V-Ray RT 1.0 for 3ds Max
Quick Installation Guide

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⚠️ IMPORTANT: The license upgrade procedure is different from the one formerly used with V-Ray for 3ds Max. Please read the **Reprogramming a dongle** section carefully, even if you are familiar with the old procedure.

Table of Contents

Preparing the installation

Before you install V-Ray RT for 3ds Max, please read the following section.

System requirements

If you are installing V-Ray RT on a workstation or a 3ds Max render slave, you must have 3ds Max and V-Ray for 3ds Max installed first. If you are installing the V-Ray RT standalone render server, there is no need to have either 3ds Max or V-Ray for 3ds Max installed.

Requirement	Minimum value	Recommended value
Processor	Pentium IV or equivalent with SSE2 support	An Intel or AMD processor with 64-bit and SSE2 support
RAM	2 GB	4 GB or as much as possible
Operating system	Windows XP SP2 or later	Windows XP Professional 64-bit SP2
3ds Max/3ds Max Design	Version 2009 or higher*	Version 2009 64-bit or higher
V-Ray for 3ds Max	V-Ray 1.5 SP3 or later	V-Ray 1.5 SP3a
USB port	Required for hardware lock	Required for hardware lock
TCP/IP	IPv4**	IPv4

* Although V-Ray RT has builds for 3ds Max 9 and 3ds Max 2008, some features may not work or may work incorrectly in those versions. This is because V-Ray RT specifically takes advantage of new 3ds Max 2009 SDK extensions which are not available in previous versions.

** IPv6 is not currently supported. You must have IPv4 set up properly in order to use V-Ray RT.

Obtaining an installer for V-Ray RT

You can obtain the latest version of V-Ray RT from the download section on the Chaos Software site at http://www.chaosgroup.com/ Please use the login name and password supplied to you when you purchased V-Ray/V-Ray RT.

Obtaining a hardware lock (dongle) for V-Ray RT

If you already have a dongle for V-Ray, you can upgrade it with additional V-Ray RT licenses – please see the **Reprogramming a dongle** section below. Alternatively, you can keep the V-Ray RT licenses on a separate dongle. For more information, please contact your reseller or Chaos Software at vray@chaosgroup.com

Installing V-Ray RT

Installing V-Ray RT requires that you have administrative privileges on your system. If you are running Windows Vista, right-click on the installer and select the **_Run as Administrator…_** option. For Windows XP, simply double-click the installer to run it.

Where to install

You will need to install V-Ray RT on the following machines in your network:

- Workstation machines, so that you can use the V-Ray RT renderer inside 3ds Max;

- 3ds Max render slaves, so that these machines can open scenes saved from your workstation. These scenes will contain references to the V-Ray RT renderer (similar to how they reference the classic V-Ray renderer). You will need to do this whether you plan on using these machines as V-Ray RT render servers, or not.

- Standalone V-Ray RT render slaves – these are machines that can be used as V-Ray RT render slaves, but do not have 3ds Max installed.

Installation types

The possible installation types are listed below. The installer will choose one of these types automatically based on the installed software on your system. One or more options may be disabled, if they are not compatible with the existing (or missing) installation of V-Ray for 3ds Max.

- *Workstation* – choose this option to install V-Ray RT on your workstation. It will install the V-Ray RT plugin for 3ds Max, the standalone V-Ray RT render server (used for local rendering), and an update to the V-Ray license server to recognize the V-Ray RT licenses.

- *3ds Max render slave* – choose this option to install V-Ray RT on a render slave machine that is already used as a 3ds Max render server.

- *Standalone render server* - this installation type allows you to use a machine for distributed rendering with V-Ray RT. This installation does not require 3ds Max or V-Ray for 3ds Max.

- *License server* - this installation type is used if you want to upgrade an already installed V-Ray license server to support V-Ray RT.

Running the installation

Follow these steps to install V-Ray RT.

1. Make sure that you have the standard V-Ray 1.5 SP3 or SP3a for 3ds Max installed and set up correctly.

2. Run the V-Ray RT installer. On Windows Vista and later, you must right-click the installer and select the **Run as Administrator...** option if UAC (User Access Control) is enabled.

⚠️ If the installation file is not downloaded properly, it may crash when you attempt to run it. If this happens, please re-download the installation.

