

Autodesk® Softimage®

Installing and Licensing Softimage on Linux

For Linux® 32-bit and 64-bit systems using SPM

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Installing and Licensing Softimage

These are the steps for installing and licensing Autodesk® Softimage® and Autodesk® Softimage® Advanced on a 32-bit or 64-bit Linux system.

On Linux systems, Softimage and Softimage Advanced use a dongle-based licensing scheme. When you install your license, the license is associated to the dongle. The dongle must be connected to the port of the computer that is running the SPM license server.

You can install Softimage on a standalone computer (for example, on your home computer, or any computer that is not connected to a network), or on a computer pointing to a license server on the same network.

User Privileges

To install and license the Softimage software, you must be logged on as Administrator. If not, the Setup program displays an error message and fails.

To run Softimage, however, no extended privileges are required. You need only log on as a valid user.

Basic Steps

1. *Installing the License Server* on page 5.
2. *Getting Your Licenses* on page 8.
3. *Verifying Server and License Status* on page 10.
4. *Installing Softimage* on page 11.
5. *Installing mental ray as a Render Slave* on page 17.
6. *Adding and Removing Softimage Components* on page 18.

Installing the License Server

Linux-based Softimage products use the Software Protection Manager (SPM) to protect and license their software components.

An *SPM license server* is the computer that has the SPM daemon running on it and grants available licenses upon request.

An *SPM client* is a machine running Autodesk Softimage and protected with the SPM system. SPM clients contact the SPM server and ask for licenses to run Softimage. An SPM client may be the same computer as the SPM server (in the case of a standalone installation). An SPM client may also be a computer communicating through a port with the SPM server on the same network.

Install the License Server First

It is recommended that you install the SPM license server first. With the SPM server installed and running, you can easily point to it during the installation of Softimage.

If you choose to install Softimage before installing the SPM license server, you can manually edit the `SPM_HOST` variable with the server name in the environment script (the `.xsi_7.5` file), after you have installed the SPM licensing software.

To install the SPM software

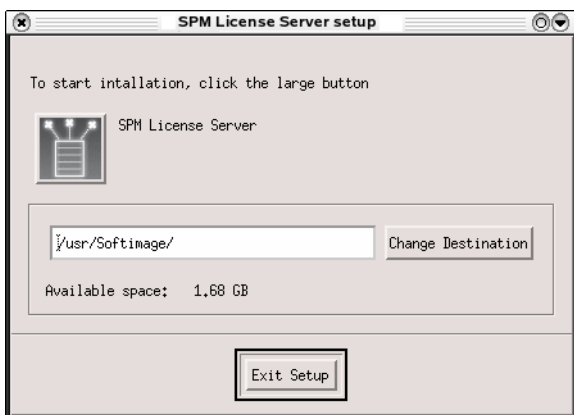
1. Run the SPM Setup program to install the SPM software on the computer you designate as the license server.

- Run the SPM Setup program from its folder location on the Software DVD.

or

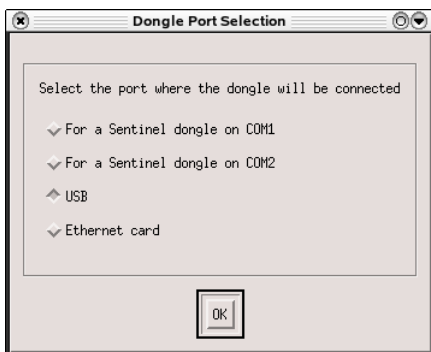
- Download the SPM Server Setup program from <http://www.autodesk.com/softimage-downloads> and extract it to a temporary location on your computer.

2. When the Welcome screen opens, click **Continue**.
3. Accept the End User License Agreement (EULA).
4. Specify a destination folder for the files. Click OK.
5. Click the **SPM License Server** button to confirm the path and start the installation of files.

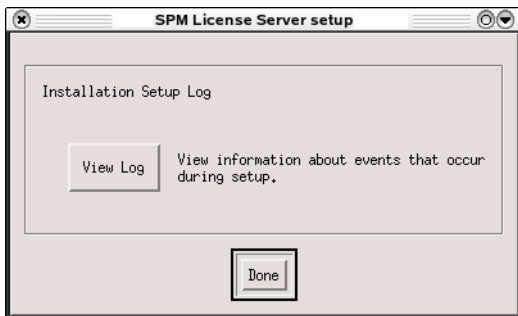


Choosing the Dongle Type and Port

6. Select the **USB** option (the default dongle type for Softimage). The licenses are associated to an iButton dongle on a USB port.



