

GUIDELINE

HOW TO CONFIG AND RUN WILDFLY ON YOUR INTELLIJ AND LOCAL MACHINE

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Date: January 15, 2024

I. Clone project:

- Create a folder where you want to put the project
- Pull the project to folder

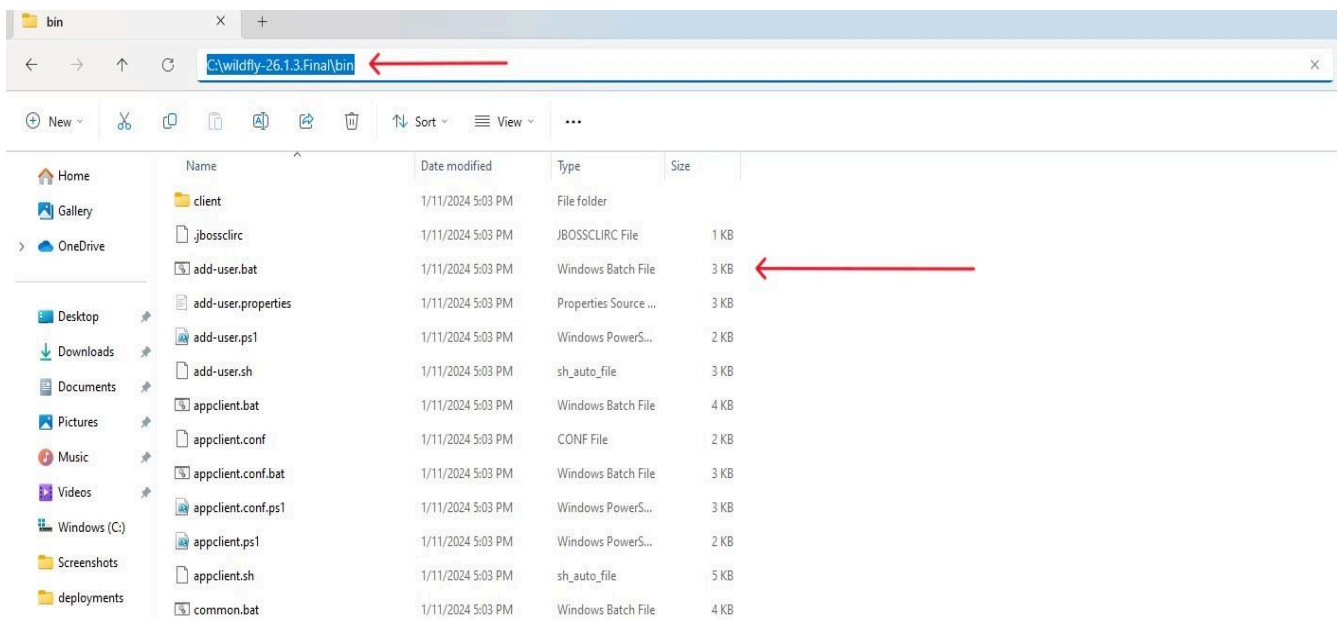
II. Config Wildfly:

1. Download the Wildfly version 26.1.3 and extract it
(<https://www.wildfly.org/downloads/>)

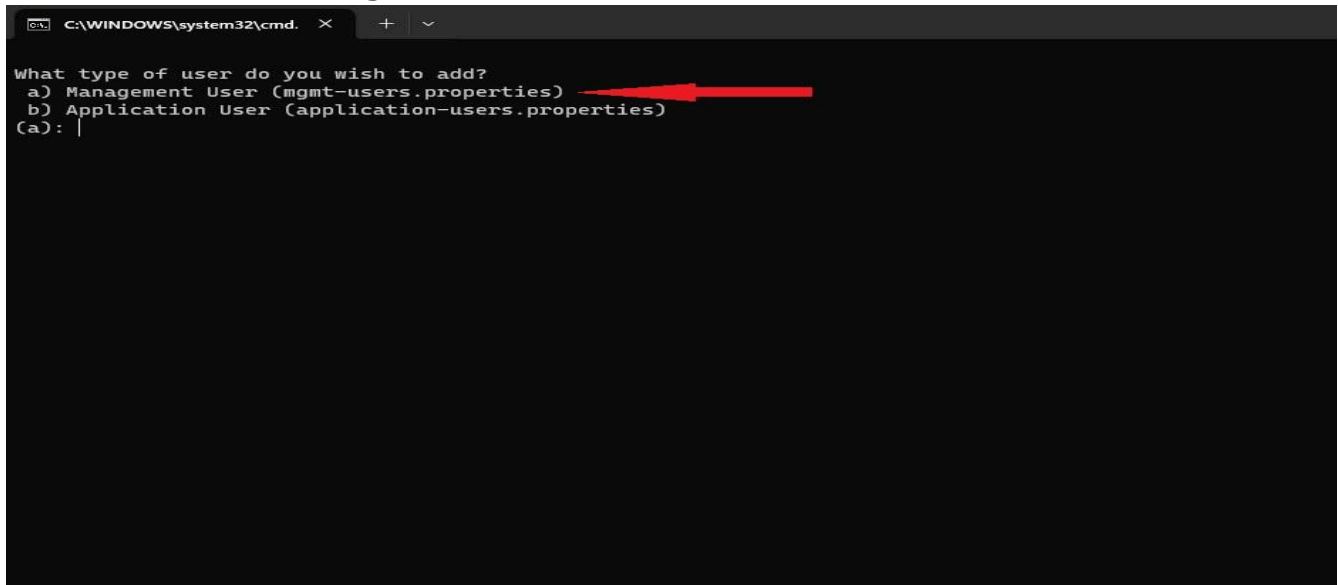
26.1.3.Final	FINAL	Jan 18, 2023
	Jakarta EE 8 Full & Web Distribution	zip SHA-1 tgz SHA-1
	WildFly Preview EE 9.1 Distribution	zip SHA-1 tgz SHA-1
	Servlet-Only Distribution	zip SHA-1 tgz SHA-1
	Application Server Source Code	zip SHA-1 tgz SHA-1
	Quick Start Source Code	Source
	Release Notes	Notes

