



## What is a floating license?

Floating license is designed for corporate or academic usage when the number of people who use "3DCoat" is more than the amount of licenses (seats). Floating serial number contains N licenses (seats). You may install "3DCoat" on as many computers as you wish. But you will be able to run "3DCoat" only on N computers simultaneously.

## "3DCoat 202x" and "3DCoatTextura 202x"

1. "3DCoat 202x" and "3DCoatTextura 202x" (further referred to as "3DCoat" and "3DCoatTextura") have "FServer" built-in. You have to click "Load license" in the startup dialog and open your file "FLOATING.license" directly in "3DCoat" and "3DCoatTextura" clients. There is no need to install and configure "FServer" for "3DCoat" and "3DCoatTextura" when your client machines are able to connect to the Internet. Only when your client machines with "3DCoat" and "3DCoatTextura" are not able to connect to the Internet but your server machine with "FServer" can connect to the "Internet" then there is a need for a local license server "FServer".

2. "3DCoat" and "3DCoatTextura" require "FServer 1.18" and above (it is available for Windows and macOS).

3. "FServer" requires a key from your ".license" file which is a plain text file. Key looks like this:

Key: **XXXXXX-XXXXXX-XXXXXX-XXXXXX**

Alternatively you can paste the whole content of plain text ".license" file and "FServer" will extract the key automatically.

4. "3DCoat V4" requires the older "FServer 1.16". This is because we have separate licensing servers for "V4" and "202x".

## "3DCoat V4"

For "3DCoat V4" you have to run a local license server "FServer 1.16" on your server machine and enter there (only on your server machine) your floating serial number that you have purchased. Inside your "3DCoat V4" clients you enter only the **IP:PORT** of your license server.

## Requirements

To use floating license you need latest "3DCoat" from here:

<https://3dcoat.com/download/>

To install a local license server for "3DCoat" (hereinafter referred to as **FServer**) you need any computer with Windows, macOS or Linux operating system with access to the Internet. If you can't provide Internet access, please read the section [Offline licensing w/o Internet connection](#) below.

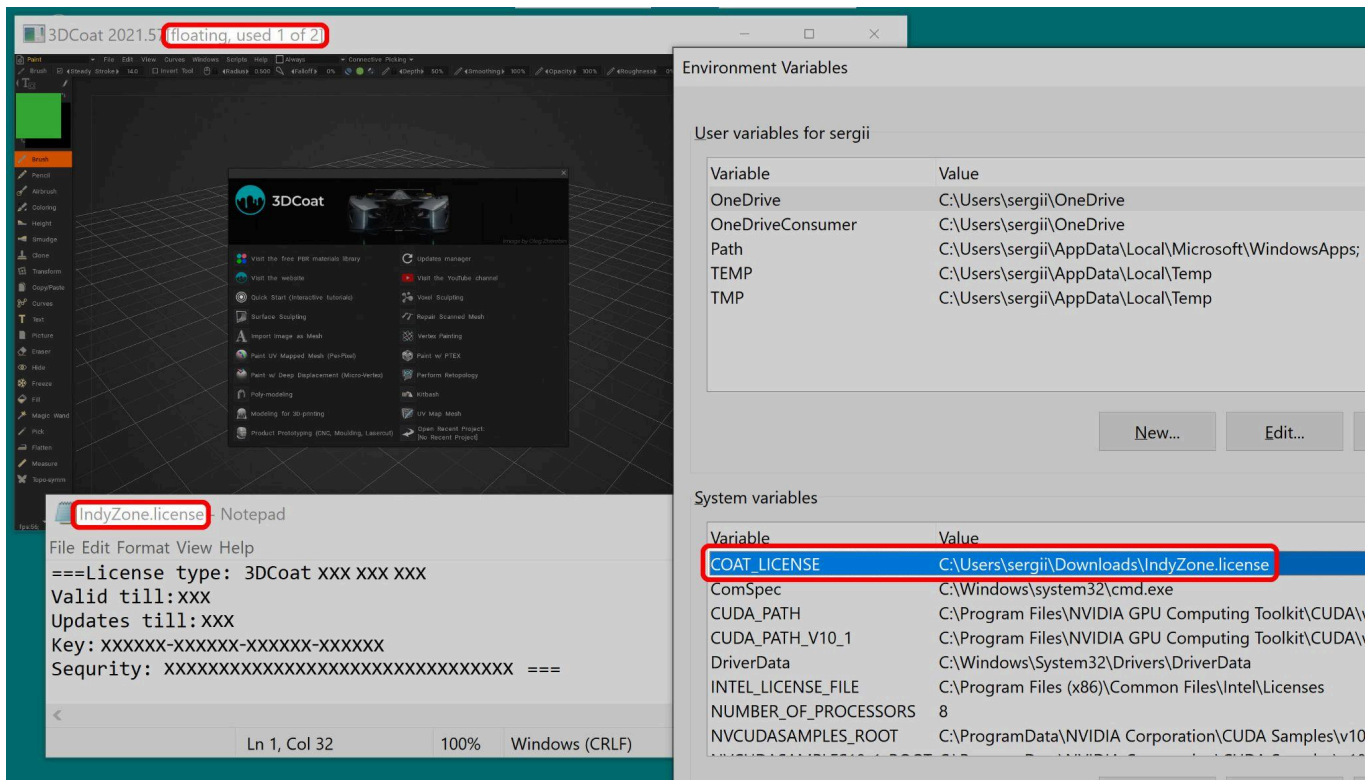
# "3DCoat(Textura) 202x" and the .license-file

Because in "3DCoat 202x" you can directly use your floating license without local license server "FServer" and because "3DCoat 202x" requires a license file even with a dedicated "FServer" here is this section.

There are several ways you can pass your license file into "3DCoat 202x". One of them simply copy your license text into the clipboard:

```
===License type: 3DCoat xxx xxx xxx  
Valid till: xxx  
Updates till: xxx  
Key: xxxxxx-xxxxxx-xxxxxx-xxxxxx  
Security: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx===
```

Then run "3DCoat 202x". In case you have an Internet connection then without any prompts you will see on the window title [floating, used 1 of x]. Alternatively (instead of copying into the clipboard) you can save your license text as a plain text file with extension ".license". Then on "3DCoat 202x" startup click the button "Load license" and select that file. If you have many workstations then you can define the system environment variable **COAT\_LICENSE** on each of them and specify the path to your license file as its value.



Only when your "3DCoat 202x" clients don't have access to the Internet and the above registration procedure won't work for you then continue "FServer" installation using this document below.

## --- How to install "FServer" under Windows ---

Download and extract the package:

[202x] <https://pilgway.com/~sergyi/FServer/3DCoat-FServer-1-18.zip>

[V4] <https://pilgway.com/~sergyi/FServer/3DCoat-FServer-1-16.zip>

Run the GUI version of "3DCoat" local license server "FServer.exe". Enter your serial number and click the "Restart Server" button. This generates a plain text file "license.dat" (if you have entered an online floating serial number) or "static.dat" (if you have entered offline serial number) inside folder "3DCoat-FServer-1-xx". This file will be used by the Windows Service version of "FServer". You can point "3DCoat" client(s) to the license server by entering IP:PORT of the license server instead of the

client serial (for example 127.0.0.1:8888).

It is convenient to run "FServer" as Windows Service, because it will stay running autonomously after logging off the user from the server. To do so enter in Command Prompt (**Admin**):

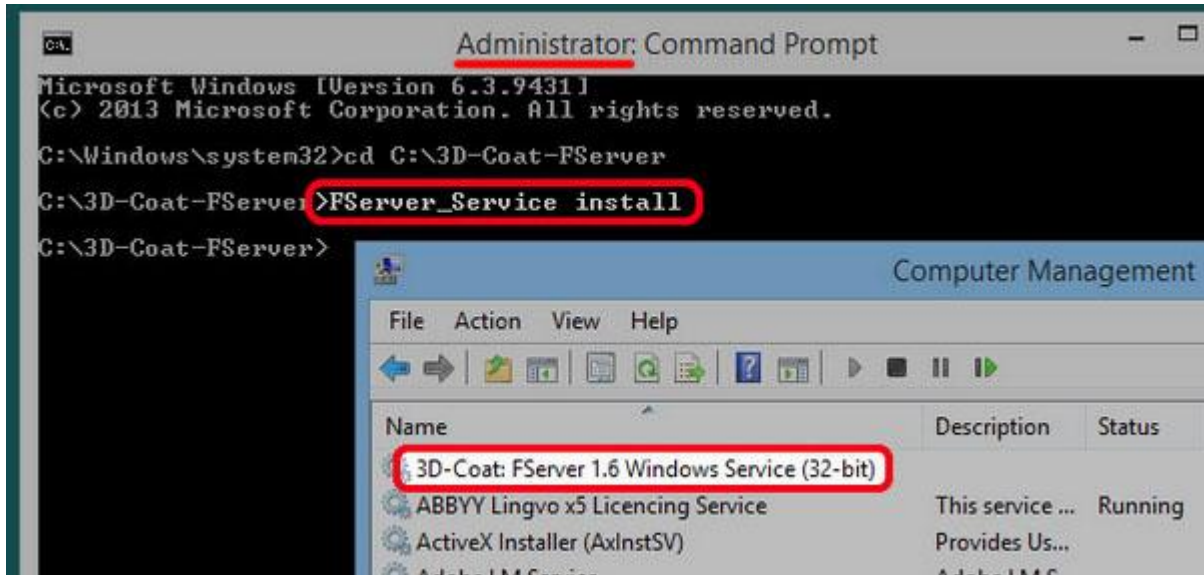
> `cd C:\3D-Coat-FServer-1-xx`

> `FServer_Service install`

This command installs "FServer" to the Windows Service Control Manager:

