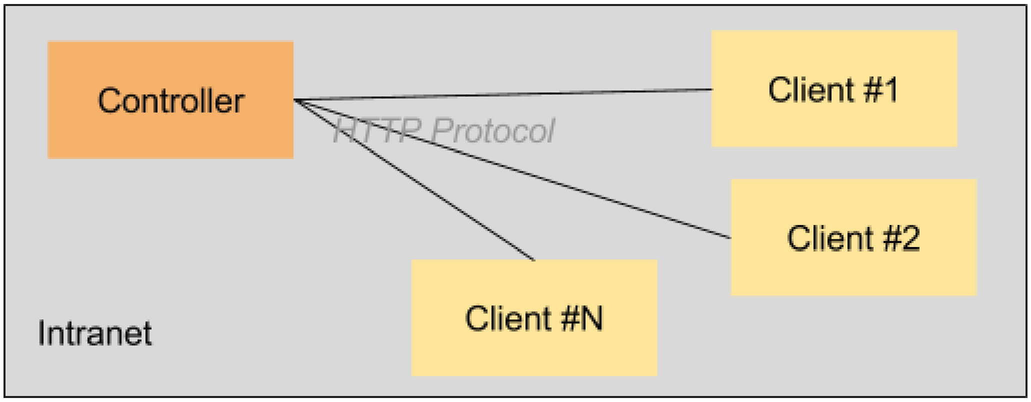
PNF Software / JEB2 Enterprise

Setting up a JEB2 Controller

Concepts

Floating builds provide more flexibility than individual builds, and can be distributed to many users within an organization. A floating build licensed for N seats will allow N JEB clients to connect to it concurrently. When a client leaves, its seat is vacated, allowing another client to connect to the Controller.

Currently, only the Enterprise version of JEB2 supports floating licenses.



When starting, as well as during its execution, JEB will regularly probe the Controller to determine whether or not it is allowed to run. This check is based on the number of seats available in your licensed build: eg, a floating license for 5 seats allows 5 different users to run JEB concurrently.

In order to start the Controller, use the '--controller' flag along with the '-c' flag. Example on a Linux machine:

```
$ jeb_linux.sh -c --controller
```

In order to start JEB, proceed as usual, for instance on Windows:

```
$ jeb_wincon.bat
```

Technical notes:

- The JEB client as well as the Controller are the same binary file: there is no separate package for the Controller.
- The '--controller' flag is not available if the build is not a floating one.
- The Controller must be started before the clients.
- JEB instances regularly contact the Controller. Therefore, the Controller should always be reachable by running instances of JEB. In order to minimize potential problems due to network latency, it is recommended to run JEB and the Controller within the same local network.
- By default, the Controller listens on all interfaces, on port 23477. This can be changed by setting the '.ControllerInterface' and '.ControllerPort' flags in the configuration file (as explained later in this document).
- The protocol used for communication between a Controller and JEB instances is HTTP, therefore eliminating potential firewall blocking issues.
- JEB instances and the Controller may be run in different environments (as in the example above: Controller on Linux, JEB on Windows, etc.)

If you have unanswered questions, please refer to our FAQ, the Google Groups forum, or email us at support@pnfsoftware.com.

First execution

On a machine connected to the Internet

What will happen:

- The support package will be downloaded automatically
- Just follow the prompt: input your password, accept the EULA, generate a license key

Sample log output:

```
C:\jeb>jeb_wincon.bat -c --controller
Downloading jeb2-sp-win64-v2.zip...
Reading 36675855 bytes:
9>>>>8>>>>7>>>>6>>>>5>>>>4>>>>3>>>>2>>>>1>>>>0
Copying file...
Success
JEB decryption password: ***************
```

```
...
...
<EULA>

Governing Law, Jurisdiction and Costs
This Agreement shall be governed, construed, and enforced in
accordance with the laws of the State of California, without regard
to its conflict of laws rules.

Severability
If any provision of this Agreement shall be held to be invalid or
unenforceable, the remainder of this Agreement shall remain in full
force and effect. To the extent any express or implied restrictions
are not permitted by applicable laws, these express or implied
restrictions shall remain in force and effect to the maximum extent
permitted by such applicable laws.
Write "yes" to agree, then press enter: yes
Hello Nicolas Falliere. Set up your JEB controller by generating a
license key. This one-time operation will only take a few seconds.
Please visit https://www.pnfsoftware.com/genlk, and use the following
"license data" blob to generate a key
License data: .............................................
Input your license key: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
Mode: Controller for floating clients
Note: X client(s) may simultaneously connect to this controller
instance
Listening on 0.0.0.0/0.0.0.0:23477...
```

On a machine NOT connected to the Internet

What will happen:

- the support package cannot be downloaded
- the installation will fail

Sample log output when the download fails:

```
C:\jeb>jeb_wincon.bat -c --controller
Downloading jeb2-sp-win64-v2.zip...
A network error occurred
Download error.
```

```
If this system is offline, please visit
https://www.pnfsoftware.com/jeb2/downloads to manually retrieve the
support package.
The support package was not dropped
```

You will have to download a support package manually, and drop it in your **bin/** folder. Instructions and download links can be found here:
https://www.pnfsoftware.com/jeb2/downloads

Configuring the settings

After the first step is completed successfully, executing the controller should display something like the following:

```
C:\jeb>jeb_wincon.bat -c --controller
Mode: Controller for floating clients
Note: X client(s) may simultaneously connect to this controller
instance
Listening on 0.0.0.0/0.0.0.0:23477…
```

As can be seen, by default, the controller is listening on port 23477 on all interfaces. This can be changed by editing the file *<JEB_FOLDER>bin/jeb-client.cfg*. Edit or add two entries named **.ControllerInterface** and **.ControllerPort** (notice the leading dot).

Example: to listen only on localhost, port 30000:

```
.ControllerInterface = localhost
.ControllerPort = 35000
```

Updating the Controller

There is no auto-update feature in the controller. The update procedure is the following:

- Download the update archive linked inthe *JEB update* email
- Rename it as **update.zip** and drop it to your main JEB folder
- Create an **update.pwd** file in the same folder, and store the decryption password in the file - the password is specified in the update email
    - This step is optional: if you decide to skip it, you will be prompted to input the decryption password during the next step
- Run the controller as normal (eg, **-c --controller**). The update will be installed.