

Autodesk® Maya® 2013



Autodesk

# Installation Help

© 2012 Autodesk, Inc. All Rights Reserved. Except as otherwise permitted by Autodesk, Inc., this publication, or parts thereof, may not be reproduced in any form, by any method, for any purpose.

Certain materials included in this publication are reprinted with the permission of the copyright holder.

Portions related to RSA Data Security, Inc. MD5 Message-Digest Algorithm Copyright (C) 1991-2, RSA Data Security, Inc. Created 1991. All rights reserved. License to copy and use this software is granted provided that it is identified as the "RSA Data Security, Inc. MD5 Message-Digest Algorithm" in all material mentioning or referencing this software or this function. License is also granted to make and use derivative works provided that such works are identified as "derived from the RSA Data Security, Inc. MD5 Message-Digest Algorithm" in all material mentioning or referencing the derived work. RSA Data Security, Inc. makes no representations concerning either the merchantability of this software or the suitability of this software for any particular purpose. It is provided "as is" without express or implied warranty of any kind. These notices must be retained in any copies of any part of this documentation and/or software.

The following are registered trademarks or trademarks of Autodesk, Inc., and/or its subsidiaries and/or affiliates in the USA and other countries: 123D, 3ds Max, Algor, Alias, Alias (swirl design/logo), AliasStudio, ATC, AUGI, AutoCAD, AutoCAD Learning Assistance, AutoCAD LT, AutoCAD Simulator, AutoCAD SQL Extension, AutoCAD SQL Interface, Autodesk, Autodesk Homestyler, Autodesk Intent, Autodesk Inventor, Autodesk MapGuide, Autodesk Streamline, AutoLISP, AutoSketch, AutoSnap, AutoTrack, Backburner, Backdraft, Beast, Beast (design/logo) Built with ObjectARX (design/logo), Burn, Buzzsaw, CAICE, CFdesign, Civil 3D, Cleaner, Cleaner Central, ClearScale, Colour Warper, Combustion, Communication Specification, Constructware, Content Explorer, Creative Bridge, Dancing Baby (image), DesignCenter, Design Doctor, Designer's Toolkit, DesignKids, DesignProf, DesignServer, DesignStudio, Design Web Format, Discreet, DWF, DWG, DWG (design/logo), DWG Extreme, DWG TrueConvert, DWG TrueView, DWFx, DXF, Ecotect, Evolver, Exposure, Extending the Design Team, Face Robot, FBX, Fempro, Fire, Flame, Flare, Flint, FMDesktop, FreeWheel, GDX Driver, Green Building Studio, Heads-up Design, Heidi, Homestyler, HumanIK, IDEA Server, i-drop, Illuminate Labs AB (design/logo), ImageModeler, iMOUT, Incinerator, Inferno, Instructables, Instructables (stylized robot design/logo), Inventor, Inventor LT, Kynapse, Kynogon, LandXplorer, LiquidLight, LiquidLight (design/logo), Lustre, MatchMover, Maya, Mechanical Desktop, MIMI, Moldflow, Moldflow Plastics Advisers, Moldflow Plastics Insight, Moldflow Plastics Xpert, Moondust, MotionBuilder, Movimento, MPA, MPA (design/logo), MPI, MPI (design/logo), MPX, MPX (design/logo), Mudbox, Multi-Master Editing, Navisworks, ObjectARX, ObjectDBX, Opticore, Pipeplus, Pixlr, Pixlr-o-matic, PolarSnap, PortfolioWall, Powered with Autodesk Technology, Productstream, ProMaterials, RasterDWG, RealDWG, Real-time Roto, Recognize, Render Queue, Retimer, Reveal, Revit, RiverCAD, Robot, Scaleform, Scaleform GFx, Showcase, Show Me, ShowMotion, SketchBook, Smoke, Softimage, SoftimageXSI (design/logo), Sparks, SteeringWheels, Stitcher, Stone, StormNET, Tinkerbox, ToolClip, Topobase, Toxik, TrustedDWG, T-Splines, U-Vis, ViewCube, Visual, Visual LISP, Voice Reality, Volo, Vtour, WaterNetworks, Wire, Wiretap, WiretapCentral, XSI.

ACE™, TAO™, CIAO™, and CoSMIC™ are copyrighted by Douglas C. Schmidt and his research group at Washington University, University of California, Irvine, and Vanderbilt University, Copyright (c) 1993-2009, all rights reserved.

mental ray is a registered trademark of NVIDIA ARC GmbH, licensed for use by Autodesk, Inc.

Intel is a registered trademark or trademark of Intel Corporation or its subsidiaries in the United States and other countries.

OpenGL is a trademark of Silicon Graphics, Inc. in the United States and other countries.

Python is a registered trademark of Python Software Foundation.

All other brand names, product names or trademarks belong to their respective holders.

#### **Disclaimer**

THIS PUBLICATION AND THE INFORMATION CONTAINED HEREIN IS MADE AVAILABLE BY AUTODESK, INC. "AS IS." AUTODESK, INC. DISCLAIMS ALL WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE REGARDING THESE MATERIALS.

# Contents

- Chapter 1 Installing Autodesk Media & Entertainment Products . . . . . 1**
- Installation Overview . . . . . 1
  - Prepare for Installation . . . . . 1
  - Select Install Type . . . . . 2
  - Change Product Language . . . . . 3
  - Specify License . . . . . 4
  - Configure and Install . . . . . 5
  - Activate Products . . . . . 5
  - Create Deployment . . . . . 6
- Frequently Asked Questions . . . . . 7
  - What if I have lost my serial number or product key? . . . . . 7
  - Why do I need to activate a product after installation? . . . . . 7
  - Can I install Autodesk products from a website? . . . . . 7
  - How does a trial license work in a product suite or bundle?  
. . . . . 8
  - How do I switch my license from stand-alone to network or  
network to stand-alone? . . . . . 8
  - Where can I find product license information after  
installation? . . . . . 8
  - After installation, how can I change product configuration,  
repair, or uninstall the product? . . . . . 8
  
- Chapter 2 Appendix: Installing Autodesk Maya . . . . . 11**

Installation Information Specific to Autodesk Maya 2013 . . . . .	11
Installing a 32-bit Product on a 64-bit Operating System . . . . .	11
Install Maya on Mac OS X . . . . .	12
Install Maya on Linux . . . . .	14
Install Maya on Linux using the installation wizard . . . . .	14
Install Maya on Linux using the rpm utility . . . . .	16
Additional Linux notes . . . . .	20
Optimize the Maya Hotbox and marking menus on Linux . . . . .	25
Uninstall Maya on Mac OS X or Linux . . . . .	28
Install the Maya Help . . . . .	29
Install MatchMover, Composite, Backburner, and DirectConnect . . . . .	33
Install mental ray for Maya satellite . . . . .	33
Overview of mental ray (satellite) . . . . .	33
Slave machine installation . . . . .	34
Slave machine additional setup . . . . .	35
Slave machine port setup . . . . .	36
Licensing of satellite rendering . . . . .	38
<b>Index . . . . .</b>	<b>39</b>

# Installing Autodesk Media & Entertainment Products

# 1

## Installation Overview

The following diagram shows the major parts of the installation process:



Further details are provided in the following sections.