**Windows 10** right-click the Start Button > Computer Management > Services and Applications > Services

The service *3D-Coat: FServer 1.xx Windows Service (32-bit)* will appear in the list only when you run Command Prompt (**Admin**) as **administrator**:

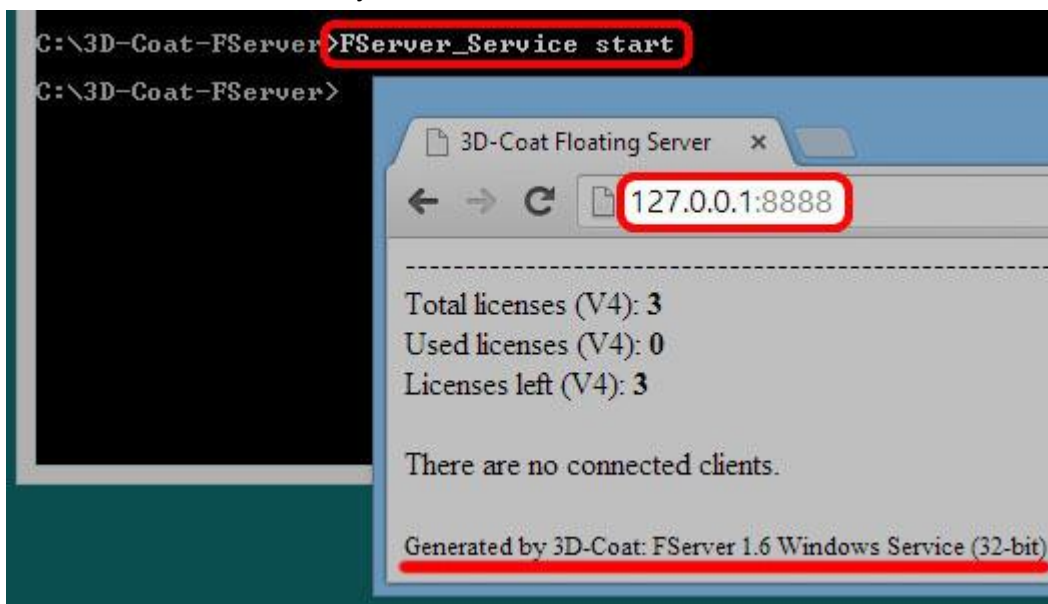


Go to Firewall to **add exception to "FServer" service**: click **START** > type **Control Panel** > **Windows Defender Firewall** > **Allow an app or feature through Windows Defender Firewall** > **Change settings** > **Allow another app...** > **Browse...** > `C:\3D-Coat-FServer-1-xx\FServer_Service.exe` > **Open** > **Add**

To start the "FServer" service manually:

> `FServer_Service start`

It automatically starts after system boot. To see whether the server has started successfully and to monitor its state enter in any web browser IP:PORT of the license server:



> `FServer_Service stop`

This stops the "FServer" service.

> `FServer_Service delete`

Stops the "FServer" service and deletes it from the Windows Service Control Manager. Please refer to the section "Linux & Windows environment variables" below for "FServer" tweaking options.

## Restart "FServer" service

To manually restart "FServer" service under Windows after changes (after entering new serial number into plain text files "license.dat" or "static.dat"):

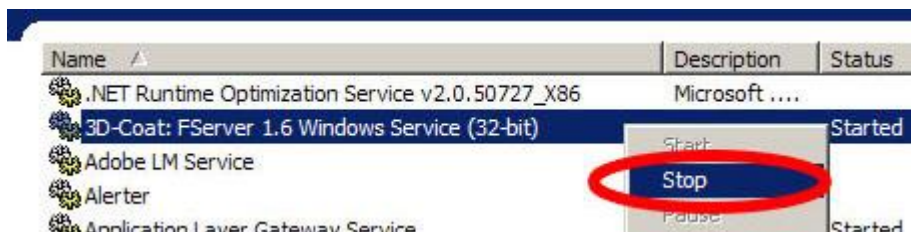
[RMB] START > Computer Management > Services and Applications > Services > 3D-Coat: FServer 1.16 Windows Service (32-bit) > Restart Service (or Stop Service / Start Service).

## Notes for Windows users

### How to uninstall Windows service

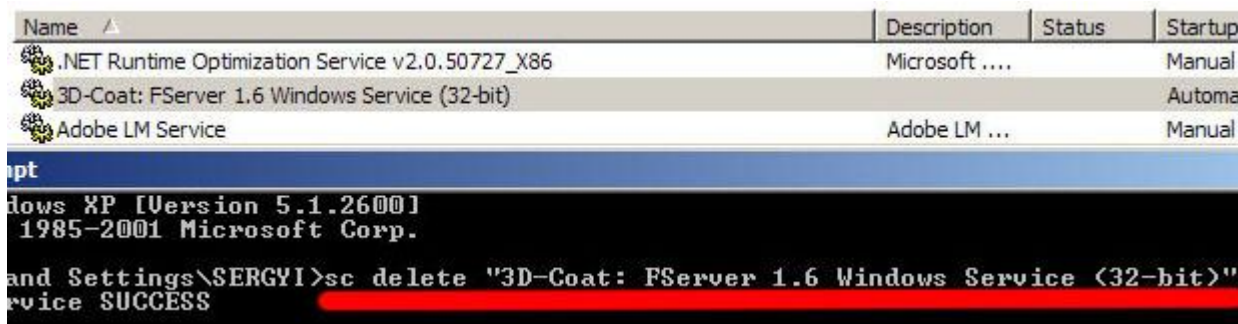
You should uninstall the old FServer Windows Service before installing the new one. To manually uninstall the Windows Service you should:

1. Stop the Windows Service in the Control Panel/Administrative Tools/Services



2. Delete the service by entering command in Command Prompt (which has to be run as administrator) in the format:

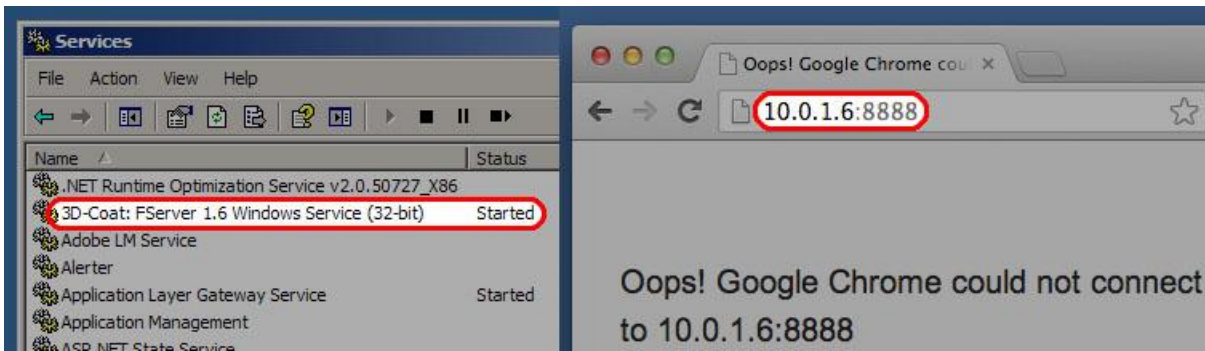
>sc delete "Service Name" ("Service Name" could be "3D-Coat: FServer 1.2")



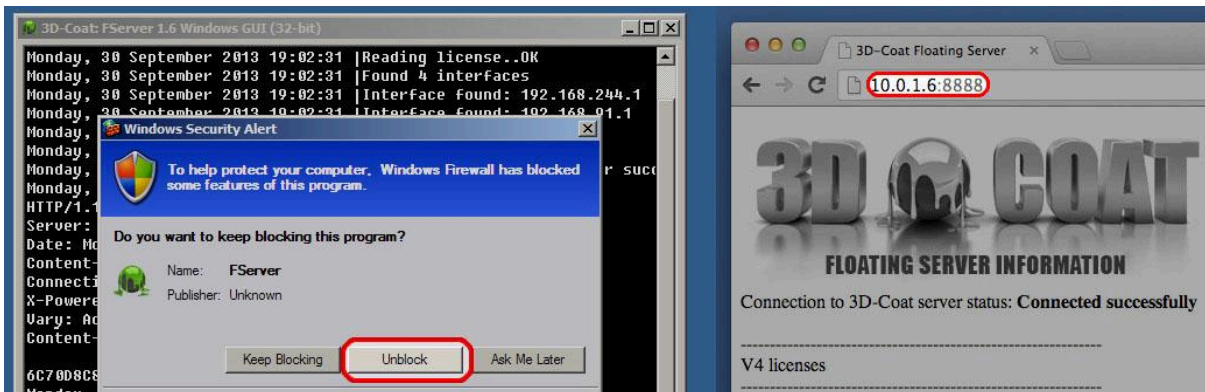
When you will select Action/Refresh from the main menu of "Services" control panel, the old FServer service should disappear from the list.

