The SOFTIMAGE|XSI Setup Guide was written by Maggie Kathwaroon, John Woolfrey; edited by Edna Kruger and John Woolfrey; and formatted by Luc Langevin.

Special thanks to Sammy Nelson, Greg Smith, Raonull Conover, Bruce Priebe, and Marc Villeneuve for their assistance in assuring the technical integrity of this guide.

© 1998–2000 Avid Technology, Inc. All rights reserved.

SOFTIMAGE and Avid are registered trademarks of Avid Technology, Inc. mental ray and mental images are registered trademarks of mental images GmbH & Co. KG in the U.S.A. and/or other countries. FLEXlm is a registered trademark of GLOBE trotter Software Inc. All other trademarks contained herein are the property of their respective owners.

The SOFTIMAGE|XSI application uses JScript and Visual Basic Scripting Edition from Microsoft Corporation.

This document is protected under copyright law. The contents of this document may not be copied or duplicated in any form, in whole or in part, without the express written permission of Avid Technology, Inc. This document is supplied as a guide for the Softimage product. Reasonable care has been taken in preparing the information it contains. However, this document may contain omissions, technical inaccuracies, or typographical errors. Avid Technology, Inc. does not accept responsibility of any kind for customers' losses due to the use of this document. Product specifications are subject to change without notice.

Printed in Canada.

Document No. 0130-04619-01 0400
Contents

Upgrading to SOFTIMAGE|XSI ......................................................... 36
Configuration Files ................................................................. 36
Environment Variables ............................................................ 36
Updating User Accounts on Windows NT .................................. 36
Updating User Accounts on IRIX .............................................. 36
Installing a Tablet ............................................................... 37
Adding or Removing SOFTIMAGE|XSI Components .................. 38
Reinstalling SOFTIMAGE|XSI .................................................... 38
Troubleshooting ................................................................. 39
  Determining the Source of Your Problem (Windows NT Only) .... 40
Error Messages ........................................................................ 41
  FLEXlm Error Messages ......................................................... 41
Other Error Messages ............................................................. 45
  Calling Softimage Customer Service ....................................... 45

Index ..................................................................................... 47
Introduction

Welcome to SOFTIMAGE®|XSI™! The Setup Guide contains the following information:

- Getting help—page 6
- System requirements—page 7
- Connecting your hardware key (Windows NT only)—page 11
- Installing and licensing the SOFTIMAGE|XSI software—page 12
- Starting SOFTIMAGE|XSI—page 31
- Renaming the SOFTIMAGE|XSI program—page 34
- Adding or removing SOFTIMAGE|XSI components—page 38
- Troubleshooting information for problems you may have during SOFTIMAGE|XSI setup—page 39
Introduction

**Online Help**

If you need help during or after the installation of the software, you have the following options:

- **Setup Online Help** and **Licensing Online Help** are available at critical points (the ? icon) from the Setup program as you install SOFTIMAGE|XSI. You can also access these files from the following locations after you have completed your installation:
  
  Windows NT (Start menu) and IRIX (Toolchest) shortcuts:
  - Softimage Products > SOFTIMAGE XSI 1.0 > Setup Help
  - Softimage Products > Licensing > Setup Help
  
  For information about mental ray® rendering software, see the Setup Online Help (Softimage Products > SOFTIMAGE XSI 1.0 > Setup Help).

**More Help**

If you need advanced information on the FLEXlm® licensing software, refer to *FLEXlm Online Documentation* or visit the GLOBEtraver web site at [globetrotter.com](http://globetrotter.com), which includes a list of frequently asked questions (FAQs) and answers about FLEXlm.

**Softimage Technical Support** experts are available to help you. For information on how to contact us, *Calling Softimage Customer Service* on page 45.
## System Requirements

The required computer hardware and software components for installing and running SOFTIMAGE|XSI are:

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
</table>
| Operating system   | • Windows NT: Version 4.0 (Service Pack 4 or later)  
• IRIX: Version 6.5.2 or later (including N32 libraries and patches) |
| Hardware           | • Windows NT: Workstation with an Intel Pentium processor  
• IRIX: Silicon Graphics workstation with a MIPS R10000 processor or higher (Indigo2 workstations require a MIPS R10000 processor or higher). Note: 8-bit Indy and 8-bit Indigo computers are not supported. |
| License server     | FLEXlm version 6.1f installed on a computer that is accessible from your workstation. This version of FLEXlm can be installed during the Setup program. |
| Available hard-disk space | • Windows NT: 130 megabytes (MB) to install only the software. 225 MB to install everything including databases.  
There must always be at least 10 MB of space available on your operating system's main hard drive (typically C:) or the installation will fail.  
• IRIX: 550 MB to install only the software; 645 MB to install everything, including databases. |
| RAM                | 128 MB (recommended minimum)                                                                                                           |
| Swap space         | 200 to 300 MB                                                                                                                             |
| Display resolution | 1280 × 1024, 1600 × 1024 (SGI Visual Workstation for Windows NT only), 1600 × 1200, or 2560 × 1024                                         |
| CD-ROM drive       | Access to a CD-ROM drive to run the Setup program and access the Online Library.                                                            |
| Mouse              | Three-button mouse                                                                                                                        |
| Web browser        | A web browser to view the Online Library and IRIX Online Help files.                                                                       |
| Recommended        | • An Internet connection for e-mailing license requests. You can also print and fax license requests.  
• A backup device, such as a DAT, 1/4” tape drive, removable hard disk, or CD-R/CD-RW.                                                 |
### Additional Windows NT Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCP/IP</td>
<td>TCP/IP service protocol must be installed on both client and server computers.</td>
</tr>
<tr>
<td>Hardware key (dongle)</td>
<td>The blue-green Sentinel hardware key attached to the parallel port of each computer designated as a FLEXlm server (provided in the SOFTIMAGE</td>
</tr>
<tr>
<td>Graphics card</td>
<td>A Windows Hardware Quality Labs–certified hardware OpenGL accelerator board with a minimum of 8 MB RAM. Graphics-card drivers should be multi-thread safe. For more information about hardware requirements, visit the Softimage web site at softimage.com.</td>
</tr>
</tbody>
</table>

### Additional IRIX Requirements

None
Before You Begin

This section contains all the information that you need to know before you install SOFTIMAGE|XSI.

When you are installing, do not copy the Setup program to a temporary directory. You must run the Setup program directly from the CD.

Installation Checklist

Minimum requirements

Make sure that the computer on which you are installing meets all the minimum system requirements detailed on System Requirements on page 7.

Installing on a server (IRIX only)

If you are installing on a network server, let your Reseller or Softimage Sales Representative know how you plan to set up your server(s). These decisions determine how many hardware keys you receive and how you fill in the License Request form during installation.

If you are an existing customer using SOFTIMAGE® 3D Version 3.8 or higher, your current license is valid for SOFTIMAGE|XSI plus additional license keys that will be sent to you based on your existing Softimage maintenance contract.

Configuring on a network

Verify that the date and time is consistent on your network, and configure your computers as time slaves of a time server. For more information, refer to Windows NT Help or the IRIX man pages.

Computers connected to the license server

We recommend against running memory-intensive activities on the FLEXlm license server; on Windows NT, you may lose the connection to the server, which will result in corrupted renders.

If you lose the connection, a dialog box appears, allowing you to Retry the connection, Abort the process, or Save the scene currently loaded. If this is a recurring problem, it’s probably because the server’s memory is swapping repeatedly, causing the Sentinel driver to lose its connection to the hardware key. To avoid this situation, either add more RAM to the FLEXlm server or move the server to a computer that will not be used for rendering. (Moving the server would require a license transfer on IRIX.)
Before You Begin

**Running with SOFTIMAGE|3D**

If you are planning to run SOFTIMAGE|3D (Version 3.7 SP1 or later), you must set the LM_LICENSE_FILE variable to `port@computer`. This applies to both server and client installations. For example:

```
LM_LICENSE_FILE 744@computer name
```

You can edit this variable in Control Panel > System > Environment > System Variables (Windows NT) or the `.xsi_1.0` file (IRIX) for the previous version of SOFTIMAGE|3D. This does not apply if you're planning to only run versions greater than 3.8 simultaneously.