## Prepare for Installation

Before starting to install, check the following details:

- Confirm that your computer meets the minimum system requirements. If in doubt, click System Requirements at the bottom of the installer screen.
- Review product documentation to clarify details such as the type of installation to do (stand-alone or network) and which products to install. Documentation is accessible from links on the lower left corner of the installer:

- Ensure that your user name has Administrator permissions to install applications on the computer or network.
- Obtain serial numbers and product keys for all products you want to install. These are on the product package or provided at the time you download the software.
- Close all running applications.

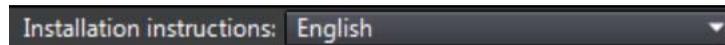
## Select Install Type

Here is some basic information to help you choose the right path.

- **Install** is recommended for individual users or small groups. The key point is that you will repeat the installation process on each computer. This is the only valid installation type for a stand-alone license, but it can also be used with a multi-seat stand-alone or network license.
- **Create Deployment** is recommended for network administrators, using either a multi-seat stand-alone or network license. In the deployment process, the installation is configured once, stored on the network, and then distributed efficiently to users' computers.  
For more information on deployments, see [Create Deployment](#) (page 6) or the *Network Administrator's Guide*.
- **Install Tools & Utilities** is used to install tools and utilities related to your suite or product. If you have a network license for your Autodesk product, you will need to use this option to install the Network License Manager before any users can run the product. Consult the documentation for your suite or product to identify the available tools and utilities of interest.

## Select Installer Language

On the first screen of the installer, you can select the language for the installer screens, using this control on the upper right:



For some Autodesk products, later in the install process you can select the language for installed products. For more information, see [Change Product Language](#) (page 3).

## Change Product Language

---

**IMPORTANT** This topic does not apply to Autodesk products that provide each language version on separate media. For these products, you must specify the product language when purchasing, and cannot change it.

---

For some Autodesk products, you can select the product language at the time of installation, using this drop-down menu on the installer:



### Language Selection Menu

If the language you want is not on this menu, your available options vary by Autodesk product. Many products, such as 3ds Max, Inventor, and all AutoCAD-based products, use language packs to support additional languages.

### These conditions apply to language selection:

- Each suite installation uses a single language. If you need to install one or more products in a different language, that requires a separate installation.
- All deployments must be in a single language. One administrative image can support deployments for different languages, but each deployment is for one language.
- If you are installing multiple products and select a language that is not supported by some products, these products use a default language.
- After you leave the Product Information page of the installer, the menu for selecting a language or adding a language pack is disabled. If you later decide to change the language or add a language pack, you cannot go back to the Product Information page and use the menu. Instead, you must cancel the installation, start the installer again, and then make the correct language selection on the Product Information page.

### About Language Packs

A language pack is a software module that can be added to an Autodesk product to change the language used throughout the user interface and the

documentation. A single instance of the product software can support multiple languages by adding language packs. Each language pack is matched to a specific Autodesk product, and includes an installer. You must install the Autodesk product before installing a language pack. Each installed language pack creates a separate icon on the Windows Start menu, such as "Inventor - French (Francais)" that you can use to start the product in that language. Depending on your product, language packs may be available on the installation media or from a website.

A language pack installer provides an option to create a language pack deployment for a particular product. The language pack deployment can be installed on multiple computers, after the related product is installed, to add another language version.

## Specify License

The following notes provide a general overview. For more detailed information, see the *Licensing Guide* for your product.

### License Types

You can install most Autodesk products for a trial period of 30 days to evaluate the product. If you purchase a license, it is configured as either stand-alone or network, and for a specific number of users. These license types are briefly described as follows:

- A **stand-alone license** is intended for use by one person. The licensed products can be installed on two computers, as long as both instances are not running concurrently.
- A **multi-seat stand-alone license** is intended to support a specified maximum number of users, but it can be installed on a larger number of computers for convenient access.
- A **network license** supports a specified number of users who are connected to a network. The Network License Manager is installed on one or more servers on the network to manage the distribution of licenses to users.

### Network License Server Models

If you are using a network license, choose the server configuration for the Network License Manager that was specified at the time of license purchase:

- **Single License Server**

One server manages all licenses on the network.

■ **Distributed License Server**

Licenses are distributed across a pool of multiple servers in the network. You enter the name of each server in the pool.

■ **Redundant License Server**

Three servers are available to authenticate each license. You enter the names of the three servers.

## Configure and Install

### Installation Path

This path specifies where the product folder will be installed. If you change the location, use only valid ASCII characters in the install path.

### Configuration

Most products have a number of configuration settings. On the Install > Configure Installation page, for any product you have selected to install, you see a triangular control for access to a configuration panel:



Click anywhere in the product box to open the configuration panel. For many products, you can select an installation type, either **Typical** to accept the default configuration settings, or **Custom** to review the settings and decide whether to modify them. More information on the configuration settings for your product may exist in an appendix to this guide. After you have configured the settings as required, click the triangle to close the configuration panel.

## Activate Products

When you run an Autodesk product for the first time, you will be asked to activate the product. If it is connected to the Internet, your computer can communicate directly with Autodesk to complete the activation process.

If your computer is disconnected from the Internet, you can activate later when you are connected. Some products also permit you to activate offline by sending the serial number, request code, and registration data to Autodesk over the Web or by email. For more information on activation, go to [Autodesk Licensing](#) and select the FAQ link.

## Create Deployment

### Administrative Image

This is a customized set of installation files created by the deployment process. It is used to install a consistent configuration of programs on each computer. Other settings:

- **Administrative image path.** Specify a shared network location where you have Full Control permissions. Users will go to this path to install the programs.
- **Target platform.** Select either 32-bit or 64-bit to match the operating system of the computers that will use the deployment.
- **Include only products required by this deployment configuration.** If selected, the deployment cannot be modified in the future to include additional products. If unselected, the administrative image will include all possible products, and the deployment can be modified in the future in any way.

### Installation Settings

- **Silent mode** runs the installation in background, without user input.  
**IMPORTANT** In silent mode, the user's computer can restart automatically and without warning when the installation is complete.
- A **log file** records installation data for each computer.
- A **network log file** keeps a central record of installation data for all computers that run the deployment. It has the same name as your deployment, and must reside in a shared folder where users have Change permissions, so that their computers can write to the log file.

# Frequently Asked Questions

For advice and assistance with topics not covered here, go to [Autodesk Support](#), click your product name, and search in the Knowledgebase for your product.

## What if I have lost my serial number or product key?

Check your product packaging or purchase records, if available, or contact [Autodesk Customer Service](#) for assistance.

## Why do I need to activate a product after installation?

Activation verifies for Autodesk and for you as a license holder that your Autodesk product is installed on an eligible computer. The activation process improves license security and management. For example, it ensures that a multi-seat license is not in use by more than the authorized number of users.