**Problem: clients can't connect to the FServer\_Service even though they successfully access the GUI version of FServer**

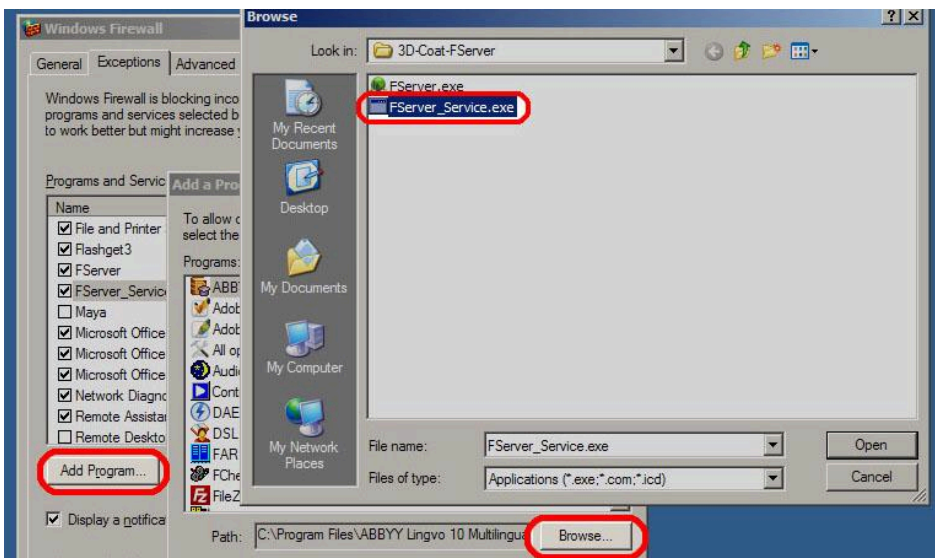
If you have installed and started FServer\_Service but you can't reach FServer web management page from the client machine and 3D-Coat client can't acquire license then you should configure Windows Firewall.



When you start the GUI version of FServer “Windows Security Alert” dialog popups and allows you to Unblock Firewall for it. Because there is no similar popup dialog for the FServer\_Service there could be situation when you can access the GUI version of FServer but you can’t access the Windows Service version of FServer from the clients.



To resolve the problem go to **Control Panel/Windows Firewall/Exceptions/Add Program.../Browse/(PATH\_TO\_FSERVER)FServer\_Service.exe**



*Problem: FServer Service has zero licenses and log file has empty hex response*

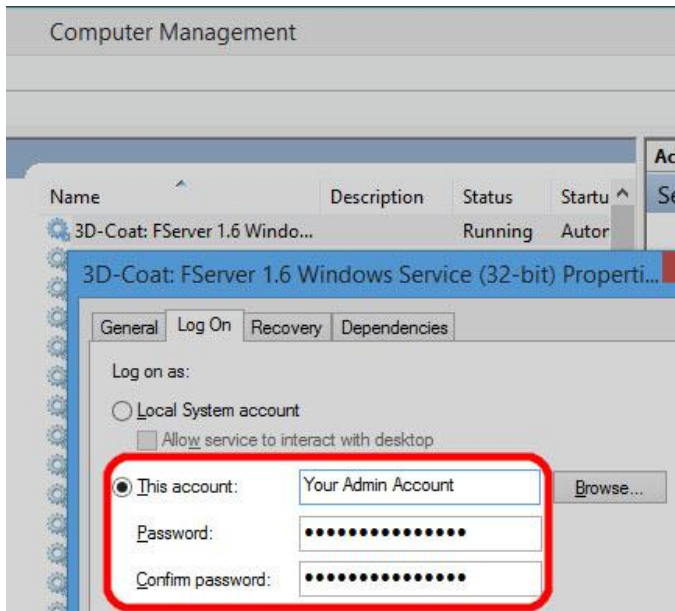
If you have successfully configured FServer Service but in the Log.txt file you see something like this:

Hex response:

Licenses used: 0 out of 0

then you should run FServer Service not from local computer account, but from administrator account.

Right-click the **Start Button > Computer Management > Services and Applications > Services > "3DCoat: FServer 1.10 Windows Service (32-bit)" > Properties > Log On > This account:** Enter your administrator name and password



## -- How to install "FServer" under Linux --

Download the latest local license server "FServer" for "3DCoat 202x" under Linux Ubuntu 2x:

<https://pilgway.com/~sergyi/FServer/FServer-1.18.tar.bz2>

Extract the archive, for example, inside your [Downloads](#) folder.

Open [Terminal](#) and run the executable [FServer-Daemon](#). It will display a short manual on usage.

Put your online floating serial number into plain text file [license.dat](#) using Terminal command:

```
echo "21CXXX-XXXXXX-XXXXXX-XXXXXX" >> license.dat
```

Or put your offline floating serial number into plain text file [static.dat](#) using Terminal command:

```
echo "FLT0XX-XXXXXX-XXXXXX-XXXXXX" >> static.dat
```

"FServer" daemon executable has 3 arguments: [start](#), [list](#), and [stop](#).

Start the daemon with argument [start](#). Monitor its status with argument [list](#) and by entering address

[127.0.0.1:8888](#) into Firefox. See the log file with Terminal command [cat Log.txt](#) and remember the

IP:PORT list below text [Found X interfaces for 3DCoat clients](#). Enter those IP:PORTs one-by-one into

Firefox on your workstations to know the correct one. Define the correct IP:PORT inside the environment variable [COAT\\_FSERVER](#) on all your workstations to point "3DCoat 202x" onto your "FServer".

## Auto start the FServer daemon in Linux Ubuntu 2x using "systemd" service

Copy the folder [FServer-1.18](#) with the already configured local license server "FServer" into [/opt](#):

```
$ sudo cp -r FServer-1.18 /opt
```

Then create a plain text file with description of "FServer" service:

```
$ sudo gedit /etc/systemd/system/FServer.service
```

Paste the text below (correct the path below if needed):

```
[Unit]
```

```
Wants=network-online.target
```

```
After=network-online.target
```

```
[Service]
```

```
Type=simple
```

```
ExecStart=/opt/FServer-1.18/FServer-Daemon start
```

```
[Install]
```

```
WantedBy=multi-user.target
```

Click [Save](#) then close the editor. Check the changes:

```
$ cat /etc/systemd/system/FServer.service
```

Enable "FServer" service for automatic start:

```
$ systemctl enable FServer
```

To immediately start "FServer" service use Terminal command:

```
$ systemctl start FServer
```

In Firefox enter local address [127.0.0.1:8888](http://127.0.0.1:8888) to see the web interface of "FServer". Enter address [127.0.0.1:8888/log](http://127.0.0.1:8888/log) to see the log.

## Stop and uninstall "FServer" service in Linux Ubuntu 2x

You can stop the already running "FServer" service manually with command:

```
$ systemctl stop FServer
```

Disable "FServer" service for automatic start:

```
$ systemctl disable FServer
```

Remove plain text file with the description of "FServer" service:

```
$ sudo rm /etc/systemd/system/FServer.service
```

Remove configured "FServer" folder from the machine:

```
$ sudo rm -r /opt/FServer-1.18
```

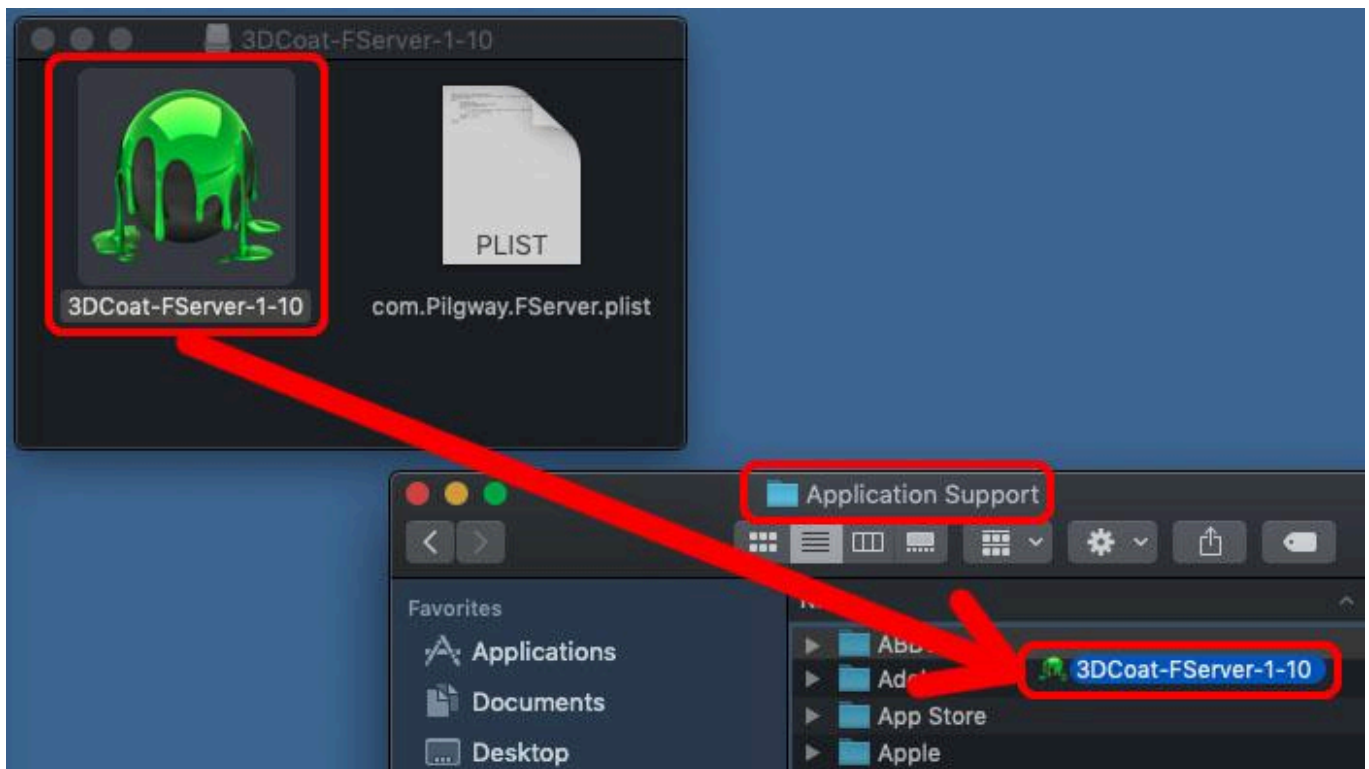
## --- How to install "FServer" under macOS Catalina ---

