# V-Ray for Maya

# Installation Guide

# for version 1.5

Online help index available at

[http://www.spot3d.com/vray/help/maya/150R1/index.htm](http://www.spot3d.com/vray/help/maya/150R1/index.htm)

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## Supported operating systems and Maya versions

V-Ray for Maya supports the following versions of Autodesk Maya 2008, Maya 2009 and Maya 2010:

|                   | Windows | Linux | Mac OS X |
|-------------------|---------|-------|----------|
| Maya 2008 32-bit  | Yes     | Yes   | Yes      |
| Maya 2008 64-bit  | Yes     | Yes   | N/A      |
| Maya 2009 32-bit  | Yes     | N/A   | Yes      |
| Maya 2009 64-bit  | Yes     | Yes   | N/A      |
| Maya 2010 32-bit  | Yes     | N/A   | Yes      |
| Maya 2010 64-bit  | Yes     | Yes   | N/A      |

V-Ray for Maya is supported on the following operating systems:

| Windows   | Windows XP, Windows Vista                             |
|-----------|-------------------------------------------------------|
| Linux*    | Various distributions (Fedora, Ubuntu, Debian etc.)   |
| Mac OS X  | Mac OS X 10.4 (tiger), Mac OS X 10.5 (leopard)        |

* The V-Ray license server is not initially available for Linux at this time, but will be added in an update.

# Installing the V-Ray license server

Before you can use V-Ray for Maya, you must install the V-Ray license server on a machine in your network. The licenses are then available for use from any machine in your local network.

Currently the V-Ray license server is supported only on Windows and Mac OS X operating systems.

The DEMO version of V-Ray for Maya does not require a license server.

The license server requires a hardware lock (dongle) in order to run. The dongle also stores the amount and type of the available licenses. You must install the dongle drivers first, before proceeding with the installation of the license server itself.

If you already have a license server for V-Ray for 3ds Max or V-Ray RT for 3ds Max running on the machine, **you must remove it** (i.e. unregister it from the Windows services list, and close it, if it is running), since it will conflict with the license server of V-Ray for Maya. However, the license server for V-Ray for Maya can also serve licenses for V-Ray for 3ds Max and V-Ray RT for 3ds Max, if these are available on your dongle.

## *Installing the V-Ray license server on Windows*

### Installing the dongle drivers on Windows

If you already have the WIBU-KEY drivers installed on the machine, you can skip this section. Otherwise, to install the WIBU-KEY drivers on Windows, start the respective installation file:

| 32-bit operating systems | WkRuntime.exe |
| --- | --- |
| 64-bit operating systems | WkRt-x64.exe |

Follow the instructions of the installer. You do not need to install the WIBU-KEY network server and monitor.

### Installing the license server on Windows

Once you have the dongle drivers installed, you can plug in the dongle into a free USB port of the machine. The dongle must be plugged into the machine whenever you need to run the V-Ray license server.

To install the V-Ray license server on Windows Vista, right-click the installer and select the **Run as Administrator...** command. On Windows XP, make sure you have administrative privileges and double-click the installer to run it.

| 32-bit operating systems | vrlservice_20001_x86.exe |
| --- | --- |
| 64-bit operating systems | vrlservice_20001_x64.exe |

Follow the instructions of the installer.

## Starting and stopping the license server on Windows

If you registered the V-Ray license server to run as a Windows service, either during the installation or from the Start Menu, you can start/stop it from the **Services** applet in the **Control Panel** (e.g. **Start Menu > Control Panel > Administratve tools > Services**). If you are running the license server manually, you can start it from **Start Menu > All Programs > Chaos Group > V-Ray license server > Launch V-Ray license server**. To stop the license server later on, double-click its icon in the taskbar and click on the **Terminate license server** button.

## Uninstalling the license server on Windows

To remove the V-Ray license server, either use the **Add/Remove Programs** applet from the **Control Panel**, or select **Start menu > All Programs > Chaos Group > V-Ray license server > Uninstall V-Ray license server**.