2. Create a new Wildfly user:

1. Go to “**wildfly-26.1.3.Final/bin**” and run “**add-user.bat**” file if your OS is Windows



2. After you run the file, the terminal will show up and you press “a” to add “Management USER”.



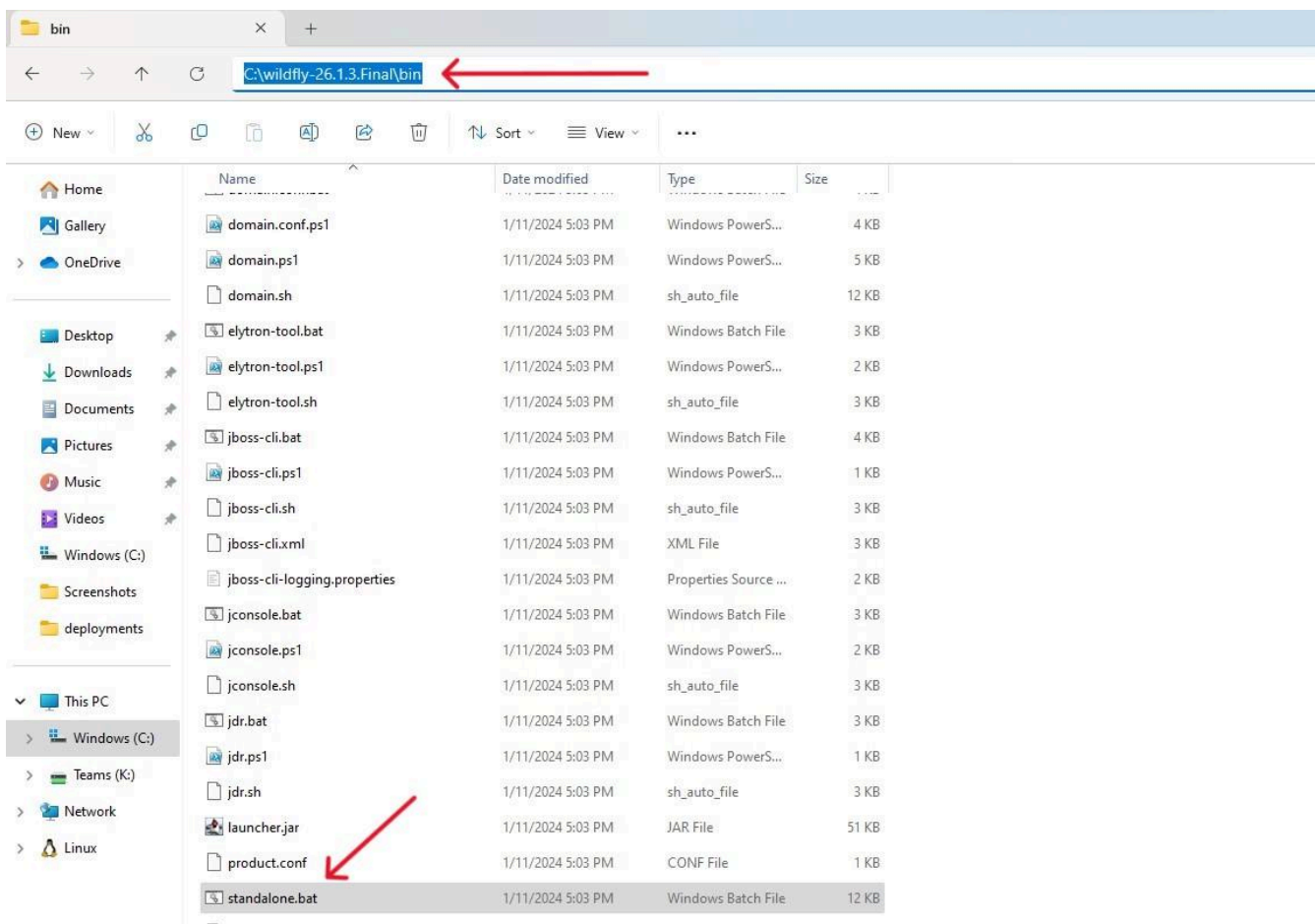
3. After that, you should be able to create your username and password.

```
C:\WINDOWS\system32\cmd.exe
What type of user do you wish to add?
a) Management User (mgmt-users.properties)
b) Application User (application-users.properties)
(a): a

Enter the details of the new user to add.
Using realm 'ManagementRealm' as discovered from the existing property files.
Username : vdmhuan
Password recommendations are listed below. To modify these restrictions edit the add-user.properties configuration file. - The password should be
different from the username
- The password should not be one of the following restricted values {root, admin, administrator}
- The password should contain at least 8 characters, 1 alphabetic character(s), 1 digit(s), 1 non-alphanumeric symbol(s)
Password :
Re-enter Password :
What groups do you want this user to belong to? (Please enter a comma separated list, or leave blank for none)[ ]:
About to add user 'vdmhuan' for realm 'ManagementRealm'
Is this correct yes/no? yes
Added user 'vdmhuan' to file 'C:\wildfly-26.1.3.Final\standalone\configuration\mgmt-users.properties'
Added user 'vdmhuan' to file 'C:\wildfly-26.1.3.Final\domain\configuration\mgmt-users.properties'
Added user 'vdmhuan' with groups to file 'C:\wildfly-26.1.3.Final\standalone\configuration\mgmt-groups.properties'
Added user 'vdmhuan' with groups to file 'C:\wildfly-26.1.3.Final\domain\configuration\mgmt-groups.properties'
Is this new user going to be used for one AS process to connect to another AS process?
e.g. for a slave host controller connecting to the master or for a Remoting connection for server to server Jakarta Enterprise Beans calls.
yes/no? yes
To represent the user add the following to the server-identities definition <secret value="TWluaGh1YW4xOTk5QA==" />
Press any key to continue . . .
```