**Running several Softimage products on NT**

If you have several Softimage products running in a Windows NT environment, you should lock all products to the same hardware key. This helps keep the hardware attached to your computer to a minimum, and it simplifies license-request tracking.

> Combining multiple dongles to a single dongle requires a license transfer.

**Logging On**

Before you install the software, log on as follows:

**Windows NT**

- Log on as an Administrator or in a user account that has Administrator privileges.
- Make sure that all user accounts have been created. For information on creating user accounts, see *Creating User Accounts (Windows NT only)* on page 11.
- We recommend that you install TCP/IP before running the Setup program. If you choose not to install TCP/IP first, you can still install SOFTIMAGE|XSI but you will not be able to run it until you install TCP/IP.

**IRIX**

- Log on as Super user.
- Make sure that the CD-ROM drive is mounted. If this mount point does not exist, then the SGI System Manager must be used to mount the drive.
- Make sure that you have a `tmp` directory and an environment that points to it. This directory is used for temporary files during installation.
Creating User Accounts (Windows NT only)

Before installing, a user account must be created for every user expected to run SOFTIMAGE|XSI on a given computer. Each user must also have a local directory.

To create a user account and its local directory

1. Choose Start > Programs > Administrative Tools (Common) > User Manager. The User Manager window appears.
2. Choose User > New User. The New User dialog box appears. Enter a user name and password.
3. Click Profile. The User Environment Profile dialog box appears.
4. In the Local Path box, type:
   c:\Users\%username% (where c: is the partition where Windows NT workstation is installed)
   A directory is created in c:\Users for the new user account.

Connecting the Hardware Key (Windows NT Only)

SOFTIMAGE|XSI for Windows NT comes with a blue-green Sentinel hardware key, also known as a dongle. During the Licensing setup, the Sentinel driver for this hardware key is installed, allowing you to configure the license server to run the program.

Before you begin the Setup program, you must connect the hardware key to the parallel port of your computer. If you’re upgrading from a previous version, make sure that it is already connected to the parallel port of each designated license server.

It is recommended that you turn your computer off before attaching the hardware key to the parallel port.

Write down the FLEXID number on the hardware key before you attach it to the parallel port at the back of your computer. This number is automatically detected and placed in the License Request form, but you may want to verify that it is correct before sending the license request.
Installing SOFTIMAGE|XSI

The Setup program guides you through the steps of installing your software. This section provides an overview of the procedure.

**Installation Overview**

To install SOFTIMAGE|XSI, perform the procedures described here. From the Setup program, follow the directions on the screen, and refer to Setup Online Help for more information related to the current task (click the ? icon in the dialog box).

The Setup program will fail if you attempt to install on a computer without enough free hard disk space. For more information on disk space requirements, see System Requirements on page 7.

**To install SOFTIMAGE|XSI**

1. Start the Setup program and click Installation to install the SOFTIMAGE|XSI software and/or licensing components. For more information on starting the Setup program, see Running the Setup Program on page 13.

2. Choose the package that you want to install. The Setup program copies the files to the location you specify. For more information, see Choosing Which Package to Install on page 15.

3. Enter the name of your license server.

**Installing as a FLEXlm License Server**

1. On the first screen of the Setup program, click Licensing. The FLEXlm licensing files are copied to the location you specify. See Setting Up the License Server on page 20 for more information.

2. If you’re a new customer or if you’re requesting a new license, fill in the License Request form if you have not yet received your license key. Send your License Request form to your Softimage Reseller or Authorized Sales Representative to get your license key.

   If you’re an existing SOFTIMAGE|XSI customer, you do not need to fill in the License Request form—your license key information will be sent to you. For more information, see Filling in and Receiving License Key Information on page 21.

3. Enter the license key information into your SOFTIMAGE|XSI license file. For more information, see Entering License Key Information on page 23.

**After the Installation**

- Edit the SOFTIMAGE|XSI configuration files to customize your workspace. For more information, see Renaming the SOFTIMAGE|XSI Program Name on page 34 and Important SOFTIMAGE|XSI Configuration Files on page 35.
Running the Setup Program

- Start SOFTIMAGE|XSI. For more information, see Starting SOFTIMAGE|XSI on page 31.
- To help you learn more about your new software, refer to the Online Library.

The Setup program is run locally from a CD drive. If you are installing from a CD, and
your computer does not have a CD drive, you can share the CD drive of another computer
to run the Setup program over the network.

Windows NT

- Locally: Insert the Software CD into the CD drive. The autorun program automatically
  starts the Setup program. If it does not, double-click the setup.exe file in the CD
  directory.
- Network: Map a network drive to the location in which the Setup program
  files reside. From that location, double-click the setup.exe file.

IRIX

- Locally: Insert the Software CD into the CD drive. (Do NOT copy the Setup
  program to your hard drive.) Start the Setup program by typing:
  
  \[<CD-ROM mount point>/irix/setup\]
  
  For example, the default location is:
  
  /CDROM/irix/setup

  Remote installation with NFS

  Scenario 1 assumes that you’re installing on computer B from computer A and
  that your CD-ROM is on computer B (local).

  Type the following from computer A:
  
  \[rlogin <computer B>\]
  \[setenv display <computer A>:0\]
  \[/CDROM/irix/setup\]

  Scenario 2 assumes that you’re installing on computer A from computer A, and
  that your CD-ROM is on computer B (remote).

  1. To mount the CD-ROM of computer B on computer A, log on computer B and type:
     
     \[vi /etc/exports (OR jot /etc/exports)\]
     
     2. Add the following lines to the exports file:
     
     \[/CDROM\]

     3. Type the following line in the shell (all on one line):
     
     \[/usr/etc/exportfs -av\]
Installing SOFTIMAGE|XSI

4. Log on computer A and type:

```
mkdir /CDROM
mount <computer B>: /CDROM /CDROM
cd /CDROM/irix
./setup (from computer A)
```

**Remote installation without NFS**

If you are installing on computer A from computer A, and your CD-ROM is on computer B (remote), do the following:

To copy the contents of the CD-ROM from computer B to computer A using rcp, log on computer A as root and type:

```
rcp -r B:/CDROM/irix /tmp
cd /tmp/irix
./setup
```

**Installation or Licensing First?**

The first screen that appears during the Softimage Setup program allows you to choose to install the software or the FLEXlm licensing components.

Determine if you must install the SOFTIMAGE|XSI software or the licensing program:

- If you want to install the SOFTIMAGE|XSI software, click **Installation**. After the Setup program copies the files to your hard drive, you are prompted to provide the name of the license server to be added to your LM_LICENSE_FILE variable.

  After the software is configured, the Setup program returns to the first screen where you can click **Licensing** to install the FLEXlm licensing components if this computer is designated as the license server.

- If you are designating this computer to act only as a FLEXlm license server and do not want SOFTIMAGE|XSI installed, click **Licensing**.
Choosing Which Package to Install

After you click the **Installation** button on the first screen, the End User License Agreement (EULA) appears, followed by prompts for your name and company and the directory where you would like to install SOFTIMAGE|XSI.

Once you have entered this information, the Setup dialog box appears, allowing you to choose which package to install. When you select one of the three options (**Typical Install**, **Render Slave**, or **Custom Install**), the software is installed first and then you are prompted to define your licensing environment.

Performing a Typical SOFTIMAGE|XSI Installation

If you select **Typical Install**, the Setup program automatically starts installing components that have already been selected to represent a “typical” installation.

- Only the features for which you are licensed will be available when you run SOFTIMAGE|XSI.
- The Typical Install does not install any databases. These must be installed using Custom Install.

