
<video device>	OctaneVideo
<type of video input>	Serial1, Serial2, Serial1and2, or SerialDual

Examples for OctaneVideo

Video OctaneVideo, Serial1

Video OctaneVideo, Serial1AND2

Sync

Identifies the sync source for the video frame buffer if you are using OctaneVideo. If you are using Input Clip or Output Clip, the sync specified in the VTR line is used.

flame on OCTANE supports the House, Digital1, Digital2 and Free sync sources.

Syntax

Sync <source>

Example

Sync House

TabletDriver

Identifies the tablet driver location and serial port. It is not necessary to specify the tablet type, only the serial port to which the tablet is connected.

Syntax

TabletDriver dlwacom, ttyd<serial port number>

Where:	Is:
<serial port number>	Serial port to which the tablet is connected.

Example

```
TabletDriver dlwacom, ttyd2
```

Security

Identifies the serial port to which the security dongle is connected.

Syntax

```
Security /dev/ttyd<serial port number>
```

Where:	Is:
<serial port number>	Serial port to which the dongle is connected.

Example

```
Security /dev/ttyd2
```

MIDIDevice

Enables an external MIDI controller device. Only the serial port and protocol need to be customised.

Syntax

```
MidiDevice <name>, <model>, <serial port>, <protocol>,  
<baud rate>
```

Where:	Is:
<name>	The name you want to give the MIDI device.
<model>	The model of the MIDI device. flame only supports JL Cooper MCS 3800.
<serial port>	The serial port to which the JL Cooper is connected. If you used a different configuration than the one recommended in this chapter, update the correct port in this line.
<protocol>	The protocol you are using to connect to the JL Cooper. If you are connecting directly from the JL Cooper to the Onyx2 or Octane, enable the line for RS422. If you are connecting the JL Cooper by routing through a SCSI Terminal Server, enable the line for RS232.
<baud rate>	The baud rate for the connection. You do not need to modify this line.

Example

```
MidiDevice myMidiDevice, JLC_MCS-3800, /dev/ttyd2, direct_RS232,
38400

MidiDevice myMidiDevice, JLC_MCS-3800, /dev/ttyd2, direct_RS422,
38400
```

VTR

Identifies the video tape recorder (VTR) that is used to record or load clips. The VTR is accessed using the Input Clip or Output Clip options in the Library menu.

Syntax

```
Vtr <protocol>, <name>, <input format>, <input sync>,
<output format>, <output sync>,
/dev/tty4d<serial port # vtr control cable>,
<timecode type>, <video output delay>, <video input delay>,
<pre-roll>, <post-roll>, <audio input delay>,
<audio output delay>, <video precision (8 or 10 bits)>,
<cue mode>, <get location delay>, <edit on delay>,
<edit off delay>, <vtr command delay>
```

Where:	Is:
<protocol>	VTR control protocol (SONY, BTS, BVW50, TASCAM, and NONE).
<name>	VTR name as it appears in the Input and Output Clip menus.
<input format>	Serial1, Serial2, SerialDual. See “Video” on page 34.
<input sync>	Digital1, Digital2, House, Free. See “Sync” on page 34.
<output format>	Serial1, Serial2, Serial1and2, SerialDual. See “Video” on page 34.
<output sync>	Digital1, Digital2, House, Free. See “Sync” on page 34.
<serial port>	Serial port to which the VTR is connected
<timecode type>	Auto, LTC, or VITC.
<video output delay>	Video output delay in frames.
<video input delay>	Video input delay in frames.
<pre-roll>	Pre-roll in frames or seconds (if you enter a value with a decimal point).

Where:	Is:
<post-roll>	Post-roll in frames or seconds (if you enter a value with a decimal point).
<audio input delay>	Specifies the input offset value in 1/100 of frames to have audio in sync with video. The delay varies depending on which VTR you are using.
<audio output delay>	Specifies the output offset value in 1/100 of frames to have audio in sync with video. The delay varies depending on which VTR you are using.
<video precision>	Optional. Specifies the precision of the video signal (8 or 10 bits).
<cue mode>	Optional. Use "vtrcueing" to let the VTR cue itself. Otherwise, this function will be controlled by the software.
<get location delay>	Optional. Delay in milliseconds before querying VTR location.
<edit on delay> <edit off delay>	Optional. Specifies how many frames before the edit sync point to send the command. Applies only to BVW50.
<vtr command delay>	Optional. Specifies how many milliseconds flame pauses before sending certain commands to the VTR. Useful for older VTRs such as the BTS.

Example

The following examples use the serial inputs and outputs on an OctaneVideo board.

For:	Keyword Line:
Sony D1 deck	Vtr sony, D1, SERIAL1, HOUSE, SERIAL1, HOUSE, /dev/tty4d1, AUTO, -3, 0, 5.00, 1.00, 0.00, 0.00, 8, vtrcueing
Digital Betacam	Vtr sony, DigBeta, SERIAL1, HOUSE, SERIAL1AND2, HOUSE, /dev/tty4d1, AUTO, -4, -1, 5.00, 1.00, 0.00, 0.00, 10, vtrcueing, 4
Betacam SP	Vtr sony, Betacam, SERIAL1, HOUSE, SERIAL1, HOUSE, /dev/tty4d1, AUTO, -4, 0, 5.00, 1.00, 0.00, 0.00, 10, vtrcueing, 3

