

SPISim[®] License Server Setup Guide

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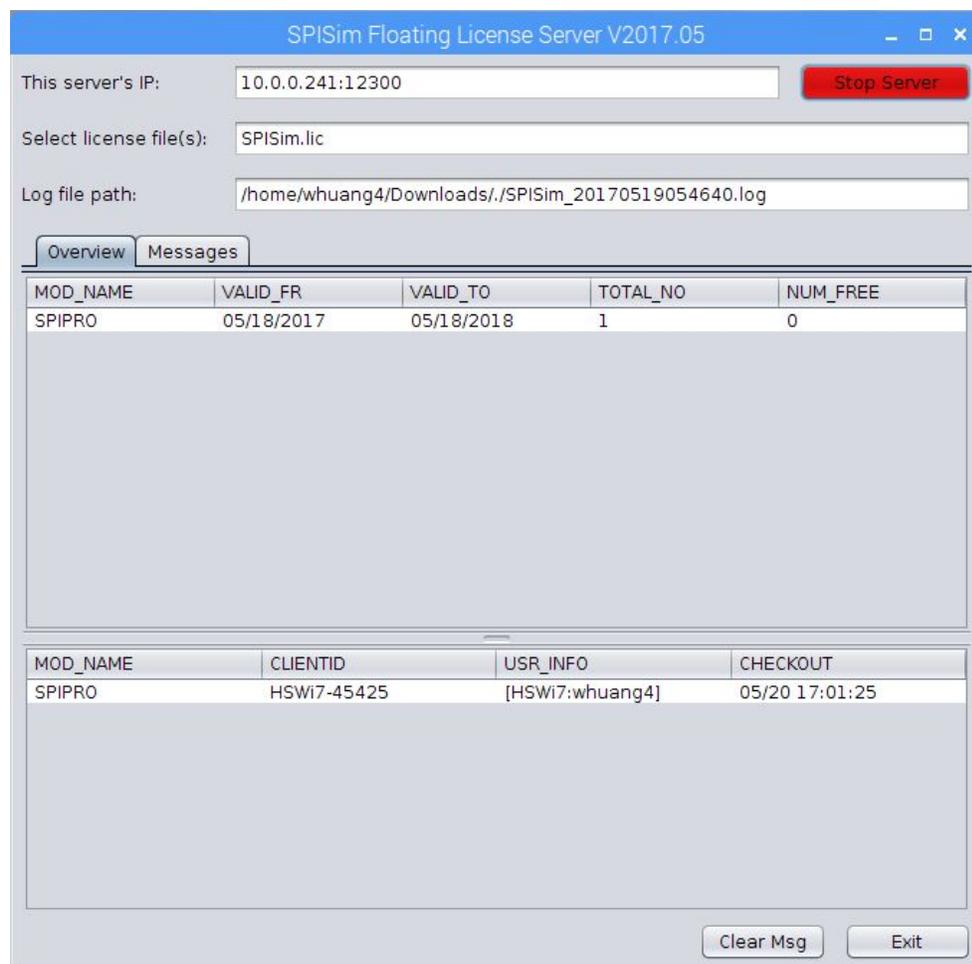
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Overview

SPISim's floating license server provides licensing mechanism for installed SPIPro application over the network. This license server can run on any supported OS environment, including Windows, Linux and OSX. SPIPro applications, (the clients), of various platforms can share limited SPIPro or module specific licenses effectively. This server program does not use much system resources and support both command line and GUI modes. The screenshot below show the GUI mode of the license server operation:



The rest portion of this manual will walk through the installation and usage of this license server.

Installation

This section describes installation and licensing process of SPISim license server.

System requirements:

Here are the requirements to run licensing server:

- Windows, Linux or OSX
- The network infrastructure should support IPV4 addressing
- An available port on the server
- Java Version 1.8.0 or newer

To check Java version you have installed, type **java -version**

```
C:\Users\whuang4>java -version
java version "1.8.0_112"
Java(TM) SE Runtime Environment (build 1.8.0_112-b15)
Java HotSpot(TM) 64-Bit Server VM (build 25.112-b15, mixed mode)
```

The version should be 1.8.0 or newer.

If the commands above produce error messages, check and make sure the java executable is part of your “PATH” settings.