3. The welcome dialog of the installer will appear. Click **Next** to continue the installation.

4. If there are any applications running that would prevent the installer from copying the required files, it will put up a list with these applications. Close them, and click the **Next** button to continue.
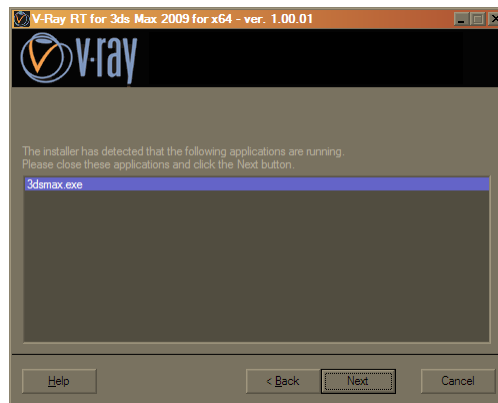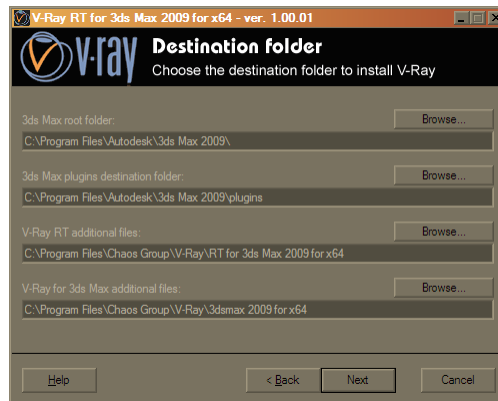

5. The V-Ray RT licensing agreement will be displayed in the next dialog. Please take a moment to read it carefully. If you agree with the terms of the agreement, click on the **I agree** button.


6. The following dialog allows you to select the installation type. See the **Installation types** section above for an explanation of the possible options. Depending on your previous installation of V-Ray for 3ds Max, some of the options may be disabled.
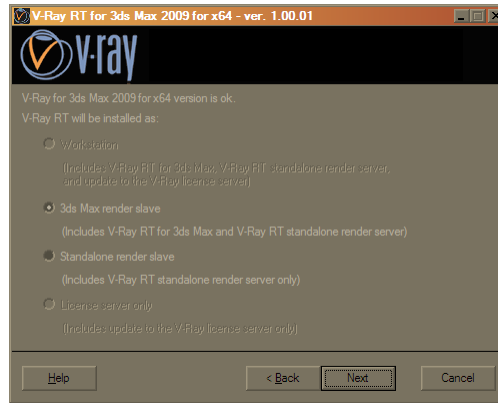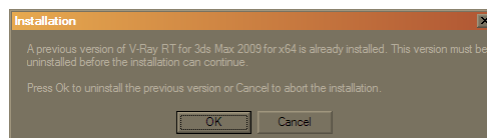
7. The next dialog lists the installation directories for V-Ray RT – the root folder of the 3ds Max installation, a folder for the 3ds Max V-Ray RT plugin, a folder for additional V-Ray RT files, and the original installation folder of the standard V-Ray 1.5 renderer. The installer will attempt to fill in these values automatically from the information about installed products on your system. Take a moment to check if the folders are correct and click on the **Next** button to contine the installation.


8. The next dialog is just for information and is the place where you can cancel the installation, or go back and change some installation options before any changes are made to your system. Click the **Next** button to perform the installation of V-Ray RT.
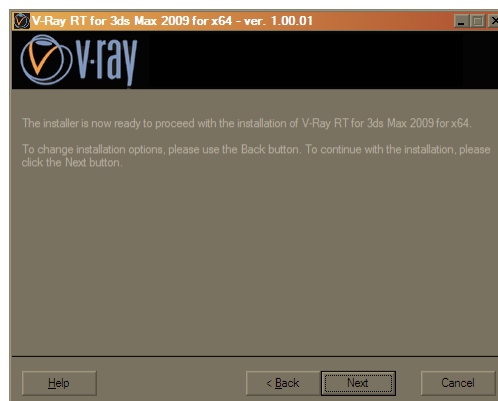

If you had a previous version of V-Ray RT installed, you may get a warning message that the old verson will be uninstalled. Click **OK** to unininstall the old version.

