

The 3delight.config File



Setting up the `3delight.config` file is optional as 3Delight will work without any specific configuration described here. In the case of the non free 3Delight license, only the `license.server` line is needed to properly set 3Delight to look for the license (otherwise, a 3Delight watermark appears in the rendered images).

Some of 3Delight's configuration must be done through options that are specified in the `3delight.config` configuration file. This configuration is usually done at the time of installation and is best left to the system administrator or the person doing the installation. The renderer looks for the `3delight.config` file at several locations in the following order:

1. In 3Delight's installation directory, as specified by the `$DELIGHT` environment variable.
2. In the directories specified by the `$DELIGHT_CONF` environment variable (a colon separated list).
3. In user's home directory, as specified by the `$HOME` environment variable.

If 3Delight encounters the file in more than one location, it uses the latest keys and values it finds (so that latter options settings override former ones). This enables to have a site specific configuration file in the `$DELIGHT` or `$DELIGHT_CONF` directories and user specific settings in their home directory. The former often is best left to the system administrator responsible for the software installation.

Each line in the configuration file is of the form "key value1 [value2 ... value_n]". The recognised keys are:

Key	Description
networkcache.size	By default, 3Delight's network caching is off. Use this option to turn it on by giving it a maximum size (in GB). To work efficiently, the recommended minimum size is 50GB. Large projects (with lots of texture maps) could easily benefit from 100GB or more. (Giving it a size of 0 ensures that it is turned off.)
networkcache.directory	By default, the network cache directory (folder) is: on Linux <code>/var/tmp/3DelightCache</code> on Windows <code>%TEMP%\3DelightCache</code> — <i>which typically translates to:</i> <code>C:\Users\UserName\AppData\Local\Temp\%USERPROFILE%\AppData\Local\Temp\3DelightCache</code> You can change that location using this option. To work efficiently as intended, <u>it should point to a directory located on a local drive of the render nodes</u> . Note that SSD drives will help performance.
networkcache.write	If this is set to 1 it enables write caching. Instead of writing small sized chunks to the network driver, 3Delight will write the image locally on the render machine and copy the resulting file in one go at the end. This feature is off by default.
texturememory	Specifies the size (in MB) of the texture cache held in memory by <i>3Delight</i> for faster access. Generally, a cache size of 1000MB is enough (and this is <i>3Delight's</i> default size). Raise this value if <i>a lot</i> of textures are used and your computer(s) have a lot of RAM to spare. In most cases, we would not recommend to raise it to more than 25% of the size of physical RAM. Note that this cache is for textures in RAM and is completely different than the <i>Network Cache</i> , which is used for textures on local disk.
collective	Specifies the path of a JSON file that defines 3Delight Collectives . If unspecified, the option in Processing Options for selecting to render with a collective will be insensitive.
ocio.useshadertextures	This Enables or Disables (default) the OCIO menu in shading nodes that read textures (e.g Texture). Note that for OCIO to be enabled, it must be properly configured.
The following does <u>not</u> apply for the free version of 3Delight or versions integrated into Katana and provided by Foundry.	
license.server	Specifies the name or IP address of the server used to run <i>3Delight's</i> license server ' <code>licserver</code> '.

license.wait

If this is set to 1, *3Delight* will wait for a license when no licenses are available for rendering. Otherwise (if it is set to 0), *3Delight* will stop /exit if no licenses are available. The latter setting is useful when managing a render farm and other work could be scheduled instead of leaving a machine waiting for a license for rendering.



Environment variables, in the form `${ENVVAR}`, can be used in any string variables (e.g. `networkcache.directory`).

The following is the default `3delight.config` file content (included in the *3Delight*'s installation directory). It is empty of any configuration and offered just for documenting the available options.

```
# This 3Delight file allows you to set some configuration options. The format
# is simple: each line is a key/value pair linking an option to a specific value.
# Lines starting with a "#" character are ignored (they serve as comment lines).
# Example:
#
#   networkcache.directory /var/tmp/3DelightCache
#
# Recognized keys are:
#
#   networkcache.directory : Set location of 3Delight's texture cache.
#   networkcache.size      : Set the maximum size of the texture cache on disk (in GB).
#   texturememory          : Set the maximum size of the texture cache in memory (in MB).
#   license.server         : The name or address of the license server.
#   license.wait           : 1 means wait for a license to be freed when none are available.
#
# Note that environment variables in the form ${ENVVAR} can be used in any string variables.
# A more detailed documentation is available here:
# https://3delight.com/documentation/display/3DSP/The+3delight.config+File
```