Java program can be obtained from the link below:

<https://www.java.com/en/download/>

Download the server program:

Platform independent server program can be downloaded this link:

<http://www.spisim.com/download/latest/LicenseServer.zip>

After unzip the program, administrator should find a .jar file and .bat files for running server on different modes.

Apply for the license file:

After the server program is downloaded, administrator needs execute the program to obtain related info. for license file application. Please type the following commands in a command prompt:

```
java -jar SPISimLicenseServer.jar
```

Server's splash screen will be displayed with some usage info.:

```
-----
.d8888b. 8888888b. 8888888 .d8888b.
d88P Y88b 888 Y88b 888 d88P Y88b
Y88b. 888 888 888 Y88b.
'Y888b. 888 d88P 888 'Y888b. .d88b. 888d888 888 888 .d88b. 888d888
'Y88b. 8888888P' 888 'Y88b. d8P Y8b 888P' 888 888 d8P Y8b 888P'
'888 888 888 '888 88888888 888 Y88 88P 88888888 888
Y88b d88P 888 888 Y88b d88P Y8b. 888 Y8bd8P Y8b. 888
'Y8888P' 888 8888888 'Y8888P' 'Y8888 888 Y88P 'Y8888 888

SPIServer: SPISim's Floating License Server
Support: support@spisim.com or http://www.spisim.com
Version: V2017.05 [Mon May 01 00:00:00 PDT 2017]
Usage: SPIServer license_file port_number [-GUI]
Where:
license_file: path to the license file
port_number: port for communication
-GUI: optional, will bring up GUI dialog

Note: MAC address of this host is listed below...
D4:3D:7E:BA:61:E0 : 10.0.0.103
-----
```

To apply for a license file, please copy and select one of the MAC address listed at the bottom of the splash screen send that info to the SPISim support. The license file is “locked” with the server where this program is to run on. The license file anywhere, preferably in the same folder as this server program. In the example above, the MAC address is: **D4:3D:7E:BA:61:E0**

Administrator also needs to select a port for communication between this server and requesting clients (SPIPro applications). Both this port number and the server's IPV4 IP are needed to set-up on client side for licensing. In the example above, the IPV4 address is **10.0.0.103**

In the subsequent session, we will run the server at **10.0.0.241** on port **12300**.

Usage

This section describes usage of license server

Overview:

SPISim's license server supports both GUI and command line modes. In either case, a time stamped "log" file will be generated upon program startup. Processing messages regarding licensing check-out/check-in info. will be logged upon event happens. Administrator may use a script to process this log file to provide licensing and user records through a web server. From the GUI mode, all the relevant info. will be displayed via the built-in interface.

Command-line mode:

To execute server in GUI mode, run the "**RunCmd.bat**" or issue the following commands:

```
java -jar -Djava.net.preferIPv4Stack=true SPISimLicenseServer.jar SPISim.lic 12300 &
```

Note that the last "&" is applicable only on Linux or OSX and will put the process into background.

After several seconds, the licensing info will be displayed. The example below show server running on **10.0.0.241** at port **12300**

```
whuang4@WeiRasPi3:~/Downloads $ java -jar -Djava.net.preferIPv4Stack=true SPISimLicenseServer.jar SPISim.lic 12300
[2017-05-21:15:26:02] SPIPRO has 1 license(s). 0 are used, 1 are free.
[2017-05-21:15:26:02] Server started. (V2017.05 [Mon May 01 00:00:00 UTC 2017])

-----
GMS: address=WeiRasPi3-7937, cluster=SPISim@10.0.0.241, physical address=10.0.0.241:12300
-----
```

At command-line mode, server process will start automatically by default. To stop the server, simply kill the process. Please see "Other Info" section for impacts on connected clients when server process is killed.