3. Run Wildfly management console:

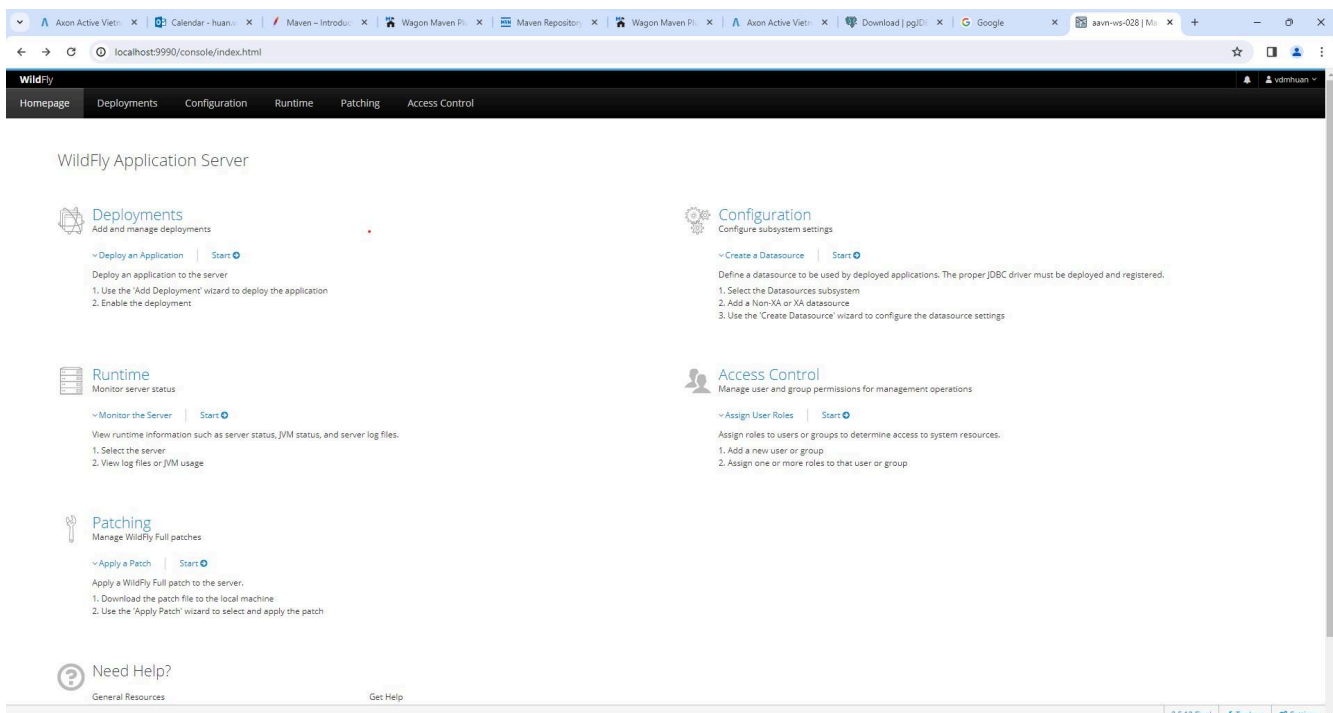
1. Go to “**wildfly-26.1.3.Final/bin**” and run the “**standalone.bat**” file if your OS is Windows