## Can I install Autodesk products from a website?

Several Autodesk websites are being set up to support product downloads, including Subscription, Education, eStore, My Account, and the Trial site. On each site where downloads have been implemented, you have a choice of several download methods to suit different requirements. If you want to install products directly on your computer, you can use a Web Installer. If you want to download the files to install products later, or to create a deployment, you can use Download Manager, or Browser Download. More details are provided on the download websites.

## How does a trial license work in a product suite or bundle?

A single trial period, usually 30 days, applies to all Autodesk products in the suite or bundle. When the first product is started, the trial period begins for all products. If the user does not activate one of the products before the trial period ends, access to all of the products is denied. After the trial period ends, the user can restore access to the products by entering an activation code.

## How do I switch my license from stand-alone to network or network to stand-alone?

If you simply entered the wrong license type by mistake, and are still running the installer, use the Back button to return to the Product Information dialog, and change the license type.

If you want to change the license type for an installed product, contact your Autodesk reseller or license supplier to obtain the new license and serial number. Then uninstall your product and run a new install to change the license type and enter the new serial number.

## Where can I find product license information after installation?

Select Help menu ► About, or About *[Product Name]*. If your product uses InfoCenter, that is where you can find the Help menu.

## After installation, how can I change product configuration, repair, or uninstall the product?

- 1 Go to the Windows control panel:
  - Windows XP: On the Start menu, click Settings ► Control Panel ► Add or Remove Programs.
  - Windows 7: On the Start menu, click Settings ► Control Panel ► Programs/Uninstall a Program.

- 
- 2 In Windows control panel, click the product name, and then click Change/Remove (Windows XP) or Uninstall/Change (Windows 7). The Installer opens in maintenance mode, and directs you through the process.



# Appendix: Installing Autodesk Maya

# 2

## Installation Information Specific to Autodesk Maya 2013

Certain items are unique to the Autodesk® Maya® install process (in contrast with other Autodesk products). In this chapter, learn how to install the 32-bit version of Maya on a 64-bit machine, and how to install a local copy of the Maya Help.

This chapter also includes information on installing and uninstalling Autodesk Maya for Mac OS X and Linux.

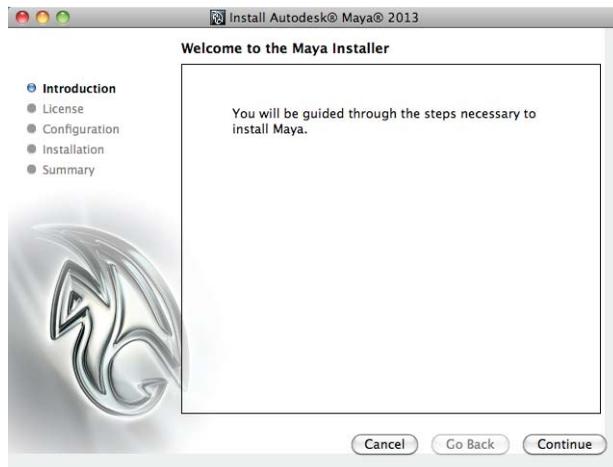
## Installing a 32-bit Product on a 64-bit Operating System

You can manually override the installer's default behavior, which automatically installs the 64-bit product on a 64-bit computer. For a stand-alone installation, navigate to the root directory of the install media, and launch the 32-bit installer, which has a file name of Setup\_32.exe or similar. For a deployment, you can select the 64-bit target platform, and specify the 32-bit version of a product.

# Install Maya on Mac OS X

## To install Maya on Mac OS X

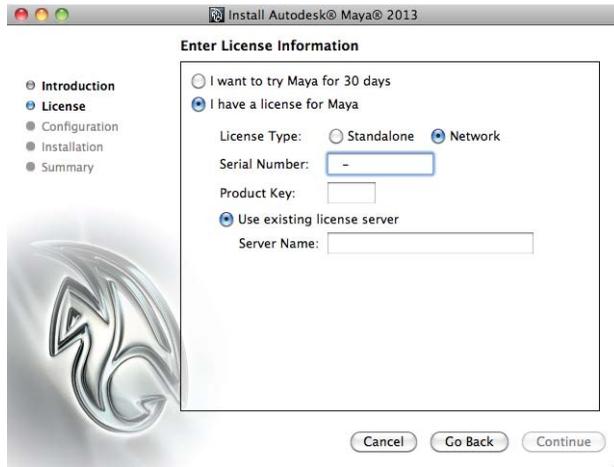
- 1 Do one of the following to launch the installer:
  - If you are installing from a DVD, insert the DVD into your drive, then double-click the Maya DVD icon that appears on your desktop. Navigate to the Maya/Mac OS X folder on the DVD drive.
  - If you are installing from a download package, double-click the Maya .dmg.
- 2 In the Finder window, double-click the Install Maya 2013 program. The Maya Installer starts.



- 3 Follow the instructions in the Maya Installer to install the product. For example, in the **License** window, do the following:
  - Enter your 11-digit serial number.
  - Enter your **Product Key**.
  - Select your License type: **Standalone** or **Network**.  
If you select the **Network** license type, click **Use existing license server** and enter your license server name in the **Server Name** field. Contact your network administrator to find your license server name. If you have access to the license server machine, you can also find its name by opening a Terminal window (**Applications > Utilities > Terminal**) and typing:

hostname <enter>

■ Click **Continue**.



4 In the final window that confirms a successful installation, click **Done**.



By default, Maya is installed in the following directory:  
/Applications/Autodesk/maya2013/.

**NOTE** As indicated in the final installer screen, the Maya Help is Internet-based. When you press F1 or select **Help > Maya Help**, the Help launches from an Autodesk web server. If you do not have reliable Internet access, you can download a copy of the Help from [www.autodesk.com/maya-helpdownload-enu](http://www.autodesk.com/maya-helpdownload-enu).

## Install Maya on Linux

This section provides detailed information on installing Maya on Linux.

### Install Maya on Linux using the installation wizard

#### To install Maya on Linux

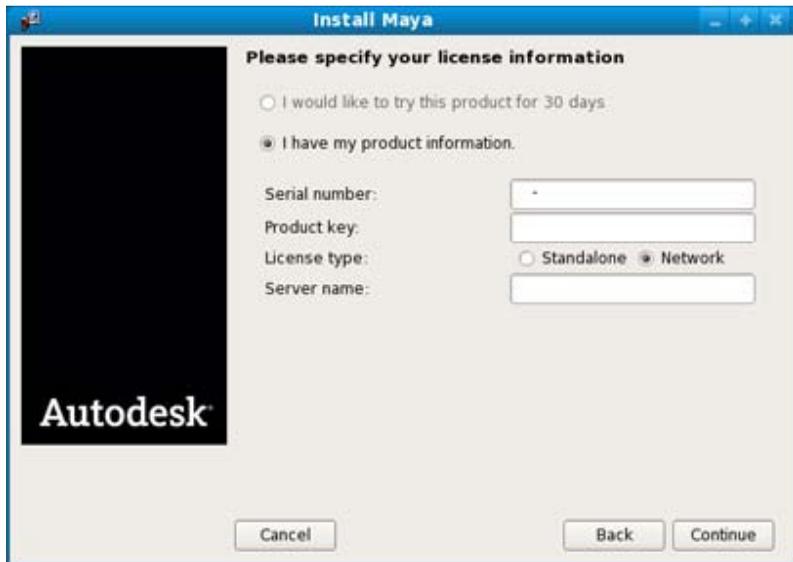
- 1 Do one of the following to start the Maya install:
  - If you are installing from a DVD or USB, insert the install media into your drive.
  - If you are installing from a download package, extract the Maya packages from the compressed file.
- 2 Open a shell as a super user (using `su -`) and navigate to the directory where you extracted the packages.