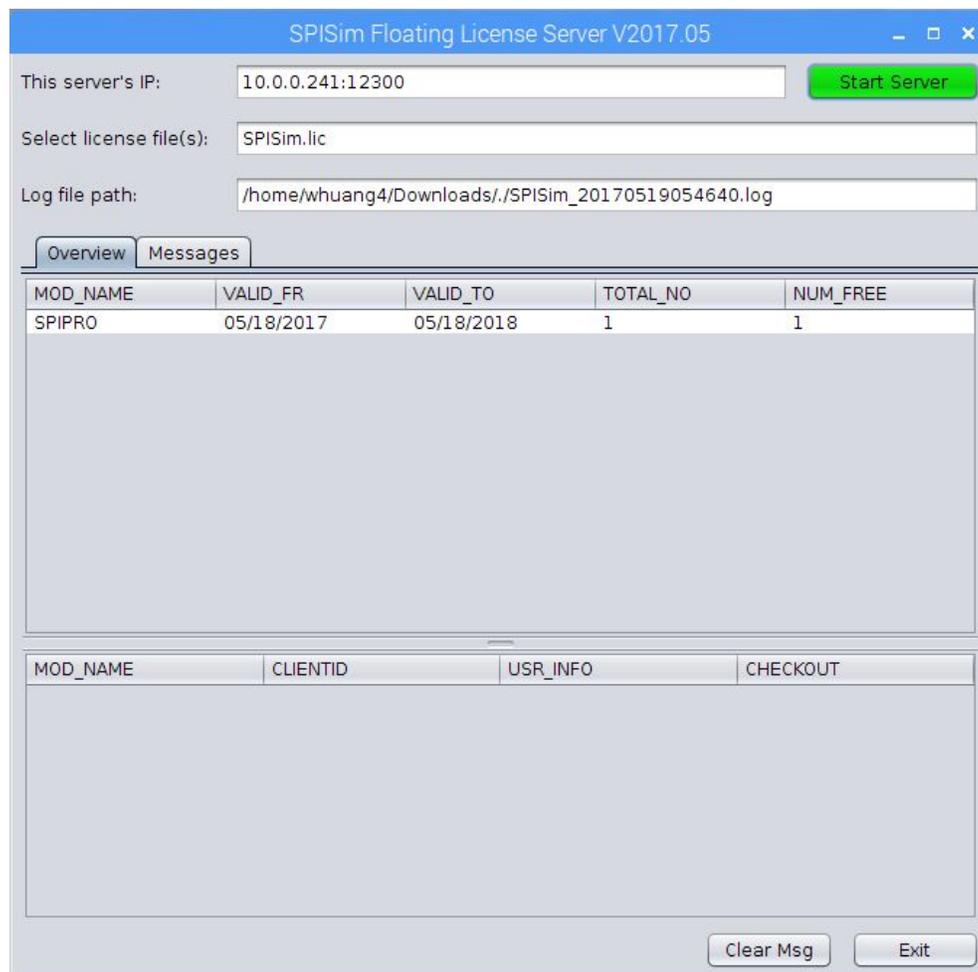
GUI mode:

To execute server in GUI mode, run the “**RunGUI.bat**” or issue the following commands:

```
java -jar -Djava.net.preferIPv4Stack=true SPISimLicenseServer.jar SPISim.lic 12300 -GUI &
```

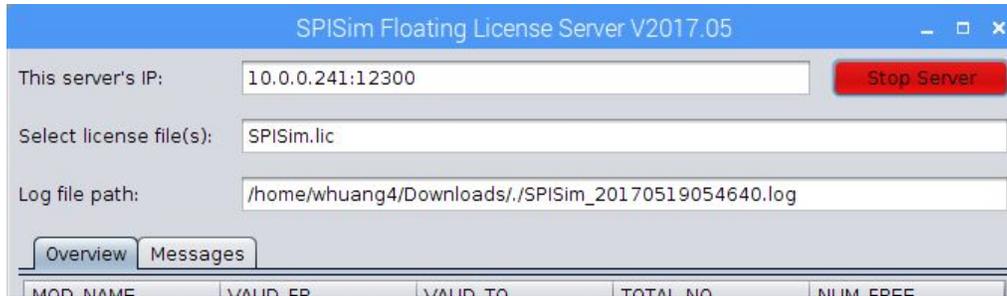
Note that the last “&” is applicable only on Linux or OSX and will put the process into background.

The server GUI will be displayed as shown below.



On this GUI, administrator will find all relevant info such as IP, license file and log file info. Please note that the server has not started at this

moment. Administrator need to click the “**Start Server**” button to start the serving process. Once started, the button will become red:



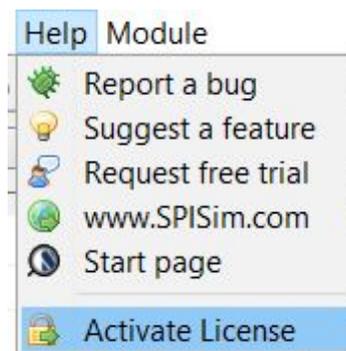
Click on the red “**Stop Server**” button will stop the serving process and it will turn green again. Please see “Other Info” section for possible impacts on connected clients when server process is stopped.