For:	Keyword Line:
BTS D1 deck	Vtr BTS, D1 BTS, SERIAL1, HOUSE, SERIAL1, HOUSE, /dev/tty4d1, AUTO, -4, -1, 5.00, 1.00, 0.00, 0.00, 8, vtrcueing, 2, -4, -4, 40
Panasonic D5 deck	Vtr sony, D5, SERIAL1, HOUSE, SERIAL1, HOUSE, /dev/tty4d1, AUTO, -3, 0, 5.00, 1.00, 0.00, 0.00, 10, vtrcueing
Panasonic DVCPRO	Vtr sony, DVCPRO, SERIAL1, HOUSE, SERIAL1, HOUSE, /dev/tty4d1, AUTO, -3, 0, 5.00, 1.00, 0.00, 0.00, 8, vtrcueing
BVW50	Vtr BVW50, Profile, SERIAL1, HOUSE, SERIAL1, HOUSE, /dev/tty4d1, AUTO, -3, 0, 5.00, 1.00, 0.00, 0.00, 8, vtrcueing, 2, -4, -4
Tascam	Vtr Tascam, Tascam, SERIAL1, HOUSE, SERIAL1, HOUSE, /dev/tty4d1, AUTO, 0, 0, 5.00, 1.00, 0.00, 0.00, 8, vtrcueing
HDCAM	Vtr, sony, HDCAM STDI, SERIAL1, HOUSE, SERIAL1, HOUSE, /dev/tty4d1, AUTO, -4, -1, 7.00, 1.00, 0.00, 0.00, 10, vtrcueing
Live video	Vtr none, Live video, SERIAL1, HOUSE, SERIAL1, HOUSE, /dev/tty4d1, AUTO, -3, 0, 0.50, 1.00, 0.00, 0.00, 8, vtrcueing

AudioDevice

Initializes the specified audio device. The default sampling rate does not need to be specified since it is saved as a preference in the application. Audio capture and playback duration on SGI audio hardware is only limited by available framestore space, so you do not need to specify an audio buffer length.

Syntax

AudioDevice <type>

Example

AudioDevice SGI

If you are using a Discreet Audio subsystem:

AudioDevice Stream

AudioStore

Enable this keyword line if the AudioStore is connected to both the Sonic board and an SGI SCSI port. For Stream (Discreet Audio) only. For more information, refer to the *SCSI Direct Connect Configuration Guide*.

Syntax

AudioStore <scsi device>

Example

Where:	Is:
scsi device	Specifies the SCSI device the AudioStore is connected to.

```
AudioStore /dev/scsi/sc90d210
```

DDR

Identifies the DDR to be used for the Auto Record feature, the Disk Recorder, and the Input and Output Clip modules. The following DDRs are supported:

- DVS ProntoVideo
- DVS ProntoVision
- Accom RTD
- Abekas A60, A65, and A66
- Sierra Labs Quick Frame
- Accom WSD

NOTE: Currently only Accom WSD is supported for Auto Record, Input Clip, and Output Clip.

Syntax

Ddr <type>, <identification>, <frame delay>, <version>, <speed>, <duration>, <auto on>, <auto start>, <auto duration>, <auto device>, <vtr start>, <vtr duration>, <vtr delay>

Where:	Is:
<type>	Device type.
<identification>	Name of the DDR device.

Where:	Is:
<frame delay>	Device offset edit.
<version>	Version number of the software used in the DDR.
<speed>	Variable playspeed.
<duration>	Size in number of frames of the DDR (this should be set to the last frame that can be stored on the DDR).
<auto on>	Auto record on by default.
<auto start>	Auto record start frame on the DDR.
<auto duration>	Auto record duration.
<auto device>	SCSI or Ethernet.
<vtr start>	VTR input start frame on the DDR.
<vtr duration>	VTR input record duration.
<vtr delay>	VTR input frame delay.

Example

For:	Keyword Line:
Accom RTD	Ddr accom, accom1, -4, 1.6, 0, 916, on, 256, 256, SCSI, 3, 30, 2
Accom WSD	Ddr wsd, bourgogne, -4, 1.6, 0, 1860, on, 256, 256, SCSI, 1, 1860, -1
Sierra Labs Quick Frame	Ddr qf, quicky, -4, 4.0, 0, 9090, on, 256, 256, SCSI, 3, 30, 2
DVS ProntoVideo	Ddr pronto, asap, -4, 4.0, 0, 3871, on, 256, 256, SCSI, 3, 30, 2
DVS ProntoVision	Ddr prontovision, pvis, -4, 4.0, 0, 8267, on, 256, 256, SCSI, 3, 30, 2

Ethernet

Identifies the device used for clip transfers using the Ethernet library.

flame supports the following ethernet device types:

- Accom RTD
- Accom WSD
- Sierra Labs QuickFrame
- Abekas A60
- Abekas A66

Syntax

Ethernet <type>, <host name>, <duration>, <start location>

Where:	Is:
<type>	Device type.
<host name>	Host name of the device as it is defined on the network.
<duration>	Size in number of frames of the DDR (this should be set to the last frame that can be stored on the DDR).
<start location>	Starting frame number on the device for the defined segment.

Example

For:	Keyword Line:
Abekas A66	Ethernet A66, a65a, 916, 20
Abekas A60	Ethernet A60, A60, 916, 10
Accom RTD	Ethernet Accom, accom1, 815, 0
Accom WSD	Ethernet wsd, bourgogne, 1860, 0
Sierra Labs Quick Frame	Ethernet qf, quicky, 9090, 0

SCSI

Defines the devices used for clip transfers using the SCSI library.

Syntax

Scsi <type>, <hostname>|<device pathname>, <version>, <duration>, <start location>

Where:	Is:
<type>	Device type.
<host name>	Host name of the device as it is defined on the network.
<device pathname>	Location of the device.
<version>	Version of the software used in the DDR.
<duration>	Size in number of frames of the DDR (this should be set to the last frame that can be stored on the DDR).
<start location>	Starting frame number on the device for the defined segment.

Example

For:	Keyword Line:
Accom RTD	Scsi accom, accom1 /dev/rdisk/dks1d6vol, 1.0, 960, 0
Accom WSD	Scsi wsd, bourgogne /dev/rdisk/dks1d6vol, 1.0, 1860, 0
Sierra Labs Quick Frame	Scsi qf, quicky /dev/scsi/sc1d610, 4.0, 9090, 0
DVS ProntoVideo	Scsi pronto, asap /dev/scsi/sc1d610, 3.0, 3871, 0
DVS ProntoVision	Scsi prontosvision pvis /dev/rmt/tps1d4ns, 0.0, 8267, 0

Tape

Identifies the tape device accessed when using the Tape Library option in the Library menu. You can declare up to 10 tape devices, and access the devices concurrently from the tape library.

NOTE: Since each new tape load or save operation requires additional memory, running several background processes at once slows down the system.