**NOTE** Recent Linux distributions may require a full super user environment to run the installer as root. You can use `su -` to obtain the proper level. (Note the trailing dash.)

- 3 Type `./setup` and press Enter.  
This starts the Maya Installer.



- 4 Follow the instructions in the Maya Installer to install the product.  
For example, in the **License information** window, do the following:
  - Enter your 11-digit serial number.
  - Enter your **Product key**.
  - Select your License type: **Standalone** or **Network**.  
If you select the Network license type, enter your license server name in the Server name field that appears. Contact your network administrator to find your license server name.
  - Click **Continue**.



- 5 In the final window that confirms a successful installation, click **Done**.  
By default, Maya is installed in the following directory:  
`/usr/autodesk/maya2013-x64.`

**NOTE** The Maya Help is now Internet-based. When you press F1 or select **Help > Maya Help**, the Help launches from an Autodesk web server. If you do not have reliable Internet access, you can download a copy of the Help from [www.autodesk.com/maya-helpdownload-enu](http://www.autodesk.com/maya-helpdownload-enu).

## Install Maya on Linux using the rpm utility

With the rpm command line utility, you can use either the `-i` flag or the `-ivh` flag to install the programs. The `-ivh` flag provides you with more information during the installation.

### To install Maya on Linux using the rpm utility

- 1 Open a shell as a super user (using `su -`).
- 2 Do one of the following:
  - Insert the install media (DVD or USB) and mount the drive. For example, type: `mount -r /dev/dvd /mnt/dvd.`

- Extract the Maya packages from the compressed file you downloaded, then change to the directory where you extracted the Maya packages.

3 Use the `ls` command to list the packages.

The packages you see will be similar to the following, where # indicates the specific package numbers.

Package name	Description	Required
Maya2013_0_64-2013.0-#.x86_64.rpm	Maya for Linux	Yes
adlmapps5-5.#.x86_64.rpm	Autodesk licensing	Yes
adlmflexnetclient-5.#.x86_64.rpm	Autodesk stand-alone licensing	Only for stand-alone licensing (Not required if you use network licensing)
adlmflexnetserver-5.#.x86_64.rpm	License server tools (for network licensing)	No
Composite_2013-2013.0-#.x86_64.rpm	Composite	No
backburner.sw.base-2013-#.i386.rpm	Autodesk Backburner	No
backburner_webmonitor.sw.base-2013-#.i386.rpm	Autodesk Backburner web monitor	No
autodesk.backburner.monitor-2013.0.0-#.i386.rpm	Autodesk Backburner monitor	No
MatchMover2013_0_64-2013.0-#.x86_64.rpm	MatchMover	No

- 4 To install the required software, enter either of the following commands (where # indicates the specific package numbers), depending on whether you are installing Maya on a computer with Mudbox already installed:

- To install Maya alone, enter:

```
rpm -ivh Maya2013_0_64-2013.0-#.x86_64.rpm
adlmapps5-5.#.x86_64.rpm
adlmflexnetclient-5.#.x86_64.rpm
```

- To install Maya with Mudbox, enter:

```
rpm -ivh --force Maya2013_0_64-2013.0-#.x86_64.rpm
adlmapps5-5.#.x86_64.rpm
adlmflexnetclient-5.#.x86_64.rpm
```

Maya 2013 adds the required libXm.so.3 library to the Maya lib directory as part of its standard install, so installing the openMotif runtime rpm is not required.

- 5 Look for a file named libGL.so in the /usr/lib/ or /usr/X11R6/lib directory to verify that OpenGL is installed.

**NOTE** /usr/lib is normally 32-bit on Red Hat, Fedora, and SuSE distributions, but may be 64-bit for Ubuntu and Debian distributions. Some distributions include the system OpenGL driver mesa-GL, which is not ideal for running Maya. Maya is a 64-bit application and requires a 64-bit OpenGL 3D-accelerated driver for best performance.

**TIP** To easily check which OpenGL driver is installed, use the glxinfo program to list the top portion of the output, then look for the driver and renderer strings. For example:

```
glxinfo | less
```

- 6 (Optional) For information on installing the Maya documentation package, see [Install the Maya Help](#) (page 29).

By default, the Maya Help is Internet-based, so launching the Help within Maya calls an Autodesk web server to display the documentation.

- 7 Run the following command to set whether you are using a network or a stand-alone license:

```
/usr/autodesk/maya2013-x64/bin/licensechooser
/usr/autodesk/maya2013-x64/ <licenseType> unlimited
```

where you specify standalone or network for <licenseType>.

This updates the `license.env` file (used by the Autodesk licensing software) with your license type information.

- 8 Add `/opt/Autodesk/Adlm/R5/lib64/` to `LD_LIBRARY_PATH` to set your shared libraries for this session.

For example, you can run the following command in a BASH shell:

```
export LD_LIBRARY_PATH=/opt/Autodesk/Adlm/R5/lib64/
```

- 9 Run the following commands to register Maya with the Autodesk licensing software, where `<productKey1>` and `<productKey2>` are your product keys, and `<serialNum>` is your serial number.

#### NOTE

If you purchased Maya as part of a suite, enter your Maya product key as `productKey1`, and your suite product key as `productKey2`.

If you purchased Maya alone and received only one product key, you can enter the Maya product key for both `<productKey1>` and `<productKey2>`.

#### ■ (Stand-alone licensing)

```
/usr/autodesk/maya2013-x64/bin/adlmreg -i S  
<productKey1> <productKey2> 2013.0.0.F <serialNum>  
/var/opt/Autodesk/Adlm/Maya2013/MayaConfig.pit
```

#### ■ (Network licensing)

```
/usr/autodesk/maya2013-x64/bin/adlmreg -i N  
<productKey1> <productKey2> 2013.0.0.F <serialNum>  
/var/opt/Autodesk/Adlm/Maya2013/MayaConfig.pit
```

For example:

```
/usr/autodesk/maya2013-x64/bin/adlmreg -i S 657E1 657E1  
  
2013.0.0.F 000-00000000  
/var/opt/Autodesk/Adlm/Maya2013/MayaConfig.pit
```

This step updates the product information `.pit` file, which you can copy to other machines that have the same configuration if you are installing many instances of Maya.

These commands return a `Registration succeeded` message, and you can now run Maya using your stand-alone or network license.

## Additional Linux notes

This section provides information for configuring Maya to run on Linux, describes differences between Maya for Linux and other versions of Maya, and provides other information specific to using Maya on the Linux operating system. For complete information on limitations and possible workarounds, also refer to the Maya Release Notes, available at [www.autodesk.com/maya-readme-2013-enu](http://www.autodesk.com/maya-readme-2013-enu).