When the installation of all the files is finished, you may have to choose a port for mental ray 2.1. For more information, see *Choosing a Port Number for mental ray* on page 16.
Choosing Which Package to Install

**Performing a Custom Installation**

Selecting the **Custom Install** option allows you to choose the SOFTIMAGE|XSI components you would like to install. Use this option if you know exactly which components you want to install, if you want to save disk space, or if you wish to install the tutorial projects. The tutorial projects are listed as “Content” in the Custom Install. You can also use Custom Install to add components which were not installed previously.

- Only the features for which you are licensed will be available when you run SOFTIMAGE|XSI.
- In the Custom Install dialog box, all of the SOFTIMAGE|XSI components are selected by default.
- The tutorial projects can only be installed using Custom Install.

When the installation of all the files is finished, you may have to choose a port for mental ray 2.1. For more information, see *Choosing a Port Number for mental ray* below.

**Choosing a Port Number for mental ray**

If this is the first time you are installing SOFTIMAGE|XSI on your computer, the Port Selection dialog box will appear. You must select a port for mental ray 2.1 to use when communicating with other computers during distributed rendering.

By default, the setup program automatically selects the first available port after 7001 for use with SOFTIMAGE|XSI. If you need to specify a different port, check the **Edit Port Number** checkbox and either enter a new port number or click **Next Available Port** to find the next available port.

In order to participate in distributed rendering, every computer running mental ray 2.1 with SOFTIMAGE|XSI on the network must use the same port.

When the port is selected, you must select a license server. If you are setting this computer as a license server, specify its host name and then continue with *Installing FLEXlm Components* on page 20.
### Files Installed by the Setup Program (Windows NT Only)

The following files are installed in the winnt\system32 directory by the Setup program:

- atl.dll
- msvcrt.dll
- urlmon.dll
- mfc42.dll
- msvcrt.dll
- wininet.dll
- mfc42u.dll
- url.dll

### Files Modified by the Setup Program

The following files are modified by the Setup program:

<table>
<thead>
<tr>
<th>Windows NT</th>
<th>IRIX</th>
<th>Purpose of File</th>
</tr>
</thead>
<tbody>
<tr>
<td>\winnt\system32\drivers\etc\services</td>
<td>/etc/services</td>
<td>mental ray 2.1 services</td>
</tr>
<tr>
<td>ray2xisserver service in Control Panel &gt; Services</td>
<td>/etc/inetd.conf</td>
<td>mental ray distributed rendering for slaves</td>
</tr>
<tr>
<td>LM_LICENSE_FILE variable added to setenv.bat</td>
<td>LM_LICENSE_FILE variable added to your .xsi_1.0 file.</td>
<td>FLEXlm licensing</td>
</tr>
<tr>
<td>Shortcuts added to Start &gt; Program Files</td>
<td>.auxchestrc is modified or created when each home account is updated by Setup ( Toolchest is modified).</td>
<td>Methods for starting SOFTIMAGE</td>
</tr>
</tbody>
</table>
Selecting the License Server

Selecting the License Server

After the Setup program has installed all the files to your hard drive, specify the name of your license server. This name is added to the LM_LICENSE_FILE variable (in Control Panel > System for Windows NT or the .xsi_1.0 file on IRIX). Regardless of whether you are installing as a license server or client, you must enter the exact name of the FLEXlm server.

1. After you install the software, the following dialog box appears:

2. By default, the port is 744 and the server name is left blank. Enter the name of the server in the text box after the @ symbol.

   For example, if you type fido, Setup tries to connect to the license server “fido” on port 744.

   You can leave the server name text box blank if you don’t want to set the LM_LICENSE_FILE variable, or if you don’t want to append to it because it’s already set.

   Windows NT: To add the server name to this variable, go to Control Panel > System > Environment, select LM_LICENSE_FILE, and enter port@computer name as the value in the text box. Click Set.
3. Click Test to make sure you can reach the server that is displayed. This validates the server name, verifies that you can connect to the server, and ensures that you can perform a license check-out test. A message appears stating if the server was reached.

An error message may appear when you click Test if you have not installed a FLEXlm license server. This is normal if you have not yet configured your server because the Setup program cannot check out a license as part of the test.

4. If the server was successfully reached, click Add. This adds port@computer name to your LM_LICENSE_FILE variable in Control Panel > System > Environment (Windows NT) or the .xsi_1.0 file (IRIX).

5. If you want to add more than one server name, enter the name of the computer and click Next. Repeat steps 3 and 4.

6. Click Done when you're finished.

7. The Setup program displays the settings to which the LM_LICENSE_FILE variable will be set. Click OK to confirm.

If you're installing as a FLEXlm server, go to Setting Up the License Server on page 20.
Setting Up the License Server

SOFTIMAGE|XSI contains version 6.1f of the FLEXlm licensing software. Once you have installed FLEXlm from the SOFTIMAGE|XSI CD, you do not need to install FLEXlm again for SOFTIMAGE|3D 3.8 SP2 or later versions.

A FLEXlm server is defined as a computer that has the FLEXlm software running on it and grants available licenses upon request. On Windows NT, this computer requires a hardware key and TCP/IP connection.

The Licensing Tools (lictools) program adds new licenses or lets you modify existing ones. To access the Licensing Tools, click Licensing in the Softimage Setup dialog box:

For more information about FLEXlm server configuration, refer to the Licensing Online Help during installation or after you have installed the product.

For the exact location and path to the Help files, see Online Help on page 6.

Installing FLEXlm Components

1. Start the Setup program for licensing. You can do this immediately after installing the Softimage product software by clicking Licensing in the dialog box (shown above).

2. Follow the instructions on the screen to install the FLEXlm license components.

Windows NT Only:

Before the licensing files are installed, the Setup program checks the following:

- Sentinel driver version. If it detects an older version, it removes it and installs a new version.

- TCP/IP networking protocol. You can install the Softimage product before installing TCP/IP, but you will not be able to start the server until you install TCP/IP and your license key information has been entered and validated.
3. You are then prompted to complete your License Request form:
   
   - If you have not filled in your License Request form, click No. The License Request dialog box appears. For more information, see Filling in and Receiving License Key Information below.
   
   - If you’ve already completed this form, click Yes. You can proceed directly to editing and validating your license keys. For more information, see Entering License Key Information on page 23.

Filling in and Receiving License Key Information

Follow the instructions on the screen to install the files. You are instructed that the new license keys are needed to run SOFTIMAGE|XSI.

- If you are an existing Softimage product user, click Yes. You do not need to complete the License Request form unless you require more licenses than you are entitled to in your current maintenance contract. You can proceed directly to editing and validating your license keys. For more information, see Entering License Key Information on page 23.

- If you are a new Softimage product user, and you have not filled in your License Request form, click No. This opens the License Request dialog box. For more information, If You’re a New User or Need a New License Key on page 22.
Setting Up the License Server

If You’re a New User or Need a New License Key

After you click No, the License Request dialog box appears.

Fill in all the required information and send the License Request (lic-req.txt file) to your Softimage Reseller or Softimage Sales Representative.

Once Softimage receives this form, it is used to generate a license for your software. This information also helps Softimage keep up-to-date records, ensuring that you get the service you deserve!

You will receive your license key(s) within 3 business days, once Softimage has received the License Request form from the Reseller or Representative.

If You’re an Existing Softimage Product User

Your Softimage Reseller or Softimage Sales Representative will send you PACKAGE license key information based on your Softimage maintenance contract. You do not need to fill in the License Request form unless you require more licenses than you are entitled to in your current maintenance contract.
Setting Up the License Server

Entering License Key Information

After the FLEXlm components are installed and you’ve filled in the License Request form (if necessary), enter the license key information by either editing your existing license file or setting up a new license file.

If you choose to enter your license key information now, the Setup program starts the license server and does a check-out test.

If you choose to enter your license key information later, you must use the Licensing Tools application to start the license server and verify its status. For more information, see Editing Your License File on page 24.

If you’re a new Softimage product user and do not already have your license key information, see Setting Up a New License File below.

If you already have your license key information, see Editing an Existing License below.

If you don’t want to enter your license key information now, Entering Your License Keys Later on page 24.

