On-premise Floating License

V1.0
Server: V4.8.5
Licensing team
JEOLJASON
JEOLUK
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1 Contents

1 Quick start Guide:

1. Download the server package at:

    Windows: https://trial.jeoljason.com/LexFloatingServer/JasonFloatServerWin485.zip

    MacOS: https://trial.jeoljason.com/LexFloatingServer/JasonFloatServerMac485.zip

2. Unzip the server package on the license server and edit the config.yml file, replace your license key in the file.
3. Start a DOS prompt (Administrator) or Linux/MacOS terminal and run the following command with the administrator/root privilege:

    Windows: lexfloatserver –s

    MacOS: sudo ./lexfloatserver –s

4. Visit the web page in a web browser: http://127.0.0.1:8090
5. Input the User and password (specified in the config.yml file), and click SETTINGS to input your license key, then click ACTIVATE to activate your license.
6. Pass the server IP address and port number used to your JASON users.
7. JASON users use http://[server ip]:8090 to request their floating license seats.
8.   Done.

   If there are any issues, please go to the appropriate section for more details.

2   Introduction

2.1   The floating licenses

Floating licenses (also known as concurrent/network licenses) allow a set number of licenses for an application to be shared among a larger number of users over time. When authorised users wish to run the application, they request a license from a license server.

For example, let's consider the case where your company has 30 employees who will use JASON. In most cases, there will be less than 20 users using JASON concurrently. Instead of purchasing 30 individual licenses, you can purchase the number of floating licenses required to support the number of concurrent users, 20 floating licenses in this case.

2.2   The per computer based on premise floating license

The floating license, is a kind of seat based license, the seat here is normally related to the application for instance, the PC or a user on a PC.

For our on-premise floating license, all copies of JASON will use a single license seat, meaning that a user can work with multiple documents on their computer by running multiple copies of JASON.

2.3   Hosted vs on-premise floating license server

We, JEOL(UK) LTD., offer both hosted and on-premise floating license servers. For the hosted server use case, you can use the license server hosted by us, and in the on-premise server use case, you will setup your own license server and manage the floating licenses on your own.

Note that the licenses of the floating server will be issued from and renewed by JEOL(UK) LTD..

2.4   More about the on-premise floating license server

The on-premise floating server is designed for the group of users of our licensed software tools such as JASON and SMILEQ, who would like to manage the license seats by themself.

We provide both a Windows and a MacOS version of the floating server.

Users need to purchase floating server licenses via https://www.jeoljason.com (or contact our customer services, support@jeoljason.com for more information).

The floating server can run as a Windows/MacOS service or run directly from the command line.

When the floating license server runs, it provides the license services via an http(s) protocol through computer port, 8090, by default. Each member of the group of users does not need to request license from us, but request a license seat from the local floating license server in the format:

http://[ip address]:[port number]

or simply:

[ip address]:[port number]

on our apps license dialog.

2.5   The client side

The standard JASON package supports on-premise floating license from V3.1 All local JASON users will need the version V3.1 onwards. Provided users have this minimum version of JASON, individuals can use any version of JASON in combination with the floating license server.

When the floating license server is set on the local network, local users can request floating license from the local server directly. For such users, whenever JASON starts, it will request a license seat from the floating license server and will get one if there is a seat available. A license seat will be released when our application quits so that that license seat can be used by any other user.

3   Downloads

The license/IT manager will need to download the floating server package; JASON users will download our applications the same way as trial/individual licensed users download them.

3.1   The floating server package download

The on-premise server can be downloaded at:

Windows server version:
https://trial.jeoljason.com/LexFloatingServer/JasonFloatServerWin485.zip

MacOS server version:

https://trial.jeoljason.com/LexFloatingServer/JasonFloatServerMac485.zip

3.2   The JASON software application download

Our applications, JASON/SMILEQ, are available to download at:
https://www.jeoljason.com/download-jason/

The users can choose to download Windows or MacOS versions.

4   The License server installation package

Simply download and unzip the server package to a folder on the server.

There should be three files in the package:

1.   lexfloatserver[.exe] – the server executable
2.   config.yml – the server configuration file
3.   product_vd150a27c-7972-414f-ac7f-b5ec23d472fd.dat – the license product file, please do not edit.

Please be sure that you have purchased the floating license and have a license key ready before proceeding.

5 Installation

The on-premise floating license server can be installed on any computer, there are no particular performance requirements because the server is very light weighted.