Administrator needs to provide server and port info. to the user running SPIPro application. In the example above, this info is **10.0.0.241** and **12300**.

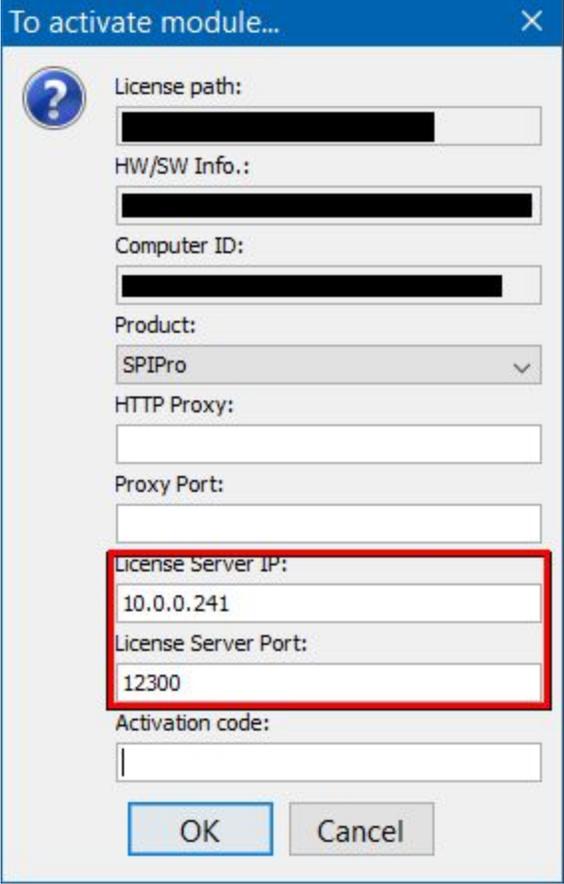
SPISim client setup:

Floating licenses’ clients, the SPIPro application, are platform independent. That is, no matter user is running SPIPro on Windows, Linux or OSX, he or she only need to enter the license server’s IP address and port number to get license served, should it be available.

To enter the server’s info, select “Help”->”Activate License” from the SPIPro application.



Then enter the server IPV4 address and port number in the fields boxed below. **This settings will take effect next time SPIPro application starts up.**



The screenshot shows a dialog box titled "To activate module...". It contains the following fields and values:

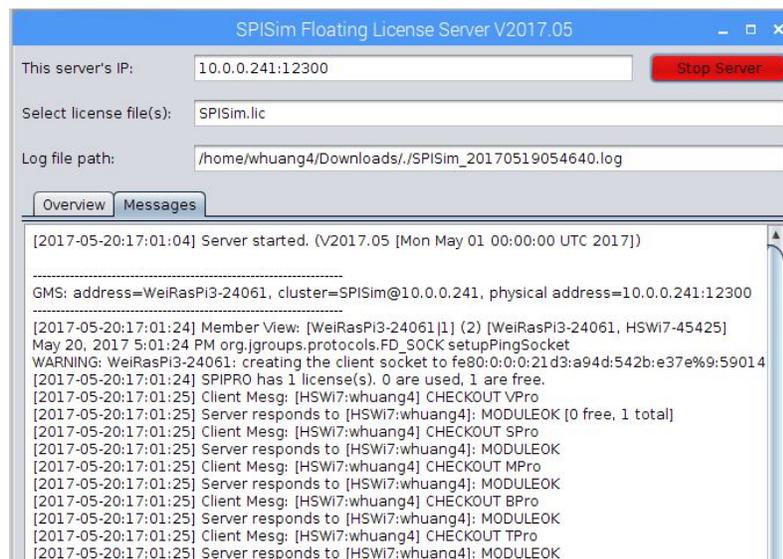
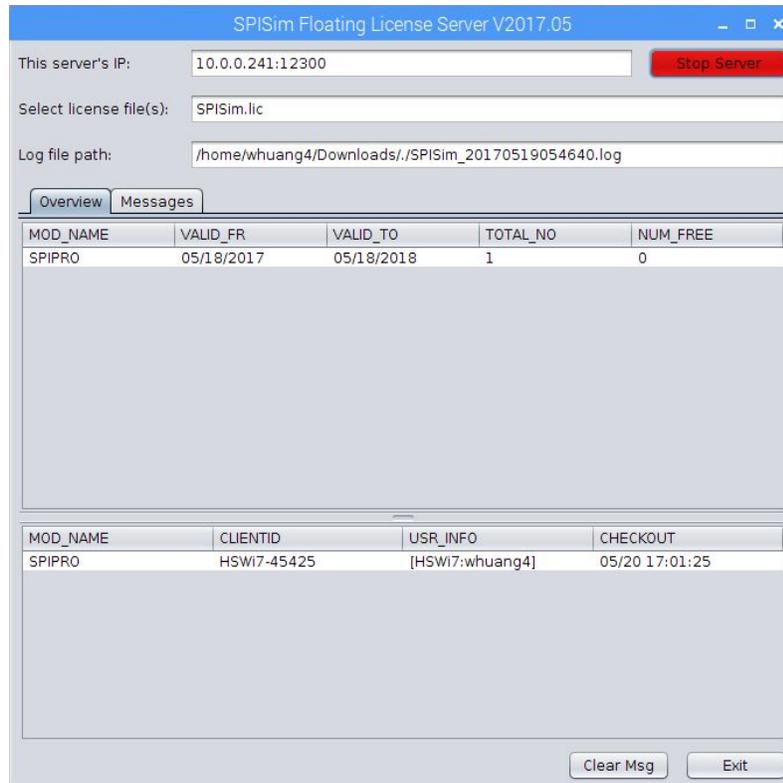
- License path: [Redacted]
- HW/SW Info.: [Redacted]
- Computer ID: [Redacted]
- Product: SPIPro
- HTTP Proxy: [Empty]
- Proxy Port: [Empty]
- License Server IP: 10.0.0.241
- License Server Port: 12300
- Activation code: [Empty]