Setting Up a New License File

If this is the first time you’re installing a Softimage product, click New License. The Setup program generates the first required lines of your license file (server and demon lines). You can easily edit the softimage.lic file to include your license key after you’ve sent the license request and received your license key. For more information, see Editing Your License File on page 24.

Editing an Existing License

If you already have a Softimage product, click Existing License. It’s easiest to use your existing license because it already has all the information regarding your previous Softimage product installation. After receiving your license key information, you only need to append the INCREMENT lines that you receive to your existing license file. For information on using the Licensing Tools application to do this, see Editing Your License File on page 24.
Setting Up the License Server

**Entering Your License Keys Later**

To enter your license key information after you have finished installing the licensing components, click **Enter Keys Later**.

You can use the standalone Licensing Tools (lictools) application to edit your license file. If no editing is required, you can copy your license file to the proper location: the FLEXlm licenses directory. See the following section, *Editing Your License File*, for details on how to edit the contents of your license file.

If you are using IRIX, note that superuser permission is required to run the licensing software utilities (lictools). Toolchest shortcuts are only available for the root account. To access licensing utilities when logged into a user account, login as root and type `toolchest`.

If you’re copying the license file, make sure the copied file contains the .lic file name extension. Also make sure the DAEMON line has the path deleted and only references the Softimage daemon (SOFTIMAGE). For more information on the correct syntax, see *What’s in Your License File?* on page 26 for correct syntax.

**Editing Your License File**

You can edit your license file by using the Licensing Tools application.

**To edit your license file**

1. Open the Licensing Tools application after you’ve installed the Softimage product by choosing the following commands:
   - **Windows NT**: Choose Start > Programs > Softimage Products > Licensing > LicTools or type the following in a command prompt window: `c:\Softimage\Flexlm\bin\lictools.exe`
   - **IRIX (for root only)**: From the Toolchest choose Softimage Products > Licensing > LicTools or type the following in a shell: `/usr/Softimage/Flexlm/bin/lictools`

2. Click **Existing License**. This opens a browser in which you can search for your license file. The browser is opened by default to the FLEXlm licenses directory.

3. Paste the license key information into your license file, then click **Save and Close**. Your license file is automatically validated.
More Information about the Licensing Tools Application

From the Licensing Tools dialog box you can also perform several other licensing maintenance tasks, some of which are equivalent to what you can do with FLEXlm utilities. This allows you to do the following:

- Request a new license at any time.
- Validate your license file to ensure that everything is correct. This option checks the syntax in the license file and its INCREMENT lines.
- Start and stop your FLEXlm server.
- Verify the status of your license file.
- View the licensing log that was created during setup.
- Verify the version of the FLEXlm and SOFTIMAGE daemons used.
- View the FLEXlm log.
- Determine if you can check out SI_TOOLS.

For more details about each option, click the Help icon in the Licensing Tools dialog box.
Setting Up the License Server

What's in Your License File?

Your license file contains all the information required by FLEXlm to start the Softimage software. This includes server names, the hardware key (for Windows NT only) or host name, and the name of the vendor daemon. Here's a sample license file:

```
# YOUR LICENSE STARTS HERE
SERVER <hostname> SENTINEL_KEY=xxxxxxxxxx 744
DAEMON SOFTIMAGE

# PACKAGE: Advanced
INCREMENT SI_TOOLS SOFTIMAGE 3.800 \ 
31-may-2000 1 xxxxxxxxxxxxxxxxxxxxxxxx \ 
VENDOR_STRING=152516 ck=77
INCREMENT SICORE_R SOFTIMAGE 1.000 \ 
31-may-2000 1 xxxxxxxxxxxxxxxxxxxxxxxx \ 
VENDOR_STRING=152517 ck=115
INCREMENT 3D SOFTIMAGE 3.800 \ 
31-may-2000 1 xxxxxxxxxxxxxxxxxxxxxxxx \ 
VENDOR_STRING=152518 \ 
NOTICE=xxxxxxxxxxxxxxxxxxxxxxxxx ck=73
INCREMENT 3D_RENDER SOFTIMAGE 3.800 \ 
31-may-2000 1 xxxxxxxxxxxxxxxxxxxxxxxx \ 
VENDOR_STRING=152519 ck=116
INCREMENT 3D_SHARED SOFTIMAGE 3.800 \ 
31-may-2000 1 xxxxxxxxxxxxxxxxxxxxxxxx \ 
VENDOR_STRING=152520 ck=16
INCREMENT 3D_ADVANCED SOFTIMAGE 3.800 \ 
31-may-2000 1 xxxxxxxxxxxxxxxxxxxxxxxx \ 
VENDOR_STRING=152521 ck=36
INCREMENT PARTICLE SOFTIMAGE 3.800 \ 
31-may-2000 1 xxxxxxxxxxxxxxxxxxxxxxxx \ 
VENDOR_STRING=152522 ck=51
INCREMENT MENTAL_RAY SOFTIMAGE 2.100 \ 
31-may-2000 1 xxxxxxxxxxxxxxxxxxxxxxxx \ 
VENDOR_STRING=152523 \ 
NOTICE=xxxxxxxxxxxxxxxxxxxxxxxxx ck=25
INCREMENT SI3D SOFTIMAGE 1.000 \ 
31-may-2000 1 xxxxxxxxxxxxxxxxxxxxxxxx \ 
VENDOR_STRING=152524 ck=17
INCREMENT SIMR SOFTIMAGE 1.000 \ 
31-may-2000 2 xxxxxxxxxxxxxxxxxxxxxxxx \ 
VENDOR_STRING=152525 ck=67
```

SERVER specifies the license server name and host ID, as well as the port number of the daemon (SOFTIMAGE).

DAEMON specifies the vendor daemon name. The Softimage daemon is a program that grants licenses. For previous versions of Softimage products, you must specify the exact path to the license file.

INCREMENT specifies all of the components of your Softimage package.
INCREMENT SIPART SOFTIMAGE 1.000 \\ 31-may-2000 1 xxxxxxxxxxxxxxxxxxxxxxxx\ VENDOR_STRING=152526 ck=62 
INCREMENT SIDYNA_R SOFTIMAGE 1.000 \\ 31-may-2000 1 xxxxxxxxxxxxxxxxxxxxxxxx\ VENDOR_STRING=152527 ck=34 
INCREMENT SIDYNA SOFTIMAGE 1.000 \\ 31-may-2000 1 xxxxxxxxxxxxxxxxxxxxxxxx\ VENDOR_STRING=152528 ck=251 
# YOUR LICENSE KEYS STOPS HERE

Important Things to Know about Your License File

- For the latest version of FLEXlm licensing, you only need to specify the DAEMON name and not the entire path to your Softimage vendor daemon.

- The name on the SERVER line must match the name of the computer that is the dedicated license server. If the server name is not provided, ‘localhost’ can be used.

- The port address used in the license file (744 by default) must match the address used by the client computer (when specifying your license server).

- The flexid (sysid or dongle) number must exactly match the one on the designated license server. If the content in the license file is not the same as the information you sent to your Softimage Reseller, contact Softimage Customer Service immediately.

- By default, the LM_LICENSE_FILE variable is set to point to a directory; for example: c:\Softimage\Flexlm\licenses. All the license files found in this directory are concatenated as one file if their extensions end with *.lic. This is a good way to separate lengthy license keys.