5.1.1 Preparation

To install/setup the floating license server, you will need:

1. The administrator permission on the Windows platform or the root permission on MacOS platform.
2. The port (8090 by default) should be available and it should be not blocked by firewall settings on either the server or your local network.
3. The server PC needs to be live all the time whenever there are users using JASON.

5.1.2 Installation

Installation of the floating license server is described in Section 4: The License server installation package.

After the installation is done, the server needs to be configured/started; the process is described in the next section(s).

6 Configuration

The configuration procedure should be done only once, when the floating license server is being set up on a PC for the first time.

All the configuration is done within the config.yml file.

The file config.yml is the plain text file and it is pre-configured. Normally, the user only needs to edit it to modify the "licenseKey" line to get the floating server work.

The user should modify "password" line to change the default password "JeolJason".

Please note, each line contains a name value pair, separated by ": ", a white space must follow ":".

Anything after "#" to the end of the line is considered a comment.

```
server:
    # Port server should listen to
    port: 8090
    # License key to activate the server
    licenseKey: 62807B-████-4F69B8-████-C84BF1-06B784
    # Product file path
    productFilePath: product_vab98071a-bcc9-4273-9f78-467ce7fac7a9.dat
    # Determines how long a license lease should last. The time is in seconds.
    leaseDuration: 60
    # Allows for a time lag (in secs) between server and client machines.
    allowedClockOffset: 1800
    # Blocked IP addresses
    blockedIps: []
    cryptlexHost: https://license.jeoljason.com

auth:
    # API key to access the following web API endpoints:
    # - GET /api/server/stats?apiKey=xxx
    # - GET /api/floating-licenses?apiKey=xxx
    apiKey: PASTE_SOME_RANDOM_STRING
    # List of admin users who can access the dashboard
    admins:
        - username: admin
          password: JeolJason    # change to your own password
          # Instead of password you can also provide a SHA256 hash of the password -
          https://xorbin.com/tools/sha256-hash-calculator
          passwordHash:
```

If the default port number 8090 is not available on the server, the user can also replace 8090 with the available port number; no matter which port number is used, it is important to make sure the license users won't be blocked by the firewall to access the server via this port number.

7 The floating server license activation

The server license can be activated by running a command line command on the server or via the web page on any device that can access the server. You only need to do this the first time you setup the server or to renew the license after the license expires.

7.1 The command line activation on Windows

1. Start DOS Prompt with the administrator permission
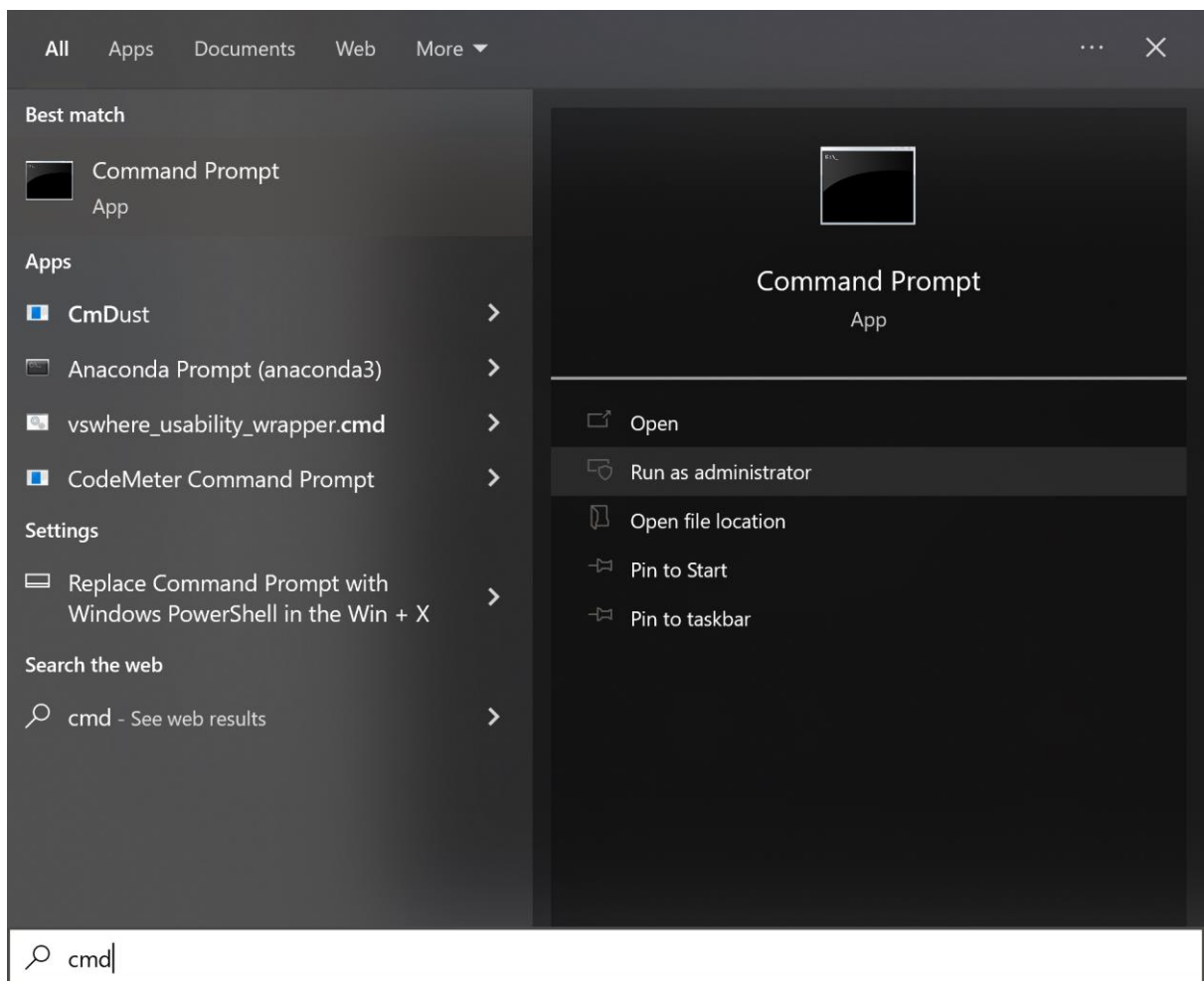
2. Go to the floating server folder you unzipped the server package into.