When specifying the device pathname, use the *hinv* command to check which controller number and device number are used for the drive. Tape devices are found in the */dev/rmt* directory. There are usually several versions of the same tape device. You must use a variable block size tape device (one that has a “v” in its name.)

You can also use a disk file as a virtual tape device.

Syntax

Tape <type>, <name>, <device pathname>, <block size>

Where:	Is:
<type>	Type of tape data format used for storing the clips on the tape. Currently, only supports the Flame format.
<name>	Name of the tape device as it appears in the flame Tape Library menu.
<device pathname>	Device file pathname for the tape drive.
<block size>	Blocking factor for the tape drive. Use the UNIX mt command to define and check the blocking factor for the drive.

Example

For:	Keyword Line:
Exabyte (variable block size)	Tape Flame, Exa var, /dev/rmt/tps0d7nsv.8500, 512 * 256
DAT (variable block size)	Tape Flame, DAT var, /dev/rmt/tps0d6nsv, 512 * 512
Disk file used as a virtual tape device	Tape Flame, Disk_Tape, /usr/tmp, 512

Gamma

Sets the gamma correction value of the SGI monitor. The Gamma keyword only affects the display of the images on the SGI monitor; it does not affect processing or video I/O. More than one gamma setting can be specified. The first specified is used by **flame** on startup; it is possible to toggle between settings “on the fly” by switching the settings under the System menu while **flame** is running. You can also switch between settings by using hotkeys available in the modules.

Syntax

Gamma <value>

Where:	Is:
<value>	Floating-point value or a name. If you use a name, it must be followed by the extension <i>.lut</i> . In this case, flame looks in the <i>lut</i> resource directory for the specified monitor look-up table.

Example

For:	Keyword Line:
Floating-point value	Gamma 1.0 Gamma 2.2
Extension <i>.lut</i>	Gamma kodak.lut
Extension <i>.monitor</i>	Gamma calib.monitor

MoncalDevice

Specifies the colorimeter used for monitor calibration as well as the serial port where it is connected.

Syntax

MoncalDevice <device type>, <serial port>

Where:	Is:
<device type>	Type of calibrator you are using.
<serial port>	Location of calibrator.

Example

For:	Keyword Line:	
Barco Calibrator	MoncalDevice	Barco Calibrator, /dev/ttyd2
X-Rite	MoncalDevice	X-Rite DTP92, /dev/ttyd2

ClipMgtDevice

Defines the devices used for archiving in the Library module. **flame** supports the following devices:

- File
- Tape
- DST
- VTR

Using a File

You must define the file pathname.

Syntax

```
ClipMgtDevice File, <path name>
```

where <path name> specifies the path to the file to be used as an archive device. This file name is just a default value; you can enter a different archive file name in the **flame** archiving module.

Example

```
ClipMgtDevice File, /usr/tmp/archive
```

Using a SCSI Tape Drive

You must define a fixed-block size device. Use the **hinv -c tape** command to determine the SCSI ID and controller number for the drive(s) you are using.

Syntax

```
ClipMgtDevice Tape, <file name>, [<block size>], [<user name>]
```

Where:	Is:
<file name>	The file name of the fixed block size device, /dev/rmt/tps*d*ns

Where:	Is:
[<block size>]	The amount of data to be written to tape in one block
[<user name>]	The name for the tape device as it will appear in the user interface.

Example

For:	Keyword Line:
DAT	ClipMgtDevice Tape, /dev/rmt/tps*d*ns, 65536, DAT
Exabyte	ClipMgtDevice Tape, /dev/rmt/tps*d*ns.8500, 65536, Exabyte
DLT	ClipMgtDevice Tape, /dev/rmt/tps*d*ns, 65536, DLT

Using DST

Use *hin*v to get the device and controller numbers for the pathname.

Example

For:	Keyword Line:
DST	ClipMgtDevice DST, /dev/rmt/tps1d4

Using a VTR

You can specify the default start timecode for VTR archiving. However, leave this field blank if you want **flame** to determine the start timecode.

Syntax

ClipMgtDevice Vtr, [<timecode>]

Example

ClipMgtDevice Vtr, 01:00:00:00

MaxLibrarySize

The MaxLibrarySize token indicates to the system the maximum size any one of the libraries will be (in megabytes). This token helps manage the library memory efficiently. A higher value will increase memory used by the application and reduce memory fragmentation, thus optimizing memory utilization. As a general rule, you make this token the size of the largest library you plan on using and calculate any extra space required for adding more clips to this library. The default size of the MaxLibrarySize token is 5 megabytes. The size of your libraries can be determined using this command in the UNIX shell:

```
du -sk /usr/discreet/clip/*/*/*.library
```

Syntax:

```
MaxLibrarySize <size>
```

Example:

```
MaxLibrarySize 5
```

ArchiveLibrary

Identifies the directory where on-line and ASCII tables of content will be saved as part of the archiving process.

It is recommended that you use the directory */usr/discreet/archive* for your ArchiveLibrary location.

Syntax

```
ArchiveLibrary <directory path>
```

Example

```
ArchiveLibrary /usr/discreet/archive
```

SetupArchiveTape

Identifies the device to which setup information for a project will be saved in “tar” format as part of the archiving process.

Syntax

```
SetupArchiveTape <device type>
```

Where:	Is:
<device type>	File or tape.

Using a File

You must define the file name.

Example

```
SetupArchive /usr/tmp/setups.tar
```

Using a SCSI tape drive

Example

For:	Keyword Line:
DAT	SetupArchiveTape /dev/rmt/tps0d2ns
Exabyte	SetupArchiveTape /dev/rmt/tps0d3ns.8500

NOTE: Only one device should be selected. If you uncomment more than one device, the last device listed will be selected.

Environment Directory Keywords

These keywords specify the pathnames to directories of resources which are shared between all projects.

Menu

Specifies where application menu files are stored.

Example

```
Menu ~/menu, menu
```

Model

Specifies where 3D models used by Action are stored.

Example

```
Model ~/action
```


Font Keywords

This section describes the font keywords in the *init.cfg* file.

TextDefaultFont

Identifies the font that is loaded by default when you enter the Text module.

