Classificator

Table of Contents

Installation

> **TIP** Be aware of the application configuration.

Windows/Unix

Since it is a simple .jar file, which can run on any device featuring Java, you can run it by simply doubleclicking.

Docker

Dockerfile

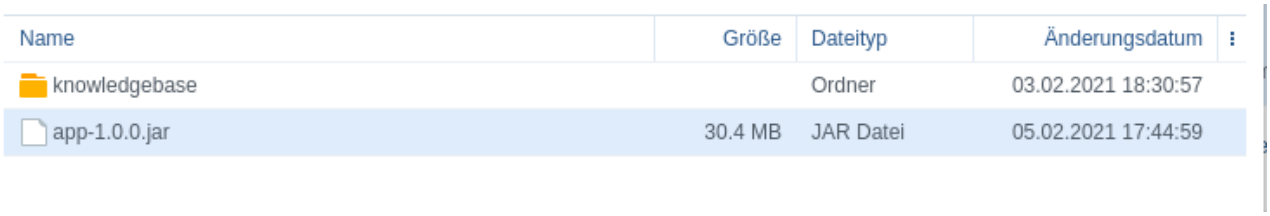
If you can use a dockerfile, you can create one like this: Note to self: Need to test this!

```
FROM openjdk:15-jdk
MAINTAINER Cuupa
WORKDIR /opt/app/classificator
COPY knowlegebase/kb-1.0.0.db ./knowledgebase/kb-1.0.0.db
COPY *.jar ./app.jar

EXPOSE 8080

ENTRYPOINT ["java", "-jar", "./app.jar", "--server.port=8080", "--
knowlegde_base=./knowlegebase/kb-1.0.0.db"]
```

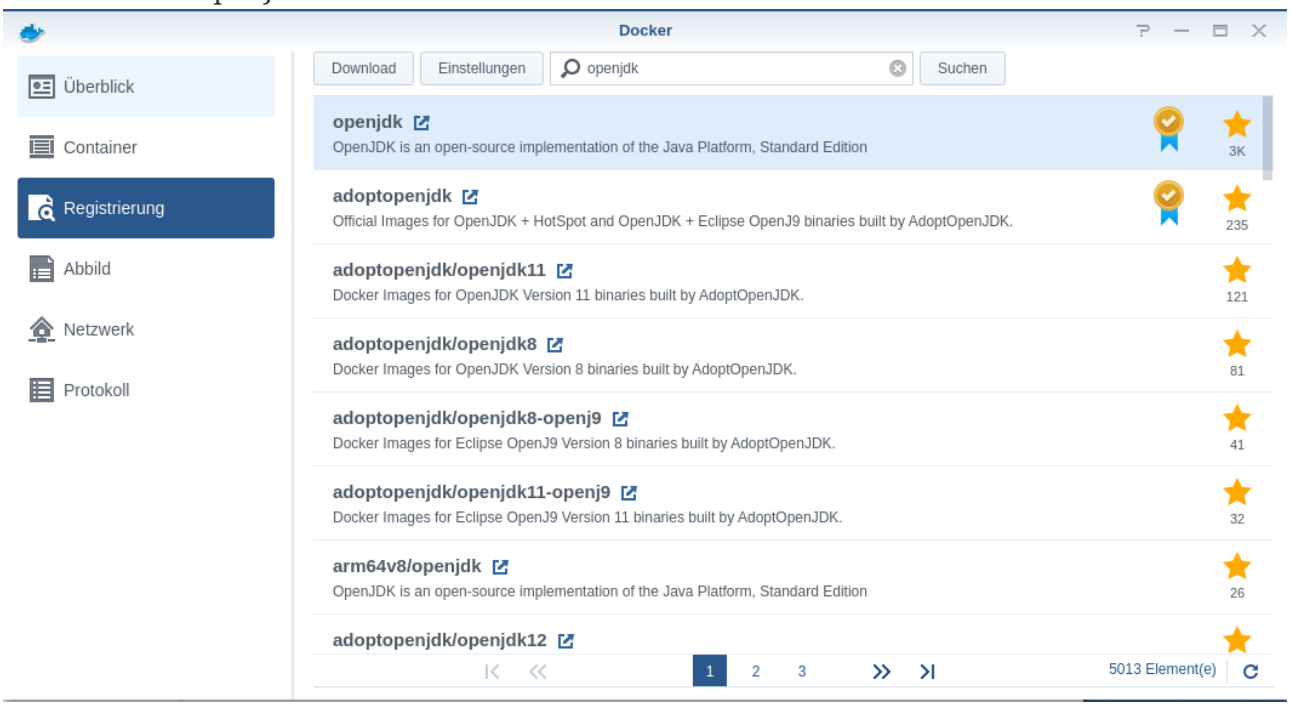
Please change the port of the application and change it accordingly.