2. If there aren't any errors, the terminal should be like this

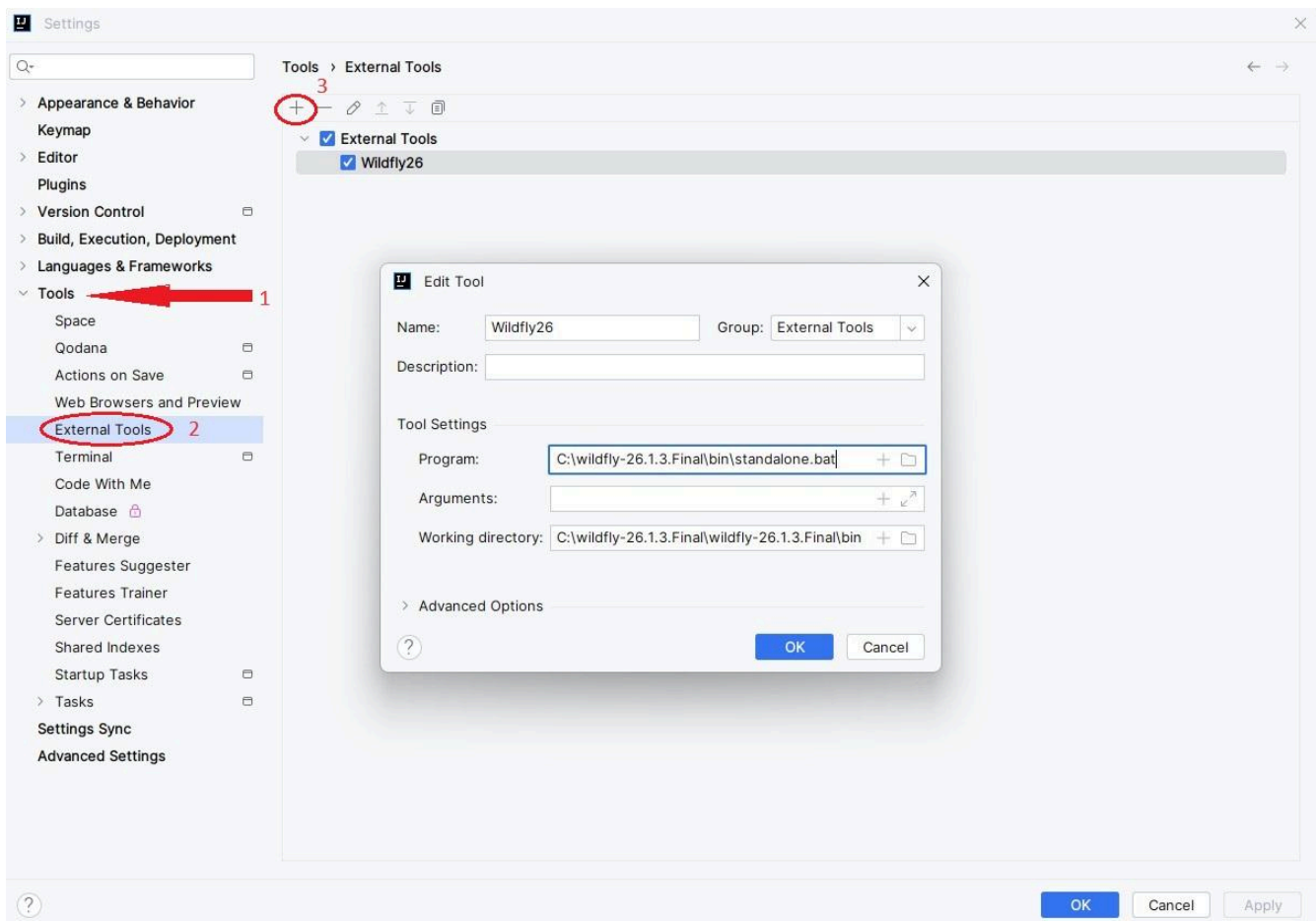
```
C:\WINDOWS\system32\cmd.exe
class org.h2.Driver (version 1.4)
11:12:55,107 INFO [org.jboss.as.connector.deployers.jdbc] (MSC service thread 1-7) WFLYJCA0018: Started Driver service with driver-name = h2
11:12:55,107 INFO [org.jboss.as.naming] (MSC service thread 1-7) WFLYNAM0003: Starting Naming Service
11:12:55,114 INFO [org.jboss.as.mail.extension] (MSC service thread 1-2) WFLYMAIL0001: Bound mail session [java:jboss/mail/Default]
11:12:55,158 INFO [org.jboss.remoting] (MSC service thread 1-6) JBoss Remoting version 5.0.25.Final
11:12:55,167 WARN [org.wildfly.extension.elytron] (MSC service thread 1-5) WFLYELY00023: KeyStore file 'C:\wildfly-26.1.3.Final\standalone\configuration\application.keystore' does not exist. Used blank.
11:12:55,244 WARN [org.wildfly.extension.elytron] (MSC service thread 1-8) WFLYELY01084: KeyStore C:\wildfly-26.1.3.Final\standalone\configuration\application.keystore not found, it will be auto generated on first use with a self-signed certificate for host localhost
11:12:55,248 INFO [org.wildfly.extension.undertow] (ServerService Thread Pool -- 75) WFLYUT0014: Creating file handler for path 'C:\wildfly-26.1.3.Final/welcome-content' with options [directory-listing: 'false', follow-symlink: 'false', case-sensitive: 'true', safe-symlink-paths: '[]']
11:12:55,295 INFO [org.jboss.as.ejb3] (MSC service thread 1-8) WFLYEJB0481: Strict pool slsb-strict-max-pool is using a max instance size of 128 (per class), which is derived from thread worker pool sizing.
11:12:55,295 INFO [org.jboss.as.ejb3] (MSC service thread 1-4) WFLYEJB0482: Strict pool mdb-strict-max-pool is using a max instance size of 32 (per class), which is derived from the number of CPUs on this host.
11:12:55,344 INFO [org.wildfly.extension.undertow] (MSC service thread 1-6) WFLYUT0012: Started server default-server.
11:12:55,344 INFO [org.wildfly.extension.undertow] (MSC service thread 1-8) WFLYUT0018: Host default-host starting
11:12:55,354 INFO [org.wildfly.extension.undertow] (MSC service thread 1-8) WFLYUT0006: Undertow HTTP listener default listening on 127.0.0.1:8080
11:12:55,494 INFO [org.wildfly.extension.undertow] (MSC service thread 1-2) WFLYUT0006: Undertow HTTPS listener https listening on 127.0.0.1:8443
11:12:55,659 INFO [org.jboss.as.ejb3] (MSC service thread 1-2) WFLYEJB0493: Jakarta Enterprise Beans subsystem suspension complete
11:12:55,739 INFO [org.jboss.as.connector.subsystems.datasources] (MSC service thread 1-5) WFLYJCA0001: Bound data source [java:jboss/datasources/ExampleDS]
11:12:57,316 INFO [org.jboss.as.patching] (MSC service thread 1-4) WFLYPAT0050: WildFly Full cumulative patch ID is: base, one-off patches include: none
11:12:57,323 INFO [org.jboss.as.server.deployment.scanner] (MSC service thread 1-7) WFLYDS0013: Started FileSystemDeploymentService for directory C:\wildfly-26.1.3.Final\standalone\deployments
11:12:57,540 INFO [org.jboss.ws.common.management] (MSC service thread 1-6) JBWS022052: Starting JBossWS 5.5.0.Final (Apache CXF 3.4.10)
11:12:57,658 INFO [org.jboss.as.server] (Controller Boot Thread) WFLYSRV0212: Resuming server
11:12:57,661 INFO [org.jboss.as] (Controller Boot Thread) WFLYSRV0025: WildFly Full 26.1.3.Final (WildFly Core 18.1.2.Final) started in 7795ms - Started 208 of 538 services (237 services are lazy, passive or on-demand) - Server configuration file in use: standalone.xml
11:12:57,663 INFO [org.jboss.as] (Controller Boot Thread) WFLYSRV0060: Http management interface listening on http://127.0.0.1:9990/management
11:12:57,663 INFO [org.jboss.as] (Controller Boot Thread) WFLYSRV0051: Admin console listening on http://127.0.0.1:9990
```