### Compiling plug-ins and standalone programs

To compile plug-ins and standalone applications for Maya 2013 on Linux, use the released gcc 4.1.2 compiler. Maya has been compiled with this compiler under CentOS 6.0 WS.

In addition, Maya uses some component libraries that may already exist on your system (for example, Qt, Python, OpenAL, Intel TBB, MKL, Cg). These libraries are installed in the `/lib` directory under your Maya installation directory, and should not interfere with the normal operation of your Linux system. In some cases, your system may include newer versions of these libraries, which may or may not be compatible with Maya.

---

**NOTE** Maya requires its own versions of the Qt libraries to run properly.

---

For more information, see the API Guide at [www.autodesk.com/maya-sdkdoc-2013-enu](http://www.autodesk.com/maya-sdkdoc-2013-enu).

### Installing additional required packages and fonts

On Linux, especially on Fedora systems, not all system libraries required to run Maya are included in the default installation of the operating system. You can use `yum` to find any additional system-dependent library packages and get the required runtime libraries.

For example, to install some of the following dependent libraries, you can execute the following commands:

- `yum install mesa-libGLw`
- `yum install libXp`
- `yum install gamin audiofile audiofile-devel e2fsprogs-libs`

### Dependent OpenGL libraries (vendor Nvidia/AMD supplied)

- `libGL.so` from Nvidia/AMD 3rd party library

- libGLw.so.1 from mesa-libGLw

### Dependent X Windows libraries

- libXp.so.6 from package libXp
- libXmu.so.6 from package libXmu
- libXpm.so.4 from package libXp
- libXt.so.6 from package libXt
- libXi.so.6 from package libXi
- libXext.so.6 from package libXext
- libX11.so.6 from package libX11
- libXinerama.so.1 from package libinerama
- libXau.so.6 from package libXau
- libxcb.so.1 from package libxcb

### Dependent System libraries

- libfam.so.0 from package gamin
- libaudiofile.so.0 from package audiofile
- libaudiofile.so from package audiofile-devel
- libuuid.so.1 from package e2fsprogs-libs
- libpthread.so.0
- libc.so.6
- libdl.so.2
- libz.so.1
- librt.so.1
- libSM.so.6
- libICE.so.6
- libutil.so.1
- libssl.so.6
- libcrypto.so.6

---

**IMPORTANT** Note the following additional information on libssl.so.6 and libcrypto.so.6.

---

libssl.so.x and libcrypto.so.x are versions of the OpenSSL library that ship with RHEL. The version number for the required system libraries depends on your Linux distribution. For example, Fedora 14 uses libcrypto.so.10 and libssl.so.10.

RHEL 6 and CentOS 6 provide a compatibility package for libssl.so.6 and libcrypto.so.6. Install this package before installing Maya.

```
yum install openssl098e-0.9.8e
```

The Maya installer checks to see if there are existing system library versions, and if so, automatically creates the symbolic links in the Maya `lib` directory. In some cases, for example if you are running Maya from a network server, this process cannot be done automatically.

If the system versions of the library exist, use them.

```
su
cd /usr/autodesk/maya2013-x64/lib
ln -s /usr/lib64/libssl.so.10 libssl.so.6
ln -s /lib64/libcrypto.so.10 libcrypto.so.6
```

If there are no versions of libssl.so and libcrypto.so on the system, as a last resort you can use the files located in `/usr/autodesk/maya2013-x64/support/openssl/`.

If you need to use the files found in the support directory, copy the files to the Maya `lib` directory with the following names:

```
su
cd /usr/autodesk/maya2013-x64/lib
cp ../support/openssl/libssl.so.6 libssl.so.6
cp ../support/openssl/libcrypto.so.6 libcrypto.so.6
cp ../support/openssl/libcrypto.so.6 libcrypto.so.0.9.8
```

### Dependent applications

- `tcsh`

This is a command language interpreter application. Run the command

```
yum install tcsh
```

 to install.

### Dependent 32-bit Backburner monitor libraries

- `php`
- `elfutils-libelf`
- `glibc`
- `libgcc`

- libstdc++
- httpd

To ensure that you install the required 32-bit version of these libraries, run the following commands to install:

**(RHEL 6.x/CentOS 6.0/Fedora 14)**

```
yum install elfutils-libelf.i586 glibc.i686  
libstdc++.i586 httpd php
```

## Fonts

Maya also uses some fonts that may not be installed by default. Execute the following to install these fonts:

```
yum install xorg-x11-fonts-ISO8859-1-100dpi  
yum install xorg-x11-fonts-ISO8859-1-75dpi  
yum install liberation-mono-fonts liberation-fonts-common  
liberation-sans-fonts liberation-serif-fonts
```

## Differences in operation

When installed on a Linux system, Maya works in much the same way as when installed on Windows.

## Unsupported Maya features

- Some of the features in the Windows version are not currently supported. These include output to AVI or SGI movie formats. Please refer to refer to the Maya Release Notes, available at [www.autodesk.com/maya-readme-2013-enu](http://www.autodesk.com/maya-readme-2013-enu) for more information.
- You can install most Autodesk products for a trial period of 30 days to evaluate the product. The 30 day trial for Maya is not available for the Linux platform.

## Linux desktop configuration

To use Maya on Linux, certain default keyboard and mouse bindings must be changed from the factory settings. These default bindings prevent commands from being received by Maya, such as the ones that let you tumble or pan a view in a panel.

Different Linux window managers have different key bindings and different procedures for setting them. Linux systems are highly customizable, and many

combinations of Linux system components are possible for use with Maya—more than can be described (or tested) by Autodesk.

The following instructions give the procedures necessary for changing the most common configurations.

### **KDE and Gnome desktop configuration**

For Maya to work properly with KDE and Gnome, some modifications should be made to the mouse control. The default bindings of the Alt key and mouse buttons do not work well with Maya. Maya 2013 adds support to use the Meta (Windows) key to act as the Alt key for tumbling. If you want to use the Alt+mouse buttons for scene tumbling, ensure the bindings do not conflict.

Different versions of KDE and Gnome may have different methods of selecting the key bindings. See the KDE and Gnome documentation for instructions if the following steps don't work for your particular window manager.

#### **KDE under Red Hat**

- 1 Open the KDE Control Center.
  - 2 Select Desktop and then select Window Behavior.
  - 3 Do one of the following:
    - (Red Hat Enterprise Linux WS 6.x) Open the Actions tab.
    - (Fedora 14) Open the Window Actions tab.
  - 4 In the following section:
    - (Red Hat Enterprise Linux WS 6.x) Inner Window, Titlebar & Frame
    - (Fedora 14) Interactive Inner Window, Inner Window, Titlebar & Frame
- For modifier key Meta, set all mouse action combinations to Nothing.
- 5 Click Apply and close the Control Center.