Download the latest version of 3DCoat FServer for macOS and open it:

[202x] <https://pilgway.com/~sergyi/FServer/3DCoat-FServer-1-18.dmg>

[V4] <https://pilgway.com/~sergyi/FServer/3DCoat-FServer-1-16.dmg>

Copy folder [3DCoat-FServer-1-xx](#) from the downloaded image into **Finder > Go > Computer > Macintosh HD > Library > Application Support** (click "Authenticate" to enter administrator name and password):



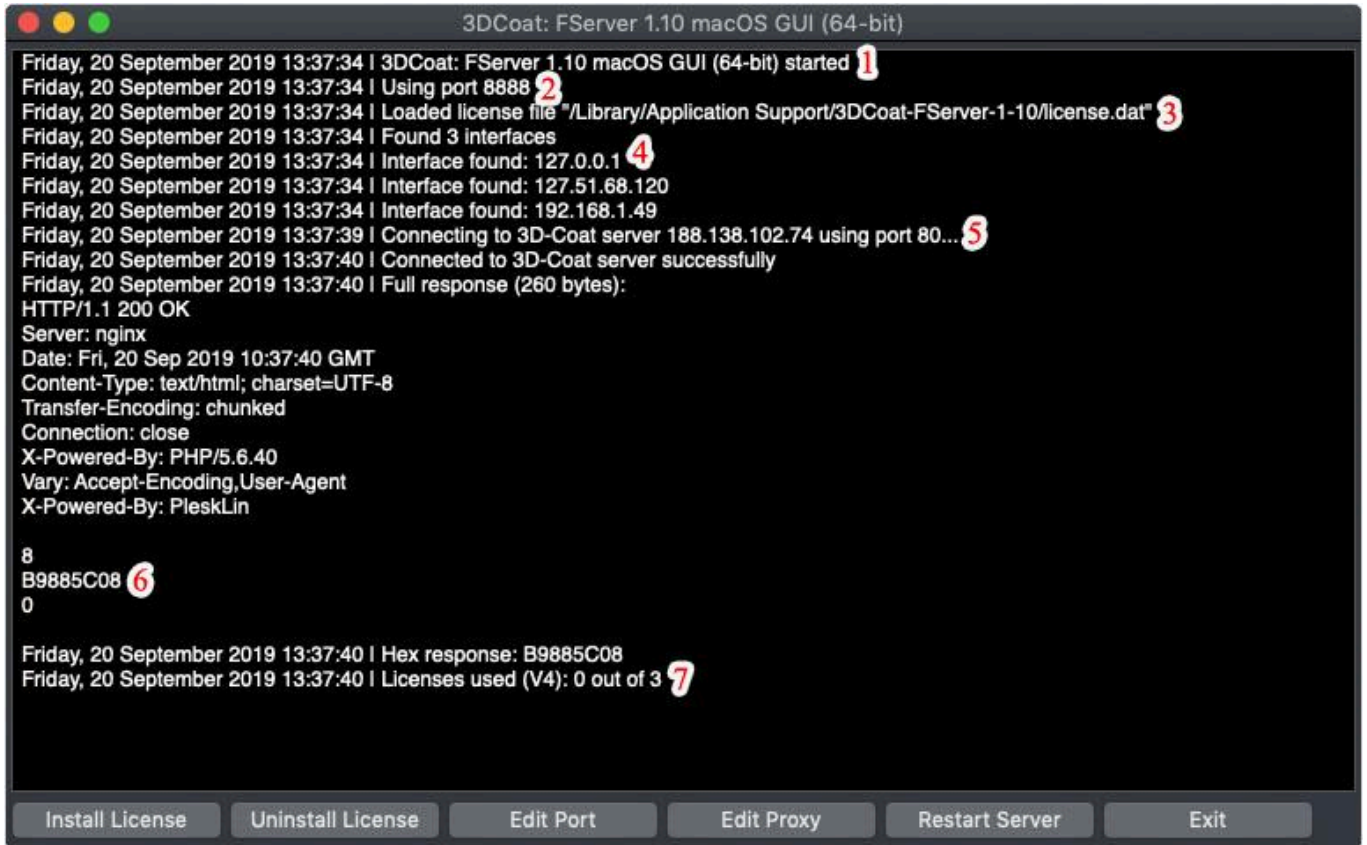
Run "FServer" executable bundle inside the copied folder. In case "FServer" on startup displays error **Can't save file "Log.txt"** in Terminal **clear quarantine** flag from copied folder:

```
$ xattr -dr com.apple.quarantine /Library/Application\ Support/3DCoat-FServer-1-16/*
```

Enter your serial number and click the button "Restart Server". After restarting "FServer" application you will see the log with:

1. version of FServer;
2. port for connection between "3DCoat" client(s) and "FServer" (you can change it by clicking "Edit Port" button);

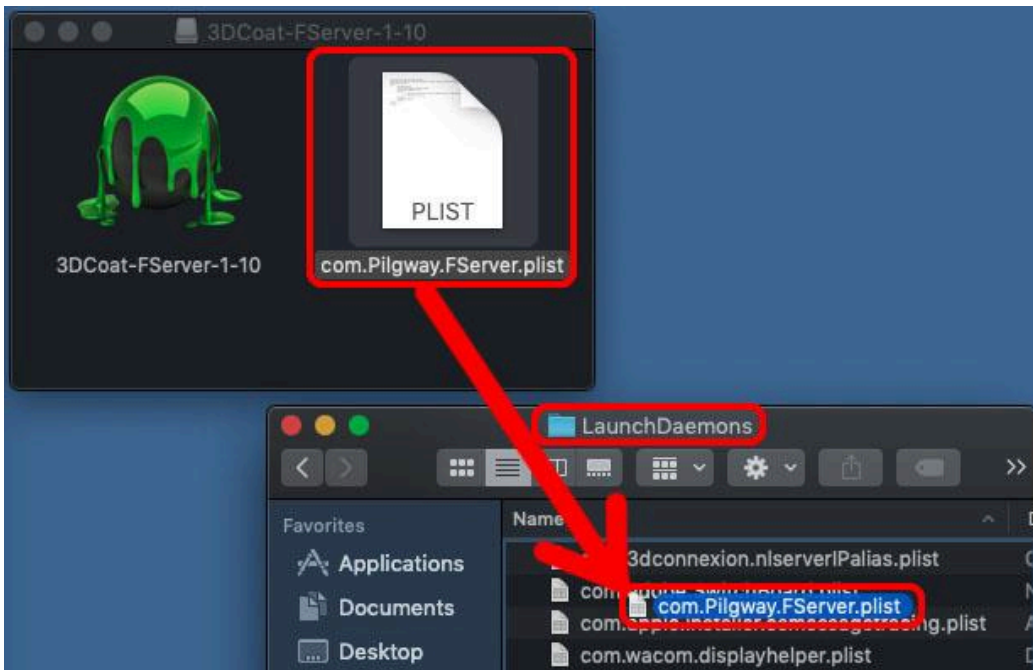
3. full path to the license file which contains your serial number;
4. a list of network interfaces through which "3DCoat" clients can connect to your local license server "FServer";
5. IP-address of our global license server and the port which are used by your local license server "FServer" to verify your license with our global license server;
6. a response from our global license license server which should not be modified by your firewall;
7. number of your licenses.