3. Go to URL “<http://localhost:9990>” and enter your username and password, you should see this page:

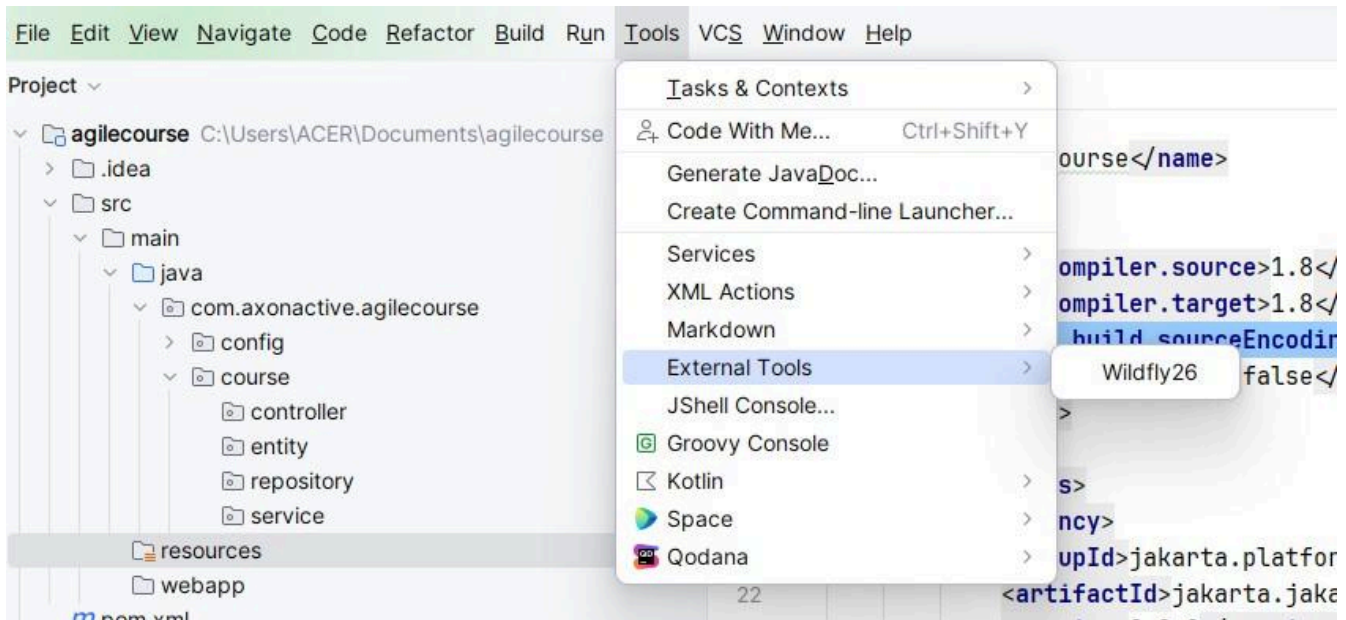


III. Configuring Wildfly in IntelliJ (Community Edition):

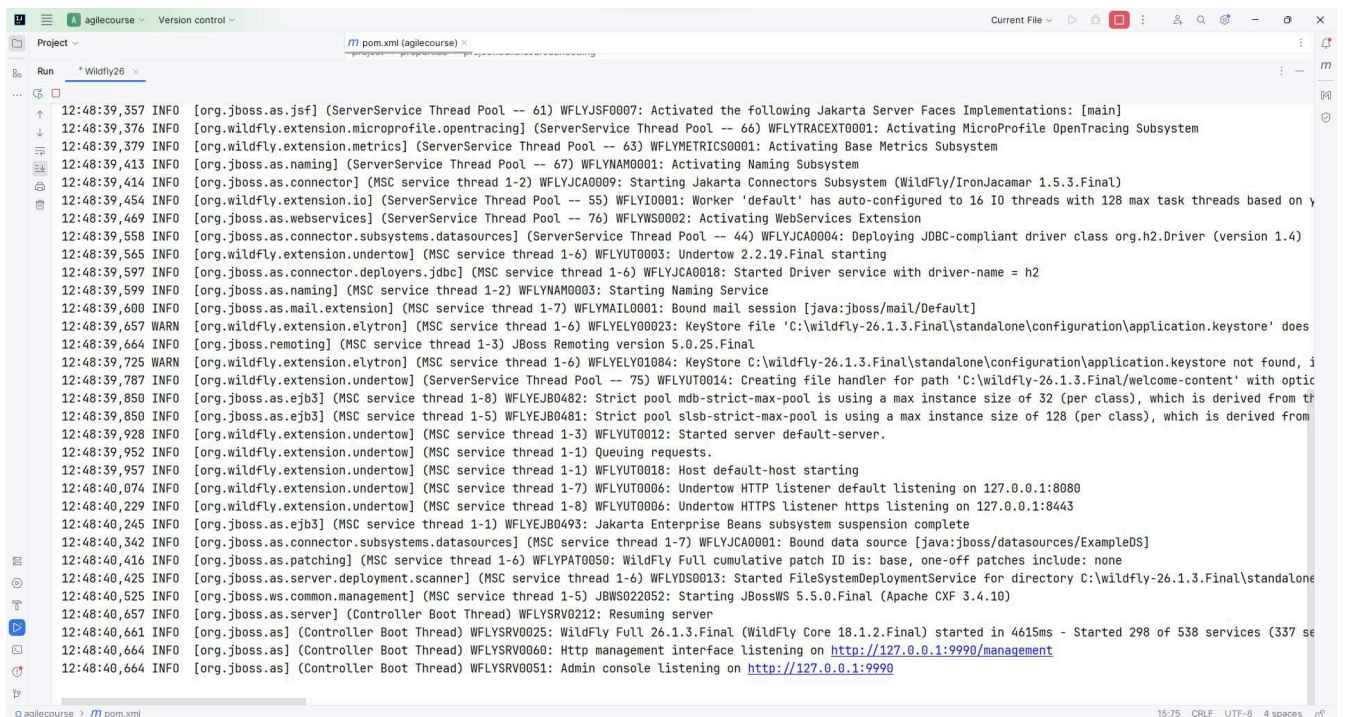
1. Open Java ee project in IntelliJ → Press “**Ctrl + Alt + S**” to open “**Settings**” Windows
2. In the “**Settings**” windows, choose “**Tools**” → “**External Tools**” → “**+**”
 - 2.1. In the “**Edit Tool**” windows:
 - 2.1.1. **Name bracket:** Type in the tool's name
 - 2.1.2. **Program:** Set the path to the “**standalone.bat**” file in the Wildfly folder
 - 2.1.3. **Working directory:** Set the path to Wildfy ‘s bin folder