## *Installing the V-Ray license server on Mac OS X*

## Installing the dongle drivers on Mac OS X

If you already have the WIBU-KEY drivers installed on the machine, you can skip this section. Otherwise, extract the file **WkRuntimeUser_5.21.500.dmg** file and double-click it to mount the image. A folder with the WIBU-KEY installation files will open. Double-click on the **WkInstall.mpkg** icon to install the WIBU-KEY drivers for Mac OS X.

## Installing the license server on Mac OS X

Once the dongle drivers are installed, you can plug the dongle into the machine and proceed with the installation of the license server:

1. Make sure the dongle is plugged into the machine;

2. Extract the license server installation file to a suitable directory, for example **vray_license_server**;

3. Open a **Terminal** window and navigate to that folder using the **cd** command;

4. Run the installation **.exe** file in that folder using the **sudo** command;

5. Follow the instructions of the installer. You will be asked for a folder where to install the license server files and whether you want to register the license server as a service, so that it runs automatically when you log on to the machine. Press **Enter** to accept the suggested defaults, or type in different ones. It is recommended to answer **yes** when asked to register the license server, otherwise you will have to start the license server manually each time you want to use V-Ray for Maya or V-Ray Standalone.

For example:

```
$ cd vray_license_server
$ sudo ./vrlservice_adv_20001_darwin_x86.exe
....
License server destination directory: [/Applications/ChaosGroup/VRLService/darwin_x86]:
Register the V-Ray license service ([no] or yes): yes
....
```

## Starting and stopping the license server on Mac OS X

If you registered the license server to run as a service during the installation, it will be registered as a *start-up item* by the installer. In that case, you can use the */sbin/SystemStarter* command to start/stop the license server with the following commands in a **Terminal** window:

```
$ sudo /sbin/SystemStarter start vrlservice
$ sudo /sbin/SystemStarter stop vrlservice
```

If the license server is not registered as a service, then you can run it directly from its install location:

```
$ /Applications/ChaosGroup/VRLService/darwin_x86/bin/vrlservice.exe
```

## Uninstalling the license server on Mac OS X

To uninstall the V-Ray license server on Mac OS X, start with root permissions the **uninstall_chaos.exe** program, which is normally located in the */Applications/ChaosGroup/ VRLService/uninstall* directory:

```
$ su
$ /Applications/ChaosGroup/VRLService/uninstall/uninstaller_chaos.exe
follow the instructions of the uninstaller
$ exit
```

The uninstaller will not remove the V-Ray license configuration files or any other files that you have modified manually after the installation.

### *License server web interface*

You can verify that the license server is installed and operating properly through a regular web browser. To do this, open a web browser, and type http://localhost:30304 as the address. You should see a web page listing the currently available licenses and the licenses which are in use.

## Installing V-Ray for Maya

This section describes the installation of V-Ray for Maya on the supported operating systems.

Keep in mind that before installing V-Ray for Maya, you must have the V-Ray license server installed and running on a machine in your local network.

### *Installing V-Ray for Maya on Windows*

This section describes the installation of V-Ray for Maya on Windows.

### Plugin installation on Windows

To install V-Ray for Maya on Windows Vista, right-click the installer for appropriate OS and Maya version, and select the **Run as Administrator…** command. On Windows XP, make sure you have administrative privileges and double-click the installer to run it:

| *Maya version* | *Installer name* |
| --- | --- |
| Maya 2008 32-bit | vray_adv_15000_maya2008_x86.exe |
| Maya 2009 32-bit | vray_adv_15000_maya2009_x86.exe |
| Maya 2010 32-bit | vray_adv_15000_maya2010_x86.exe |
| Maya 2008 64-bit | vray_adv_15000_maya2008_x64.exe |
| Maya 2009 64-bit | vray_adv_15000_maya2009_x64.exe |
| Maya 2010 64-bit | vray_adv_15000_maya2010_x64.exe |

Follow the instructions of the installer. After the installer completes, you will be asked to enter the name or the IP address of the machine where the V-Ray license server is running. You can change this information later on from **Start Menu > All Programs > Chaos Group > V-Ray for Maya > Change license settings**.