## How to install macOS launchd FServer-daemon

"launchd" is a macOS subsystem that runs daemons as root regardless of whether users are logged in or not. It is convenient to run FServer as launchd-daemon, because it will stay running autonomously after logging off the user from the server machine. To install FServer as launchd-daemon copy from the downloaded FServer image file [com.Pilgway.FServer.plist](#) into folder [Finder > Go > Computer > Macintosh HD > Library > LaunchDaemons](#) (click "Authenticate" to enter administrator name and password):





In Terminal change the owner of the copied plist-file to root:

```
$ sudo chown root /Library/LaunchDaemons/com.Pilgway.FServer.plist
```

Change the permissions to read / write for root and read only for others:

```
$ sudo chmod 644 /Library/LaunchDaemons/com.Pilgway.FServer.plist
```

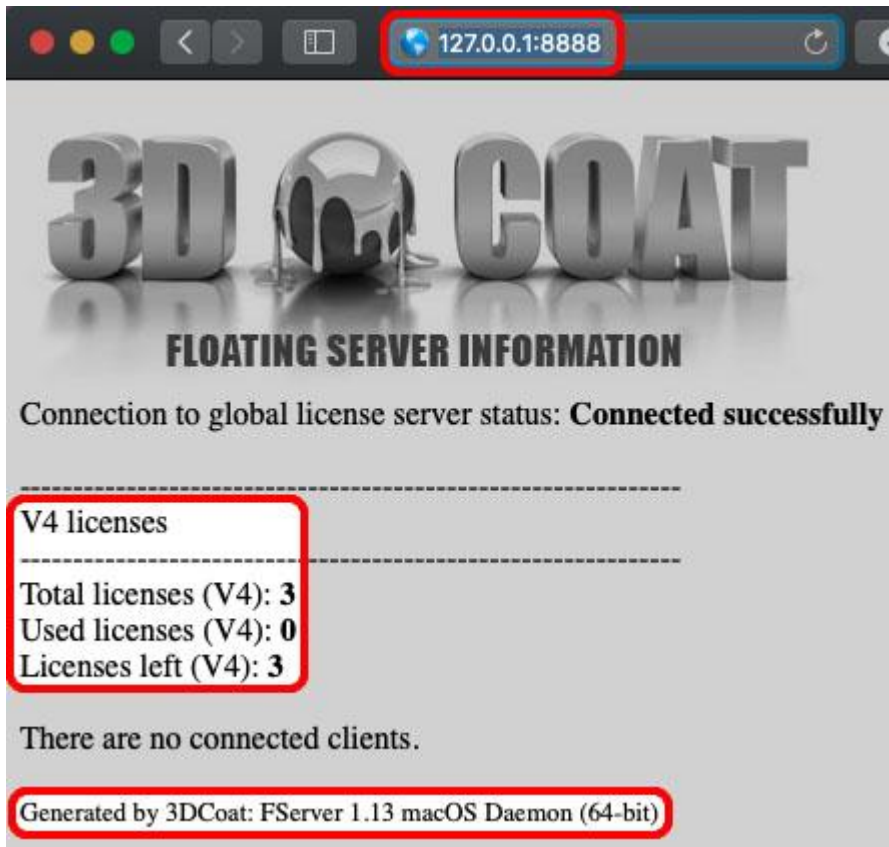
Otherwise you will get "launchd" error **Dubious ownership on file (skipping)**.

Check the owner and the permissions:

```
$ ls -l /Library/LaunchDaemons/com.Pilgway.FServer.plist
```

```
Sergiis-MBP:~ sergiikryzhanovskiy$ sudo chown root /Library/LaunchDaemons/com.Pilgway.FServer.plist
Password:
Sergiis-MBP:~ sergiikryzhanovskiy$ sudo chmod 644 /Library/LaunchDaemons/com.Pilgway.FServer.plist
Sergiis-MBP:~ sergiikryzhanovskiy$ ls -l /Library/LaunchDaemons/com.Pilgway.FServer.plist
-rw-r--r--@ 1 root wheel 452 Sep 19 15:28 /Library/LaunchDaemons/com.Pilgway.FServer.plist
Sergiis-MBP:~ sergiikryzhanovskiy$
```

FServer launchd-daemon has been installed. Restart your system to automatically start it. After restarting your system you can monitor the status of the "FServer" launchd-daemon by entering as the address in any web browser IP:PORT of one of the "FServer" interfaces:



## Manually load and unload macOS launchd FServer-daemon

After installing FServer launchd-daemon and before restarting your system to automatically start it you can test it. In Terminal manually load FServer-daemon for test:

```
$ sudo launchctl load -w /Library/LaunchDaemons/com.Pilgway.FServer.plist
```

To manually unload FServer-daemon in Terminal call:

```
$ sudo launchctl unload /Library/LaunchDaemons/com.Pilgway.FServer.plist
```

**You should manually unload FServer launchd-daemon before running the GUI version of "FServer"** to change its settings, because they share the same port between "3DCoat" clients and "FServer" itself.

## Zero licenses

In case you get zero licenses because your local license server "FServer" was unable to receive unmodified answer from our global license server 188.138.102.74 through port 80 **please contact us and request static floating serial number** which will not require that connection.

----- How to point "3DCoat" client(s) onto your local license server "FServer" -----



To point "3D-Coat" client(s) onto your local license server enter in "3D-Coat" registration dialog IP:PORT or SERVER\_NAME:PORT of your server machine where your local license server "FServer" is running. You may enter IP-address and port without "3D-Coat" GUI by defining user independent environment variable **COAT\_FSERVER** (see below).

Linux, Windows, OS X environment variables	
<b>COAT_FSERVER</b>	You can specify "IP:PORT" of your local license server "FServer" inside the environment variable "COAT_FSERVER". This will point the "3D-Coat 202x" client to your local license server.
<b>COAT_LICENSE</b>	To skip the registration dialog on "3D-Coat 202x" startup you can specify the path to your license file inside the environment variable "COAT_LICENSE".
FSERVER_LOGFILE	Contains absolute, relative, or even non-existent path and name of alternative "FServer" log file.
FSERVER_LICPATH	Overrides the location of the license files license.dat, port.dat, proxy.dat used by local license server "FServer". It can contain absolute, relative, or even non-existent path. The trailing slash is optional.

Linux environment variables	
FSERVER_PIDFILE	Overrides the pathname of the "fserver_console_daemon.pid" file.

## Environment variables under Linux

3D-Coat and FServer (GUI) are GNOME applications. Therefore the environment variables should be defined globally to GNOME. Variables that are defined in the `.bashrc` file will not be visible to GNOME applications. You can edit appropriate script files by entering in Terminal:

\$ gedit ~/.profile (Ubuntu)

# gedit /etc/profile (CentOS)

Examples of environment variables:

export COAT\_FSERVER=127.0.0.1:8888

export COAT\_PEN="Stylus name from the list on 3DCoat startup from Terminal"

export FSERVER\_LOGFILE=/home/UserName/Documents/My.txt

export FSERVER\_LICPATH=/home/UserName/Documents/FServer/License

export FSERVER\_PIDFILE=/home/UserName/Documents/My.pid

export COAT\_FILES\_PATH=/home/UserName/3D-Coat-Files/Data

## Environment variables under Windows

**Windows 10** **START** > type [Control Panel](#) > View by: [icons](#) > [System](#) > [Advanced system settings](#) > [Environment Variables...](#) > [System variables](#) > [New...](#)

**Windows 8** *Right-click the Start Button* > *System* > *Advanced system settings* > *Environment Variables...* > *System variables* > *New...*

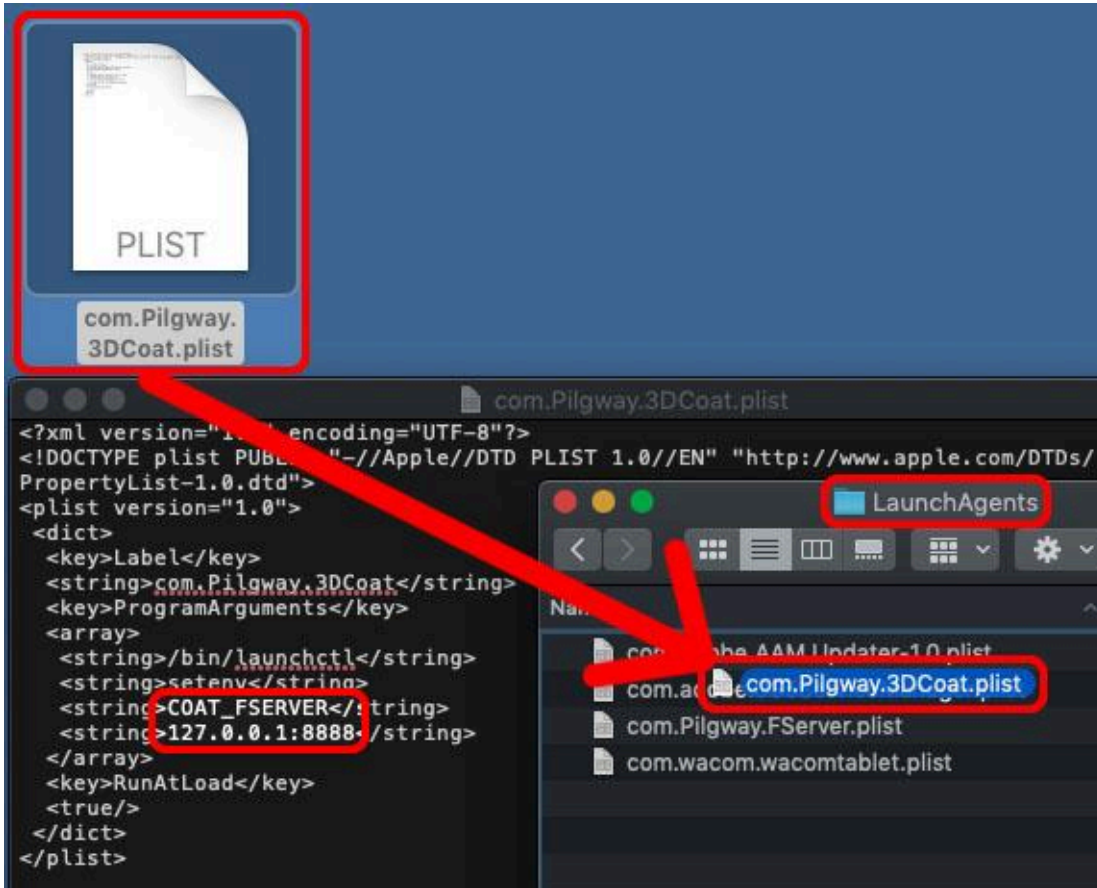
Variable name:	Variable value:
COAT_FSERVER	127.0.0.1:8888 (replace with IP:PORT of your license server)
FSERVER_LOGFILE	C:\Documents and Settings\UserName\My Documents\Logs\FServer.txt
FSERVER_LICPATH	C:\Documents and Settings\UserName\My Documents\FServer\License Files
COAT_FILES_PATH	C:\Users\UserName\Documents\3D-Coat-Files\Data

