

3Delight Installation Guide

For installing the software and the license server

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1 Obtaining a License

You don't need a license if you are using the free version that is downloadable from our website. This document is only meant for commercial licenses. To run the free license, simply install and start rendering.

To obtain a license you must first determine on which machine the license server will run and find its *hostid*. The *hostid* is a unique identifier to each machine and is used by the licensing software to correctly identify the system on which it runs.

Once *3Delight* is installed, you can get the *hostid* by following these steps:

1. Open a shell (Linux and Mac OS X) or a command prompt (Windows).
2. Execute the following command:

```
licutils hostid
```
3. The returned *hostid* should be emailed to sales@3delight.com to obtain a license and a new package.

3Delight licensing is controlled through a separate proprietary program called 'licserver' (The program is included with the package). The licensing software can run on the same machine where the software is installed, or on another machine on the same network. The license server provides floating licenses: they can be used on any machine on a given network.

NOTE:

- The license server we provide is designed to serve licenses easily to thousands of nodes even if running on a low performance machine. On the other hand, it can become unresponsive if installed on a powerful machine with a too heavy load (if it is also used for rendering for example). So, it is important to carefully choose the machine for the license server as it may affect the performance of an entire render farm.
 - The *hostid* is usually the MAC address of the machine, but not always. This is because on some machines, the MAC address changes after the machine is restarted. Our `licutils` command automatically detects this and will provide a fixed and proper *hostid*. For this reason, it is important and necessary to use the `licutils` command to obtain the *hostid*.
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2 Setting Up and Running the License Server

2.1 Installing the License File

The license will be sent by e-mail in the form of an hexadecimal string. A license looks like this:

```
# Feature name : 3Delight
# Host ID      : e08122074c
# Licenses     : 2 (up to 4 threads per machine)
# Expiration   : none
# Service Exp. : Wed Aug 30 00:00:00 2009

3Delight 2d 1c dc 0e ec d7 a9 1a 7d b9 3b 32 ba 93 f6 7f 77 e0 bc 1f 15 07 b0 fc
```

In this example, the # lines are not necessary for the license to work, they are only use as reminder of the features of the license; you can add your own # lines if you like.

Save the provided string into a ‘license.dat’ file into the root of your installation. If you don’t know the root of the installation, simply inspect the DELIGHT environment variable which points to that specific location (the default installation path on *Windows* platforms is ‘C:\Program Files\3Delight\’).

If you have licenses for more than one product, you can simply concatenate the license, such as:

```
# comments...
3dfs-a 0b 94 66 97 93 0b fc 1e 58 d2 1a d7 7e e8 87 54 dc f9 cc a5 6e 93 56 cc
# comments...
3Delight 2d 1d 40 b6 b7 17 67 99 04 74 b4 f6 93 01 5b 28 07 a4 53 bc 6d bc 00 e5
```

2.2 Starting the License Server - licserver

IMPORTANT: One license server can serve licenses for all platforms, there is no distinction between a license for *Windows* and a license for *Linux*. Additionally, only one license server can be started on a LAN: starting multiple license servers will not work.

On *Windows* systems it is possible to launch the license server through the *Start->All Programs->3Delight* menu, given that the ‘license.dat’ file was installed properly. It is also possible to start it by hand:

```
C:\> licserver "%DELIGHT%/license.dat"
```

On *Linux* systems, the license server has to be started manually. The ‘-d’ options launches the license server in “daemon” mode.

```
% licserver -d $DELIGHT/license.dat
```

2.3 The License Server as a System Service

On *Windows*, the license server can be installed as a service for automatic startup with the system. With administrative privileges, it's as simple as:

```
C:\> licserver -installservice "%DELIGHT%/license.dat"
```

Removing the service is equally simple:

```
C:\> licserver -removeservice
```

It's a good idea to check that the setup works by running the license server in the foreground before installing it as a service as the service will not give detailed error messages.

2.4 Modifying the Configuration File

If you are running the software in a networked environment, it is necessary to indicate to *3Delight* where the license server is running. This is done by modifying the configuration file. The file is named '`rendermn.ini`' and is located in the root of the installation. Adding the following line is enough to indicate where the license server is located:

```
/3delight/licserver servername
```

Here, *servername* is the name of the machine for which you provided the *hostid*. A network name or an IP address is accepted. Note that this is **not** the "*hostid*". If you are unsure about the name of the license server, log on to the machine and issue the following command in a *DOS* box:

```
C:\> licutils hostname
```

3 How 3Delight Licensing Works in Multi-Processing

3Delight licenses are related to threads or processes and are bound to a machine, not to actual CPUs. So a 4-thread license offers the following flexibility on a given machine:

- Run a single render with four threads working in parallel on a single image.
- Run two different renders (working on two separate images), each one using two threads.
- Run four different renders, each one using one thread working on 4 separate images.

All these options are independent on how many CPUs or Cores are available on the given machine. In practice, to fully use a dual CPUs / dual Core machine, one need a 4-thread license.

As a reminder, all licenses are *floating*; they can be used by any machine in a network. They are also *platform independent*.

NOTE: When running *3Delight* without a license, for testing purposes, a watermark will be displayed. In this form, the renderer cannot be used for commercial work.

4 Troubleshooting

Q:

Why does *3Delight* displays the following message and adds a watermark on the image ?

```
3DL INFO: please complete the 'rendermn.ini' file as explained in 'InstallationGuide.pdf'
```

A:

This happens when the `'rendermn.ini'` file doesn't contain the `"/3delight/licserver"` entry. Please modify that file as explained in [Section 2.4 \[Modifying the Configuration File\]](#), page 4.

Q:

I tried starting the licenser server but it says there is “no valid license keys” in the license file. How do I fix this?

A:

This means that the license file (usually `'license.dat'`) provided to the license server doesn't contain any known license key. This happens if the license key line was not put in the license file. Please open the license file and paste the provided license key inside. If you don't have a license key please refer to [Chapter 1 \[Obtaining a License\]](#), page 2.

Q:

Why does *3Delight* displays the following message and stops the render ?

```
3DL SEVERE ERROR: Unable to contact license server (Connection refused)
3DL INFO: Make sure the license server is running on 'servername'
```

A:

If *servername* is really the name of the machine entered in the `'rendermn.ini'` file then probably the license server hasn't been started. If *servername* is not the machine specified in the `'rendermn.ini'` file then it might mean that there is another `'rendermn.ini'` file that is overriding the one containing the right *servername*. Such a thing might happen if there is, for example, another `'rendermn.ini'` file in user's home directory. To assess this, one could set the `DL_DUMP_DEFAULTS` environment variable and start a render; all loaded `'rendermn.ini'` files will then be displayed.

Q:

What do these error messages mean when starting the license server ?

```
unable to bind TCP address
unable to bind UDP address
```

A:

There is most likely another license server process already running on the machine. It needs to be stopped first. Some software firewalls can also cause that kind of error.