

Licensing Documentation

1. License Manager

All Pixelmania's products use an industry standard licensing system called Reprise License Manager (RLM), that is licensed from Reprise Software, Inc. This software allows for reliable and fair license tokens that can be used for both node locked and floating license arrangements.

2. Finding your Host ID for specifying to Pixelmania when buying a license

For Pixelmania to be able to issue a valid license to run NNFlowVector you need to provide us with your Host ID. The Host ID is a number that is unique to a specific computer that can be used to identify that computer for licensing purposes. Most often it's the same as the MAC address of your primary ethernet device (en0), but without the colons (":"). The format is always a hexadecimal string made up of 12 characters.

An example Host ID would be: c56ef435b23d

There are multiple ways to find out your Host ID on your workstation (for node locked licenses), or on your license server (for floating licenses). The easiest one is to download Pixelmania License Server software from the downloads page on our website. Once downloaded and extracted, you will have a utility executable called **rlmutil** (the same utility executable is called **rlmutil.exe** on Windows). To get the Host ID, do the following:

- Open a terminal / command prompt
- Change directory to the place where you extracted the Pixelmania License Server, for example "cd ~/Downloads/PixelmaniaLicenseServer-v1.0.1_Linux"
- Run the rlmutil executable with the following flags: **rlmutil rlmhostid ether**

Copy the acquired Host ID by selecting it, right-click and choose "copy", or by selecting it and pressing Ctrl+Shift+C. You can now paste it into the purchase form in the Shop of our website.

Linux:

An alternative way would be to run the system utility **/sbin/ifconfig** to print information about all your network devices, and then look for your primary network device ("ether" or "en0") to find the MAC address. Remove the ":" characters and you have your Host ID.

Windows:

An alternative way would be to open a command shell/terminal and run the system command **ipconfig /all** to print information about your network device, and look for "physical address" to find the MAC address. Remove the "-" characters and you have your Host ID. For a description with screen shots, you can visit this page:

<https://www.laptopmag.com/articles/find-mac-address-windows-10>

3. Node Locked License

A node locked license is limited to run on only a single machine, specified by the Host ID that was communicated to Pixelmania at the time of purchase. A node locked license doesn't need a license server to be setup, and the installation of the license file is simple.

There are a couple of different options of how to install the license file. The recommended way is to simply copy the provided license file to this folder on the local file system (you will highly likely need administrative permissions to do so):

Linux:

/var/Pixelmania/rlm

Windows:

C:\Program Files\Pixelmania\rlm

Another option is to put it in the same folder as you installed the downloaded plugin package, i.e. in the same folder as the **NNFlowVector.so** file is located (**NNFlowVector.dll** file on Windows). This is not recommended since you may accidentally delete it when updating to a newer version of the plugin.

The last option is to put the license file in a custom folder of your choice, and create an environment variable called **pixelmania_LICENSE** that points to that folder.

Linux:

The simplest way to create this environment variable is to put a single line like this in your **.bashrc** file in your user's home folder:

export pixelmania_LICENSE=/full/path/to/license/folder

Windows:

In Windows 10, you have to add the environment variable using the system preferences. The easiest way to get to the right place is using the search bar on the Start Menu. Search for "environment variables", and choose "Edit the system environment variables". Add the "**pixelmania_LICENSE**" variable and set the value to the full path to the folder where the license files is saved.

For a more detailed guide of how to do this, you can search on Google for "windows 10 set environment variable permanently", and you will get links to pages like:

<https://www.architectryan.com/2018/08/31/how-to-change-environment-variables-on-windows-10/>

<https://www.opentechguides.com/how-to/article/windows-10/113/windows-10-set-path.html>

If you want to first test it out by setting the environment variable in a command line shell/terminal, you can use the command:

set pixelmania_LICENSE=C:\full\path\to\license\folder

Be aware that this only sets the environment to this current session of the shell/terminal. You can launch Nuke several times, but after you've closed the shell window, the environment variable is gone. To permanently set it, please follow the guide above instead.