## Environment variables under macOS Catalina using Launch Agents

To define environment variable using Launch Agents create a plain text file with such content (as an example we are using COAT\_FSERVER with IP:PORT of 127.0.0.1:8888):

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN"
"http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
<dict>
<key>Label</key>
<string>com.Pilgway.3DCoat</string>
<key>ProgramArguments</key>
<array>
<string>/bin/launchctl</string>
<string>setenv</string>
<string>COAT_FSERVER</string>
<string>127.0.0.1:8888</string>
</array>
<key>RunAtLoad</key>
<true/>
</dict>
</plist>
```

Save that plain text file as `com.Pilgway.3DCoat.plist` (for example, on your Desktop) and move it inside folder `Finder > Go > Computer > Macintosh HD > Library > LaunchAgents` (click "Authenticate" to enter administrator name and password):



To share the same environment variable `COAT_FSERVER` between multiple users of your Mac, in Terminal change the owner of this plist-file to root:

```
$ sudo chown root /Library/LaunchAgents/com.Pilgway.3DCoat.plist
```

Change the permissions to read / write for root and read only for others:

```
$ sudo chmod 644 /Library/LaunchAgents/com.Pilgway.3DCoat.plist
```

Check the owner and permissions (should be `-rw-r--r-- root`):

```
$ ls -l /Library/LaunchAgents/com.Pilgway.3DCoat.plist
```

Then log out (or restart your Mac). Log in under any account (check availability of defined environment variable with Terminal command `echo $COAT_FSERVER`). Run "3DCoat" client. It should register by itself and it should display a number of your floating licenses on its window title:



It has been tested, that the method above of defining environment variable "COAT\_FSERVER" using "Launch Agents" works also in old macOS High Sierra 10.13.

# Example of "3DCoat - FServer" licensing layout under macOS Catalina

**Server machine**

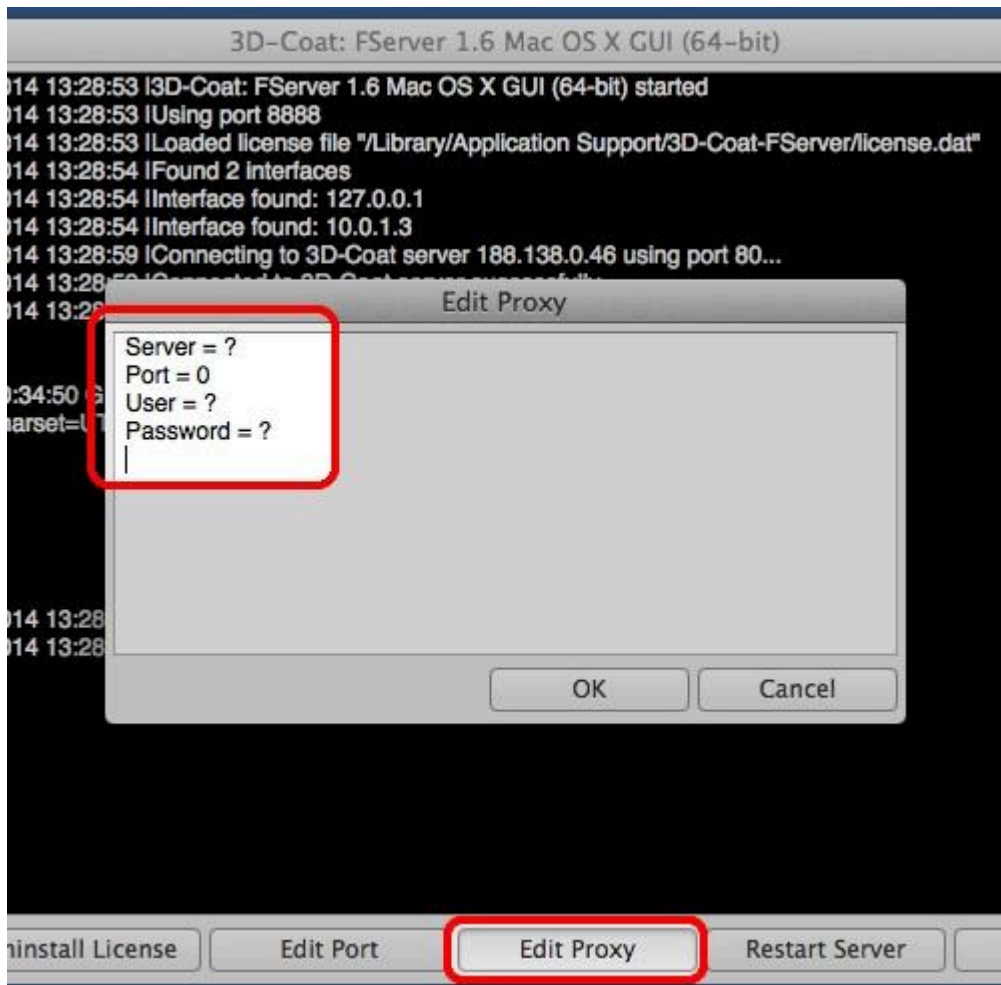
The screenshot shows the 'Server machine' interface. At the top, a file browser window displays the contents of the '3DCoat-FServer-1-11' folder, including 'FServer', 'license.dat', and 'Log.txt'. Below this, the 'Log.txt' file is open, showing a log of events from Friday, 04 October 2019. Key log entries include: 'Waiting for network 127.0.0.1 127.51.68.120', 'Network is ready 127.0.0.1 127.51.68.120 192.168.1.49', '3DCoat-FServer-1.11 macOS Console (64-bit) started', 'Port between 3DCoat and FServer is 8888', 'Loaded license file "/Library/Application Support/3DCoat-FServer-1-11/license.dat"', and 'Found 3 interfaces for 3DCoat clients: IP:PORT 127.0.0.1:8888, IP:PORT 127.51.68.120:8888, IP:PORT 192.168.1.49:8888'. Further down, it shows 'Define on client machine(s) environment variable COAT\_FSERVER with one of IP:PORT above', 'Connecting to global license server 188.138.102.74 using port 80...', 'Connected to global license server successfully', and 'Full response (389 bytes): HTTP/1.1 200 OK'. Below the log, a 'LaunchDaemons' folder is shown, containing several plist files, with 'com.Pilgway.FServer.plist' highlighted. This plist file is open, showing its XML content, which includes a label 'com.Pilgway.FServer', a program path to the FServer app, and a 'RunAtLoad' key set to true. A terminal window at the bottom shows the hex response 'B9885C08' and 'Licenses used (V4): 0 out of 3'.

**Client machine**

The screenshot shows the 'Client machine' interface. The top part displays the 3DCoat software interface, with the title bar indicating '3D-COAT 4.9.0.4 (GL64) (floating, used 1 of 3)'. The main window shows the 3DCoat logo and a list of tools and features, including 'Quick Start (Tutorial Missions)', 'Voxel Sculpting', 'Surface Sculpting', 'Repair Scanned Mesh', 'Import Image as Mesh', 'Vertex Painting', 'Paint UV Mapped Mesh (Per-Pixel)', 'Paint w/ PTEX', 'Perform Retopology', 'UV Map Mesh', and 'Product Prototyping (CNC, Moulding, Lasercut)'. Below the software interface, a 'LaunchAgents' folder is shown, containing several plist files, with 'com.Pilgway.3DCoat.plist' highlighted. This plist file is open, showing its XML content, which includes a label 'com.Pilgway.3DCoat', a program path to the launchctl binary, a service name 'com.Pilgway.3DCoat', and a 'RunAtLoad' key set to true. A terminal window at the bottom shows the license information: 'Connection to global license server status: Connected successfully', 'V4 licenses', 'Total licenses (V4): 3', 'Used licenses (V4): 1', 'Licenses left (V4): 2', 'Clients list:', and '#1 127.0.0.1 [localhost], joined Friday, 04 October 2019 14:50:57'. The terminal also shows 'Generated by 3DCoat: FServer 1.11 macOS Console (64-bit)'.

## ----- Proxy server setup -----

To verify the license FServer connects to our license server using port 80 (HTTP) at least once per run. If your server has access to the Internet via proxy you may specify proxy parameters using "Edit Proxy" button:



Other way is to manually create file [proxy.dat](#) in the same folder as FServer executable. It should contain 4 lines without any extra data:

```
Proxy_address  
Proxy_port  
Proxy_username  
Proxy_password
```

If some field is empty, leave it empty.

To specify serial number and port without using GUI manually create file [license.dat](#) and enter your serial number without any extra characters. The size of the file should be 27 bytes. Place custom port number for connection between FServer and 3D-Coat client to the file [port.dat](#)

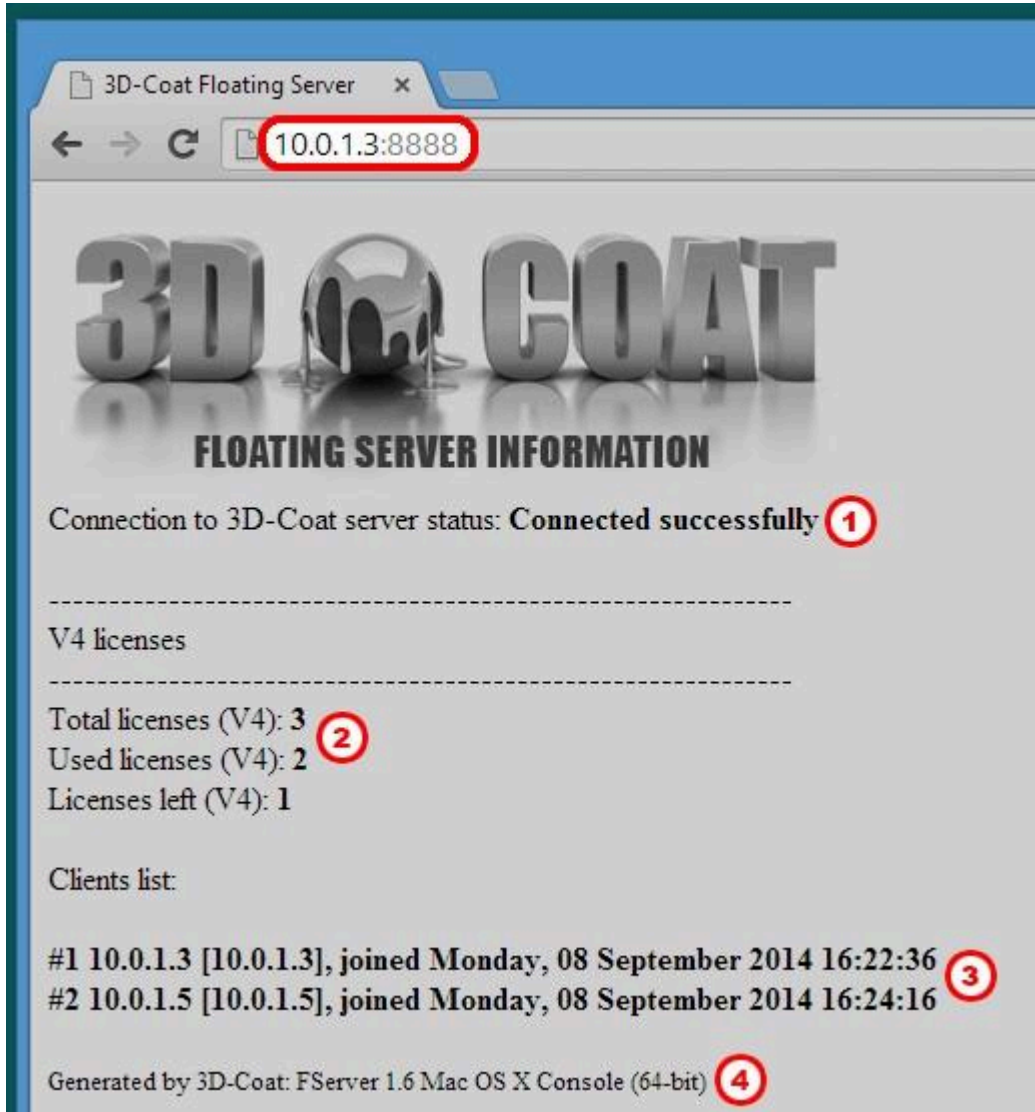
## --- Offline licensing w/o Internet connection ---

If it is impossible to provide Internet connection for FServer we provide another solution as an exception. On your request we will send you special serial number. You should uninstall previous license (press [Uninstall License](#) button or manually delete the file [license.dat](#)). Then press [Install License](#) button and enter new serial number or manually create file [static.dat](#) with new serial number in the folder where [license.dat](#) was located. Usually we provide offline licensing if you own 5 or more floating licenses.

## ----- Monitoring FServer -----

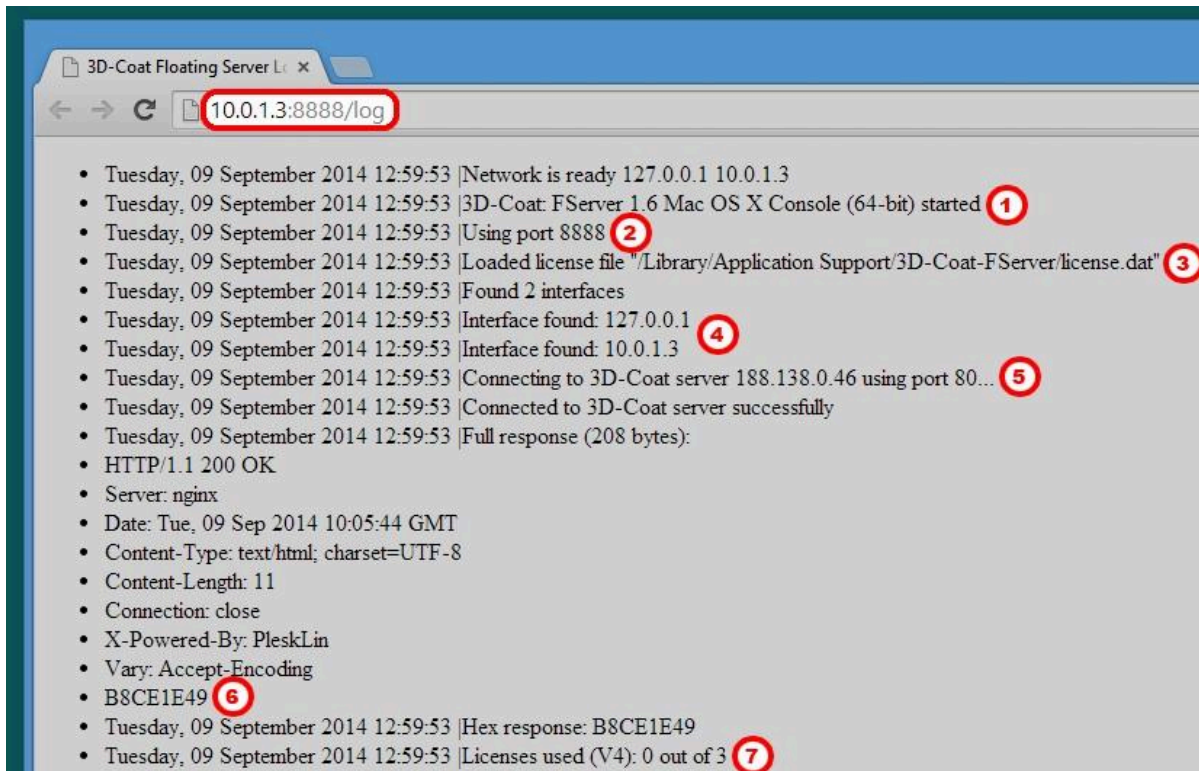
FServer has internal web-server that allows to see it's state on any workstation that has access to the license server. Type in any web browser address IP:PORT of your license server (for example 10.0.1.3:8888) to get statistics of floating server that includes:

1. connection status between FServer and our license server;
2. number of licenses, number of used licenses, number of remaining licenses;
3. list of connected clients;
4. version of FServer application.



To get the log of FServer type in browser IP:PORT/log (for example 10.0.1.3:8888/log):



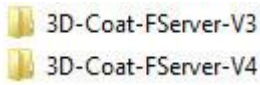
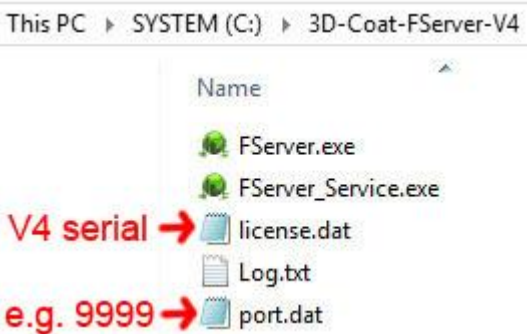


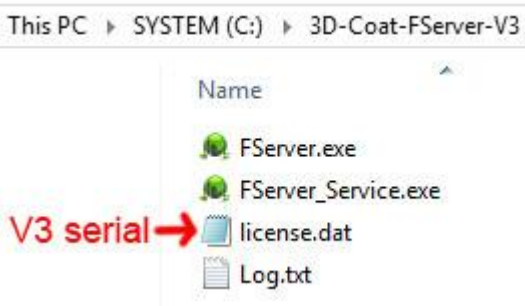
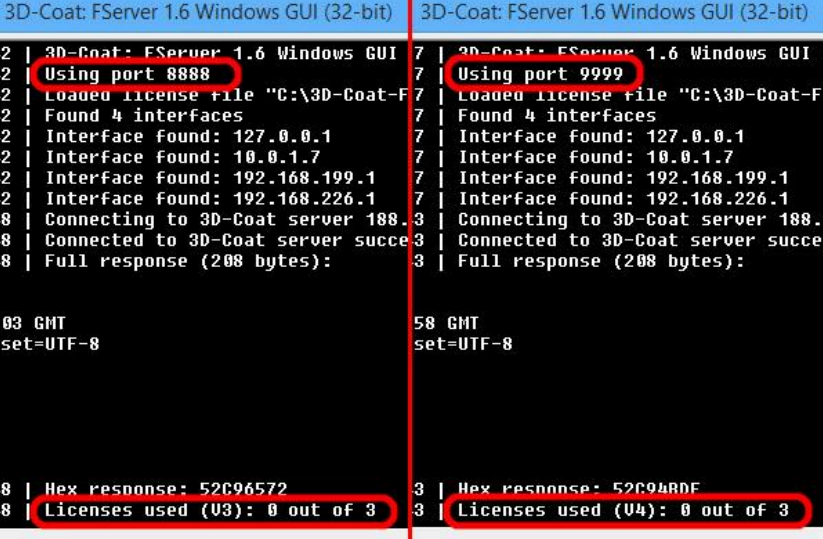
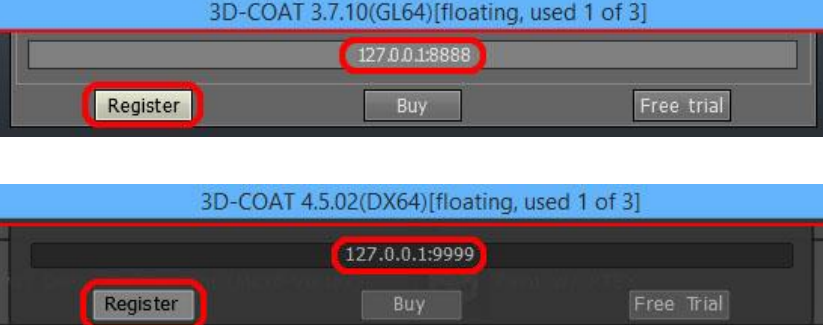
The log includes:

1. version of FServer;
2. port for connection between 3D-Coat client and FServer;
3. full path to the license file which contains your serial number;
4. the list of network interfaces to which 3D-Coat clients can connect;
5. IP-address of our license server and the port which are used by FServer to verify your license;
6. response from our license server which should not be modified by your firewall;
7. number of your licenses.

Only the last 50 KB of the log file will be shown by the web interface. To see the whole log view the file log.txt in the folder where FServer executable is located.

## --- How to use V3 and F4 licenses simultaneously ---

1	Duplicate folder with FServer. Give self-explanatory names to the folders to know which FServer corresponds to V3 and which to V4.	
2	Put your V4 serial number into file "license.dat" within folder of FServer for V4 (or into "static.dat" if you have static serial number for V4). Make plain text file "port.dat" and enter unique port number between FServer and 3D-Coat V4 clients (e.g. 9999).	

3	Put your V3 serial number into file "license.dat" within folder of FServer for V3 (or into "static.dat" if you have static serial number for V3). If you will not create "port.dat" the default port between FServer and 3D-Coat V3 clients will be 8888.	
4	Run these two instances of FServer following previous sections "How to install FServer" under Windows/Linux/OS X". Note that two instances of FServer should use different serial numbers and different ports (for example the default "8888" for V3 and custom "9999" for V4).	
5	Register 3D-Coat clients by entering the same IP of the FServer but using different ports for V3 and V4.	

## --- Share the same 3D-Coat installation between multiple users ---

To separate 3D-Coat's installed files and user data files that will be created and modified by the users during their work just install 3D-Coat into any location (even read-only) and then define environment variable `COAT_FILES_PATH` with the location the current user's data files. Standalone license file should be placed in the same folder as current user's data files. Floating license server should be defined as environment variable `COAT_FSERVER` with IP:PORT of the FServer. In this case all changed files will be written to the new location but if the installation location is read only you will not be able to delete any initial folders and files (like initial brushes, materials, strips, models). By default for user data files 3D-Coat uses folder `3D-CoatV4` in current user's folder under any OS.