Syntax

```
TextDefaultFont <font name>
```

Example

```
TextDefaultFont Times-Roman
```

FontMapping

Specifies which font encoding vector is used. The encoding vector affects the characters that are displayed in the Text module extended keyboard, as well as how imported ASCII text files are interpreted.

Choose the Standard encoding vector to use the standard extended keyboard. Choose the ISOLatin1 encoding vector to use accented characters for Western European languages. In order to use encoding vectors other than Standard, Symbol or ISOLatin1, you will need to install Adobe Type1 fonts, which include the symbols for these encodings. The extended keyboard is available when you enable the Up Ascii button in the Text menu. If you do not specify which encoding vector to use, **flame** uses Standard.

Syntax

```
FontMapping <encoding vector>
```

Where <encoding vector> is:

For:	Encoding Vector:
Standard mapping	Standard
Symbol font mapping	Symbol
Western European	ISOLatin1
Eastern European	ISO88592
Russian	ISO88595
Greek	ISO88597

For:	Encoding Vector:
Turkish	Iso88599
Alternate Russian	KOI8R

Example

FontMapping Standard

FontDPSBase

Identifies the directory pathname where the font program is stored. At initialization, **flame** creates links to the fonts in this directory and stores them in the directory */usr/discreet/font*. If you do not specify the directory pathname, **flame** uses */usr/lib/DPS/outline/base*. You use this directory in most cases since it is one of the directories created when you install the Display PostScript software. Note that **flame** also uses TrueType fonts. Simply copy these fonts into the */usr/discreet/font* directory and make sure you use a *.ttf* extension to allow the fonts to be recognised.

Syntax

FontDPSBase <directory pathname>

Example

FontDPSBase /usr/lib/DPS/outline/base

FontDPSAFM

Identifies the directory pathname where the font metrics are stored. At initialization, **flame** creates links to these font metric files in the directory */usr/discreet/font*. If you do not specify a pathname and file name, **flame** uses */usr/lib/DPS/AFM*. You should use this directory in most cases since it is one of the directories created when you install the Display PostScript software.

Syntax

FontDPSAFM <directory pathname>

Example

FontDPSAFM /usr/lib/DPS/AFM

Image File Extensions

flame supports the following image formats:

Format:	Extension:
Alias	als
Cineon	no default extension
Dpx	no default extension
Jpeg	jpg
Pict	pict
Pixar	picio
Sgi	sgi
Softimage	pic
Targa	tga
TdiMaya	iff
Tiff	tif
Wavefront	rla

Project Configuration Files

This section describes the keywords found in the project configuration files. In the following sections, ~ represents your project directory. In most cases, you will not need to edit any of the project template configuration files.

Project Templates

When you create a project in **flame** 7.0, a 24p template is available. The 24p template creates a project using a 24fps progressive frame rate and timecode. Any resolution may be used with this frame rate. A broadcast output signal can not be broadcast in this mode.

Standard

Sets the video standard.

Syntax

Standard <type>

Where:	Is:
<type>	Standard used in this configuration. Either NTSC, PAL or DTV.

Example

Standard DTV

Framerate

Sets the default frame rate. Common frame rates are 23.976, 24, 25, 29.97, 30, 50, 59.94 or 60 frames per second.

Syntax

Framerate <frame rate>

Example

Framerate 29.97

Timecode

Specifies the default timecode format used by the project. Currently supported formats are 24, 25, 30, 50 and 60 fps timecodes.

Syntax

Timecode <format>

Example

Timecode 30

If you are using 30fps timecodes, a drop frame mode can be specified.

Syntax

Timecode <format, DF>

Example

Timecode 30, DF

Colourspace

Defines how RGB/YUV conversions are handled. By default, if the video standard is NTSC or PAL, the ITU-R BT.601-5 colour space is used. If the standard is DTV, the ITU-R BT.709-3 colour space is used. The SMPTE-240M colour space is also supported.

Example

ColourSpace 601

ColourSpace 709

ColourSpace 240

Hires

Specifies the refresh rate for the SGI monitor. When using OctaneVideo, match the refresh rate with the video rate. The rate is measured in Hertz (Hz).

You can also set a custom rate, in which case an extra parameter specifies the current monitor synchronization rate.

Syntax

Hires [Custom,]<refresh rate>

Example

For:	Keyword Line:
NTSC	Hires 60Hz
PAL	Hires 50Hz
NTSC with OctaneVideo	Hires 30Hzf
PAL with OctaneVideo	Hires 25Hzf
FILM	Hires 72Hz
Custom (does not change the current mode at startup)	Hires Custom, 60Hz

FrameStore

Defines the framestore and partition to be used for storing clips.

The project template files included with **flame** include the keyword FrameStore. When the project management system creates a new project based on one of these template files, it will replace this keyword with the corresponding FrameStore token. The framestore used is the one selected by your *init.cfg* config file, and the partition is selected by the project management system.

If you do not use the project management system to create your project config files, you need to replace the FrameStore token with one which selects the desired framestore and partition.

Example

The following examples use NTSC as the partition.

For:	Keyword Line:
Discreet Filesystem	FrameStore stonefs, "NTSC"
System disk, 200 MB	FrameStore /usr/tmp/flame.fs, "NTSC", 200

Memory

Determines the number of additional frame buffers allocated for video I/O , Action, and Batch processing. The number of additional buffers will depend on the amount of memory installed in your system and the size of the images you will be using. Typically, this value will be much larger when working at video resolution than when working at film resolution. You can change this value from within the **flame** user interface when you are creating or modifying a new project.

HINT: If you allocate too much memory for this token, the system's performance may degrade due to a lack of memory. It is recommended that you determine a safe number of memory buffers before setting this token.

To determine the maximum safe Memory token:

1. In a UNIX shell, type:

```
gr_osview -a
```
2. Look at the CPU Wait line and make sure there is no yellow swap activity. If swap activity is present, the performance of your system will be slow and **flame** may crash.

3. Look at the Memory line and the green free memory portion. It is recommended that you have between 64MB and 128MB of free memory available.

Syntax

Memory <# buffers>

Where:	Is:
<buffers>	Number of frame buffers you require.