  FLEXlm reads .lic files in alphabetical order. It is important, therefore, to name your license files with this in mind—ensure that increments are read before upgrade lines.
Rules for Entering License Key Information

An error in the license file is the main reason that a Softimage product will not run. This can either be a typographical error or a mailer/editor line wrap error. Your license file (softimage.lic) must conform to the following rules:

- The license-file name ends with a .lic extension. For example: my_license.lic.
- In the license file, the name on the SERVER line must match the name of the computer that is the dedicated license server.
- In the license file, the Softimage daemon must be specified at least by name (do not include the path); that is, DAEMON SOFTIMAGE.
- Verify that the back slashes (\) at the end of the PACKAGE and INCREMENT lines are followed with a hard return and not a space. Also, there must be a space before the back slash (\).
- Do not use tabs.
- If you received your Softimage License Confirmation by e-mail, lines that are particularly long in your license file may wrap around to the next line. If a back slash (\) appears anywhere other than at the end of a line, it has been incorrectly wrapped by a mailer/editor. This is considered a typographical error when you try to validate your license file.
- Do not add spaces—they are considered typos.
Setting Up SOFTIMAGE|XSI for Distributed Rendering

Overview

Distributed rendering is a method of speeding up a scene’s rendering time by distributing processing among a network of workstations. To set up distributed rendering for SOFTIMAGE|XSI, several steps must be followed before and after the program is installed.

All computers on a rendering network must be running the same versions of SOFTIMAGE|XSI and mental ray rendering software.

In a network-rendering setup, whichever computer initiates the render (the master) oversees the organization of the images to be rendered and distributes the rendering tasks among the other computers in the setup (the slaves). This is accomplished through the use of the .ray2hosts and linktab.ini text files, which must be created on every computer that will be part of the distributed-rendering setup.

The .ray2hosts file identifies the computers that will participate in distributed renders. The linktab.ini file is used to coordinate sharing resources when rendering on a network that uses a mix of Windows NT and IRIX operating systems.

.ray2hosts and linktab.ini Files

The .ray2hosts and linktab.ini text files enable SOFTIMAGE|XSI to coordinate distributed rendering.

• The .ray2hosts file contains a list of the computers that can participate in distributed rendering, excluding the master. Each computer must be listed by name on a separate line; any line preceded by a hash (#) symbol is considered a comment and ignored by SOFTIMAGE|XSI. Here’s a sample .ray2hosts file:

```
# The first three computers are always part of the # render network. The last computer listed is only # used for overnight renders; remove the # to make # it available.
larry
moe
curly
# shemp
```

The .ray2hosts file must be present on the master computer. Once a render is initiated, SOFTIMAGE|XSI searches for .ray2hosts in %HOMEDRIVE%%HOMEPATH% (Windows NT) or ~/ (IRIX), then in SI_HOME.

• The linktab.ini file is used when the render network uses a mix of Windows NT and IRIX operating systems. Each line in a linktab.ini file contains a Windows NT path and an IRIX path, indicating where...
Setting Up SOFTIMAGE|XSI for Distributed Rendering

SOFTIMAGE|XSI or resources such as textures are located on both operating systems. This allows the rendering master to find required files on slaves regardless of operating system.

Most linktab.ini files contain only one line, indicating where SOFTIMAGE|XSI is located on both platforms. Here's a sample linktab.ini file:

- c:\Softimage    /usr/Softimage

If you are using textures or memory-mapped images, you must have entries which point to the Windows NT and IRIX directories containing them.

The linktab.ini file must be present on the master computer. SOFTIMAGE|XSI searches for linktab.ini in SI_LINKTAB_LOCATION, then in SI_HOME. If the scene was imported from SOFTIMAGE|3D, SOFTIMAGE|XSI searches in SI_LOCATION.

**Environment Variables**

These environment variables are required for distributed rendering.

- LM_LICENSE_FILE must be set to a directory containing license files (for example, %SI_HOME%\Flexlm\licenses) or a specific port on a host (for example, 744@larry). LM_LICENSE_FILE is set in the environment script (setenv.bat on Windows NT and .xsi_1.0 on IRIX) during setup. For more information on the LM_LICENSE_FILE environment variable, see *Important Things to Know about Your License File* on page 27.

- MI_ROOT must be set to the rsrc directory in the SOFTIMAGE|XSI application directory. In a default install, MI_ROOT would be set as C:\Softimage\XSI_1.0\rsrc (Windows NT) or /usr/Softimage/XSI_1.0/ rsrc (IRIX). MI_ROOT is set in setenv.bat (Windows NT) and ray2.sh (IRIX) during setup.

- SI_HOME must be set to the directory in which SOFTIMAGE|XSI is installed. If you will be importing scenes from SOFTIMAGE|3D, then the SI_LOCATION variable must also be set to the directory where SOFTIMAGE|XSI is installed. SI_HOME is set in the environment script (setenv.bat on Windows NT and .xsi_1.0 on IRIX) during setup.

- SI_LINKTAB_LOCATION must be set to the location of the linktab.ini file. If you will be importing scenes from SOFTIMAGE|3D, set SI_LOCATION in the ray2.sh script (IRIX) or as a system variable by choosing Start > Settings > Control Panel > System > Environment (Windows NT).
Starting SOFTIMAGE|XSI

This section outlines how to start SOFTIMAGE|XSI on Windows NT and IRIX.

For information about customizing SOFTIMAGE|XSI startup options, see Renaming the SOFTIMAGE|XSI Program Name on page 34.

If you are using ImageFox under Windows NT, you must disable any of its options related to SOFTIMAGE|XSI. In the ImageFox Options window, click the Local Options tab, select xsi.exe, and uncheck the three options below.

Windows NT

To start SOFTIMAGE|XSI on Windows NT, choose Start > Programs > Softimage Products > SOFTIMAGE XSI 1.0 > SOFTIMAGE XSI.

The splash screen appears after you start SOFTIMAGE|XSI.

- To open SOFTIMAGE|XSI from a desktop icon, edit the icon properties so that they refer to the xsi.bat file.
- If you create a shortcut pointing only to the xsi.exe file, the environment will not initialize properly.

Starting from a Command Prompt Window

You can also start SOFTIMAGE|XSI from a Command Prompt window if you want to start SOFTIMAGE|XSI using specific options.

1. Choose Programs > Softimage Products > SOFTIMAGE XSI 1.0 > Command Prompt. Do not use a standard MS-DOS shell (unless you run the sishell.bat file first).

2. At the prompt, type xsi

The SOFTIMAGE|XSI splash screen appears.

IRIX

To start SOFTIMAGE|XSI on IRIX, choose Softimage Products > SOFTIMAGE XSI 1.0 > SOFTIMAGE XSI from the Toolchest.

If you start SOFTIMAGE|XSI from the Toolchest, you may want to open a console window to monitor error messages that might occur while you're working with SOFTIMAGE|XSI. To open a console window, choose System > Start New Console from the Toolchest.

The splash screen appears after you start SOFTIMAGE|XSI.
Starting from an IRIX Shell

You can also start SOFTIMAGE|XSI from a shell if you want to start it using specific options.

1. From your user account, type `source .xsi_1.0`

   You must now source the .xsi_1.0 file manually because the .cshrc file no longer sources the environments needed by SOFTIMAGE|XSI.

2. Type `xsi` at the prompt. The SOFTIMAGE|XSI splash screen appears.

   If you will be starting SOFTIMAGE|XSI from a shell on a regular basis, you can configure the .cshrc file so that you will not have to source the .xsi_1.0 file manually every time you start SOFTIMAGE|XSI.

   1. Make sure that the .xsi_1.0 file is in your home directory.

      If the file does not exist, you have not yet updated your user account. For more information, see Upgrading User Accounts on IRIX on page 36.

   2. Add a line reading `source .xsi_1.0`

      - If SOFTIMAGE® Eddie Version 3.5 SP1 is installed on your computer, this line must appear after the line that sources the SOFTIMAGE|Eddie variables.

      - If an earlier version of SOFTIMAGE|Eddie is installed on your computer, this line must appear before the line that sources the SOFTIMAGE|Eddie variables.

Exiting SOFTIMAGE|XSI

You can exit using any of these methods:

- Click the \( \times \) icon in the upper-right corner.
- Double-click on the SOFTIMAGE|XSI icon in the upper-left corner.
- Select the File > Exit command from the menu.
- Press Alt+F4.

This returns you to your desktop, command prompt window, or shell.
Switching and Terminating Applications

**Windows NT**

If you need to terminate or switch between applications, the Windows NT Task Manager allows you to do this without having to search for the proper window. It is useful when you're running the Setup program and need to close an application without exiting the Setup program.