CD [floating server dir]

3. Run the following command to activate your license:

LexFloatServer -a --license-key=[license_key] --config=config.yml --product-file=product_v d150a27c-7972-414f-ac7f-b5ec23d472fd.dat

To de-activate the license on the current computer, run the command:

lexfloatserver -d

7.2   The command line activation on MacOS

1. Start a Terminal from LaunchPad (by typing Terminal)
2. Go to the floating server folder you unzipped the server package into.

cd [floating server dir]

3. Run the following command to activate your license:

sudo ./lexfloatserver -a --license-key=[license_key] --config=config.yml --product-file=product_v d150a27c-7972-414f-ac7f-b5ec23d472fd.dat

To de-activate the license on the current computer, run the command:

sodu ./lexfloatserver -d

7.3   Notes on the command line activation

If there are any issues in this step, please check that:

1. you are running the command with super user privilege;
2. the license key matches the license key in the config.yml file;
3. the productfile in the command line matches the one in the config.yml;
4. there is a clear error message after running the command;

If you cannot deal with the error on your own, please contact our support (support@jeoljason.com).

Alternatively, you can try the activation method described below.

7.4   License activation via Web

If you have either installed the floating server as service or run from the command line, but you have not activated the purchased license key yet, then please follow these steps.

When you start from DOS prompt without license, you can see the following error:

```
D:\FloatingServer>LexFloatServer.exe -s
[2023-01-12 10:21:51Z] WRN License not activated! Please activate the license using a license key.
 Error code: 1
[2023-01-12 10:21:51Z] INF Starting floating license server...
[2023-01-12 10:21:51Z] INF Total number of available floating licenses: 0
[2023-01-12 10:21:51Z] INF Listening on port: 8090
```
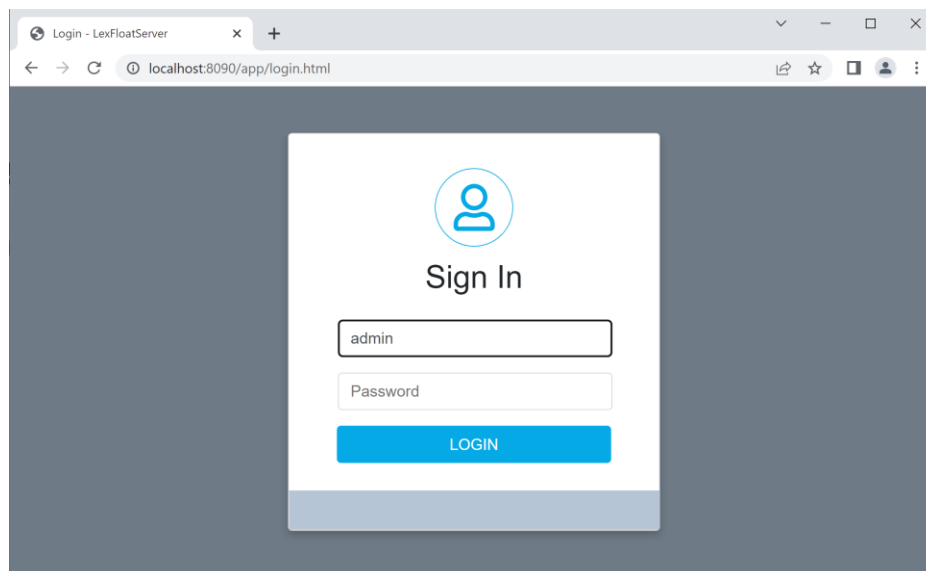
In this case, you do not need to stop the program running, simply follow the procedure below to activate your license:

1. Start a web browser, such as Google Chrome, Mozilla Firefox, and input the web address:

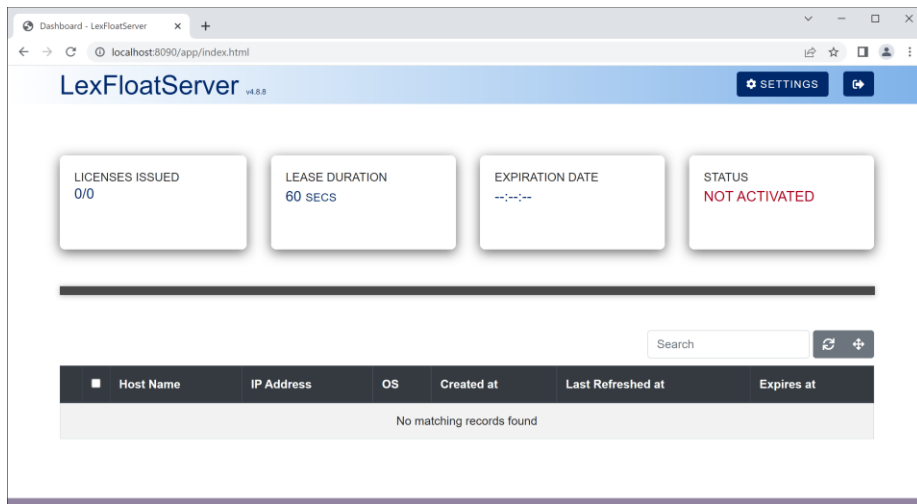http://localhost:8090/ or

http://127.0.0.1:8090

2. You should be redirected to the login page:

The login account can be found in the config.yml file, you can find/edit the login account in the file.