Example

Memory 30

NOTE: For HD resolutions, it is highly recommended that you use 10 buffers. Avoid changing this token to a value over 30.

Environment Directory Keywords

These keywords specify the pathnames to directories of resources which are shared between all projects.

[illegible]

Supplemental Procedures

Before and after the installaion

*Learn how to mount a CD-ROM drive, and install the **flame** 7.0 licence
after the software is already installed.*

Mount the CD-ROM Drive

Before you install **flame**, a CD-ROM drive must be installed and mounted on your system. For instructions on mounting a drive across the network, consult your system administrator.

To mount a CD-ROM drive:

1. Log in as super-user to give you special privileges for changing settings in UNIX. Open a new UNIX shell by selecting Shell from the Tools menu in the Toolchest.
2. Type **su** and press **ENTER**.
3. Type the root password and press **ENTER**.

NOTE: You may have to consult your system administrator to gain access, or have your system administrator mount the CD-ROM drive for you.

4. Check whether the drive is mounted. In a UNIX shell, type **df** and press **ENTER**.
If the drive is mounted, a line appears that ends with **/CDROM**. If there is no line that ends with **/CDROM**, the drive is not mounted. Continue with step 5.
5. Type **mediad -k** and press **ENTER**. This ensures no devices are running in the background.
6. Type **mediad** and press **ENTER**.
7. Verify that the CD-ROM drive is recognized by the system. Type **df** and press **ENTER**.
A line ending with **/CDROM** appears. You are ready to install **flame**.

8. Close the shell in which you logged in as root by double-clicking the close button in the top-left corner of the shell.

Alternate Procedure for Mounting the CD-ROM Drive



If you are not able to mount the CD-ROM drive using the *mediad* command, try the following procedure.

1. Get the device and controller numbers of the CD-ROM drive using the *hinv* (hardware inventory) command. Type:

```
hinv | grep CDROM
```

and press **ENTER**. 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.

2. Mount the CD-ROM drive. Type:

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

using the controller and device numbers of the CD-ROM drive and press **ENTER**. For example:

```
mount -o ro /dev/dsk/dks0d3s7 /CDROM
```

Install the flame 7.0 Licence

This section describes how to enter your **flame** 7.0 software licence after the software has already been installed.

NOTE: Before you install the license, make sure you have enabled the Security token in the configuration file to specify the serial port of the dongle. For more information on the Security token, see “Security” on page 40.

1. Log in using the **flame** icon or change directories to the **flame** directory in a UNIX shell.
2. Start **flame** by typing **f1ame**
The Licensing Agreement window opens.
3. You must obtain a license code by registering the software. If you have not registered and received a license, you choose to register using email or fax, a web site, or by telephone by clicking the appropriate button in the Licensing Agreement window. If you have a license, click Next.
4. Enter the following information in the fields: Feature Name, License Code, Expiry Date, Checksum, System ID, and Dongle ID. All of this information is listed in your license.
5. Click Install.

6. The license is installed and you are asked if you want to install other licenses. Click Yes if you want to install licenses for other components such as **wire**. Otherwise, click No.

You are now ready to run **flame**.

[illegible]



Installing IRIX 6.5.7f

*Preparing your system to run **flame***

Back up your system disk, install IRIX 6.5.7f, and load setup files.

Summary

This chapter teaches you how to prepare your system disk for IRIX installation before you run **flame**.

This installation requires the following items:

- *IRIX 6.5.7 Installation Tools and Overlays (1 of 2)* – P/N 812-0818-007
- *IRIX 6.5.7 Overlays (2 of 2)* – P/N 812-0819-007
- *IRIX 6.5 Applications (Feb. 2000)* – P/N 812-0877-006
- *IRIX 6.5 Foundation 1* – P/N 812-0759-002
- *IRIX 6.5 Foundation 2* – P/N 812-0760-002

For Octane:

- OCTANE/IMPACT Video for IRIX 6.5 - P/N 812-0787-001

All platforms:

- *ONC3/NFS version 3, for IRIX 6.2, 6.3, 6.4, and 6.5* - P/N 812-0774-001

If your system is on a network, it is recommended that you keep a copy of the files required to set up the network after the upgrade. For example:

/etc/hosts, /etc/sys_id, /etc/ethers, /etc/TIMEZONE, /etc/sendmail.cf, /etc/exports, /etc/host.equiv, /etc/aliases, /etc/initd.conf, /etc/fstab, /etc/group, /etc/config/, /etc/init.d/network.local, /etc/nsswitch.conf, /etc/passwd, and /var/yp/ypdomain.*

Refer to your system administrator for more information regarding network-related files.

Backing Up Your System Disk

It is strongly recommended that you back up the information from your system disk before you install IRIX 6.5.7f. When you install IRIX 6.5.7f following the procedure outlined in this chapter, you will lose all information currently stored on the disk. If you are an experienced IRIX user, it is also possible to upgrade to IRIX 6.5.7f without overwriting the contents of your disk. For more information, refer to your IRIX documentation.

Use the *backup* command to make a tape backup of your entire system.

Using the Backup command:

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 you obtained using the *hinv* command. This command takes all new files since your last backup specified in the */etc/lastbackup* file and copies them to tape.

A confirmation message appears, indicating that your backup is complete.

Backing Up Your Selected Files Using TAR

The *tar* command is another method for backing up your system files on 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 the list of directories you want to back up.

For example, if you are currently running **flame**, and want to back up */etc* and */usr/discreet* to tape, type:

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

NOTE: It is important to determine which files you want to back up prior to using the *tar* command. Each time the *tar* command is executed, the files on the tape will be overwritten.

See your system administrator for assistance or type **man tar** in a Unix shell.

It is recommended that you back up the following directories:

- */usr/discreet* (for software setup files and configuration files)
- */etc* (for IRIX configuration files, including network configuration)
- */usr/lib/DPS/* (for fonts)
- */usr/local/flexlm/licenses* (for license files)

Repartition the System Disk

This procedure takes approximately one hour to run. This process ensures that the disk is clean and free from bad blocks. It is recommended to exercise the drive to re-map any bad blocks.

