Setting-up Jenkins Agent as a Window's Service

This article will help you in setting-up jenkins agent on your PC.

Requirements:

- Node should have been configured on jenkins-master by an administrator.
- agent.jar file will be sent to you by administrator.

What does the Jenkins-Administrator require in order to Create your node?

- Path of Working Directory (The location on your PC where Jenkins will be set-up)
- Path of git.exe on your PC.

📘 Instructions

Follow these steps in order.

1. First **Install java** 11 or 17 if not already installed on your PC. Open CMD/Powershell and run.

```
1  java -version
```

Java Download Link: https://www.openlogic.com/openjdk-downloads

2. Place the agent.jar file received from administrator in the Jenkins Working Directory (the path which you provided to administrator).

3. Download WinSW in the same folder.
https://github.com/winsw/winsw/releases/download/v2.11.0/WinSW-x64.exe

4. Rename WinSW-x64.exe to jenkins-slave.exe

5. Open Notepad and Create a ***jenkins-slave.xml*** file in the same directory. After this step the working directory should look like this:
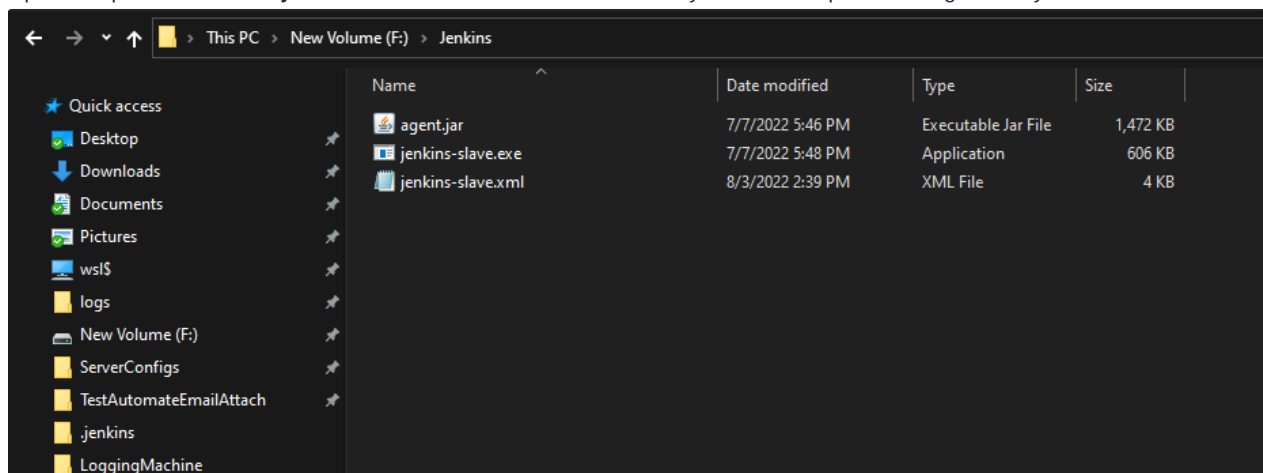
6. You will receive the command from administrator which looks something like this after your Node has been created.

```
1  java -jar agent.jar -jnlpUrl http://35.xxx.xx.105:8080/computer/myComputer/jenkins-agent.jnlp -secret a47f1d7d
```

7. Open *jenkins-slave.xml* and paste the text below:

*Note: in **<arguments>-Xrs** [command from step 5]**</arguments>** block, you must paste the above command without java. i.e. from -jar agent.jar -jnlpUr......*

```
1   <service>
2     <id>jenkins-slave</id>
3     <name>Jenkins agent (jenkins-slave)</name>
4     <description>This service runs an agent for Jenkins automation server.</description>
5     <!--
6       if you'd like to run Jenkins with a specific version of Java, specify a full path to java.exe.
7       The following value assumes that you have java in your PATH.
8     -->
9     <executable>"C:\Program Files\Java\jdk-17.0.4\bin\java.exe"</executable>
10    <arguments>-Xrs -jar agent.jar -jnlpUrl http://35.xxx.xx.105:8080/computer/myComputer/jenkins-agent.jnlp -s
11    <!--
12      interactive flag causes the empty black Java window to be displayed.
13      I'm still debugging this.
14    <interactive />
15    -->
16    <logmode>rotate</logmode>
17
18    <onfailure action="restart" />
19
20  </service>
```

ⓘ Make sure that executable block contains correct path to java.exe on your PC

1.
```
1   <executable>C:/Path/to/java.exe</executable>
```

8. Open **cmd** and run:

```
1   jenkins-slave.exe install
```

```
1   jenkins-slave.exe start
```

Login to jenkins using your credentials and navigate to your Node. It should now be connected and you should be able to run your builds.

📋 Related articles

- winsw/winsw: A wrapper executable that can run any executable as a Windows service, in a permissive license. (github.com)