

Installation Overview and FAQ

Autodesk [®] Maya [®] 2012

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Installing Autodesk Media & Entertainment Products

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 5) 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 5).

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.

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.

Change Product Language

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:

Product language: English

If the language you want is not available from this control, and if you see the Add Language option on the menu, you can add a language pack.

NOTE The Add Language Pack option is available only to subscription customers.

For deployments, language packs can be included in an administrative image when you initially create a deployment, or when you create a new deployment configuration, but not when you modify a deployment.

To Download a Language Pack

You can obtain language packs from the *Subscription Center* website, as follows:

- 1 On the Select the Products to Install page, click the language drop-down arrow and select Add Language Pack.
- **2** In the Language Pack dialog box, click the Browse button and select the language pack downloaded from the subscription center.

The following rules apply to language selection:

- Only one language can be chosen per installation session. For example, you cannot chose English for one product and German for another product during the same installation.
- 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 modifying a deployment, or creating a new deployment using an existing deployment as a template, you cannot change the language of the deployment.
- If you select a language that is not supported by some products, a default language is chosen.

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.

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 countdown 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 Vista or 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 Vista and 7).

The Installer opens in maintenance mode, and directs you through the process.

Appendix: Installing Autodesk Maya

Installation Information Specific to Autodesk Maya 2012

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/MacOSX 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 2012 program. The Maya Installer starts.

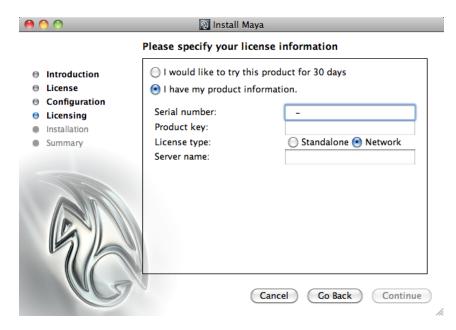


- **3** Follow the instructions in the Maya Installer to install the product. For example, in the **License Configuration** window, do the following:
 - Enter your 11-digit serial number.
 - **■** Enter your **Product key**.
 - Select your License type: **Standalone** or **Network.**If you select the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

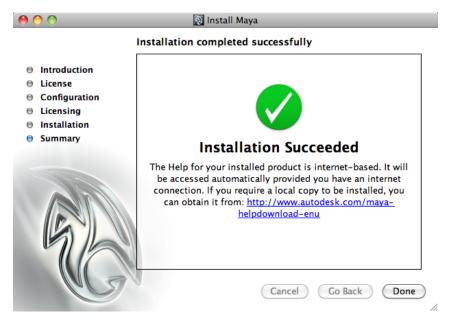
administrator to find your license server name. If you have access to the license server machine, you can also find its name by opening a Terminal window (Applications > Utilities > Terminal) and typing:

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/Maya2012/.

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.

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, insert the DVD 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.

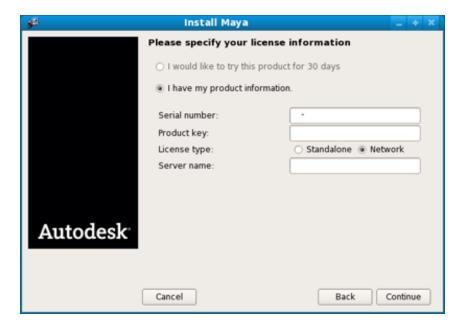


4 Follow the instructions in the Maya Installer to install the product.

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/maya2012-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.