NOTE: This procedure is destructive.

To repartition the system disk:

1. Log in as root.
2. Shut down the computer. Type **halt**

3. After the following message appears, click Restart:

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

The following message appears:

Starting up the system

4. Click Stop For Maintenance or press **ESC** if your system does not display the Stop for Maintenance button.

The *PROM* monitor menus appear.

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 *hinv* listing that appears, look for a line similar to this:

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

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

8. Insert the *Installation Tools and Overlays (1 of 2)* disk in your CD-ROM drive.

9. Launch the *FX* utility. Use the syntax appropriate for your platform (where X is the controller number and Y is the unit number of your CDROM drive)

For IP30 (Octane) and IP27 (Onyx2):

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

For IP25 (Onyx IR) and IP32 (O2):

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

10. For platforms that have the "CDROM: unit Y on SCSI Controller X" line, type:

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

The *FX* utility is launched.

11. Specify your system drive. When the following message appears, press **ENTER**:

```
SGI Versions 6.5 ARCS
```

```
fx :device-name = (dksc)
```

12. When the following message appears, type the controller of your system disk:

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

13. When the following message appears, type the drive number of your system disk:

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


The system drive is opened and the *FX* menus are displayed.

14. Once the test is done, exit the exercise menu and go to the repartition menu. At the *fx/exercise>* prompt, type **/rep**
15. Partition the drive as a root drive. At the *fx/repartition>* prompt, type **ro**
16. Resize the partitions. At the *fx/repartition>* prompt, type **re**
17. Select the swap partition as the partition to be resized. When the following message appears, press **ENTER**:

```
fx/repartition/resize:partition to change = (swap)
```
18. Select megabytes as the partitioning method. When the following message appears, press **ENTER**:

```
fx/repartition/resize :partitioning method = (megabytes(2^20))
```
19. Use 256 MB as the size of the swap partition. Type **256** when the following message appears:

```
fx/repartition/resize :size in megabytes (max 4301)= (128)
```

NOTE: To run **flame**, a minimum of 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.

20. Confirm that you want to use the new partition layout. Type **yes** when the following message appears:

```
Use the new partition layout? (no)
```
21. Exit the *FX* utility. At the *fx/repartition>* prompt, type **/exi**
22. If the following message appears, type **yes**

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

The screen turns black and you are returned to the *PROM* Monitor.

Install IRIX 6.5.7f

1. Select the Install System Software option from the *PROM* monitor.
2. Select the Local CD-ROM option, and click Install. The following message appears:

```
Insert the installation CD-ROM now.
```
3. Insert the *IRIX 6.5.7f Installation Tools and Overlays (1 of 2)* CD in the CD-ROM drive and wait until the LED on the drive stops blinking. If your CD-ROM drive does not have an LED, wait approximately 10 seconds before continuing to the next step.

4. Click Continue.

The installation files are copied to disk.

5. Create a file system on your system disk. Type **yes** when the following message appears:

Make new file system on /dev/dsk/dks0d1s0 [yes/no/sh/help]:

and type **y** when the following message appears:

About to remake (mkfs) file system on: /dev/dsk/dks0d1s0. This will destroy all data on disk partition: /dev/dsk/dks0d1s0. Are you sure? [y/n]:

NOTE: In some instances, the installation may stop on the line:

Unable to mount partition: /dev/dsk/dkscXdYs0 on /root:

Press Enter to display the C shell (csh#).

If the installation stops, press **ENTER**. Create a filesystem by typing:

mkfs /dev/rdsk/dksXdYs0

Replace X with the controller that your system disk is on and Y with the SCSI ID of your system disk. After the prompt returns, type **exit** and press **ENTER**.

6. Type **4096** and press **ENTER** when the following line appears:

Block size of filesystem 512 or 4096 bytes?

NOTE: If the system does not prompt you to create a new file system (mkfs), type **admin** at the first *Inst*> prompt, type **mkfs** at the *Admin*> prompt, and type **yes** to all questions. Type **..** to go back to the initial menu.

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

from /CDROM/dist

Inst gives you information regarding your IRIX installation.

8. Click the **SPACEBAR** to scroll through the information.

Inst reads the CD-ROM.

9. Select the release stream you want to use. **flame** requires the "feature" stream to be installed.

When the following lines appear, type **2** and press **ENTER**:

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

Loading the IRIX 6.5.7f Overlays (2 of 2) and Unbundled Distributions

1. At the following prompt, eject the CD from the CD-ROM drive and load the *IRIX 6.5.7f Overlays (2 of 2)* CD. Wait until the CD-ROM LED light stops flashing. If your CD-ROM does not have a LED indicator, wait approximately 10 seconds.
2. Type **/CDROM/dist** and press **ENTER**.
3. At the following prompt, type **/CDROM/dist/unbundled** and press **ENTER**, without changing CD-ROMs:

```
Install software from:
```

Loading the IRIX 6.5.7f Applications Distributions

1. At the following prompt, eject the CD from the CD-ROM drive and load the *IRIX 6.5.7f Applications* CD:

```
Install software from: [/CDROM/dist/unbundled]
```
2. Type **/CDROM/dist** and press **ENTER**.

Loading the IRIX 6.5.7f Foundation 1 Distributions

1. At the following prompt, eject the CD from the CD-ROM drive and load the *IRIX 6.5.7f Foundation 1* CD:

```
Install software from:
```
2. Type **/CDROM/dist** and press **ENTER**.

Loading the IRIX 6.5.7f Foundation 2 Distributions

1. At the following prompt, eject the CD from the CD-ROM drive and load the *IRIX 6.5.7f Foundation 2* CD:

```
Install software from:
```
2. Type **/CDROM/dist** and press **ENTER**.

Installing OCTANE/IMPACT Video Software

1. At the following prompt, eject the CD from the CD-ROM drive and load the *OCTANE/IMPACT Video For IRIX 6.5* CD:

```
Install software from:
```
2. Type **/CDROM/dist** and press **ENTER**.

Installing NFS/NIS Software

NOTE: NFS/NIS software is mandatory if you want to run wire and MountStone.