3. Finally, press “OK”. In the “Settings” windows press “Apply”
4. After that, you should see this in your IDE:



5. Recheck if WildFly is Running

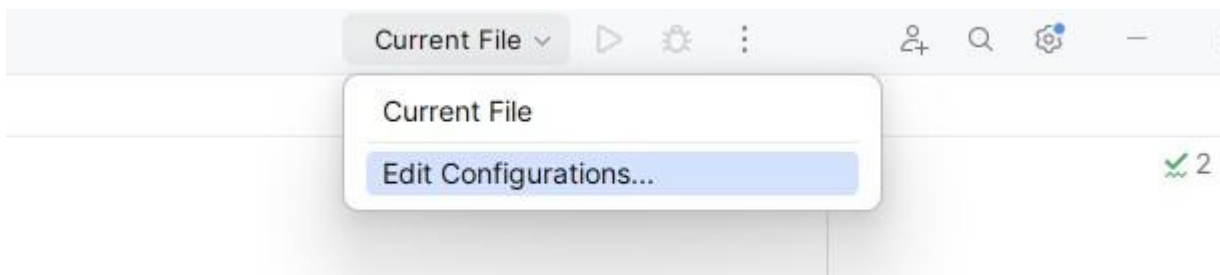


6. Go to URL: “<http://localhost:8080>”

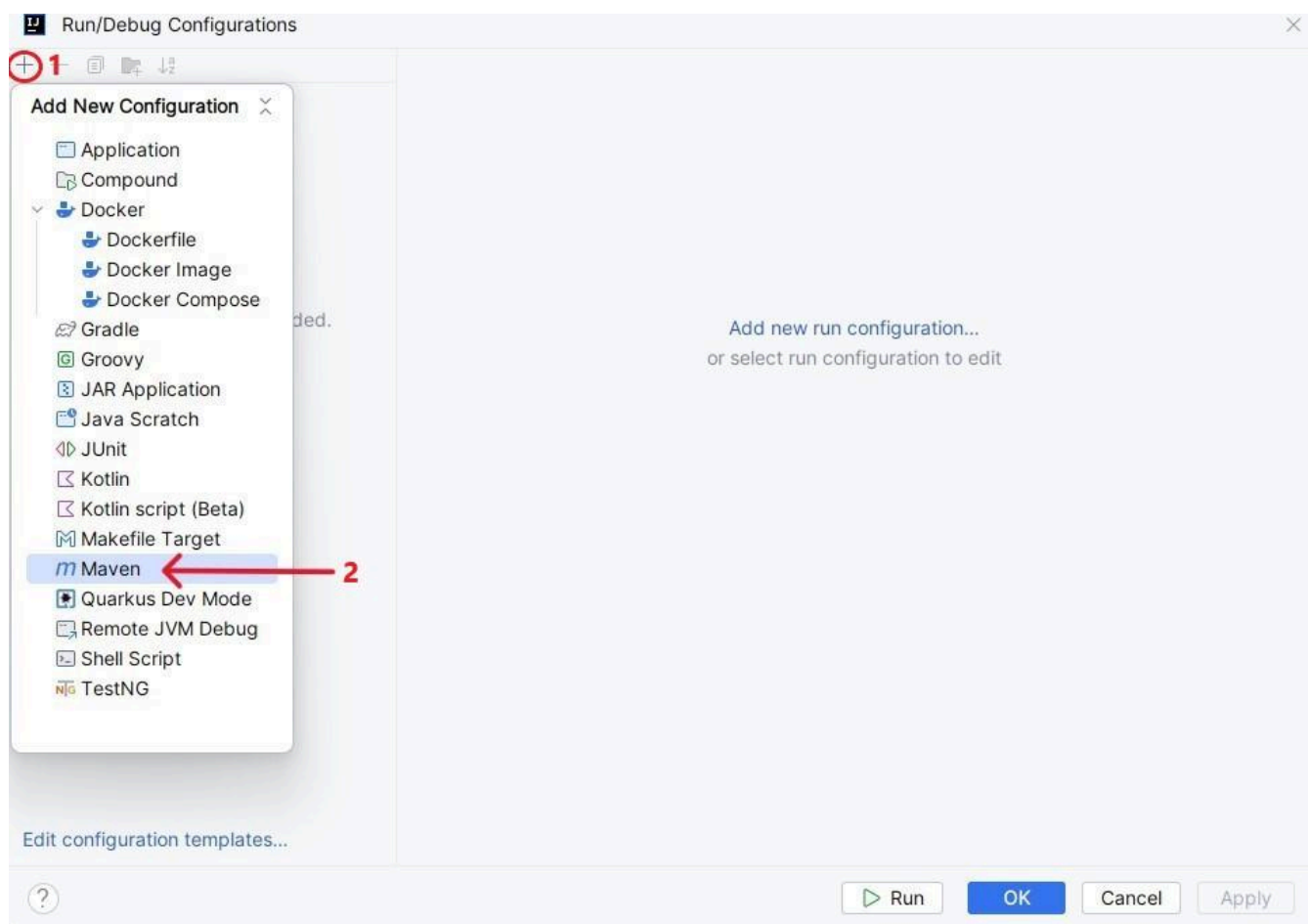


IV. Config IntelliJ to compile and deploy the AgileCourse project automatically:

1. On the top right of IntelliJ, you will see the “**Current File**” bracket. Press it then press “**Edit Configurations...**” like in picture