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 Maya DVD into your drive and mount the DVD 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
Maya2012_0_64-2012.0- #.x86_64.rpm	Maya for Linux	Yes
adlmapps4- 4.#.x86_64.rpm	Autodesk licensing	Yes
adlmflexnetclient- 4.#.x86_64.rpm	Autodesk stand-alone li- censing	Only for stand-alone licensing (Not required if you use network licensing)
adlmflexnetserver- 4.#.x86_64.rpm	License server tools (for network licensing)	No
Composite_2012-2012.0- #.x86_64.rpm	Composite	No
backburner.sw.base-2012- #.i386.rpm	Autodesk Backburner	No

Package name	Description	Required
backburner_webmonit- or.sw.base-2012- #.i386.rpm	Autodesk Backburner web monitor	No
autodesk.backburner.mon- itor-2012.0.0-#.i386.rpm	Autodesk Backburner monitor	No
MatchMover2012_0_64- 2012.0-#.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 Maya2012_0_64-2012.0-#.x86_64.rpm
adlmapps4-4.#.x86_64.rpm
adlmflexnetclient-4.#.x86 64.rpm
```

■ To install Maya with Mudbox, enter:

```
rpm -ivh --force Maya2012_0_64-2012.0-#.x86_64.rpm
adlmapps4-4.#.x86_64.rpm
adlmflexnetclient-4.#.x86_64.rpm
```

Maya 2012 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 24).
 - 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/maya2012-x64/bin/licensechooser
/usr/autodesk/maya2012-x64/ censetype> unlimited
```

where you specify standalone or network for < license Type>.

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

8 Add /opt/Autodesk/Adlm/R4/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/R4/lib64/
```

- **9** Run the following commands to register Maya with the Autodesk licensing software, where roductKey1> and cproductKey2> are your product keys, and <serialNum> is your serial number:
 - (Stand-alone licensing)

```
/usr/autodesk/maya2012-x64/bin/adlmreg -i S
coductKey1> coductKey2> 2012.0.0.F <serialNum>
/var/opt/Autodesk/Adlm/Maya2012/MayaConfig.pit
```

■ (Network licensing)

```
/usr/autodesk/maya2012-x64/bin/adlmreg -i N
coductKey1> coductKey2> 2012.0.0.F <serialNum>
/var/opt/Autodesk/Adlm/Maya2012/MayaConfig.pit
```

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

For example:

```
/usr/autodesk/maya2012-x64/bin/adlmreg -i S 657D1 657D1
```

```
2012.0.0.F 000-00000000 /var/opt/Autodesk/Adlm/Maya2012/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-2012-enu.

Compiling plug-ins and standalone programs

To compile plug-ins and standalone applications for Maya 2012 on Linux, use the released gcc 4.1.2 compiler. Maya has been compiled with this compiler under RHEL 5.1 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-2012-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
- ibpthread.so.0
- llibc.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.

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 there are no system libssl.so.x libcrypto.so.x libraries, you can manually create local symbolic links. The files are located in /usr/autodesk/maya2012-x64/support/openssl/.

As root, create the symlinks in the Maya lib directory to isolate them from the rest of your system. If the installer does not detect a libssl.so.6 library, it should attempt the following.

```
su
cd /usr/autodesk/maya2012-x64/lib
ln -s /usr/lib64/libssl.so.8 libssl.so.6
ln -s /usr/lib64/libcrypto.so.8 libcrypto.so.6
```

Dependent applications

■ tcsh

This is a command language interpreter application. Run the command yum install tesh 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:

(Fedora 14)

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

(Red Hat Enterprise Linux WS 5.4)

```
yum install elfutils-libelf.i386 glibc.i686
libstdc++.i386 httpd php
```

Fonts

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

```
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-2012-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 2012 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 5.4) Open the Actions tab.
 - (Fedora 14) Open the Window Actions tab.
- **4** In the following section:
 - (Red Hat Enterprise Linux WS 5.4) 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 5.4) 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.

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/Maya2012/).
- **2** Drag the Maya2012 application to the trash.
- 3 Open a Terminal window and execute both of the following commands, where roductKey> is your product key:

```
adlmreg -u S productKey> 2012.0.0.F
adlmreg -u N productKey> 2012.0.0.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/Maya2012-x64/bin/adlmreg -u S
conductKey> 2012.0.0.F
```

```
/usr/autodesk/Maya2012-x64/bin/adlmreg -u N cproductKey> 2012.0.0.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 Maya2012 # 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 2012 launches the Help from the Autodesk.com Web site. You can download and install a copy of the Maya 2012 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 2012.
- Download the Autodesk Maya 2012 English Documentation installer for your platform from www.autodesk.com/maya-helpdownload-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 26).