### Loading the V-Ray for Maya plugin on Windows

Once you have installed V-Ray for Maya, you can load the plugin from the Maya plugin Manager:

1. Start Maya;
2. Open the Plugin Manager from the **Windows > Settings and Preferences > Plugin manager** menu.
3. Scroll down to the **vrayformaya.mll** plugin entry;
4. Check the **Loaded** and **Auto-load** options to load V-Ray for Maya.

If the **vrayformaya.mll** plugin is not listed, you may have to browse for it manually. It is installed by default in the folder **[Program Files]\Autodesk\MayaNNNN\vray\plug-ins**.

## Running V-Ray Standalone on Windows

V-Ray Standalone is installed as part of V-Ray for Maya in the folder
*[Program Files]\Autodesk\MayaNNNN\vray\bin* and can be run directly, e.g.:

```
c:\> c:\program files\Autodesk\Maya2010\vray\bin\vray –scenefile="[v-ray scene file]"
```

where *[v-ray scene file]* is a *.vrscene* file. Start it without parameters for a list of available
command-line options.

## Uninstalling V-Ray for Maya on Windows

You can uninstall V-Ray for Maya from the **Add/Remove Programs** applet in the **Control
Panel**, or from **Start Menu > All Programs > Chaos Group > V-Ray for Maya > Uninstall V-
Ray for Maya**. The uninstaller will not remove any files added or modified after the
installation of V-Ray for Maya.

## *Installing V-Ray for Maya on Linux*

This section describes the installation of V-Ray for Maya on Linux.

## Plugin installation

Once you have installed the license server on a machine in your network, you are ready to
install V-Ray for Maya:

1. Unpack the contents of the installation archive to a temporary folder  (called
   **vray_install_dir** below);

2. Open a console and navigate to that folder;

3. Make sure you have root permissions or use the **su** or the **sudo** command;

4. Run the installation .exe file in the directory for the respective OS and Maya version:

| *Operating system* | *Maya version* | *Installer name* |
|---|---|---|
| Linux 32-bit | Maya 2008 | vray_adv_15000_maya2008_linux_x86.exe |
| Linux 64-bit | Maya 2008 | vray_adv_15000_maya2008_linux_x64.exe |
| Linux 64-bit | Maya 2009 | vray_adv_15000_maya2009_linux_x64.exe |
| Linux 64-bit | Maya 2010 | vray_adv_15000_maya2010_linux_x64.exe |

5. Follow the instructions of the installer; if you had a previous version of V-Ray for Maya,
   the installer will try to automatically remove it first.

For example:

```
$ cd vray_install_dir
$ su
$ ./vray_adv_15000_maya2009_linux_x64.exe
follow installer instructions
$ exit
```

## Specifying the location of the license server

If you are running the V-Ray license server on a different machine, you need to tell V-Ray for Maya where to look for it. To do this, run the **setvrlservice.exe** program from the ***/usr/autodesk/mayaNNNN/vray/bin*** directory, e.g:

```
$ /usr/autodesk/maya2009-x64/vray/bin/setvrlservice.exe –server=[server name or IP]
```

where *[servername or IP]* is the IP address or name of the machine where the V-Ray license server is running, *without* the enclosing '[' and ']' characters.

Note that this setting is per user; if there are many users running V-Ray for Maya on the machine, you will need to set the license server location for each of them.

## Loading the V-Ray for Maya plugin on Linux

Once you have installed V-Ray for Maya, you can load the plugin from the Maya plugin Manager:

1.  Start Maya;
2.  Open the Plugin Manager from the ***Windows > Settings and Preferences > Plugin manager*** menu.
3.  Scroll down to the **vrayformaya** plugin entry;
4.  Check the ***Loaded*** and ***Auto-load*** options to load V-Ray for Maya.

If you do not see the **vrayformaya** entry, you will need to browse explicitly for the V-Ray for Maya plugin, which is called **vrayformaya.so** and is located by default in the ***/usr/autodesk/ mayaNNNN/vray/plug-ins/*** directory. The plugin will attempt to load a shared library, **libvray.so**, which is installed in the ***/usr/autodesk/mayaNNNN/lib*** folder and should be readily accessible for Maya to load without modifying the LD_LIBRARY_PATH variable.