2. In “Run/Debug Configuration” " press the “+” icon then choose “**Maven**”



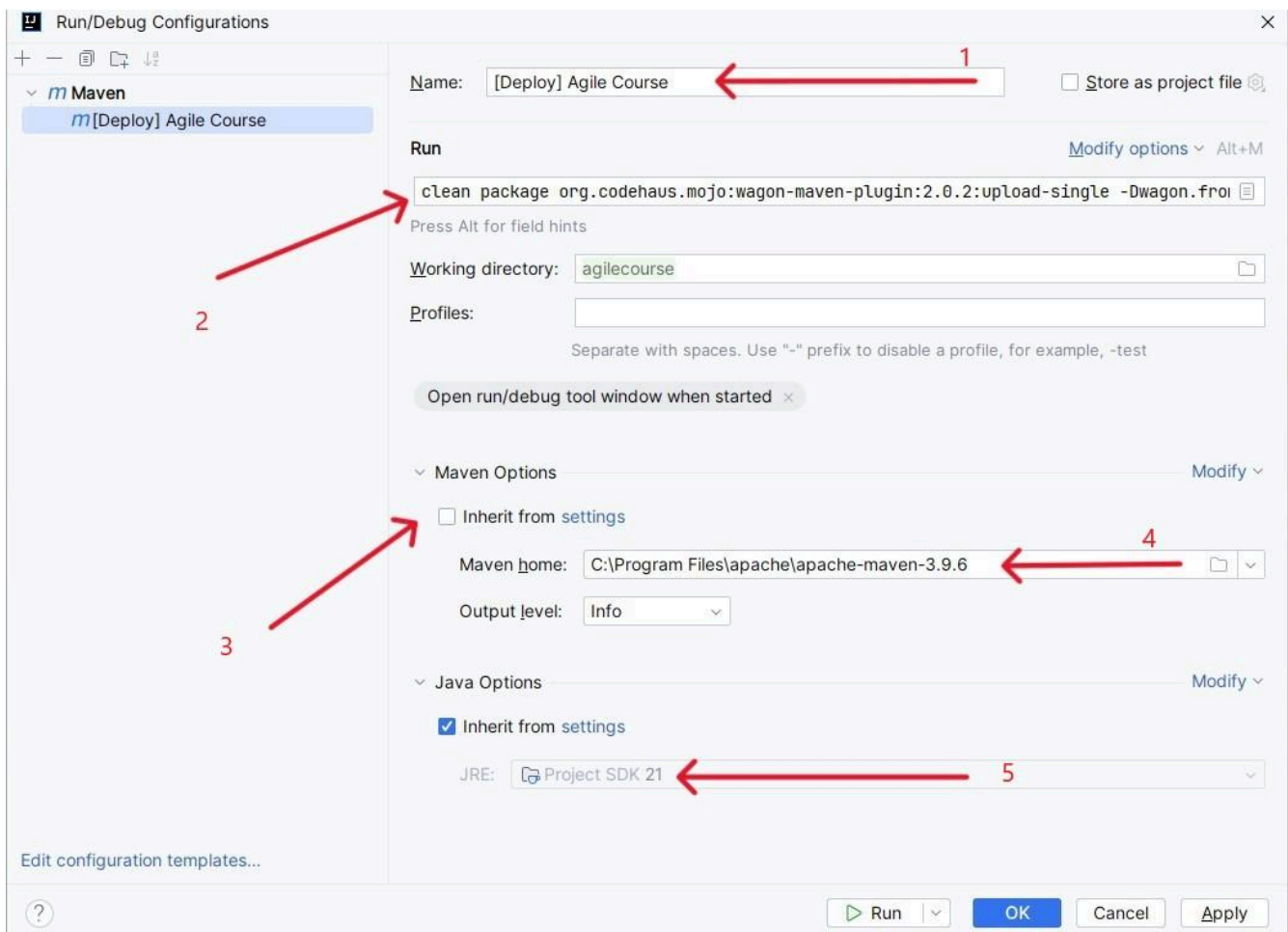
3. Start config Maven:

3.1. Set the name for the run/debug

3.2. In the “**Run**” bracket type in this command line:

```
clean package
org.codehaus.mojo:wagon-maven-plugin:2.0.2:upload-single
-Dwagon.fromFile=target/agilecourse.war
-Dwagon.url=file:///C:/wildfly-26.1.3.Final/standalone/deployments
```

