

# Getting started with myWMS

## Release 2

## Programming Environment

This is a description how to set up myWMS release 2.

### Requirements

- Sources of myWMS. Clone the project on gitlab or download the sources.  
<https://gitlab.com/mkrane/mywms>  
Below we will call the directory where the sources are located **\$media**
- Java SDK  
The checked version is OpenJDK version **1.8.0** and **11.0**  
Beware that we need the **SDK**, not the JRE
- WildFly application server  
You will find it on [www.wildfly.org/](http://www.wildfly.org/)  
The checked version is 18.0.0  
Below we will call the directory where wildfly is located **\$wildfly**
- Maven build system  
You will find it on <https://maven.apache.org>
- Netbeans programming IDE  
You will find it on <https://netbeans.apache.org>  
The currently used version is **NetBeans 11**  
Other versions of Netbeans will potentially not work without changing the program. In doubt use this version.

### Setup Server

- Configure WildFly  
Copy the file **\$media/config/wildfly-18/standalone.xml** to **\$wildfly/standalone/configuration/standalone.xml**
- Compile the server components  
Open a shell and go to **\$media/dev**  
Run command: **mvn clean install**  
This will build all server components
- Deploy the application to wildfly  
Copy the file **\$media/dev/project-ear/target/mywms.ear** into the folder **\$wildfly/standalone/deployments**
- Start wildfly

Open a shell and run `$wildfly/bin/standalone.sh`

(on windows `standalone.bat`)

Now the server components are available to you.

- Point a web browser to '<http://localhost:8080/los-mobile>'.
- You should be able to login with 'admin', 'admin'.

## Setup Rich Client (Netbeans)

- Start Netbeans
- Choose 'File / Open Project' and browse to `$media/rich.client/los.clientsuite`.
- You will get a project called 'LinogistiX LOS Client'.
- Open context menu on the project and choose 'Clean and Build'.
- There is another netbeans suite available called 'LOS Reference Client'  
This is a reference implementation of the basic 'LinogistiX LOS Client'. To access this application, you first have to create a netbeans platform based on the 'LinogistiX LOS Client' and then you can build and start the reference-implementation.
  - Open the context menu on the project 'Linogistix LOS Client'
  - Select 'Package as | ZIP Distribution'
  - Choose 'File / Open Project' and browse to `$media/rich.client/los.reference`
  - You will get a project called 'LOS Reference Client'
  - Open the context menu on the project 'LOS Reference Client'. And choose 'Properties'.
  - Navigate to the Libraries category and select 'Manage Platforms...'
  - Choose 'Add Platform...'
  - Navigate to  
`$media/rich.client/los.clientsuite/nbplatform/linogistix_clientsuite` and  
Choose 'Finish'
  - Now you are able to select the NetBeans Platform 'Linogistix LOS Client'
  - Make sure that all platform modules are included!
  - Finish this step with 'OK'
  - Open the context menu on the project 'LOS Reference Client'. Choose 'Run'. On start up a login dialog is displayed and you should be able to log in with 'admin', 'admin'

## Further Optional Actions

### Setup postgresSQL Database

The basic installation uses a h2 database. In productive environments, we recommend the usage of PostgreSQL.

- Download and Install the PostgreSQL database  
You will find it on [www.postgresql.org](http://www.postgresql.org)  
Latest checked version is 10
- Configure database
  - Create a new role named 'mywms' with password 'mywms'

- Create a new database named 'mywms' with owner 'mywms'  
These names and passwords are used in some scripts. If you use different names, you have to change the login and data-source scripts.
- Change Wildfly configuration to use the PostgreSQL database:
  - Stop wildfly
  - Copy **\$media**/config/wildfly-16/standalone-postgres.xml to **\$wildfly**/standalone/configuration/standalone.xml
- Deploy the database driver  
Download the JDBC driver for PostgreSQL. postgresql-42.2.5.jar. You will find it on <https://jdbc.postgresql.org>  
Copy postgresql-42.2.5.jar into the directory **\$wildfly**/standalone/deployments
- Change myWMS configuration to use the PostgreSQL database  
Edit the file **\$media**/dev/project-persistence/src/main/resources/META-INF/persistence.xml  
Change the hibernate.dialect property to 'org.hibernate.dialect.PostgreSQLDialect'  
Open a shell and go to **\$media**/dev and run the command: **mvn clean install**
- Deploy the application to wildfly  
Copy the file **\$media**/dev/project-ear/target/mywms.ear into the folder **\$wildfly**/standalone/deployments
- Start wildfly  
Open a shell and run **\$wildfly**/bin/standalone.sh  
(on windows standalone.bat)

## Change Passwords

For security reasons it is strictly recommended to change all passwords.

It is more easy for a first time setup of a local development system with the use of documented default passwords. But at the latest when leaving the development system these passwords should really be changed.