1. Press Ctrl+Alt+Del to display the Windows NT Security menu, and select the Task Manager.
2. Select an application from the list, then click End Task to terminate the application, or click Switch To to go that application.

You can also use the Task Manager when applications become unresponsive and you are unable to close them in the normal fashion. However, you should be aware that using the Task Manager to close running applications may not free all resources properly.

**IRIX**

To switch between applications, press Alt+F9 to minimize SOFTIMAGE|XSI to an icon on the IRIX desktop. You can also raise or lower windows by pressing Alt+right-click and selecting the option from the list.

- If SOFTIMAGE|XSI becomes unresponsive, you can close it by typing the following in an IRIX shell:

  siclean
Renaming the SOFTIMAGE|XSI Program Name

You can change the name of the SOFTIMAGE|XSI program—just make sure you update everything that references the program name (see Important SOFTIMAGE|XSI Configuration Files on page 35).

Windows NT

To rename SOFTIMAGE|XSI:

1. In Windows NT Explorer, the SOFTIMAGE|XSI program name is in the Winnt\Profiles\All Users\Start Menu\Programs directory path.

2. To rename it, select the program icon in the appropriate Start Menu\Programs directory, choose File > Rename, enter a new name, and press Enter.

IRIX

To rename SOFTIMAGE|XSI:

Use a text editor (such as vi or jot) to edit the .shortcuts file located in $SI_HOME. To change the name of the Softimage shortcut, modify the f.menu value.

Here is an example of the .shortcuts file, which is located in $SI_HOME:

Menu "SOFTIMAGE Products"
{
   "SOFTIMAGE XSI 1.0" f.menu "SOFTIMAGE XSI 1.0"
}

Menu "SOFTIMAGE XSI 1.0"
{
   "XSI" f.checkexec "/usr/Softimage/XSI_1.0/bin/xsi"
}

You can modify the f.checkexec value to use command line options to start SOFTIMAGE|XSI. This is similar to editing the xsi.bat file on Windows NT. You can also modify the alias set in the .xsi_1.0 file to include command-line options.
Important SOFTIMAGE|XSI Configuration Files

There are a number of important files that SOFTIMAGE|XSI uses. These files allow you to customize your SOFTIMAGE|XSI setup, and they contain default settings for the location of databases and directories. For a complete list of all the files, see the table below.

The environment script references the environment variables that provide information that SOFTIMAGE|XSI uses to determine where certain directories are located. You can also use some environment variables to customize your setup for SOFTIMAGE|XSI. For a complete list of the environment variables you can set for SOFTIMAGE|XSI, refer to the Setup Online Help.

You can edit the environment script (in setenv.bat on Windows NT and .xsi_1.0 on IRIX) to change many of the default settings for SOFTIMAGE|XSI, as described in this section.

The following table lists the configuration files you can modify with the User Tools application:

<table>
<thead>
<tr>
<th>Windows NT</th>
<th>IRIX</th>
<th>Default Location</th>
</tr>
</thead>
</table>
| setenv.bat | .xsi_1.0 | Windows NT: SI_HOME\bin  
IRIX: $SI_HOME/bin |
| .ray2hosts | .ray2hosts | Windows NT:  
SI_HOME  
IRIX: $SI_HOME |
| xsi.bat | Not necessary on IRIX | SI_HOME\bin |

For examples of editing the files listed in the previous table, refer to the Setup Online Help.
Upgrading to SOFTIMAGE|XSI

If you are upgrading from an earlier version of SOFTIMAGE|3D, some settings and files must be modified.

Configuration Files
The linktab.ini file must be copied from its old location to the directory where SOFTIMAGE|XSI is installed. The .rayhosts file must be copied to each user’s home directory and renamed .ray2hosts.

Environment Variables
The SI_HOME variable must be modified to reference the directory where SOFTIMAGE|XSI is installed.

Updating User Accounts on Windows NT
User profiles are not updated on Windows NT because the xsi.bat file calls the setenv.bat file, which sets the required SOFTIMAGE|XSI environments for any user. On Windows NT, shortcuts needed to start the various software components are set for any user created by the operating system (All users\Start menu\Programs) by default.

Updating User Accounts on IRIX
On IRIX, you can use the User Tools application to update user accounts. Note that you cannot use User Tools to create user accounts.

To update an account:
1. Choose Softimage Products > SOFTIMAGE XSI 1.0 > Setup > User Tools or type the following in a shell (case is important):
   /$SI_HOME/XSI_1.0/Setup/UserTools
2. Copy the .xsi_1.0 file from SI_HOME to the user account you are updating. Shortcuts are also added to that user’s toolchest.
   or
   Create a new .xsi_1.0 in the user account if one does not already exist. You need to specify the server name for the LM_LICENSE_FILE variable for this option.

   Shortcuts are added to the toolchest for both of these methods by modifying the .auxchestrc file to point to the .title file. If the .auxchestrc file does not exist, User Tools creates one in the user’s home directory.
Installing a Tablet

Windows NT: To install a tablet on Windows NT, the drivers must be installed. Then, define the SI_TABLET environment variable in the environment script (in `setenv.bat`).

IRIX: To install a tablet on IRIX, you must modify the `tablet.rs` file. Then, define the SI_TABLET environment variable in the environment script (in `.xsi_1.0`) as follows:

```
setenv SI_TABLET
```

This indicates that a tablet is active.
Adding or Removing SOFTIMAGE|XSI Components

After you’ve installed the SOFTIMAGE|XSI software, you can run the Setup program to add or remove any of the SOFTIMAGE|XSI components.

For example, you may want to remove some files that are not essential to operating SOFTIMAGE|XSI, such as databases, flipbooks, custom effects, and demos, to free up space on your hard disk. You may also want to add a file that you did not install during the initial setup or that you had previously removed.

Any time you start the Setup program after SOFTIMAGE|XSI is installed, it automatically opens in maintenance mode.

1. From the Start Menu (Windows NT) or the Toolchest (IRIX), choose Softimage Products > SOFTIMAGE XSI 1.0 > Setup.

   A Setup dialog box in which you can select maintenance options appears.

2. From the dialog box, select one of the following options:
   - **Add/Remove** opens the Maintenance Installation dialog box in which you can select files that you want to either add or remove. If you select this option, proceed to step 3.
   - **Remove All** removes all previously installed components and returns you to the Program Manager window. If you select this option, skip the remaining steps.

   Make sure to back up any personal or Softimage user-configurable files such as the DatabaseSys.rsrc file before you remove all of the software.

3. In the Maintenance Installation dialog box, select the components that you want to install and deselect those that you want to remove in the Options list.

4. Click **Continue** to start the add/remove operation.

   A dialog box appears prompting you to confirm the removal of the unchecked components. Click Yes to begin removal or No to return to the Maintenance Installation dialog box.

Reinstalling SOFTIMAGE|XSI

If you need to reinstall the SOFTIMAGE|XSI application, be sure to uninstall the current version first (see the previous procedure for the Remove All option). This ensures that your SOFTIMAGE|XSI shortcuts in the Start menu (Windows NT) or the Toolchest (IRIX) are accurate and not duplicated.
Troubleshooting

We strongly suggest that you read through this section to ensure a quick solution to any installation problems. The following sections are included:

- Determining the Source of Your Problem (Windows NT Only)—page 40.
- Error Messages—page 41.
- Contacting Softimage Customer Service—page 45.

You can also refer to *Rules for Entering License Key Information* on page 28.
Troubleshooting

Determining the Source of Your Problem (Windows NT Only)

To determine why the software fails to start, cycle through the open applications by pressing Alt+Tab. One of the following three situations will occur:

- When you try to open SOFTIMAGE|XSI, you will not get the splash screen or the interface. In this case, you have the wrong graphics card driver installed. Refer to the Softimage web site at softimage.com for a list of the latest supported graphics cards. Contact your hardware vendor or hardware manufacturer for the correct driver.