1. At the following prompt, eject the CD from the CD-ROM drive and load the *ONC3/NFS for IRIX 6.2 6.3 6.4 and 6.5.7f* CD:

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

2. Type **/CDROM/dist6.5** and press **ENTER**.

To complete loading distributions:

1. Type **done**

The distribution information is read and you are returned to the *Inst* prompt.

Completing the Installation and Installing Subsystems

1. At the *Inst>* prompt, type **keep ***
2. Type **install standard**
3. To prevent conflicts with *appletalk.sw.xinet_base* subsystems, type:
keep appletalk.sw.xinet_base

NOTE: If you require Apple Talk connectivity on your SGI system, you can obtain the latest version of K-Ashare on Xinet's website: <http://www.xinet.com>.

4. Install subsystems if required. These subsystems are optional but recommended. At the *Inst>* prompt, type:

```
install eoe.sw.fonttools
```

This command helps to import PC fonts to **flame**.

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

```
install eoe.sw.uucp
```

This command is required to connect to a modem in terminal mode and troubleshoot Wacom tablets.

6. Install the XLV subsystems. At the *inst* prompt, type:

```
install eoe.sw.xlv
```

This command is required to ensure optimum stability with SGI audio, including systems that are not running XLV arrays.

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

```
install eoe.sw.spell
```

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

```
install ftn_eoe
```

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 display, perform these steps again.

11. Type **go** to begin the installation.

Once installation is complete, you will be returned to the *Inst*> prompt.

NOTE: When prompted to insert a CD, insert the CD in the drive. *Inst* will detect the new CD automatically and will continue with the installation.

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

Inst restarts the ELF files and prompts you to restart the system after a few minutes.

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

The system reboots with the newly installed IRIX software.

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 6.5.7f**) is displayed in the shell.

Setting Up Network Information

After you install IRIX 6.5.7f, all network information and other customizations are deleted. If your machine was customized for your environment, the following files need to be reconfigured:

```
/etc/hosts, /etc/sys_id, /etc/ethers, /etc/TIMEZONE, /etc/sendmail.cf, /etc/exports, /etc/host.equiv,  
/etc/aliases, /etc/initd.conf, /etc/resolv.conf, /etc/fstab, /etc/group, /etc/config/*, /etc/init.d/  
network.local, /etc/nsswitch.conf, /etc/passwd, and /var/yp/ypdomain.
```

Loading Setup Files from the System Disk Backup

Restore setup files created in previous versions of **flame** and retrieve files archived to tape.



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 6.5.7f. Restoring should be performed with extreme caution.

To load files from tape:

1. Log in as root.
2. Load the contents of the tape.

For tapes created using the *Backup* command:

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

For tapes created using the *tar* command:

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

For example, to load saved directories, type (on one line):

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

You are now ready to install **flame**.

For further information regarding IRIX installation issues, consult the SGI web site at:
<http://support.sgi.com/6.5/installing.html>



Installing a JLCoooper

Setting up an audio console

Learn how to install and configure a JLCoooper controller.

Overview

flame 7.0, supports an external audio console. The JLCoooper MCS-3800™ MIDI device can be used to control all the audio controls as well as map hot keys for any other module in the software. An extensive set of default hot keys are provided to give you instant access to the most common hot keys and controls in the software the moment you connect the device.

Depending on your hardware configuration, you may require some additional hardware to connect the device to your system. For complete information, see “Connecting the Device” on page 74.

To use the JLCoooper with **flame**, you need to:

- Install the correct drivers
- Reconfigure the kernel
- Connect the device to your system
- Enable the appropriate keywords in the configuration file

Follow the procedures in this appendix to make sure your JLCoooper is installed and configured correctly.



Photo property of JLCoooper Electronics

NOTE: The JLCoooper is not sold or distributed by Discreet. If you do not have this device, you need to obtain it from an independent distributor. This device is also not supported by Discreet Technical Support, however significant resource and development have been dedicated to incorporate the JLCoooper with Discreet software and to ensure its full compatibility and operation.

Reconfiguring the Kernel

If you do not have any free ports to connect the device directly to the system, you need a SCSI terminal server. If you do not have one, you can obtain it from Digi International. See “Connecting the JLCoooper to an Octane” on page 74.

To reconfigure the kernel:

1. Insert the CD that came with your SCSI Terminal Server (STS).
2. Follow the installation instructions that came with the STS.
3. Reboot the system.

Hardware Requirements

Depending on your hardware, the procedure for connecting the JLCoooper to your machine will vary. Follow the procedure that applies to your hardware configuration. The JLCoooper supports both the RS232 and the RS422 protocol with an additional expansion card. We recommend using the RS422 protocol for the best reliability, especially with long cables. If you have an Onyx2, you can connect the JLCoooper directly to the system. However, Octane systems will not have any free ports for this connection. In this situation, you will need to purchase a SCSI terminal server from an independent vendor to complete the installation.

The SCSI Terminal Server (STS) is manufactured by Digi International. The required device is model 1400 (part #70001436). A kernel driver is provided on a CD which comes with the STS shipment. You can obtain the STS from their website at:

www.digi.com

Cables for the STS are not very common. You need RJ-45 (Ethernet-like) to DB-9 (RS-232 serial). The pinout is the following:

SCSI Terminal Server (RJ-45)	DB-9
1 RTS	7 RTS
2 DSR	6 DSR
3 DCD	1 DCD
4 RxD	2 RxD
5 TxD	3 TxD
6 GND	5 GND
7 DTR	4 DTR
8 CTS	8 CTS

NOTE: Do not use Ethernet/Network cable. It will not operate properly with twisted pairs. Use the same cable as for regular serial cables.

Use the following table to determine your hardware requirements.

This platform:	Requires:
Octane	JLCooper MCS-3800 RS-422 option card RS422 Cable SCSI terminal server (not supplied by discreet) RJ-45 to DB-9 (RS-232 serial) cable

NOTE: By default, the RS-422 options card jumpers are set to communicate at 38400 baud and to be in "Host Computer" mode, which is correct. Do not adjust the jumpers on the option cards.