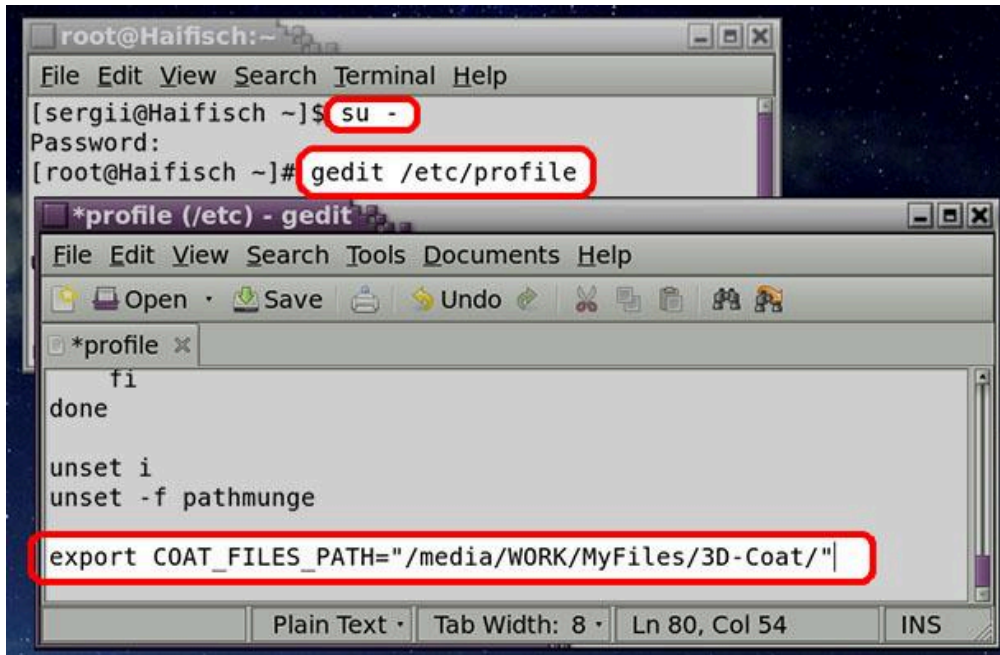
### User data files under Linux

To change the location of 3D-Coat user data files under Linux which by default are located in \$HOME folder, set environment variable `COAT_FILES_PATH` with full path. Because 3D-Coat is GNOME application that environment variable should be defined globally to GNOME. Variables which are defined

in .bashrc file are not visible to GNOME applications. You can edit appropriate script files by entering in Terminal:

\$ `gedit .profile` (Ubuntu)

# `gedit /etc/profile` (CentOS)



Please note, that folders `$HOME/3D-CoatV4(3)/Exchange` are created for compatibility with third party applications and plugins.

## How to migrate "FServer" to a new server machine

1. There should be only one instance of a local license server "FServer" with the same serial number. Therefore you should stop "FServer" on the old machine to use the same floating serial number on the new machine (under Windows [RMB] **START** > **Computer Management** > **Services and Applications** > **Services** > **3DCoat: FServer 1.16 Windows Service (32-bit)** > **Stop**, under Linux use Terminal command \$ `./fserver_console stop` or \$ `./fserver_console_64 stop`).
2. On your new server hardware install a new instance of local license server "FServer" according to section "**How to install "FServer" under Windows**" (**macOS**, **Linux**) in this document above. Into new instance of "FServer" enter your floating serial number or copy from the old server machine file "**license.dat**" which is located in the same folder as "FServer" executables (also copy "**static.dat**" and "**port.dat**" if such files exist). In case local license server "FServer" on the new server machine will show in the log "**0/0 licenses**" (empty hex response) please note that local license server "FServer" is connecting to our global license server **188.138.102.74** using port **80**. Therefore you should open that address and port in your router and Firewall. Also you should add executables "**FServer.exe**" and "**FServer\_Service.exe**" to your Firewall exceptions. Local license server "FServer" is receiving response from our global license server. That response is short and antivirus software can block it. Therefore you should add exceptions to antivirus software if you have one.
3. If your new server machine has a different local IP address compared to the old server machine then into every "3DCoat" client you should enter new IP:PORT of the new server machine. Look for the new IP:PORT inside the file "**Log.txt**" from the "FServer" folder below text "**Found x interfaces for 3DCoat clients**". Default PORT between "3DCoat" clients and local license server "FServer" is **8888** (but it can be custom inside plain text file "**port.dat**" within "FServer" folder). Using a web browser you get access from the client workstation to the web interface of "FServer". Enter IP:PORT of local license server "FServer" as web browser address. After you will reach "FServer" from the web browser on the client machine enter the same IP:PORT combination inside "3DCoat". To do that on every "3DCoat" client machine manually edit plain text file "**This PC > Documents > 3D-CoatV49** (or **48**)\floating.dat" in which

"3DCoat" stores IP:PORT of local license server "FServer". Or edit (specify) on every client machine environment variable `COAT_FSERVER` instead of plain text file "floating.dat" with IP:PORT (under Windows 10 **START** > type **environment variables** > **Environment Variables...** > **System variables** > **New...**). Under Linux edit "**HOME/3D-CoatV49/floating.dat**". Under macOS "**Finder** > **Go** > **Home** > **3D-CoatV49/floating.dat**".

## Warning! Your serial number is used on another PC! You should exit immediately



This warning means that standalone license and floating have been mixed. Your floating serial number should be entered only on server machine inside local license server "FServer". "3DCoat" clients should not know about any serial number (only IP:PORT of your server machine). Remove standalone local license file "**This PC** > **Documents** > **3D-CoatV48(or 49)\License.dat**" on all client machines.