- You see a SOFTIMAGE|XSI command prompt and a Fatal Error message telling you that you are not running a supported video mode. From Control Panel > Display > Settings, reset the Resolution to 1280 × 1024, 1600 × 1024 (SGI Visual Workstation only), 1600 × 1200, or 2560 × 1024. Set the Color Depth to True Color.

- You see a Flexible License Manager dialog box that contains an error message and code. Refer to the table in the next section, Error Messages, to find the cause of the error message.

%SI_HOME% is the environment variable pointing to the directory in which SOFTIMAGE|XSI is installed. You must be working in the SOFTIMAGE|XSI Command Prompt for this variable to be recognized. To find the value of %SI_HOME%, in the SOFTIMAGE|XSI Command Prompt type: echo %SI_HOME%
Error Messages

The following section contains tables of error code numbers, error messages, and their possible causes. In the tables, <flex_install_path> refers to the location of the FLEXlm directory on your license server. The default location for <flex_install_path> is \softimage\flexlm (Windows NT) or /usr/Softimage/Flexlm (IRIX).

**FLEXlm Error Messages**

The following table contains a list of the FLEXlm error messages that you may encounter during installation or licensing.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Message</th>
<th>Possible Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1</td>
<td>Cannot find license file.</td>
<td>A valid license has not been requested, received, or installed—see Filling in and Receiving License Key Information on page 21. The environment variable LM_LICENSE_FILE is set incorrectly. Windows NT: Check Control Panel &gt; System &gt; Environment. Verify that the TCP/IP service is running. In Control Panel &gt; Devices, ensure that the status of TCP/IP is Automatic and Started. If TCP/IP does not appear in Devices, you must install it. If TCP/IP does appear but is not running, refer to the Microsoft Windows NT documentation or contact Microsoft Technical Support for Windows NT at 1 800 936 3500 (U.S. and Canada). IRIX: Edit your .xsi_1.0 file (page 35).</td>
</tr>
<tr>
<td>-2</td>
<td>Invalid license file syntax.</td>
<td>There is a typo or syntax error in the softimage.lic file—see Rules for Entering License Key Information on page 28.</td>
</tr>
<tr>
<td>-5</td>
<td>No such feature exists.</td>
<td>There is a typo or syntax error in the softimage.lic file—see Rules for Entering License Key Information on page 28. The wrong license is being referenced by the application. Verify that the environment variable LM_LICENSE_FILE in the .xsi_1.0 file points to the correct license file for version 3.9. For information about editing the .xsi_1.0 file, see page 35. Your license file does not contain the component you currently require. You may not be licensed for the feature you are trying to open, or the license file contains only upgrade lines and not increments. Use the Licensing Tools application to confirm which components are licensed. To do this: • Open the Licensing Tools application (page 23). Select Verify Status and click lmstat to confirm which features are licensed. • If you are registered for this component and it is still inaccessible, contact Softimage Customer Service.</td>
</tr>
</tbody>
</table>
Error Messages

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Message</th>
<th>Possible Cause</th>
</tr>
</thead>
</table>
| -8         | Invalid (inconsistent) license key.        | You have not requested, received, or installed a valid license—see Filling in and Receiving License Key Information on page 21.  
|            |                                             | There is a typo or syntax error in the softimage.lic file—see Rules for Entering License Key Information on page 28. |
|            |                                             | **Windows NT only:**                                                             |
|            |                                             | The hardware key (dongle) number in the license file is wrong. Verify if the number in the softimage.lic file matches the 8-digit hex number on the hardware key (example: B2851nnn). If they don’t match, you must request a new license; or, if you have more than one hardware key, install the one that matches your SOFTIMAGE|XSI license file. |
|            |                                             | The computer name contains illegal characters (underscores, dashes, spaces, and periods). Change the computer name to eliminate any illegal characters. Don’t forget to edit the softimage.lic file to reflect the new server name. |
|            |                                             | The system ID (sysid) encrypted in the license file doesn’t match the computer sysid. To confirm, use Licensing Tools as described in Rules for Entering License Key Information on page 28. If they don’t match and you’re working on a network, make sure you’re installing the correct license on the right computer. Note that a sysid that contains spaces between the characters is considered a typo. If there is a problem with the sysid specified in your license file, contact Softimage Customer Service. |
| -9         | Invalid host.                              | The host ID of this system doesn’t match the host name specified in the license file. Run lictools to do a license request and compare the license-key number it gives you with your current license number. (If you get a 0, either the license key is not plugged in or it is not being read.) |
| -10        | Feature has expired.                       | Feature has expired. Check your license file for the expiration date stated on the INCREMENT line.  
|            |                                             | There is a typo or syntax error in the date part of the license—see Rules for Entering License Key Information on page 28.  
|            |                                             | Contact Softimage Customer Service if the problem persists.                     |
| -11        | Invalid date format in license file.       | There is a typo or syntax error in your softimage.lic file—see Rules for Entering License Key Information on page 28.  
|            |                                             | There is an error on an INCREMENT line of the license file. Open your softimage.lic file and check the expiration date entered on each INCREMENT line.  
|            |                                             | Check that there are no characters or spaces after the back slash (\) at the end of each line.  
|            |                                             | Verify that the number of license keys (the number immediately after the expiration date) is not missing from the INCREMENT line. |
| -13        | No SERVER lines in license file.           | There is a typo on the SERVER line of the license file—see Rules for Entering License Key Information on page 28.  
|            |                                             | The host name in your license file is incorrect. Verify that the host name on the SERVER line of the softimage.lic file matches the computer name.  
|            |                                             | The LM_LICENSE_FILE environment variable points to a non-existent server. This variable is located in the .xsi_1.0 file, the setenv.bat file, or a system environment variable (Control Panel > System). Use the ping command to verify that the server is correct; if it is not, you need to check the network configuration. |
Error Messages

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Message</th>
<th>Possible Cause</th>
</tr>
</thead>
</table>
| -14        | Cannot find SERVER hostname in network database. | The lookup for the host name on the SERVER line in the license file failed. This often happens when NIS, DNS, or the hosts file is incorrect. **Workaround:** Use an IP address (example: 123.456.789.123) instead of the host name. The host name in your license file is incorrect. Correct the host name on the SERVER line of the softimage.lic file. Note that it is case sensitive. Confirm that the host name is in the /etc/hosts file and that "local" appears on the hostresorder line of /etc/resolv.conf file. The **LM_LICENSE_FILE** environment variable points to a non-existent server. This variable is set in the .xsi_1.0 file. Use the ping command to verify that the server is correct. If it is not, you need to check the network configuration.

Your computer cannot resolve the server name from the /etc/hosts list. |

| -15        | Cannot connect to license server.            | There is a typo or syntax error in your softimage.lic file—see Rules for Entering License Key Information on page 28. The server is unable to locate the softimage.lic file. Rename and/or move the softimage.lic file into the <flexlm_install_path> licenses directory. The environment variable **LM_LICENSE_FILE** is not set correctly in Control Panel > System or the .xsi_1.0 file. It should be set to port@host (example: 7444@myserver), where host is the license server. You have a network problem. If you cannot reach the FLEXlm server defined by **LM_LICENSE_FILE**, check your network configuration. Your server is not started. From Licensing Tools (page 23), click Start Server. **Windows NT only:** If the license server does not start, open a SOFTIMAGE\XSI Command Prompt window and enter the following command: `lmgrd –app` This will indicate one of the following issues:
  • You don’t have TCP/IP installed. You must install TCP/IP or MS Loopback adapter from the Windows NT software disk. Refer to Installing TCP/IP in the Microsoft Windows for NT manual. In some cases, you may have to install the MS Loopback adaptor even if you have a network card (some computers don’t start the network services unless there is a network cable connected).
  • The hardware key is not being read. To test the parallel port, run License Tools (Start > Programs > Softimage Products > Licensing > LicTool) and select License Request. The FLEXID should display something like B2851xxx. Confirm that this matches the hardware key ID by looking at the label on the hardware key itself. If the FLEXID # is not included in the license request window, the hardware key may be improperly connected to the parallel port or the Sentinel driver is not running. (This can be confirmed in Control Panel > Devices. Look for Sentinel: It should be Started and Automatic.) |
### Error Messages