Connecting the Device

To connect the JLCopper, you need to have an available port. On the Onyx2, you can connect directly to serial port 1 using an RS422 cable. If you are using an Octane, there are only two serial ports available, so you need a SCSI terminal server to convert the extra serial RS232 connections to a SCSI output and route the devices to the SCSI port. Use the SCSI Terminal Server to connect the tablet and the dongle to the SCSI port on the Octane.

Connecting the JLCopper to an Octane

The Octane has only two serial ports, which may already occupied by the VTR and tablet. If this is the case, you must use the SCSI port on the Octane by using a SCSI Terminal Server (STS) to convert the RS232 data to SCSI output. The STS provides additional serial ports for the input devices, and has two SCSI-2 outputs. Use the SCSI outputs to connect to the workstation and to daisy chain other peripheral devices. For information about obtaining the STS, see “Hardware Requirements” on page 72.

If you are connecting directly to the RS422 port, you need a cable with the following pin outs.

JLCopper RS422	Octane(RS422)
2 TxD-	2 RxD-
3 RxD+	4 TxD+
4 GND	4 GND
7 TxD+	6 RxD+
8 RxD-	3 TxD-

If you do not connect the JLCopper directly to the Octane but use the SCSI Terminal Server instead, note that the STS uses only RS232, and not RS422. Make sure you are using the correct connection from the back of the JLCopper.

The cable required for the STS does not use standard pinouts. Use the following table to determine the correct pin outs.

SCSI Terminal Server (RJ-45)	DB-9
1 RTS	7 RTS
2 DSR	6 DSR
3 DCD	1 DCD
4 RxD	2 RxD
5 TxD	3 TxD
6 GND	5 GND

SCSI Terminal Server (RJ-45) DB-9

7 DTR

4 DTR

8 CTS

8 CTS

A typical configuration would be:

This port:

Octane serial port 1

Octane serial port 2

STS port 1

STS port 2

STS SCSI port 1

Connects to:

VTR (RS422)

JLCooper (RS422)

Tablet (RS232)

Dongle (RS232)

Octane SCSI port

If you currently have a CD ROM drive or other external SCSI device connected to the Octane SCSI port, create a SCSI loop with the SCSI Terminal Server.

NOTE: Do not attempt to create a SCSI loop with the audio store or the ports on the back of the expansion chassis.

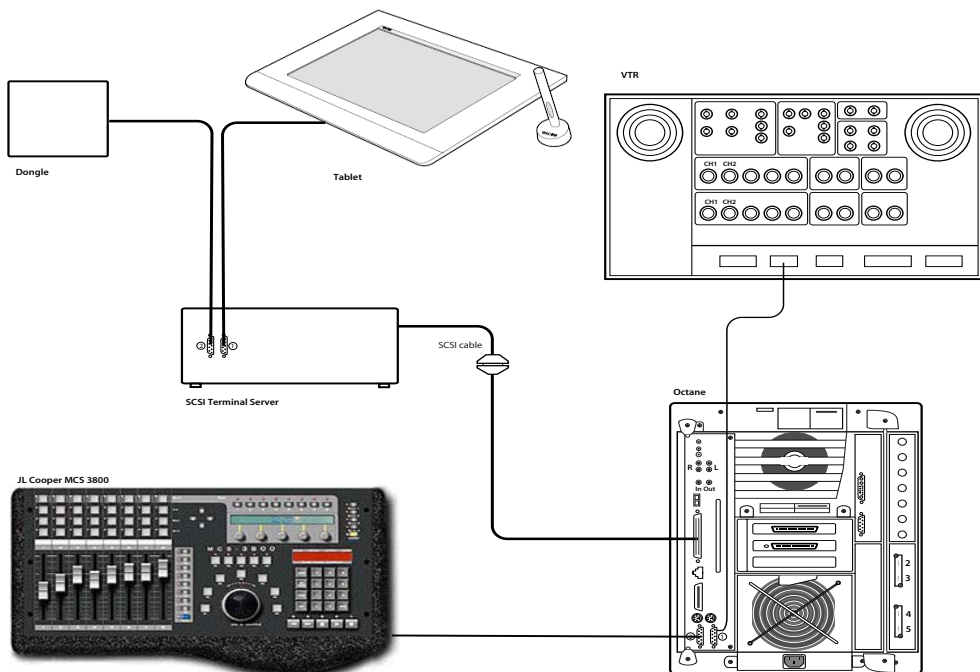


Photo property of JLCooper Electronics

Updating the Configuration File

To use the JLCooler, you must enable it in the *init.cfg* file. You enable the device by removing the # from the keyword line. You can also modify the variables. Consult the table below for a definition of the variables.

To update the *init.cfg* file:

1. In the home directory, type:

```
dlcfg
```

The *init.cfg* file opens.

2. In the *init.cfg* file, search for the following lines and enable the one that applies to your configuration:

```
#MidiDevice    myMidiDevice, JLC_MCS-3800, /dev/ttyd1,
direct_RS232, 38400

#MidiDevice    myMidiDevice, JLC_MCS-3800, /dev/ttyd1,
direct_RS422, 38400
```

Syntax:

```
MidiDevice <name>, <model>, <serial port>, <protocol>,
<baud rate>
```

Where:

Is:

<name>	The name you want to give the MIDI device.
<model>	The model of MIDI device. flame only supports JLCooler MCS 3800.
<serial port>	The serial port to which the JLCooler is connected. If you used a different configuration than the one recommended in this chapter, update the correct port in this line.
<protocol>	The protocol you are using to connect to the JLCooler. If you are connecting directly from the JLCooler to the Onyx2 or Octane, enable the line for RS422. If you are connecting the JLCooler by routing through a SCSI Terminal Server, enable the line for RS232.
<baud rate>	The baud rate for the connection. You do not need to modify this line.

3. If you are using the SCSI Terminal Server, the syntax for the serial port will be slightly different:

```
/dev/ttyd0YZ
```

where Y is the SCSI ID and Z is the port number (0-3) on the STS.

4. Save the *init.cfg* file.

5. Start the software.

The JLCooler has a number of predefined hot keys for use in **flame**. For complete information on customizing and using the hot keys, see the *flame User's Guide*.

Acknowledgments

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flame*

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