NOTE: do not attempt to make V-Ray for Maya load the **libvray.so** library with the same name for the standalone version of V-Ray, which is located in the ***/usr/ChaosGroup/V-Ray/Standalone_for_Linux_x64/lib/linux_x64*** folder. Attempting to load the V-Ray standalone library into Maya will cause Maya to crash immediately.

## Running V-Ray Standalone on Linux

V-Ray Standalone is installed as part of the V-Ray for Maya installation. It can be executed using the **vray** bash script which is normally installed in the ***/usr/autodesk/mayaNNNN/vray/bin*** directory:

```
$ /usr/autodesk/maya2009-x64/vray/bin/vray –scenefile="[v-ray scene file]"
```

Start it without parameters to see a list of available command line options.

## Uninstalling V-Ray for Maya on Linux

To uninstall V-Ray for Maya, start with root permissions the **uninstall_chaos.exe** program, which is normally located in the ***/usr/ChaosGroup/ V-Ray/Standalone_for_linux_x64/uninstall*** directory:

```
$ su
$ /usr/ChaosGroup/V-Ray/Standalone_for_linux_x64/uninstall/uninstaller_chaos.exe
follow the instructions of the uninstaller
$ exit
```

The uninstaller will not remove the V-Ray license configuration files or any other files that you have modified manually after the installation.

### *Installing V-Ray for Maya on Mac OS X*

This section describes the installation of V-Ray for Maya on Mac OS X.

## Plugin installation

have installed the license server on a machine in your network, you are ready to install V-Ray for Maya:

1. Unpack the contents of the installation archive to a temporary folder  (called **vray_install_dir** below);

2. Open a Terminal console window and navigate to that folder;

3. Run the installation .exe file in the directory for the respective OS and Maya version using the **sudo** command:

| *Operating system* | *Maya version* | *Installer name* |
|---|---|---|
| Mac OS X | Maya 2008 | vray_adv_15000_maya2008_darwin_x86.exe |
| Mac OS X | Maya 2009 | vray_adv_15000_maya2009_darwin_x86.exe |
| Mac OS X | Maya 2010 | vray_adv_15000_maya2010_darwin_x86.exe |

4. Follow the instructions of the installer; if you had a previous version of V-Ray for Maya, the installer will try to automatically remove it first.

For example:

```
$ cd vray_install_dir
$ sudo ./vray_adv_15000_maya2009_darwin_x64.exe
....
Maya root folder: [/Applications/Autodesk/maya2008/Maya.app/Contents]:
V-Ray plugins destination folder:
[/Applications/Autodesk/maya2008/Maya.app/Contents/vray]:
V-Ray additional files: [/Applications/ChaosGroup/V-Ray/Standalone_for_darwin_x86]:
....
```

The folder names in the square brackets [] show the default values for the folders where V-Ray for Maya will be installed. Press Enter to keep the default value, or enter other folder paths. The specified folders will be created if they do not exist.

## Specifying the location of the license server

If you are running the V-Ray license server on a different machine, you need to tell V-Ray for Maya where to look for it. To do this, run the **setvrlservice.exe** program from the ***/Applications/Autodesk/mayaNNNN/Maya.app/Contents/vray/bin*** directory, e.g:

```
/Applications/Autodesk/maya2009/Maya.app/Contents/vray/bin/setvrlservice.exe
-server=[server name or IP]
```

where *[servername or IP]* is the IP address or name of the machine where the V-Ray license server is running, *without* the enclosing '[' and ']' characters (note that the entire command is just one line).

This setting is per user; if there are many users running V-Ray for Maya on the machine, you will need to set the license server location for each of them.