- Double-click the Autodesk Maya 2012 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\Maya2012\docs\Maya2012\en_US* on Windows 32-bit systems.
- C:\Program Files(x86)\Autodesk\Maya2012\docs\Maya2012\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 2012 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 2012 English Documentation executable file.
 - The Maya Help package appears in a Finder window.
- **2** Double-click the package (.pkg) file.
 - The installation wizard appears.
- **3** Follow the instructions in the installation wizard.
 - By default, the Maya Help is installed in the following directory:
 - /Applications/Autodesk/maya2012/docs/Maya2012/en_US.
 - You cannot change the install location of the docs directory.
- 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 2012 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 26).

- 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/maya2012-x64/docs/Maya2012/en_US.

 You can change the install location of the docs directory during the
- 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.

installation if necessary.

- 8 In the **Help Location** section, select **Installed Local Help**.
- **9** Click **Save** and exit the **Preferences** window. The Maya 2012 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\Maya2012\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 24) and Install the Maya Help on Linux (page 26).
- **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 2012 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® MatchMoverTM camera tracker, Autodesk® BackburnerTM 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 and load the Craft Animations™ plug-in

The following sections describe how to install the Craft Animations plug-in on Windows, Mac OS X and Linux platforms. It also describes how to load the plug-in using the Maya **Plug-in Manager**.

Install the Craft Animations plug-in

Install the Craft Animations plug-in on Windows

- 1 Navigate to the 3rdParty folder of your Maya installation DVD or downloaded package.
- **2** Navigate to the CraftAnimations folder and double-click the craftdirectorstudio .exe file.
 - This starts the Craft Animations plug-in installation.

Install the Craft Animations plug-in 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/MacOSX folder on the DVD drive.
 - If you are installing from a download package, double-click the Maya .dmg.
- 2 In the Finder window that opens, control-click the Install Maya 2012 program, then select **Show Package Contents** from the pop-up menu.
- **3** In the Finder window that opens navigate to *Contents/Resources/Maya/AdditionalItems*.
- 4 Double-click the Craft Animations .dmg.
- 5 In the Finder window that opens, double-click Install.
 This launches the Craft Animations plug-in installation.

Install the Craft Animations plug-in on Linux

- 1 Do one of the following to start the plug-in install:
 - If you are installing from a DVD, insert the DVD into your drive.
 - If you are installing from a download package, extract the Maya packages from the compressed file.
- **2** Open a shell and navigate to the location of the extracted files.
- **3** Extract the craftdirectorstudio .tar.gz file.
- **4** As a super user (using su -), navigate to the craftdirectorstudio 11.1.1 installer maya2012promo directory.
- 5 Type ./install.bash.
 This starts the Craft Animations plug-in installation.

Load the Craft Animations plug-in

Before using the Craft Animations plug-in for the first time, you need to load the plug-In using the **Plug-in Manager**.

To load Craft Animations Director Studio plug-in

- 1 Start Maya.
- 2 Select Window > Settings/Preferences > Plug-in Manager. The Plug-in Manager opens.
- 3 Locate craftdirectorstudioadaptor_maya2012.mll and turn on **Loaded**.

 To load the plug-in automatically every time you start Maya, turn on **Auto load**.
- 4 Click Close.
 You can access the Craft Animations plug-in from the shelf by clicking the **DirectorStudio** tab, then clicking the icon.