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Message</th>
<th>Possible Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>-18</td>
<td>License server does not support this feature.</td>
<td>There is a typo or syntax error in your <code>softimage.lic</code> file—see Rules for Entering License Key Information on page 28. The feature has expired. Check your license file for the expiration date on the INCREMENT line(s) of your license file. You are attempting to start an unlicensed component. Refer to the INCREMENTS line of your license file for a list of your licensed components. An older version of FLEXlm is running on the license server. You must upgrade your FLEXlm version. To install version 6.0 of FLEXlm, see Setting Up the License Server on page 20.</td>
</tr>
<tr>
<td>-31</td>
<td>Feature start date is in the future.</td>
<td>The date on your system is incorrect. Confirm this using the <code>date</code> command and contact Softimage Customer Service if the problem persists.</td>
</tr>
<tr>
<td>-57</td>
<td>socket() call failed</td>
<td>Reboot your FLEXlm server and refer to the “Cannot connect to license server [-15, 10: ... ]” error message.</td>
</tr>
<tr>
<td>-77</td>
<td>Bad version number—must be floating point number, with no letters.</td>
<td>Your license file has an invalid version number. Make sure that version numbers on the INCREMENT lines are 3.8 (or 1.x for SOFTIMAGE</td>
</tr>
<tr>
<td>-90</td>
<td>Future license file format or misspelling in license file.</td>
<td>The file was issued for a later version of FLEXlm than this program recognizes.</td>
</tr>
<tr>
<td>-93</td>
<td>This feature is available in a different license pool.</td>
<td>This is a warning condition. The server has pooled one or more INCREMENT lines into a single pool, and the request was made on an INCREMENT line that has been pooled.</td>
</tr>
<tr>
<td>-96</td>
<td>Server node is down or not responding.</td>
<td>See the system administrator about starting the server, or make sure that you’re referring to the right host—see Setting Up the License Server on page 20.</td>
</tr>
<tr>
<td>-97</td>
<td>The desired vendor daemon is down.</td>
<td>Check the lmgrd log file, or try the <code>lmreread</code> command.</td>
</tr>
<tr>
<td>-101</td>
<td>All licenses are reserved for others.</td>
<td>The system administrator has reserved all the licenses for others. Reservations are made in the options file. The server must be restarted for options file changes to take effect.</td>
</tr>
</tbody>
</table>
Other Error Messages

The following table contains a list of the various error messages that you may encounter when starting SOFTIMAGE|XSI.

<table>
<thead>
<tr>
<th>Platform</th>
<th>Message</th>
<th>Possible Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows NT</td>
<td>Dr. Watson error: (Example: “the application generated an application error. The error occurred on 10/01/99 at 16:19:45.870 the exception generated was c0000037@address77f80430”)</td>
<td>You do not have the correct driver version for your graphics card. See the Softimage web site at softimage.com for a list of the latest supported graphics cards. Contact your hardware vendor or hardware manufacturer for the correct driver.</td>
</tr>
</tbody>
</table>

Calling Softimage Customer Service

For telephone support, the Softimage hotline is available Monday to Friday from Softimage Customer Service located in Montreal and our European office located in London.

e-mail: support@softimage.com

<table>
<thead>
<tr>
<th>Location</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montreal/Worldwide</td>
<td>Tel: (514) 845-2199</td>
</tr>
<tr>
<td></td>
<td>Fax: (514) 845-8252</td>
</tr>
<tr>
<td>North America</td>
<td>Tel: 1 800 387-2559</td>
</tr>
<tr>
<td></td>
<td>Fax: (514) 845-8252</td>
</tr>
<tr>
<td>UK/International</td>
<td>Tel: 44 (0) 1 753 650 670</td>
</tr>
<tr>
<td></td>
<td>Fax: 44 (0) 1 753 658 503</td>
</tr>
</tbody>
</table>

You can also visit the Knowledge Base (KB) from the Support section of the Softimage web site (softimage.com). Once you’re at the KB site, enter a keyword in the search field. For example: Error Message.
Error Messages
Index

Symbols

.ray2hosts 29
.rayhost file 35
See also Setup Online Help

A
adding Softimage software components 38
applications
Licensing Tools 24
switching between 33
terminating 33
User Tools 36

B
backup-device requirements 7

C
CD-ROM requirements for installation 7
checklist for installation 9
configuration files 35
.rayhost 35
setenv.bat 35
sisof.bat 35
custom installation of Softimage software 16
Customer Service, Softimage 45

D
DAEMON line in license file 26
disk space requirements for installation 7
display resolution requirements for installation 7
distributed rendering
choosing a port number 16
setting up 29
dongle 11

E
editing, environment variables 35
e-mail
Customer Support Service 45
requirements for sending license 7
environment script
See setenv.bat
environment variables
environment script 35
for distributed rendering 30
error messages 41

F
files
.rayhost 35
configuration 35
license, example of 26
modified by the Setup program 17
setenv.bat 35
sisof.bat 35
FLEXlm error messages 41
FLEXlm licensing
installing as server 12
online documentation 6
requirements for installation 7

G
Games Development Environment (GDE), installing 16
GLOBE trotter web site for FLEXlm information 6
graphics card requirements for installation 8

H
hard disk space requirements for installation 7
hardware key 11

I
INCREMENT lines in license file 26
Installing
Softimage software 12
installing as FLEXlm license server 12
checklist 9
custom installation 16
remotely on IRIX 13
Internet connection requirements 7

L
license file
editing existing 23
editing with Licensing Tools application 24
element 26
list of package components (INCREMENT lines) 26
setting up new 23
license key
entering information 23
receiving from Softimage 22
License Request form, filling out 21
license-server requirements 7
licensing
editing license file with Licensing Tools application 24
eeding LM_LICENSE_FILE for server name 18
entering license-key information 23
filling out License Request form 21
installing as FLEXlm server 12
license file example 26
receiving license key 22
selecting name of server 18
sending license by e-mail 7
Licensing Tools application 24
linktab.ini 29
LM_LICENSE_FILE
setting name of server 18
logging on to workstation 10

M
memory requirements
See RAM requirements
mental ray renderer
.rayhost file 35
messages, error 41
minimizing Softimage program 33
mouse, 2- or 3-button required 7
O
online documentation
  See Online Library
online help
  accessing 6
  licensing 6
  setup 6
Online Library
  viewing with browser 7
operating system, requirements
  installation 7
P
Product Support Services (PSS)
  See Customer Support Services
R
RAM requirements for
  installation 7
remote installation on IRIX 13
removing Softimage software components 38
renaming Softimage program 34
requirements
  backup devices 7
  display resolution 7
  installation 7
  Internet 7
  mouse 7
  operating system 7
  RAM 7
resolution requirements 7
S
SERVER line in license file 26
setenv.bat file, editing environment variables 35
Setup program
  files modified by 17
  running 13
sisoft.bat file 35
  See also Setup Online Help
Softimage
  Customer Support Service 45
  renaming program name 34
  web site 45
Softimage software
  adding or removing components 38
  starting 31
  uninstalling 38
space required for installation
  hard disk 7
  swap space 7
starting Softimage software 31
Support Service, Customer 45
swap space requirements for
  installation 7
switching between applications 33
T
TCP/IP service protocol 8
terminating applications 33
troubleshooting
  error messages 41
  Windows NT problems 40
U
uninstalling Softimage software 38
updating user accounts 36
upgrading from previous version
  license key information 22
user accounts, updating 36
User Tools application 36
  updating user accounts 36
V
viewing Online Library with
  browser 7
W
web browser requirements for
  installation 7
web sites
  FLEXlm 6
  GLOBetrotter 6
  Softimage 45
  Windows NT problems 40