The "License Server IP" and "License Server Port" fields are highlighted with a red box. At the bottom, there are "OK" and "Cancel" buttons.

Please note that when both a valid local license file and server IP:port info. are provided, the local license will take precedence. After SPIPro confirms the unavailability or invalidity of the local license file, it will use the provided server info. to communicate with server and check out license(s).

Licensing:

If the server info has been set-up properly and the server is running, licenses will be check-out upon a client SPIPro application launching. Command-mode server program will find updated log entries. GUI-mode server program will see machine, user and time when license checking out on both front panel and log message panel:



Other info

In this section, some caveats are listed for user/administrator's future reference.

License:

On the server side, there is only one license file needed. Availability of all SPIsim modules have been consolidated into this single license file. This license file must be served on the same machine whose MAC address was used to apply for the license.

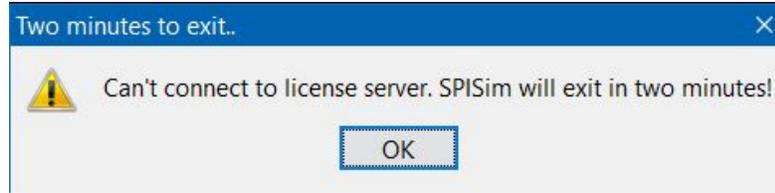
On the client side, SPIPro will always try to check out full SPIPro license first. If no more full SPIPro licenses are available, then client will try to check-out individual module's license. License checkout is on a first come, first served basis.

For example, if there is one full SPIPro license and two modules, MPro and BPro, available for checking out. Any client connected to the server first will checkout full license while leaving remaining license available for others.

Disconnection:

Once a SPIPro application ends, regardless it's closed by user, its process is killed or simply crashes, the checked-out license(s) will be returned to the server within several seconds.

If a server process is stopped or killed for any reason, those connected clients will receive a two minute warnings to save the progress before the SPIPro program will be shut down automatically:



Change settings:

Server's IP and port info. will be stored by the SPIPro client in the registry or preference file. User will not be able to change these settings if license continues being available from the license server.

To change these settings, either administrator needs to stop the server side program, or users have to remove and clean relevant registry/preference settings entries.

Update:

For stability consideration, SPISim's license server will not patch automatically. Server administrator needs to obtain the updated server program, **SPISimLicenseServer.jar**, and replace the existing one. Current version of the server program will be displayed on the GUI mode title bar.

Feedbacks and support

For comments and feedbacks:

info@spisim.com or <http://forum.spisim.com>

For general support:

support@spisim.com or <http://support.spisim.com>