7. You can view the setup log for all events that took place during the installation of SPM. When you're finished click **Done**.



8. Click **OK** to exit the SPM setup.



Getting Your Licenses

To run Softimage, you must install the license file you receive. Licenses are stored in a database which is read by the SPM license server.

You may have purchased new licenses, or perhaps your maintenance contract makes you eligible for an upgrade. Either way, you must generate and submit a request code to obtain your license file.

Here are the basic steps:

1. Download your software packages (Softimage and SPM Server) from <http://www.autodesk.com/softimage-downloads>.
2. Install the SPM Server. See *Installing the License Server* on page 5.
3. Generate a request code using LicTools. See *Requesting Licenses* on page 8.
4. Submit the request code on <http://www.autodesk.com/softimagelinuxactivation>.
5. Wait to receive an e-mail containing your license key file.
6. Install the license keys using LicTools. See *Installing Licenses* on page 9.
7. Install and start Softimage. See *Installing Softimage* on page 11.

Licensing Tool (LicTools)

The LicTools program lets you generate request code, install, and manage your licenses. LicTools is automatically installed with the SPM license server.

- To open LicTools, type the following in a shell:

```
/usr/Softimage/Spm/bin/lictools
```

Requesting Licenses

A license is needed to run each new version of Softimage. You must generate and then submit a license request code on <http://www.autodesk.com/softimagelinuxactivation>.

1. In LicTools, click the **Generate Request** button. This generates the request code and displays it in the Generate request code dialog box.
2. Click **Save As** to save the code to a request file (*.req).



Type the .req extension at the end of the file name in the text box to make sure that it is saved properly.

3. Go to <http://www.autodesk.com/softimagelinuxactivation>.
4. Enter your request code and account information in the appropriate fields.
5. Click **Submit**.
6. The next steps: You will receive a .keys file by e-mail, which you will be required to install (see next section).

Installing Licenses

You must install the license that you received by e-mail. Remember that you also must start the license server before starting Softimage.

1. In LicTools, click the **Install Keys** button. In the browser, select your license file (*.keys) to install it in the database.



If you get the error “*Wrong SYSTEM-ID for SPM License Keyfile*”, it means that you are installing a new license on a machine with a previously installed license. You need to delete the **spm-kf** file located in the **/var/spm** directory. This is a hidden file, so you need to display hidden files to see it.

2. Click **List keys** to view the contents of the license database.
3. Click the **Start Server** button.
4. Close LicTools.
5. Now you can install and start Softimage. See *Installing Softimage* on page 11 (if you have not done so yet).

Verifying Server and License Status

You can use LicTools or `spmstat` shell commands from the command line to check the status of any SPM license server on the network. You can also start and stop the server when managing the keys database.

Monitoring Servers and Licenses from LicTools

1. In LicTools, click **Verify Status** to open the Licensing Diagnostic dialog box.
2. In the License Server box, enter the name of the server you want to verify.
3. Click **Spmstat** to get a listing of the active key databases and the currently used licenses.
4. To identify that the local server is running and able to check out a license, click the **Check Local Server** button.

Monitoring Servers and Licenses from the Command Line

You can use the `spmstat` shell commands to get a variety of information on the status of the available license server(s).

1. Launch the `spmstat` shell by typing the following:


```
/var/spm/spmstat spmhost
```
2. Use command line options, such as:
 - `spmstat -h` to get syntax and all the `spmstat` options.
 - `spmstat -V` to display the version of the SPM program.
 - `spmstat [spmhost]` to get status on a particular SPM server.

Starting or Stopping the SPM Server

To install licenses or generate request code, you must stop and then start the license server. Do either of the following:

- In LicTools, click the **Start Server** or **Stop Server** button.
- Type `/etc/init.d/spm {start|stop}` at the command line.

Installing Softimage

These are the steps for installing Softimage or Softimage Advanced on a Linux system.

You can install Softimage on a standalone computer (for example, on your home computer, or any other computer that is not connected to a network), or on a computer pointing to a license server on the same network.

1. Run the Softimage Setup program.
 - Run the Setup program from its folder location on the Software DVD.

or

 - You can download it from <http://www.autodesk.com/softimage-downloads> and extract it to a temporary location on your computer.
2. When the Welcome screen opens. Click **Continue**.
3. Accept the End User License Agreement (EULA).