## Loading the V-Ray for Maya plugin on Mac OS X

Once you have installed V-Ray for Maya, you can load the plugin from the Maya plugin Manager:

1.   Start Maya;

2.   Open the Plugin Manager from the ***Window > Settings/Preferences > Plug-in Manager*** menu.

3.   Scroll down to the **vrayformaya.bundle** plugin entry;

4.   Check the ***Loaded*** and ***Auto-load*** options to load V-Ray for Maya.

If you do not see the **vrayformaya.bundle** entry, you will need to browse explicitly for it. The file is located by default in the ***/Applications/Autodesk/mayaNNNN/Maya.app/Contents/vray/plug-ins/*** directory. The plugin will attempt to load a shared library, **libvray.dylib**, which is installed in the ***/Applications/Autodesk/mayaNNNN/Maya.app/Contents/MacOS/*** folder and should be readily accessible for Maya to load without modifying the DYLD_LIBRARY_PATH variable.

NOTE: do not attempt to make V-Ray for Maya load the **libvray.dylib** library with the same name for the standalone version of V-Ray, which is located in the ***/Applications/Autodesk/mayaNNNN/Maya.app/vray/bin*** folder. Attempting to load the V-Ray standalone library into Maya will cause Maya to crash immediately.

## Running V-Ray Standalone on Mac OS X

V-Ray Standalone is installed as part of the V-Ray for Maya installation. It can be executed using the **vray** bash script which is normally installed in the ***/Applications/Autodesk/mayaNNNN/Maya.app/vray/bin*** directory:

```
/Applications/Autodesk/maya2009/Maya.app/vray/bin/vray -scenefile="[v-ray scene file]"
```

where *[v-ray scene file]* is a .vrscene file. Start it without parameters to see a list of available command line options.

## Uninstalling V-Ray for Maya on Mac OS X

To uninstall V-Ray for Maya, start the **uninstall_chaos.exe** program through the **sudo** command, which is normally located in the ***/usr/ChaosGroup/ V-Ray/Standalone_for_darwin_x86/uninstall*** directory:

```
$ sudo /usr/ChaosGroup/V-Ray/Standalone_for_darwin_x86/uninstall/uninstaller_chaos.exe
follow the instructions of the uninstaller
```

The uninstaller will not remove the V-Ray license configuration files or any other files that you have modified manually after the installation.

## Running a V-Ray Standalone render server

You can use V-Ray Standalone render servers for distributed rendering, where a single frame is simultaneously calculated across many machines. Before you can use distributed rendering, you have to start the V-Ray Standalone application in render server mode on the machines that you wish to use. See the table below for information on how to do that.

| *Operating system* | *How to start the render server* |
|---|---|
| Windows | ***Start Menu > All Programs > Chaos Group > V-Ray for Maya > Launch V-Ray render slave*** |
| Linux | ***/usr/autodesk/mayaNNNN/vray/bin/vrayslave*** |
| Mac OS X | ***/ Applications/Autodesk/mayaNNNN/Maya.app/Contents/vray/bin/ vrayslave*** |

## Reprogramming a dongle

If you purchase more copies of either V-Ray for Maya or V-Ray Standalone, your dongle will need to be reprogrammed to reflect the new number of available licenses and/or the addition of new products. Reprogramming the dongle is a two-part process:

A. In the first part, you need to send us a special file, created through the V-Ray License Server, which contains information identifying your specific dongle.

B. Chaos Software will send you another file, which includes the new contents of your dongle. This is transferred onto the dongle by the WIBU-KEY drivers.

After the dongle is reprogrammed, you can check if the new licenses/products have been added successfully. Here are these steps in more details.

### *Creating a dongle remote programming context file (.wbc)*

In order to reprogram a dongle, you first need to create a file which identifies your specific dongle.