3.3. Turn off “**inherit from settings**” and select the Maven version on your local machine



***Note:**

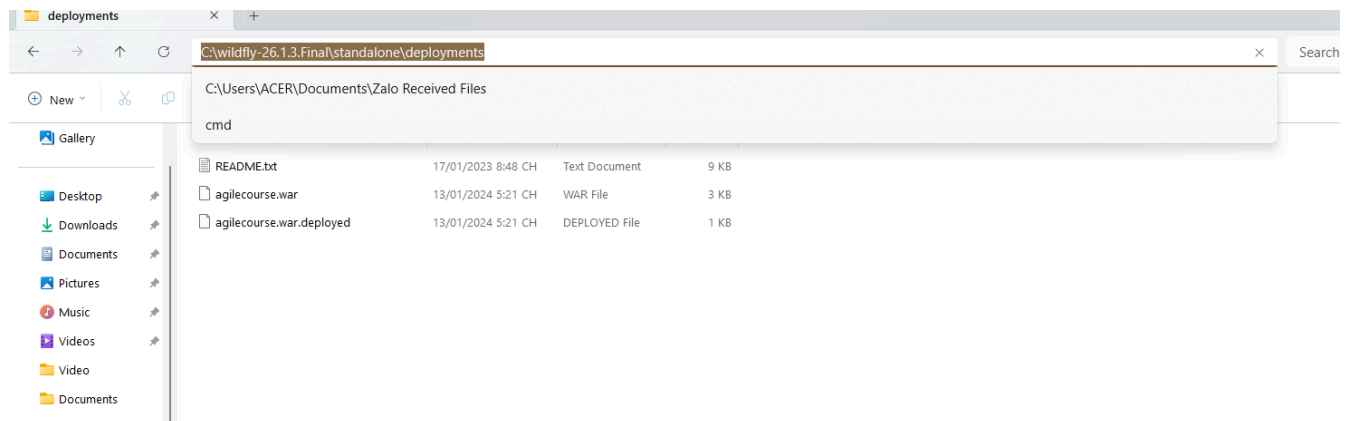
- **"agilecourse.war"** : This is the name of this application war file.
- **"C:/wildfly-26.1.3.Final/standalone/deployments"**: This is our WildFly deployments path. Please change it based on its location.
- Your JRE should display 17 if you are using JDK 17

3.4. When you are done with all steps, simply press **"Apply"**

4. Check if it's running correctly

```
Run [77] [Deploy] Agile Course x
[Deploy] Agile Course: . 5 sec, 628 ms
"C:\Program Files\Java\jdk-21\bin\java.exe" -Dmaven.multiModuleProjectDirectory=C:\Users\ACER\Documents\agilecourse -Djansi.passthrough=true "-Dmaven.home=C:\Program
[INFO] Scanning for projects...
[INFO]
[INFO] -----< com.axonactive:agilecourse >-----
[INFO] Building agilecourse 1.0.0-SNAPSHOT
[INFO] from pom.xml
[INFO] -----[ war ]-----
[INFO]
[INFO] --- clean:3.2.0:clean (default-clean) @ agilecourse ---
[INFO] Deleting C:\Users\ACER\Documents\agilecourse\target
[INFO]
[INFO] --- resources:3.3.1:resources (default-resources) @ agilecourse ---
[INFO] Copying 0 resource from src/main/resources to target/classes
[INFO]
[INFO] --- compiler:3.10.1:compile (default-compile) @ agilecourse ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 1 source file to C:\Users\ACER\Documents\agilecourse\target\classes
[INFO]
[INFO] --- resources:3.3.1:testResources (default-testResources) @ agilecourse ---
[INFO] skip non existing resourceDirectory C:\Users\ACER\Documents\agilecourse\src\test\resources
[INFO]
[INFO] --- compiler:3.10.1:testCompile (default-testCompile) @ agilecourse ---
[INFO] No sources to compile
[INFO]
[INFO] --- surefire:3.2.2:test (default-test) @ agilecourse ---
[INFO] No tests to run.
[INFO]
[INFO] --- war:3.3.2:war (default-war) @ agilecourse ---
[INFO] Packaging webapp
[INFO] Assembling webapp [agilecourse] in [C:\Users\ACER\Documents\agilecourse\target\agilecourse]
[INFO] Processing war project
[INFO] Copying webapp resources [C:\Users\ACER\Documents\agilecourse\src\main\webapp]
[INFO] Building war: C:\Users\ACER\Documents\agilecourse\target\agilecourse.war
[INFO]
[INFO] -----< com.axonactive:agilecourse >-----
[INFO] Building agilecourse 1.0.0-SNAPSHOT
[INFO] from pom.xml
[INFO] -----[ war ]-----
```

5. Check if the application is deployed:
 - 5.1. Go to “wildfly-26.1.3.Final/standalone/deployments”



- 5.2. Go to URL: “<http://localhost:9990>” then go to “Deployments”, you should see your **war** file is deployed

The screenshot displays the WildFly Management Console interface. The 'Deployments' tab is selected in the top navigation bar. On the left, a list of deployments shows 'agilecourse.war' with a red arrow pointing to it. The main content area displays the details for 'agilecourse.war', including its name, runtime name, context root, hash, and status (OK). A green message bar at the top indicates the deployment is enabled and active.

Main Attributes	
Name:	agilecourse.war
Runtime Name:	agilecourse.war
Context Root:	/agilecourse
Hash:	f3f6dcf7355619f1b64724ee33c2174569c2ba4e
Enabled, Managed, Exploded:	✓ ✓ ✗
Status:	OK
Last enabled at:	1/13/24, 5:22 PM
Last disabled at:	n/a

V. References:

- <https://www.mojohaus.org/wagon-maven-plugin>
- <https://www.mojohaus.org/wagon-maven-plugin/upload-single-mojo.html>
-