9. The installation of V-Ray RT proceeds and changes made to your system are listed in the next dialog. If everything was completed successfully, you will see a message "The installation was successful." If there are any errors, you can scroll the dialog to see which part of the installation failed. Click **Next** to finalize the installation.
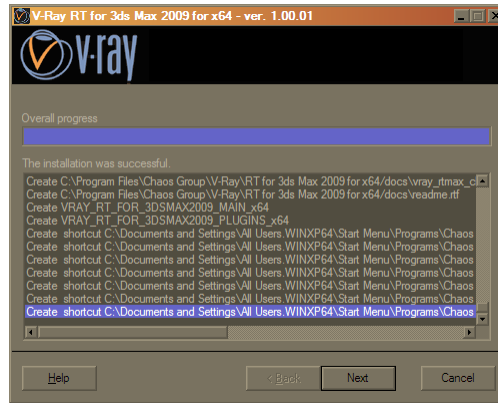
10. The final dialog of the installer gives you options to see the changelog and readme files for V-Ray RT. Click Finish to exit the installer.
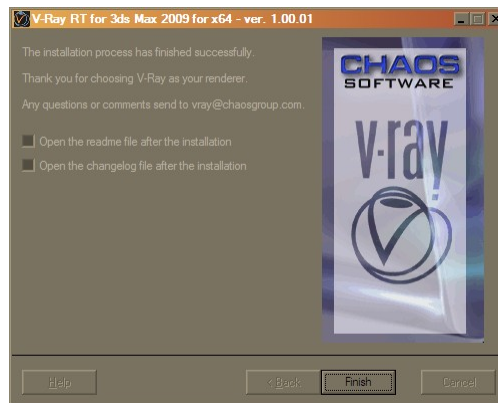
Once V-Ray RT is installed, you can start using it. Note that you may need to upgrade your dongle with licenses for V-Ray RT - see the **Reprogramming a dongle** section below for more information.

Visit the V-Ray RT online help index at http://www.spot3d.com/vray/help/rt100/ for information on using V-Ray RT.

Uninstalling V-Ray RT

There are two possible ways to run the V-Ray RT uninstaller:

- From the Command panel: choose the Add/Remove programs applet and double-click on V-Ray RT for 3ds Max to uninstall it.

- From the Start menu: choose **Start menu > Programs > Chaos Group > V-Ray RT for 3ds Max > Uninstall V-Ray for 3ds Max**.

Follow the instructions of the uninstaller to remove V-Ray RT from your system. Any files overwritten by the V-Ray RT installer will be restored:
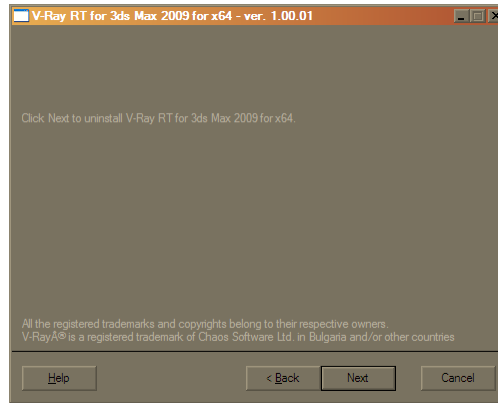
Reprogramming a dongle

⚠ The updated version of the V-Ray license server is required for reprogramming the dongle. For this reason, before following the rest of this section, please make sure that V-Ray RT is already installed on the machine where your dongle is plugged.

If you purchase more copies of either V-Ray for 3ds Max or V-Ray RT, 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)
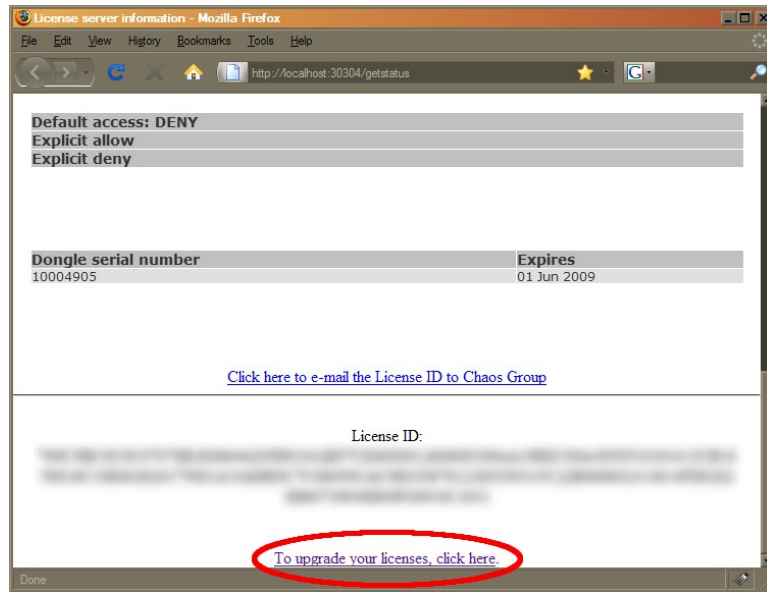
2. In the address field, enter **http://*someserver*:30304** where ***someserver*** is the name or IP address of the machine where the V-Ray licensing service is running (or *localhost* if you are on that machine). Click on the **Get status of the server** link on the page that loads. On this page, scroll down to the bottom and click on the **To upgrade your licenses...** link.