3. After login, you are redirected to the Dashboard:

4. In the Dashboard, click the "Settings" button at the top-right corner to go to the configuration page.

5. In the configuration page, input your license key and click the "Activate" button:
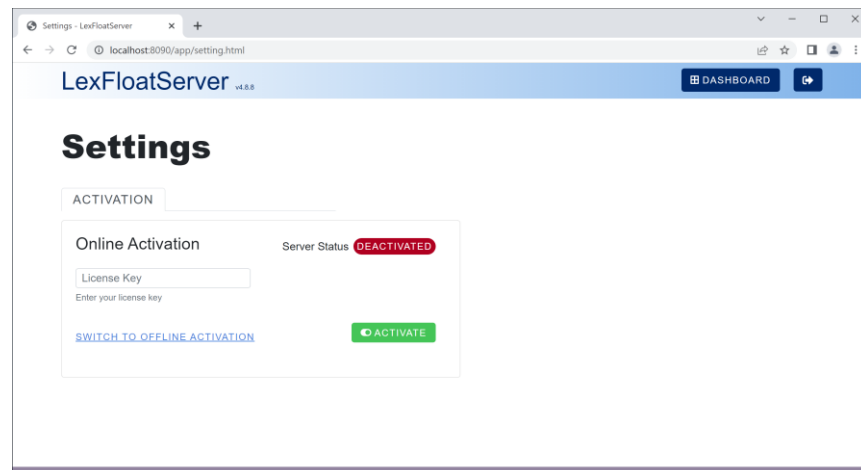
6. After you activated your license, you can check out the status of your license in the Dashboard (return to the Dashboard by clicking the "Dashboard" button in the configuration page, see above); the license information should be given as shown:
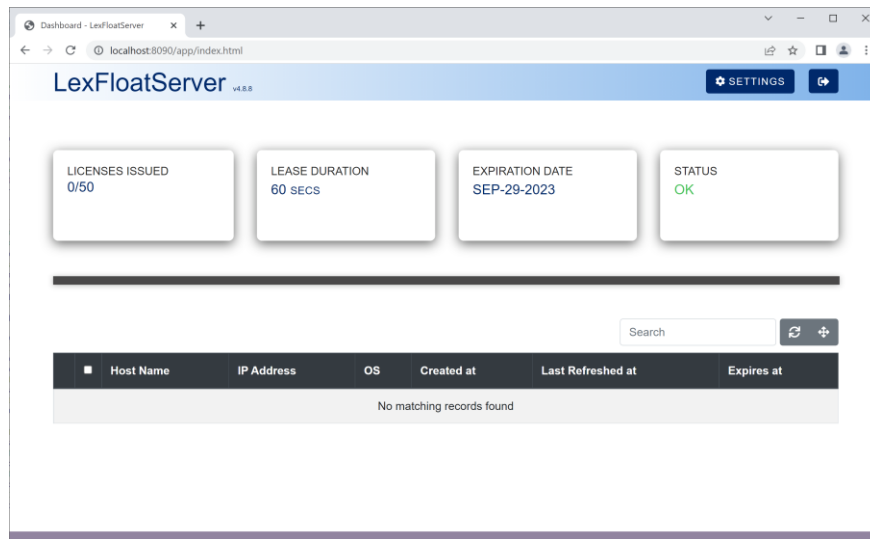
Notes:

If for any reason, you cannot reach the login page or get an error on the webpage such as:
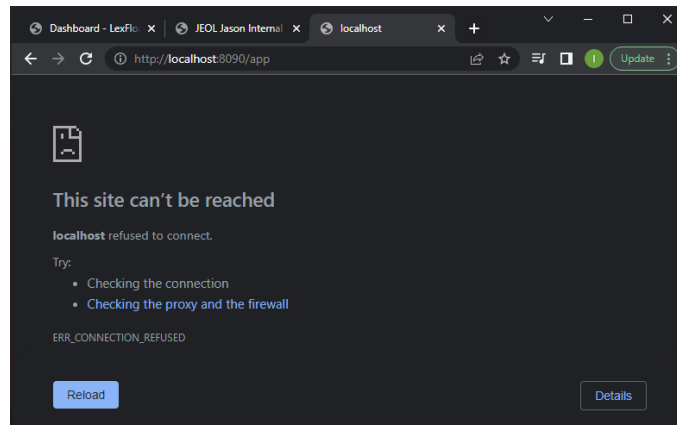
This means that the floating server is not running. Please go through Section 7, the "Starting server via the command line" section to detect the error.

8 Starting the floating license server

The floating license server can be run either as a Windows/MacOS service, or via a command line command. However, you can only run the server on the same port number using one of these options. For example, if the floating server is running as a Windows service on the port 8090, the command line command will fail to run on the same port number.

8.1 Starting the floating server via the command line

You need to run the following command as Administrator/Root.

For the well configured server, to start the on-premise floating server, run the command:

lexfloatserver –s

on Windows or

sudo ./lexfloatserver -s

on MacOS.

If you do not want to use the default configuration file, config.yml, or you want to use the different license product file, you can run the following command line command:

lexfloatserver -s --config=ConfigurationFile --product-file=LicenseProductFile

8.2 Starting floating server as a Windows/MacOS service

8.2.1 The floating service on Windows

You need to run the following command as an Administrator.

To install the floating service:

lexfloatserver -i --service-name Jeolfloatingserver --service-display-name JeolFloatingServer

To stop the floating service:

sc stop JeolFloatingServer

To start the service:

sc start JeolFloatingServer

You can start the Windows Task Manager or Services to manage the service.

To un-install the floating server, run the following command line command:

lexfloatserver -u --service-name Jeolfloatingserver

8.2.2   The floating service on MacOS

You need to run the following command with the root privilege.