#### **Gnome under Red Hat**

- 1 Open the Gnome Panel.
- 2 Do one of the following:
  - (Red Hat Enterprise Linux WS 6.x) Select Applications, then Preferences and then select Windows.
  - (Fedora 14) Select System, then Preferences and then select Windows.

- 3 In the Window Preferences dialog box, set the “To move a window...” key to Super.  
(Setting either Control or Alt here can cause problems when using Maya.)
- 4 Click Close.

## Optimize the Maya Hotbox and marking menus on Linux

Modifications to operating system and window manager settings are recommended to optimize the performance of Maya’s hotbox and marking menus on Linux systems.

There are three display methods that the hotbox and marking menus can use: RGB Overlay, X Compositing, and Internal Software Compositing.

In general, you should try using RGB Overlay and X Compositing to see which method works best in practice. The Internal Software Compositing method is the slowest method and should be avoided if possible.

Certain limiting factors may determine which method you can use:

### ■ **RGB Overlay**

Use this method if you intend to use the Stereo feature in Maya. Do not use this method with AMD graphics cards.

### ■ **X Compositing**

Use this method with AMD graphics cards (the Linux drivers with AMD graphics do not support RGB Overlay).

### ■ **Internal Software Compositing**

Only use this method if both RGB Overlay and X Compositing Mode are unsuitable. This is the Maya default.

## Using RGB Overlay

The RGB Overlay method uses the hardware RGB overlay to display the hotbox and marking menu. This method removes flickering that occurs with Internal Software Compositing.

### To turn on RGB Overlay

- 1 Open the `/etc/X11/xorg.conf` file.
- 2 Replace the "CIOverlay" option (Color Index Overlay) as follows:

```
Section "Device"
    Option "Overlay" "on"
EndSection
```

OR

```
Section "Screen"
    Option "Overlay" "on"
EndSection
```

- 3 Turn off X Compositing as follows:

```
Section "Extensions"
    Option "Composite" "false"
EndSection
```

- 4 Save the `xorg.conf` file.

## Using X Compositing

To use the X Compositing method, the X Composite Extension must be enabled, and your window manager must have compositing enabled. This method removes flickering that occurs with Internal Software Compositing.

### To turn on X Compositing

**NOTE** X Compositing is turned on by default on Red Hat 6 and Fedora 14 systems, so you do not have to modify the `xorg.conf` file.

- 1 Open the `/etc/X11/xorg.conf` file.
- 2 Turn on X Compositing as follows:

```
Section "Extensions"
    Option "Composite" "true"
EndSection
```

- 3 Save the `xorg.conf` file.

## To turn on window manager compositing

The following table outlines how to turn on window manager compositing.

Window Manager	To turn on compositing...
KDE	Select <b>System Settings &gt; Desktop Effects</b> , and under <b>Activation</b> , turn on <b>Enable desktop effects at startup</b> .
Metacity	Open the <b>Configuration Editor</b> , then go to <b>Metacity &gt; General</b> , and turn on <b>compositing_manager</b> .
Others	Consult the window manager's Help for information.

## Using Internal Software Compositing

Internal Software Compositing takes a screen shot and draws the hotbox and marking menus on top of that image to simulate the transparency.

This is a fallback method and should only be used if RGB Overlay and X Compositing methods are not suitable. You may find this method is slow and is likely to cause flickering when the hotbox or marking menu disappears from the screen.

## Other Recommended Settings

### Focus Settings

To further improve interaction with the hotbox and marking menus in Maya, use the following focus policy settings for the window manager you are using.

Window Manager	Recommended setting
KDE	<ul style="list-style-type: none"><li>■ Use the Focus follows the Mouse Pointer policy.</li><li>■ Turn off Click raises active window.</li><li>■ For Inactive Inner Window, set Activate &amp; Pass Click for LMB, MMB and RMB.</li></ul>

---

## Window Manager

## Recommended setting

Metacity (with Gnome)

- Set `focus_mode` to `sloppy`.
- Set `raise_on_click` to `false`.

## Environment Variables

The following adjustments to Maya environment variables are also recommended to improve interaction with the hotbox.

In your `Maya.env` file, set the following:

- `MAYA_SET_PARENT_HINT=0`

Controls the automatic parenting of windows, where setting it to 0 disables the default parenting. (The behavior is similar to Maya 2010 on Linux systems.)

- `MAYA_HBFreeFocus=1`

When set to 1, does not force the focus back to the window that had focus prior to the hotbox appearing on screen. (This is an additional control when `MAYA_SET_PARENT_HINT=0` is set on Linux systems.)

- `MAYA_HBFreeRaise=1`

When set to 1, does not force the previously focused window to be raised when the hotbox disappears from screen. (This is an additional control when `MAYA_SET_PARENT_HINT=0` is set on Linux systems.)

# Uninstall Maya on Mac OS X or Linux

## To uninstall Maya on Mac OS X

- 1 Navigate to the Maya directory (by default, `/Applications/Autodesk/Maya2013/`).
- 2 Drag the `Maya2013` application to the trash.
- 3 Open a Terminal window and execute both of the following commands, where `<productKey>` is your product key:

```
adlmreg -u S <productKey> 2013.0.0.F
adlmreg -u N <productKey> 2013.0.0.F
```

This ensures that product information is properly removed from the `ProductInformation.pit` file.

## To uninstall Maya on Linux

To uninstall Maya on Linux you can use the rpm utility.

- 1 Open a shell as a super user.
- 2 Add `/opt/Autodesk/Adlm/R4/lib64/` to `LD_LIBRARY_PATH` to set your shared libraries for this session.

For example, by running the following command: `export LD_LIBRARY_PATH=/opt/Autodesk/Adlm/R4/lib64/`

- 3 Run both of the following commands, where `<productKey>` is your product key:

```
/usr/autodesk/Maya2013-x64/bin/adlmreg -u S  
<productKey> 2013.0.0.F
```

```
/usr/autodesk/Maya2013-x64/bin/adlmreg -u N  
<productKey> 2013.0.0.F
```

- 4 List the installed package names by entering:

```
rpm -qa |egrep 'adlm|Maya'
```

- 5 Identify each package name you want to uninstall. For example, the `Maya2013_#` package (where # is the package number).

- 6 Uninstall each package using the following command:

```
rpm -e PackageName
```

## Install the Maya Help

By default, your installed version of Maya 2013 launches the Help from the Autodesk.com Web site. You can download and install a copy of the Maya 2013 Help using the following instructions.

### Prepare to install the Maya Help

Before you install the Maya Help, ensure that you have done the following:

- Install Maya 2013.
- Download the Autodesk Maya 2013 English Documentation installer for your platform from [www.autodesk.com/maya-help/download-enu](http://www.autodesk.com/maya-help/download-enu).

This file installs Maya Help for 32-bit and 64-bit systems.

## Install Maya Help on Windows

This section describes how to install a local version of the Maya Help on your system. You can also install the Maya Help on a shared location such as an internal network or web server. See [Install the Maya Help on a shared location](#) (page 32).

- 1 Double-click the Autodesk Maya 2013 English Documentation executable file.

The installation wizard appears.

- 2 Extract the Help files to a temporary directory, then click **Next**.  
These files are automatically removed from your system after the installation completes.