Install and load the PhysX® for Maya plug-in

Install the PhysX for Maya plug-in

- 1 Run the Maya installation wizard.
- 2 Open the Maya configuration options by clicking Click to open and configure.



3 Under **Sub-Components**, select **PhysX**.

The PhysX for Maya plug-in will be installed during the Maya 2012 installation.

Load the PhysX for Maya plug-in

Before using the PhysX for Maya plug-in for the first time, you need to load the plug-In using the Plug-in Manager.

To load PhysX for Maya plug-in

- 1 Start Maya.
- 2 Select Window > Settings/Preferences > Plug-in Manager. The **Plug-in Manager** opens.
- 3 Locate **physx.mll** and turn on **Loaded**. To load PhysX automatically every time you start Maya, turn on **Auto** load.
- 4 Click Close.

In Maya, a **PhysX** menu is added to the Maya main menu bar and a PhysX item is added to the shelf. Use these shelf items to access the plug-in.



Install and load the DMM plug-in for Maya

The following sections describe how to install the DMM[™] plug-in for Maya on Windows, Mac OS X, and Linux platforms. It also describes how to load the plug-in using the Maya Plug-in Manager.

Install the DMM plug-in on Windows

- 1 Run the Maya installation wizard.
- 2 Open the Maya configuration options by clicking **Click to open and** configure.



3 Under Sub-Components, select DMM.
The DMM plug-in for Maya is installed during the Maya 2012 installation.

Install DMM plug-in on Mac OS X

- 1 Run the Maya installation wizard.
- **2** In the list of components to be installed, ensure that **DMM** is selected. The DMM plug-in for Maya is installed during the Maya 2012 installation.

Install the DMM plug-in on Linux

- 1 Extract the Maya packages from the compressed file 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.
 This starts the Autodesk Product Configuration wizard.
- 4 In the list of components you want to install, under **Maya**, select **DMM**. The DMM plug-in for Maya is installed after the Maya 2012 installation completes.

Load the DMM plug-in

Before using the DMM plug-in for the first time, you need to load the plug-In's associated files using the **Plug-in Manager**. To use you all of the plug-in's

features, you need to ensure that **dmm_cinematic.mll** and **DmmPlugin.py** are both loaded.

To load the DMM plug-in

- 1 Start Maya.
- 2 Select Window > Settings/Preferences > Plug-in Manager. The **Plug-in Manager** opens.
- 3 Locate **dmm_cinematic.mll** and **DmmPlugin.py**, and then turn on **Loaded** for each file.
 - To load these files automatically every time you start Maya, turn on Auto load.
- 4 Click Close.

In Maya, a **DMM** item is added to the shelf. Use these shelf items to access the plug-in.



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 > 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\mrsat3.9.1-maya2012
```

(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/mrsat3.9.1-maya2012
```

(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 mentalraySatellite3.9.1 maya2012-3.9-#.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 3.9.1 for Maya 2012) 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\mrsat3.9.1-maya2012\bin\.
- **3** Type the following:

```
raysat2012server
/query
```

A message should be returned that the RaySat2012 Server service is running.

If you do not get this message, make sure that RaySat2012 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:

```
raysat2012server
/start
```

Slave machine port setup

On the slave machine, port number 7412 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 7412, 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, 7412) to the desired port number:

```
mi-raysat2012
7412/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-raysat2012 7412/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 3.9.1 for Maya 2012).
- **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-raysat2012 7412/tcp.
- **4** Save the file.
- 5 Open a Terminal window and do the following:

```
/usr/bin/dscl . -change /Services/mi-raysat2012port
<currentportnumber>
<newportnumber>
```

For example:

```
/usr/bin/dscl . -change /Services/mi-raysat2012 port
7109 7412
```

NOTE To determine the port you're currently using, in a Terminal window, type: /bin/dscl . -read /Services/mi-raysat2012

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 your received your Maya key. The workstation can distribute mental ray for Maya rendering to up to eight 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.

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