⚠ If this link doesn't appear, then you are likely using an old version of the V-Ray license server. On the machine that has the license server installed, check again your V-Ray RT installation and reinstall if needed.

3. A web-based wizard will appear. Click on the first link.
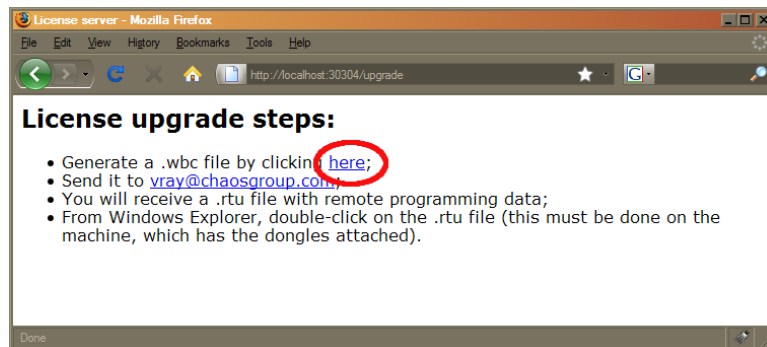
4. Wait until the remote context file is created on the server (this normally takes 10-20 seconds)

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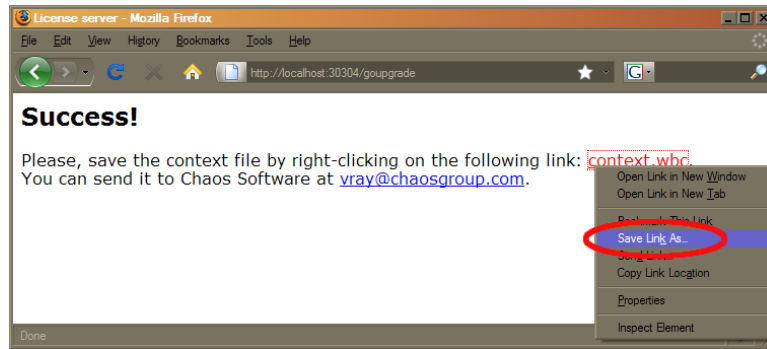
6. Email this file to vray@chaosgroup.com along with any other relevant information.

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 RT licensing service, if it is running. 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. 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 see the ".rtu files are not associated with any program" topic in the Troubleshooting section below.

4. If the contents of the file is successfully transferred, you will get a confirmation dialog; click **OK** to close the dialog.

5. Start the V-Ray licensing service again, for example from the **Start menu > Programs > Chaos Group > V-Ray for 3dsmax > Licensing > 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.
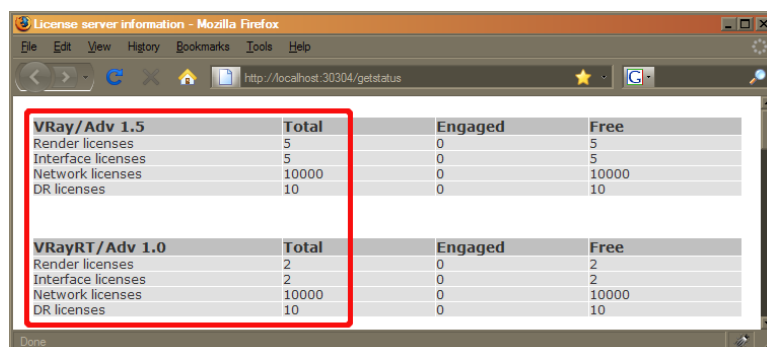
Troubleshooting

⚠️ For troubleshooting of issues not listed here, please visit the V-Ray RT online help index at http://www.spot3d.com/vray/help/rt100/

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 "V-Ray RTEngine DLL not found" message

Problem: The message "V-Ray RTEngine DLL is not found!" appears in the ActiveShade window and the scene is not rendered.

Cause: This message means that there is something wrong with the installation of V-Ray RT.

Solution: Reinstalling V-Ray RT may fix the problem. Also check that the environment variables **VRAY_RT_FOR_3DSMAX***mmmm***_MAIN_x***bb* and **VRAY_RT_FOR_3DSMAX***mmmm***_PLUGINS_x***bb* are defined, where *mmmm* is the respective 3ds Max version (2009, 2010 etc), and *bb* is the bitness (x86 for 32-bit, and x64 for 64-bit).