- 3 Follow the instructions in the installation wizard.

By default, the Maya Help is installed in the following directory:

- *C:\Program Files\Autodesk\Maya2013\docs\Maya2013\en\_US* on Windows 32-bit systems.
- *C:\Program Files(x86)\Autodesk\Maya2013\docs\Maya2013\en\_US* on Windows 64-bit systems.

You can change the install location of the `docs` directory during the installation if necessary.

- 4 Start Maya.
- 5 In Maya, open the Help preferences window by selecting **Window > Settings/Preferences > Preferences**.  
The **Preferences** window appears.
- 6 Under **Categories**, click **Help**.
- 7 In the **Help Location** section, select **Installed Local Help**.
- 8 Click **Save** and exit the **Preferences** window.

The Maya 2013 Help is now available from the **Help**, F1, and context sensitive help menus.

## Install Maya Help on Mac OS X

- 1 Double-click the Autodesk Maya 2013 English Documentation .dmg.  
The Maya English Documentation disk image mounts on the desktop.
- 2 Double-click the disk image.  
A Finder window opens.

- 3 Double-click the Install Maya 2013 Documentation icon.  
The installation wizard appears.
- 4 Follow the instructions in the installation wizard.  
By default, the Maya Help is installed in the following directory:  
*/Applications/Autodesk/maya2013/docs/Maya2013/en\_US*.  
You cannot change the install location of the `docs` directory.
- 5 Start Maya.
- 6 In Maya, open the Help preferences window by selecting **Window > Settings/Preferences > Preferences**.  
The **Preferences** window appears.
- 7 Under **Categories**, click **Help**.
- 8 In the **Help Location** section, select **Installed Local Help**.
- 9 Click **Save** and exit the **Preferences** window.  
The Maya 2013 Help is now available from the **Help**, F1, and context sensitive help menus.

## Install Maya Help on Linux

This section describes how to install a local version of the Maya Help on your system. You can also install the Maya Help on a shared location such as an internal network or web server. See [Install the Maya Help on a shared location](#) (page 32).

- 1 Extract the Maya Help package from the compressed files you downloaded.
- 2 Open a shell as a super user (using `su -`) and navigate to the directory where you extracted the packages.
- 3 Type `./setup` and press Enter.  
The installation wizard appears.
- 4 Follow the instructions in the installation wizard.  
By default, the Maya Help is installed in the following directory:  
*/usr/autodesk/maya2013-x64/docs/Maya2013/en\_US*.  
You can change the install location of the `docs` directory during the installation if necessary.
- 5 Start Maya.
- 6 In Maya, open the Help preferences window by selecting **Window > Settings/Preferences > Preferences**.

The **Preferences** window appears.

- 7 Under **Categories**, click **Help**.
- 8 In the **Help Location** section, select **Installed Local Help**.
- 9 Click **Save** and exit the **Preferences** window.

The Maya 2013 Help is now available from the **Help**, F1, and context sensitive help menus.

## Install Maya Help on a shared location

On Windows and Linux platforms, you can install the Maya Help to a shared location, such as internal network or web server, so that it can be accessed by multiple users. You can then set the Maya Help preferences on individual systems to access Help from this location.

---

**NOTE** On the Mac OS X systems, you can only install the Maya Help to the default directory. To use the Maya Help from a shared location, you must copy the `docs` directory to a shared location. Individual systems can then set their Help preferences so they access Help from this location.

---

When choosing a shared location, ensure that the directory path to the Maya Help does the following:

- Points directly to the Help location. For example,  
`\\CompanyServer\SharedLocation\MayaHelp\docs\Maya2013\en_US`.  
Do not use an alias path.
- Points to the directory containing the `index.html` file. For example, the path pointing to the English Maya Help ends at the `\en_US` directory.
- Uses either `http` or `https` protocol for a web server location.

## To install Maya Help to a shared location

- 1 Extract the Maya Help files for your platform and start the installation wizard as described in steps 1 and 2 of the Maya Help installation instructions.  
See [Install the Maya Help on Windows](#) (page 30) and [Install the Maya Help on Linux](#) (page 31).
- 2 During the installation when asked to confirm the destination folder for the Help install, depending on your platform, click **Change** (Windows) or **Browse** (Linux), then specify a shared location for the Help.  
Individual systems can then set their Help preferences so they access Help from this location.

## To set Help preferences for a shared location

- 1 Start Maya.
- 2 In Maya, open the Help preferences window by selecting **Window > Settings/Preferences > Preferences**.  
The **Preferences** window appears.
- 3 Under **Categories**, click **Help**.
- 4 In the **Help Location** section, select **Custom**, and then click the  icon to browse to the shared location of the Maya Help, or type the directory of http path directly in the **Custom** field.
- 5 Click **Save** and exit the **Preferences** window.  
The Maya 2013 Help is now available from the shared location.

# Install MatchMover, Composite, Backburner, and DirectConnect

The Maya installer gives you the option of installing Maya Composite, Autodesk® MatchMover™ camera tracker, Autodesk® Backburner™ network render queue manager, and Autodesk® DirectConnect. You do not need a separate license to install and run these applications.

---

**NOTE** You must install Maya if you want to install and run MatchMover or Composite. You can install and run Backburner without Maya.

---

## Install mental ray for Maya satellite

### Overview of mental ray (satellite)

mental ray for Maya supports a different form of network rendering: mental ray satellite rendering. The new network rendering capability, based on mental ray satellite technology, allows you to install a version of mental ray (satellite) on any networked computer. This special version of mental ray resides on that machine and waits for rendering tasks from Maya. It supplements the mental ray rendering capabilities in Maya with the additional rendering power provided by the networked computers' CPUs.

A mental ray distributed rendering can speed up all of the following tasks:

- interactive rendering (through the Maya interface)
- IPR rendering with mental ray for Maya
- interactive batch rendering (a batch render started by Maya)
- command-line rendering

The rendering process is typically initiated from the master machine (the machine running Maya or where the command-line render starts from). The slave machines (satellite rendering computers) process rendering tasks they receive over the network from the master and send back results. The master machine handles task distribution, load balancing, and the collection of received rendering tasks which make up the rendered image.

For more information about mental ray satellite, including how to set up the rayhosts file to get and receive data from Maya, see the **Maya Help**. In the **Maya Help**, navigate to **User Guide > Rendering and Render Setup > mental ray Rendering > mental ray for Maya Rendering > Network rendering using mental ray for Maya**.

Setting up the rayhosts file is required for mental ray for Maya satellite rendering to work.

## Slave machine installation

The special version of mental ray standalone with satellite rendering technology must be installed on all slave machines. The satellite-enabled versions of mental ray for Windows, Mac OS X, and Linux are included with this release of Maya on the Maya DVD.

### (Windows) To install mental ray standalone with satellite licensing

- 1 On each slave machine, begin the installation process by inserting the Maya DVD, opening the mental ray satellite folder and the platform-specific Windows folder, and double-clicking the mental ray standalone installer.

The installer appears.

- 2 Follow the installation steps.