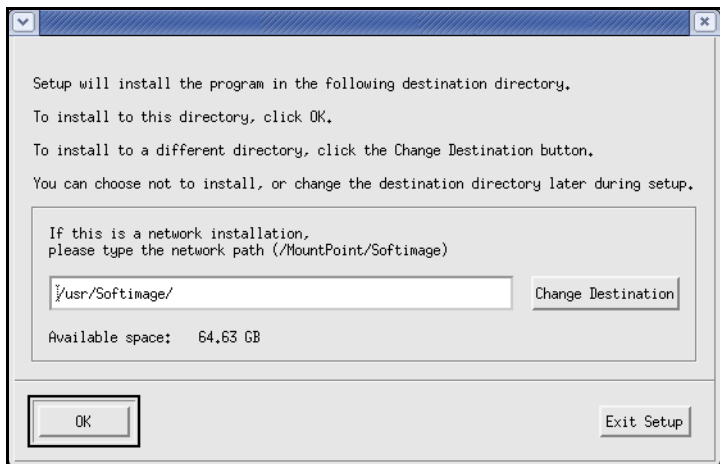
Specifying the Installation Path

4. Choose the folder in which you want to install Softimage. By default, Softimage is installed in the folder /usr/Softimage.

If you want to use a different location, click **Change Destination**.

Avoid using non-alphanumeric characters such as !, @, or # as part of the install path name. These are reserved characters in the Linux operating system and may cause the installation to fail.

When the Destination Folder is the one you want, click **OK** to continue.



After installation, `$SI_HOME` is the environment variable pointing to the directory in which Softimage is installed.

Shared Installation on Linux

You can install Softimage on a shared drive and users can run it remotely from their own workstations without requiring a local installation of all the software files.

The initial startup time is a bit slower when accessing Softimage remotely, but once Softimage is up and running, it performs the same as if you were running locally.

To set up a shared installation

- Install Softimage to a shared drive.

On the machine from which you want to run Softimage, do the following:

- Change directories to the location of the shared drive.
- Source the `.xsi_7.5` environment script from the shared location.
- Start Softimage.

The first time you run Softimage from the shared drive, your local registry is automatically updated and the necessary preference files and per-user data structure is created.



You can have a local installation of Softimage on a machine from which you also want to access a remote installation of Softimage of the same version. However, you will have to delete the registry file in the user account and source the `.xsi_7.5` file again before starting Softimage. You will have to do this each time you switch between the local and remote installation from the same machine.

Choosing a Setup Type

5. Choose the setup type:



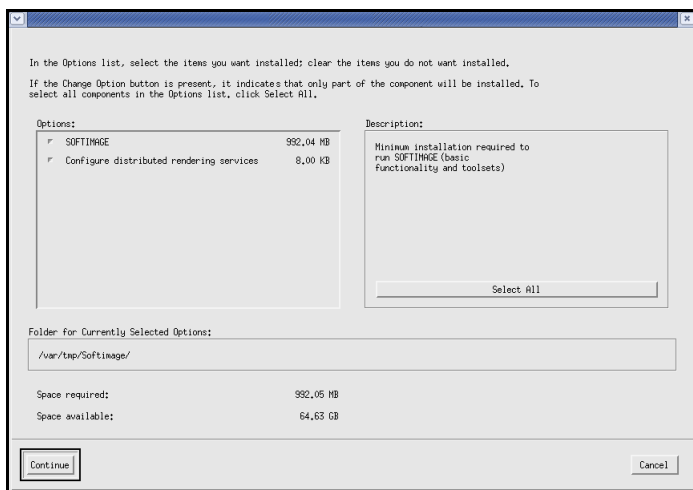
Typical Install

Click **Typical Install** if you want a typical installation of the software components.

- The Autodesk Softimage software.
- The Autodesk Softimage SDK components.
- The **Softimage User's Guide** and **Softimage SDK Guide** are installed to your system as several files in the Compiled HTML Help format (*.chm). These guides provide complete procedural information for using Softimage. When installed, the Guides are available from the Help menu in Softimage.
- XSI_Samples project that you can use to get started with Softimage.

Custom Install

Click **Custom Install** to choose extra options that are not available in a typical install.