To install the floating license server on MacOS, run the terminal command:

sudo ./lexfloatserver -I---service-name com.jeoljason.floatingserver

To stop the service, run the following terminal command:

sudo launchctl stop com.jeoljason.floatingserver

To start the service, run the following terminal command:

sudo launchctl start com.jeoljason.floatingserver

To un-install the floating server, use the following terminal command:

sudo ./lexfloatserver -u --service-name com.jeoljason.floatingserver

Notes:

To run lexfloatserver on the MacOS, you may need to use the root permission to allow lexfloatserver to run on your MacOS computer.

Occasionally, the floating server needs to restart after the computer restarts or becomes active from a sleeping mode. In this case, you can try to restart the service when there has been an issue with the web access.

Another reason may be is that the web access port number is different from the port number you start the server with. Please double check the port number when there is a web access issue.
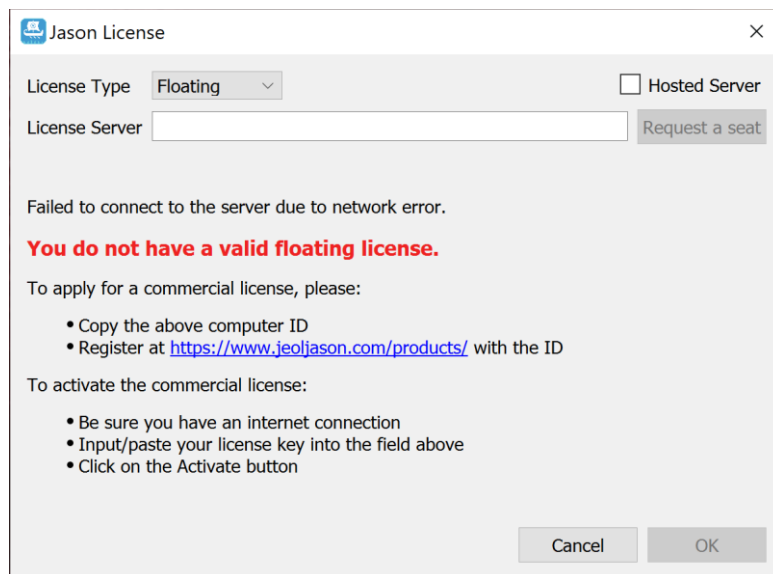
9   The floating license clients

## 9.1   Running JASON for the first time

When JASON is started for the first time on a computer, it verifies the license with a popup dialog as shown:
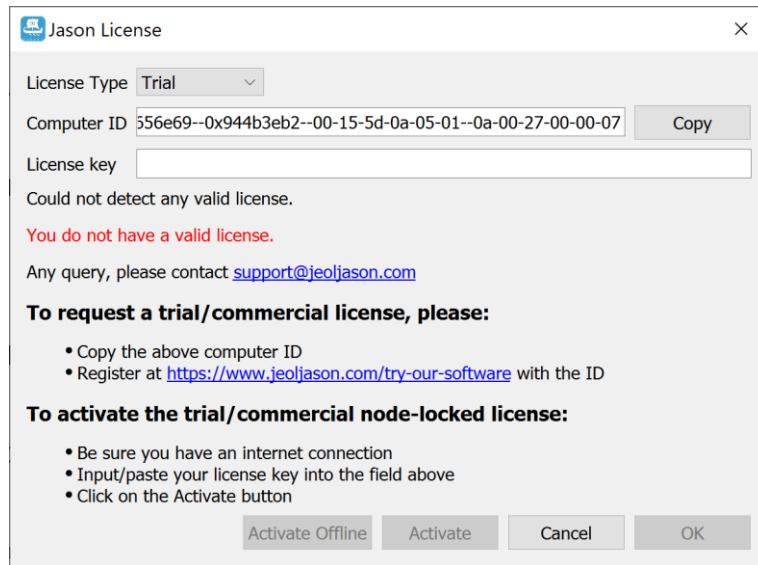
The floating license users need to choose the "Floating" license type:

Input the license server address, which is configured by the local license/IT manager: it is the IP address of the license server, followed by the port number, with the default port number being 8090, separated by ":", for example:
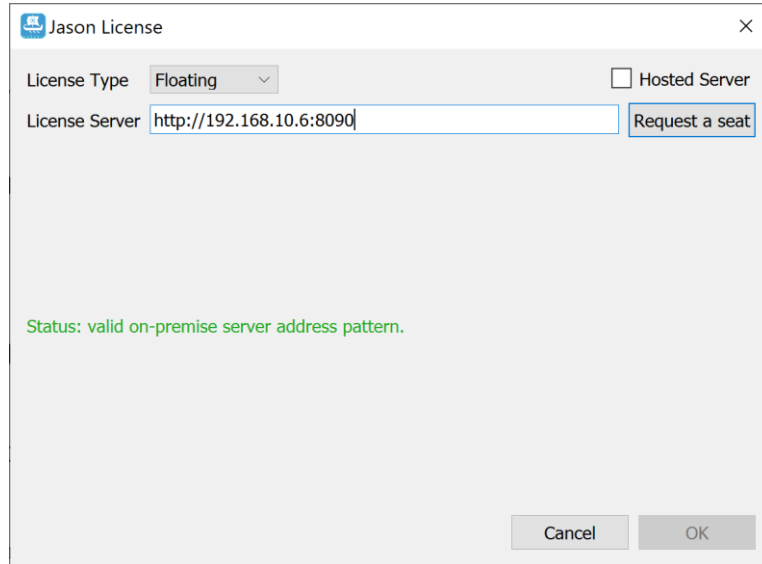
The user input license server address is validated automatically. If the input server address is not in the correct format, the button "Request a seat" is disabled. *When the address format is correct, it does not mean the address is the actual server address in your local network, only means the server address pattern is valid, and then the "Request a seat" button is enabled.*

Click on the "Request a seat" button when you have entered the completed license server address. If the server address is correct and there is a license seat available, the following message will be shown:
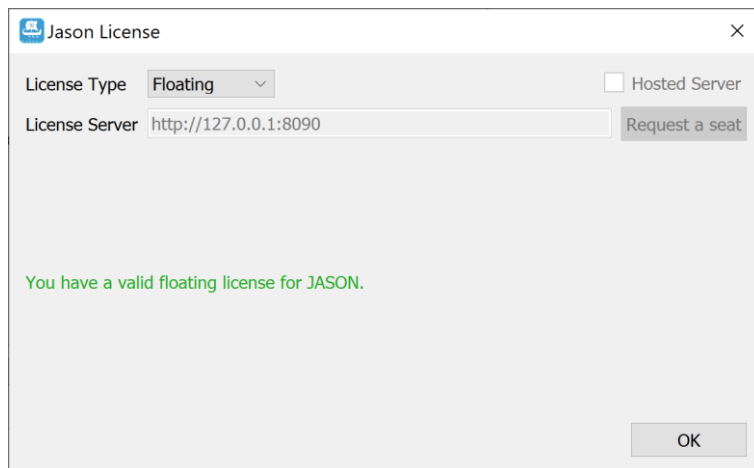
9.2   License seats release

The floating license seat will be released immediately whenever the user quits JASON. If the user leaves their computer for a while, and the computer goes into a sleeping mode, after the specified time (the lease duration), the license seat is released as well. Whenever the user returns to the computer and wants to use JASON, JASON will check the local license server for a license seat.

9.3   The license expiration

When the floating license is expired, JASON will quit automatically; however, JASON will show popup messages to warn the user to save their work before closing:
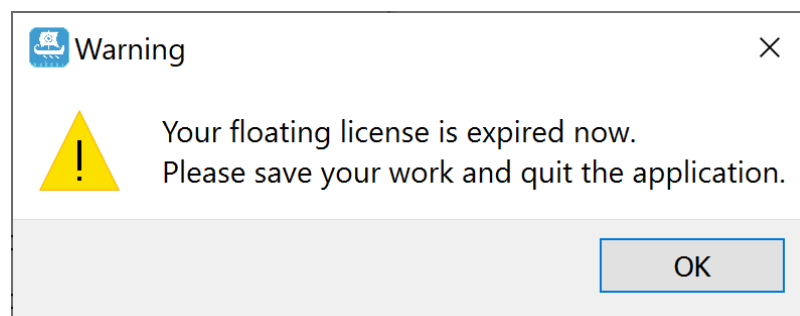

At this point, it is the user's responsibility to save their work immediately.

9.4   Continuing using the floating license

If the user requests a floating license on a computer, the next time the user starts JASON, JASON will automatically try to request a floating license from the local license server in the background. The user can use JASON immediately if there is a license seat available.