During the installation, you can click **Custom** to change the installation directory. The default installation directory is:

```
C:\Program
Files\Autodesk\mrsat3.10.1-maya2013
```

### (Mac OS X) To install mental ray standalone with satellite licensing

- 1 On each slave machine, begin the installation process by inserting the Maya DVD, opening the mental ray satellite folder and double-clicking the mental ray standalone installer.
- 2 Follow the installation steps.  
During the installation, you can change the installation directory. The default installation directory is:

```
/Applications/Autodesk/mrsat3.10.1-maya2013
```

### (Linux) To install mental ray standalone with satellite licensing using rpm

- 1 Log in as root.
- 2 On each slave machine, begin the installation process by inserting the Maya DVD.
- 3 Mount the DVD drive, if necessary. For example, type:

```
mount
-r /dev/dvd /mnt/dvd
```

- 4 Open the mental ray satellite directory, go to the Linux directory, and enter the following command (where # is the specific package number):

```
rpm -ivh mentalraySatellite3.10.1_maya2013-3.10-#.x86_64.rpm
```

**NOTE** 64-bit Windows releases of mental ray for Maya satellite use the same port and service name as the 32-bit version. You will run into problems if you install both the 32-bit and the 64-bit versions on a 64-bit system. There is only one service entry/xinetd config, so installing a 64-bit package after the 32-bit (or the other way around) leaves only the last installed version working.

## Slave machine additional setup

Once this version of mental ray is installed and running, a service on the machine (the Ray Sat server) waits for rendering tasks from mental ray for Maya on the master machine. The satellite-enabled version of mental ray does not require its own licensing; it is activated through Maya's licensing.

On the slave machine, the Ray Sat server (service name: mental ray Satellite 3.10.1 for Maya 2013) must be running. To verify that it is running on Windows, follow this procedure.

### To verify that Ray Sat server is running (Windows)

- 1 Open a Windows command prompt.
- 2 Navigate to the `bin` directory of the mental ray satellite standalone. By default this is `C:\Program Files\Autodesk\mrsat3.10.1-maya2013\bin\`.
- 3 Type the following:

```
raysat2013server  
/query
```

A message should be returned that the RaySat2013 Server service is running.

If you do not get this message, make sure that RaySat2013 Server has been installed as a service, and start it from the **Services Control Panel (Settings > Control Panel > Administrative Options > Services)** or type the following:

```
raysat2013server  
/start
```

## Slave machine port setup

On the slave machine, port number 7413 is set by default. This works well in the majority of cases and you won't need to change the port number.

If you want to change the port number that mental ray satellite uses to a value other than 7413, you must edit the services file. The port value would be determined by your network administrator (a free TCP/IP port).

### To change the port number (Windows, Linux)

- 1 Edit the services file with a text editor.  
The services file is located at:
  - (Windows XP) `C:\Windows\system32\drivers\etc\services`
  - (Linux) `/etc/services`
- 2 Change the number in the following line (here, 7413) to the desired port number:

```
mi-raysat2013
7413/tcp
```

### To change the port number (Mac OS X 10.4, Tiger)

- 1 Log in as superuser (`sudo -s`).
- 2 Open the file `/etc/services` using your preferred text editor.
- 3 Edit the line: `mi-raysat2013 7413/tcp`.
- 4 Save the file.
- 5 From the **Finder** menu, select **Go > Applications** and then double-click the **Utilities** folder.
- 6 Double-click the NetInfo Manager icon.
- 7 Under the Services directory of the NetInfo database, find and select the appropriate service (mental ray Satellite 3.10.1 for Maya 2013).
- 8 Click the lock icon at the bottom of the panel and then enter your administrator user name and password. This allows you to unlock the NetInfo database and make changes.
- 9 Select the port field and change its value to the desired port number.
- 10 Click the lock icon again when you're done.
- 11 From the **Finder** menu, select **Domain > Save Changes** to commit your changes to the NetInfo database.
- 12 Reboot your machine.

### To change the port number (Mac OS X 10.5, Leopard)

- 1 Log in as superuser (`sudo -s`).
- 2 Open the file `/etc/services` using your preferred text editor.
- 3 Edit the line: `mi-raysat2013 7413/tcp`.
- 4 Save the file.
- 5 Open a Terminal window and do the following:

```
sudo
/usr/bin/dscl . -change /Services/mi-raysat2013port
<currentportnumber>
<newportnumber>
```

For example:

```
sudo
/usr/bin/dscl . -change /Services/mi-raysat2013 port
7109 7413
```

**NOTE** To determine the port you're currently using, in a Terminal window, type: `/bin/dscl . -read /Services/mi-raysat2013`

- 6 Reboot your machine.

## Licensing of satellite rendering

For standalone licenses, the use of mental ray for Maya with satellite can only be initiated from the specified host for which you received your Maya key. The workstation can distribute mental ray for Maya rendering to up to four slave CPUs.

For networked licenses, use of the functionality is slightly more flexible. For networked license setups, the license running Maya and the license running mental ray for Maya can be logged out separately, allowing certain rendering tasks to be initiated remotely.

There are two possible cases when using mental ray for Maya with networked licenses:

- (Interactive) With Maya running interactively on a workstation, initiate a mental ray for Maya render (either a single frame in the Render View, Batch render or command line render) on the workstation. The networked mental ray for Maya portion of your license is logged out. This allows the mental ray satellite slaves indicated in your rayhost file to participate in the render.
- (Offline) If you launch a command line mental ray for Maya render, the computer you launched the command from then becomes the master machine for mental ray for Maya satellite rendering.

**NOTE** If you have launched Maya but have not yet rendered with mental ray for Maya since the start of your interactive session, no mental ray for Maya line item from your networked license is checked out. You may therefore start a command line mental ray for Maya render from another host. This checks out the mental ray for Maya portion of the license, making it unavailable for any other workstation, including the workstation of the user who launched Maya.

For more details on mental ray rendering, see the **Rendering** sections of the **Maya Help**, as well as the mental ray reference included with the **Maya Help**.

# Index

## A

- activation
- administrative image

## C

- change license type
- Composite, MatchMover, Backburner, DirectConnect 33
- configuration settings
- custom settings

## D

- distributed license server
- documentation links
- Download Manager

## I

- InfoCenter
- install Maya Help 29
- installation log
- installation process diagram

## K

- Knowledgebase

## L

- languages
- license server models
- license types
  - change
- Linux 11, 29
- log files

## M

- Mac OS X 11, 28
- master machine 34
- mental ray
  - satellite rendering 33
- mental ray for Maya satellite 33

## N

- network license

## O

- operating system selection

## P

- port number
  - changing 36
- product settings

## R

- ray sat server 36
- redundant license server
- repair product

## S

- satellite rendering
  - changing port number 36
  - master 34
  - mental ray 33
  - ray sat server 36
  - slave 34
  - slave machine installation 34
- serial number
- silent mode

single license server  
slave machine 34  
stand-alone license  
suite  
system requirements

## **T**

tools and utilities  
typical settings

## **U**

uninstall Maya 28, 29  
uninstall product

## **W**

web-based installation