1. Open a web browser (you need to have Javascript enabled)
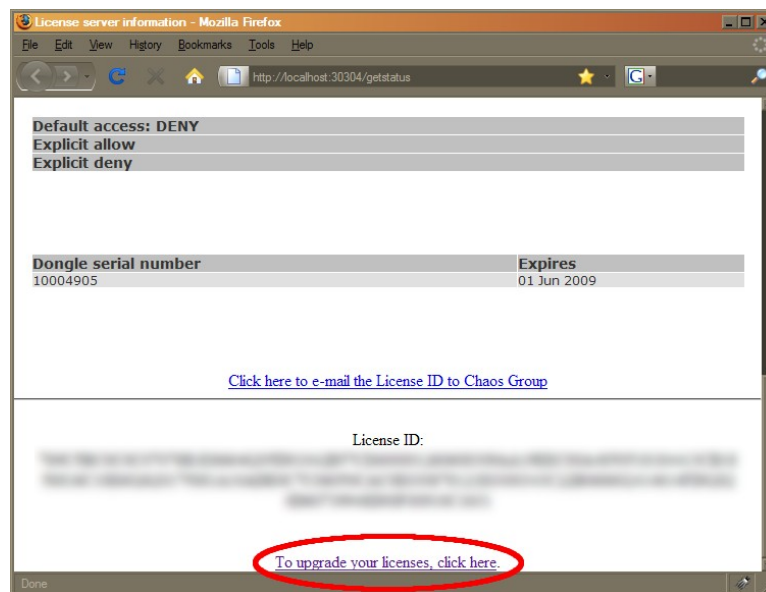


2. In the address field, enter **http://*someserver*:30304** where *someserver* is the name or IP address of the machine where the V-Ray licensing service is running (or *localhost* if you are on that machine). Click on the **Get status of the server** link on the page that loads. On this page, scroll down to the bottom and click on the **To upgrade your licenses...** link.

3. A web-based wizard will appear. Click on the first link.

4. Wait until the remote context file is created on the server (this normally takes 10-20 seconds)
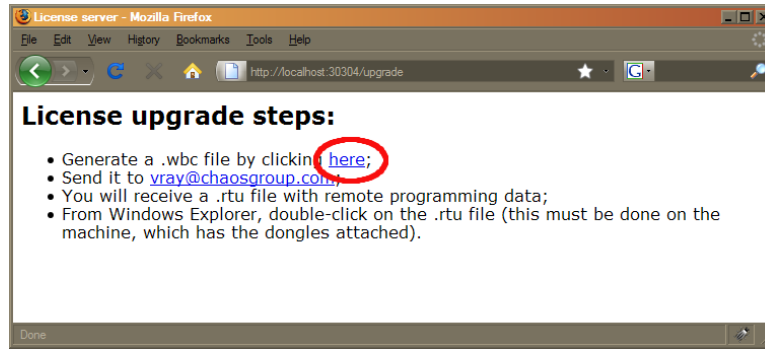
5. When the **Success!** page appears, save the remote context file by right-clicking on the link and using **Save Link As.../Save Target As...**
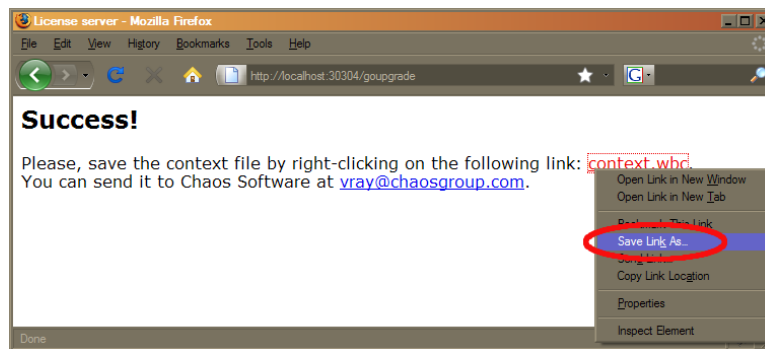


6. Email this file to vraymaya@chaosgroup.com along with any other relevant information.

### *Updating the contents of the dongle with remote programming file (.rtu)*

Once we receive the *.wbc* file, we will generate another file with extension *.rtu* that can be used by the dongle drivers to update the contents of the dongle.

1. When you receive the *.rtu* file, save it on the Desktop of the machine where the dongle is plugged.

2. Close the V-Ray license server, if it is running. On Windows, you can do this either by right-clicking the V-Ray license service icon in the Task Bar and selecting **Exit**, or if it is running as a service – from the *Control panel > Administrative tools > Services* applet.