The user can check the "About JASON" dialog to verify the use of floating license as shown:
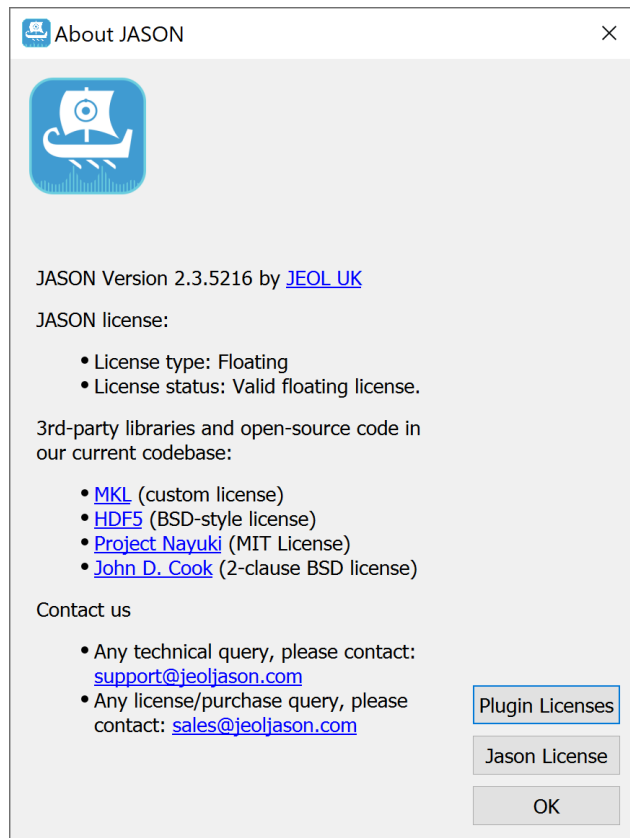
It is the license/IT manager's responsibility to maintain the license, so there is no license term displayed on the dialog.

10 Dealing with the zombie license seat

10.1 What is the zombie license seat

If a client requests a floating license successfully from license server, the client holds the license seat throughout the lease term.

If the client finishes work but does not notify the license server to release the license seat, then the license seat is still occupied by this client but not used, the license (seat) becomes a zombie license.

10.2 The causes of the zombie license seat

The zombie licenses can be generated in many ways, for example:

1. A client requests a floating license successfully and leaves his/her desk without quitting the floating licensed application.
2. A client requests a floating license successfully and stops the floating licensed application abnormally.
3. A client requests a floating license successfully and the computer loses the network connection to the license server.
4. A client requests a floating license successfully and the computer crashes.

10.3 How to avoid the zombie license

The floating license seat is released when the user quits the floating licensed application normally; it is recommended that all floating license users do so to release their license seats for the others to use.

If the computer crashes, or the application is terminated abnormally, please use the "Seat Reset" button:
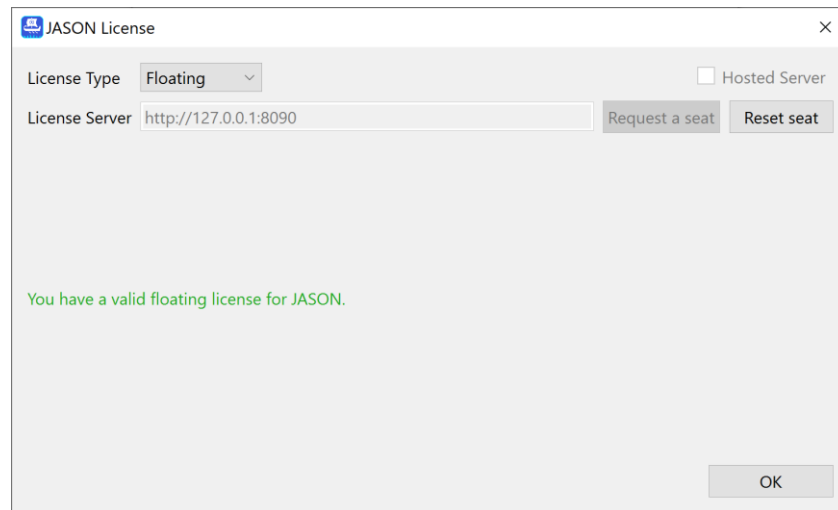
Then you have only one application instance running.

Or if you are asked to release your license seat, but you are sure you are not running the floating licensed application at all, your license seems to be a zombie license already. Please start the application, go the above page to click the "Reset seat" button, then quit the application. Your license seat will be released.

There is one case when the zombie license cannot be removed via the above method, it is when the client is disconnected from the license server. Then the license manager needs to restart the floating license server to solve the issue.