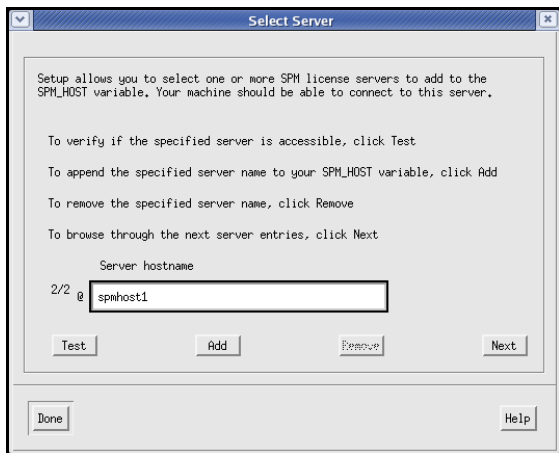
- Select **Configure distributed rendering services** to make this computer available to be used for distributed rendering. See *Configuring Distributed Rendering* on page 16.

Render Slave

- Click **Render Slave** to install mental ray standalone only on this computer. See *Installing mental ray as a Render Slave* on page 17.

Selecting the License Server

6. Enter the name of the license server.



In the **Server hostname** box, enter the computer name or IP address of the computer that is running the SPM server.

If you are installing Softimage on the same machine as the SPM server and you don't know the name of your computer, enter localhost.

7. Assuming that you already have the SPM license server installed, click **Test** to verify that your computer can connect to the license server. A message appears confirming if the server was reached.
8. If the server was successfully reached, click **Add** to append this server name to the SPM_HOST variable in your environment script (the `.xsi_7.5` file).

To add more than one server to the list, enter another computer name and click **Add** again. Click the **Next** button to cycle through the server names you have set.

If you leave the server name box blank, you can edit the SPM_HOST environment variable in the .xsi_7.5 file later.

9. Click **Done** when you're finished.

Configuring Distributed Rendering

After the files are installed, a dialog box appears if you selected the **Configure distributed rendering services** option for a Custom Install, or if you are installing mental ray as a **Render Slave** option.

Choosing a Distributed Rendering Type

You can configure two types of distributed rendering:

- Satellite distributed rendering requires an Softimage license that supports Satellite rendering for the master machine. No additional licences are required for the slave machines. Select the **Configure satellite distributed rendering** check box for this option.
- Standalone distributed rendering requires an Softimage license that supports standalone rendering for the master machine. Each slave processor requires an additional mental ray standalone license. Select the **Configure standalone distributed rendering** check box for this option.

To configure one or both types of distributed rendering, activate it by selecting its checkbox. This activates its port selection options. You can then choose a port for its mental ray service to listen on.

Choosing a TCP/IP Port for Distributed Rendering

You must select a port for mental ray to use when communicating with other computers during distributed rendering sessions.

Choosing a Port

- By default, the Setup program automatically chooses port 7004 or the next available port for whichever type of distributed rendering you've configured. If you need to specify a different port, select **Edit Port Number** and either enter a new port number or click **Next Free Port** to find the next available port.

When you click OK, Setup will install and start the services used for distributed rendering.



All computers in a distributed rendering network must run the same version of the mental ray software. It is strongly recommended that they also use the same TCP/IP port number for each distributed rendering type.

It is particularly important to use the same TCP/IP port number if you are distributed rendering across different platforms. Any port number greater than 7024 is recommended.

In Softimage, choose **Help > User's Guide > Rendering > Distributed Rendering** for complete details on how to set up a distributed rendering environment.

Installing mental ray as a Render Slave

If you chose the **Render Slave** option as the setup type, as described in *Choosing a Setup Type* on page 13, only the mental ray standalone software will be installed on the computer you want to use for rendering.

1. After you have selected the **Render Slave** option, you must specify the location of the license server, as described in *Selecting the License Server* on page 15.
2. Configure the distributed rendering as described in *Configuring Distributed Rendering* on page 16.

If you configure both types of distributed rendering, you'll need to choose a port for each type.

3. Setup will install and start the services used for distributed rendering.

In Softimage, choose **Help > User's Guide > Rendering > Distributed Rendering** for complete details on how to set up a distributed rendering environment.

Adding and Removing Softimage Components

After you've installed the Softimage software, you can run the Setup program to add or remove all of the Softimage components. You may also want to add a component that you did not install during the initial setup or one that you previously removed. Any time you start the Setup program after Softimage is installed, it automatically opens in maintenance mode.

You must exit Softimage before running the Setup program. Make sure to back up any personal or Softimage user-configurable files before you remove all of the software.