4. Floating License

4.1 Starting the rlm server

A floating license requires running a license server on your local network. Please download our license tools from the downloads page on our website under the section Pixelmania License Server. Once downloaded and extracted to a preferred location, you can start the server with the **rlm** command (**rlm.exe** on Windows):

```
% rlm [-c license_file] [-dlog [+]logfile]
      [-nows] [-ws port] [-x [rlmdown|rlmremove]]
      [-install_service] [-service_name sname]
      [-isv_startup_delay seconds]
```

The *-c license_file* flag overrides the RLM_LICENSE environment variable, and makes it possible to directly specify a path to a folder where you keep your license file(s).

The *-dlog logfile* specifies the path to a log of what the server does. If you precede the path to the log file with a + character, the log will be appended instead of overwritten.

The *-nows* and *-ws port* options control the operation of the embedded Web Server. The *-nows* option instructs the rlm server to not start the embedded web server. The *-ws port* option instructs the rlm server to use port as the port number for the web server.

The *-x [rlmdown | rlmremove]* option controls whether the rlm`down` and/or rlm`remove` commands will be processed by the server. Specifying only *-x* will disable both commands. Specifying either command name after the *-x* will disable just that command.

These options can appear in any order on the command line.

Please note that if the rlm server cannot bind the web server port (which is 5054 by default), the server will not start and directly exit.

4.2 Configuring the clients to connect to the server

Once the license server is up and running, you need to direct the clients so they can connect to the license server and use the licenses it's serving. There are three alternatives to configure the clients:

The easiest option is to set the environment variable **pixelmania_LICENSE** to point to the correct **host** and **port** that is running the license server. The format to use is **port@hostname** where port is the TCP/IP port of the server, where the default is 5053. The host is the hostname of the license server on the network, for example "licman". You can also specify the host using the IP-address.

Linux:

The full line to set it to use the example values directly in a terminal or in a .bashrc file would be:

```
export pixelmania_LICENSE=5053@licman
```

Windows:

In Windows 10, you have to add the environment variable using the system preferences. The easiest way to get to the right place is using the search bar on the Start Menu. Search for “environment variables”, and choose “Edit the system environment variables”. Add the “**pixelmania_LICENSE**” variable and set the value to “**5053@licman**” (where you change the name licman to the server name that applies to you, or the IP-address).

For a more detailed guide of how to do this, you can search on Google for “windows 10 set environment variable permanently”, and you will get links to pages like:

<https://www.architectryan.com/2018/08/31/how-to-change-environment-variables-on-windows-10/>

<https://www.opentechguides.com/how-to/article/windows-10/113/windows-10-set-path.html>

The second option is to create a new license file (just a simple text file with the file ending .lic) in the following folder:

Linux:

/var/Pixelmania/rIm

Windows:

C:\Program Files\Pixelmania\rIm

The actual license file needs to be edited to include the following two lines only:

HOST <hostname> 5053

ISV pixelmania

You do need to replace <hostname> with the actual host name of the license server on the network (without the < and > brackets!). You can also use the IP-address if you want (instead of the host name). If you’ve changed the default port of 5053 to something else, you do need to specify that here as well.

The third option would be to create a license file exactly as above, but place it in a custom path of your choice. If you decide to do that, you need to specify the environment variable **pixelmania_LICENSE** and point it to that custom folder.

Linux:

The simplest way to create this environment variable is to put a single line like this in your .bashrc file in your user’s home folder:

export pixelmania_LICENSE=/full/path/to/license/folder

Windows:

In Windows 10, you have to add the environment variable using the system preferences. The easiest way to get to the right place is using the search bar on the Start Menu. Search for “environment variables”, and choose “Edit the system environment variables”. Add the “**pixelmania_LICENSE**” variable and set the value to the full path to the folder where the license files are saved.

For a more detailed guide of how to do this, you can search on Google for “windows 10 set environment variable permanently”, and you will get links to pages like:

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5. License Transfer

If you find yourself in a situation where you need to transfer one of your Pixelmania product licenses from an old machine to a new, please visit the License Transfer Form page at <https://www.pixelmania.se/license-transfer-form>