3. The exact method of writing the *.rtu* file onto the dongle depends on the operating system:

| Windows | Double-click the saved *.rtu* file. The dongle software will ask you whether you really want to transfer the file to the dongle. Click *Yes* to update your dongle. If the .rtu file extension is not associated with any program on your system, please contact us at vraymaya@chaosgroup.com |
| --- | --- |

| Mac OS X | In ***Finder***, navigate to the ***/Applications/WIBUKEY*** folder and start the ***WkConfig*** application. Select the ***Update*** tab and click on the ***Execute Update…*** button to browse for the ***.rtu*** file and update the dongle. |
| --- | --- |

4.  Start the V-Ray license server again. On Windows, you can do this from ***Start menu > All Programs > Chaos Group > V-Ray License server > Launch V-Ray license server***.

### *Checking if the dongle has been reprogrammed correctly*

After the dongle is successfully updated, you may wish to check if the number of licenses is correct. Open the license server status page as described in step **2)** of the **Creating a dongle remote programming context file** section above.

## Troubleshooting

In this section are listed some common problems that may arise during the installation of V-Ray for Maya. If you encounter a problem that is not listed here or cannot be solved with the suggested solutions, please email vraymaya@chaosgroup.com

### *The installation crashes when you attempt to run it*

**Problem:** The installation file crashes when you attempt to run it.

**Cause:** This will happen if the installation file is not downloaded properly.

**Solution:** Please re-download the installation file from our web site.

### *I get a "Could not obtain license (10061)" error when I try to render (Windows)*

### *I get a "Could not obtain license (61)" error when I try to render (Linux/Mac OS X)*

**Problem:** When attempting to render, the Maya status line shows the message "error: Could not obtain a license (10061)" or "error: Could not obtain a license (61)"

**Cause:** This error means that V-Ray could not connect to a working license server.

**Solution:** There are several things to check:

- Check that the license server settings are correct. How to do this depends on your operating system:

| Windows | Go to: ***Start menu > Programs > Chaos Group > V-Ray for Maya > Change license settings*** |
|---------|------------------------------------------------|
| Linux | Run: ***/usr/autodesk/mayaNNNN/vray/bin/ setvrlservice.exe -dump*** |
| Mac OS X | Run: ***/Applications/Autodesk/maya2009/Maya. app/Contents/vray/bin/setvrlservice.exe - dump*** |

  This will show you the IP address or the name of the computer that V-Ray is trying to connect to;

- If the license server settings are correct, make sure that the license server is really running on that machine (if the license server is specified as **localhost** or **127.0.0.1**, this is your workstation);

- If the license server is running on the specified machine, try to connect to it manually from a web browser. Open your web browser and type **http://*servername*:30304** where ***servername*** is the IP address or the name of the machine where the V-Ray license server is running. If you do not see the license server web page, or an error is displayed, it may be that the connection to the license server is blocked by a firewall or

an antivirus program. You must change the set up of this program to allow connections to the license server.

If all of the above points are ok, try restarting the license server and then the ActiveShade window. If the problem persists, contact our support team at [vraymaya@chaosgroup.com](mailto:vraymaya@chaosgroup.com)

### *I get a "Could not obtain a license (-98)" error*

**Problem:** When attempting to render, the Maya status line shows the message "error: Could not obtain a license (-98)".

**Cause:** This error means that, while V-Ray successfully connected to the V-Ray license server, there are no respective licenses for V-Ray on it.

**Solution:** Check the license server status page to see if you have the appropriate type of license. Contact our support team at [vraymaya@chaosgroup.com](mailto:vraymaya@chaosgroup.com) for further assistance.

### *I get an error "Could not read V-Ray environment variable... Please re-install" in the Script Editor*

**Problem:** Right after an apparently successful installation, the V-Ray for Maya plugin loads in Maya, but V-Ray does not appear in the list of available renderers. The script editor shows a number of errors "Could not read V-Ray environment variable VRAY_FOR_MAYA2008_MAIN_x64. Please re-install" or similar.

**Cause:** V-Ray for Maya uses several environment variables to find out where various components are installed. The above errors appear when V-Ray for Maya cannot find these variables.

**Solution:** Try to log out and log in to your machine again – sometimes the environment changes are not propagated immediately throughout the system.