The ActiveShade window remains black

Problem: The ActiveShade window remains black; the message "Waiting for image data..." may be displayed.

Cause: This may happen if the transfer of the render data to the render slaves takes a long time. It may also happen if there are no available V-Ray RT render servers to perform the rendering.

Solution: There are several things to check:

- Check the Render servers dialog in the V-Ray RT render settings and make sure that there is at least one render server selected, or that the **Auto-start local server** option is enabled;

- If there are render slaves selected, check that the V-Ray RT render server application is started on those render slaves;

- If the V-Ray RT render server application is running, check its console window for any error messages.

If all of the above points are ok, try restarting the V-Ray RT render server and then the ActiveShade window. If the problem persists, contact our support team at vray@chaosgroup.com

I get a "Could not obtain license (10061)" error

Problem: The ActiveShade window displays a message "error: Could not obtain a license (10061)" and remains black.

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

Solution: There are several things to check:

- Check that the license server settings are correct. You can do that from **Start menu > Programs > Chaos Group > V-Ray for 3ds Max > Licensing > Administration > Change V-Ray client license settings**;

- 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 vray@chaosgroup.com

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

Problem: The ActiveShade window displays a message "error: Could not obtain a license (-98)" and remains black.

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

Solution: Check the license server status page to see if you have a license for V-Ray RT. Contact our support team at vray@chaosgroup.com for further assistance.

## .rtu files are not associated with any program

Problem: The .rtu files are not associated with any program; double-clicking them does not work.

Solution: To update the dongle manually from the .rtu file, please follow the steps below:

- Make sure the WIBU-KEY dongle drivers are properly installed. You can download the latest version of the drivers from http://wibu.com/download_user.php?lang=en

- Open the Windows Control Panel and start the WIBU-KEY applet:
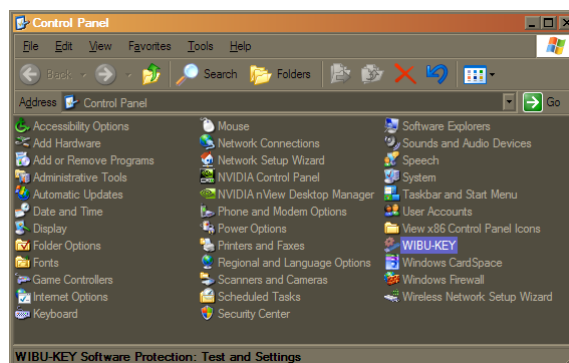
- In the WIBU-KEY applet, click on the application icon in the upper left corner and select the "Advanced mode" option:
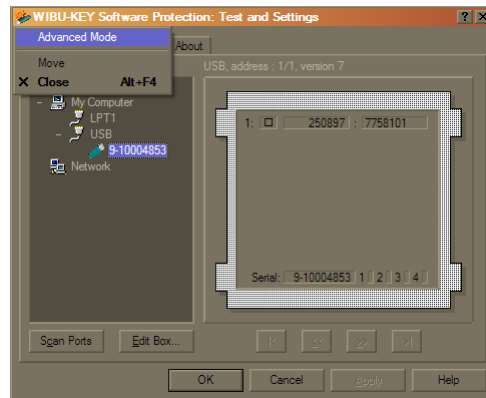
- Select the "WIBU-BOX Update" tab. Make sure that your dongle is listed in the "Selected WIBU-BOXes" control:
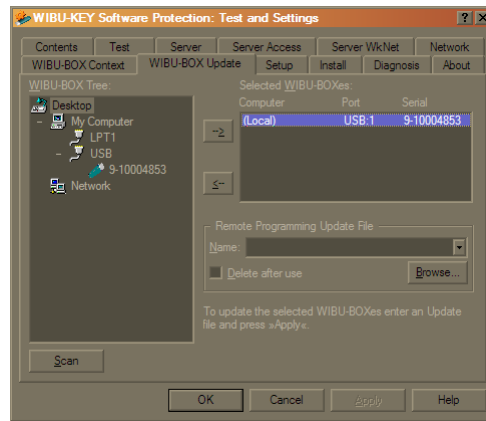
- Click the "Browse" button in the "Remote Programming Update File" box and locate the *.rtu* file that you have received from Chaos Software.

- Click the "Apply" button to write the contents of the *.rtu* file on the dongle.