Synology NAS

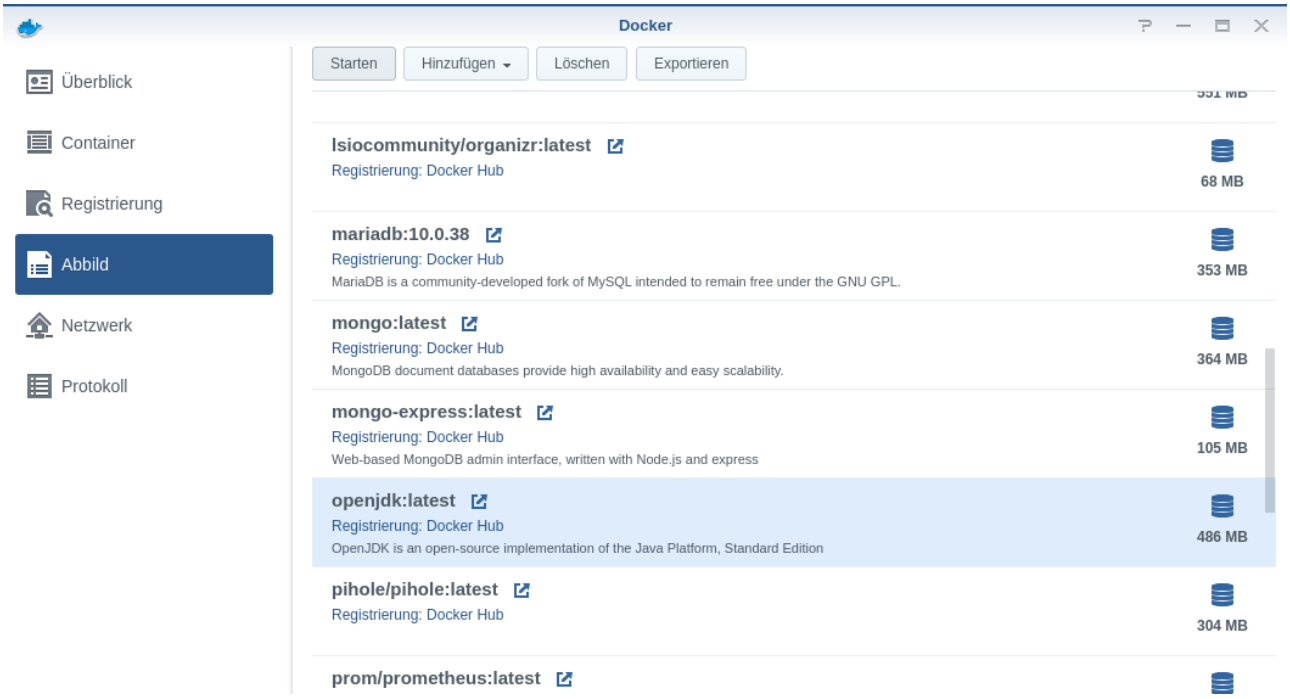
1. Create yourself a folder, where you upload the files to



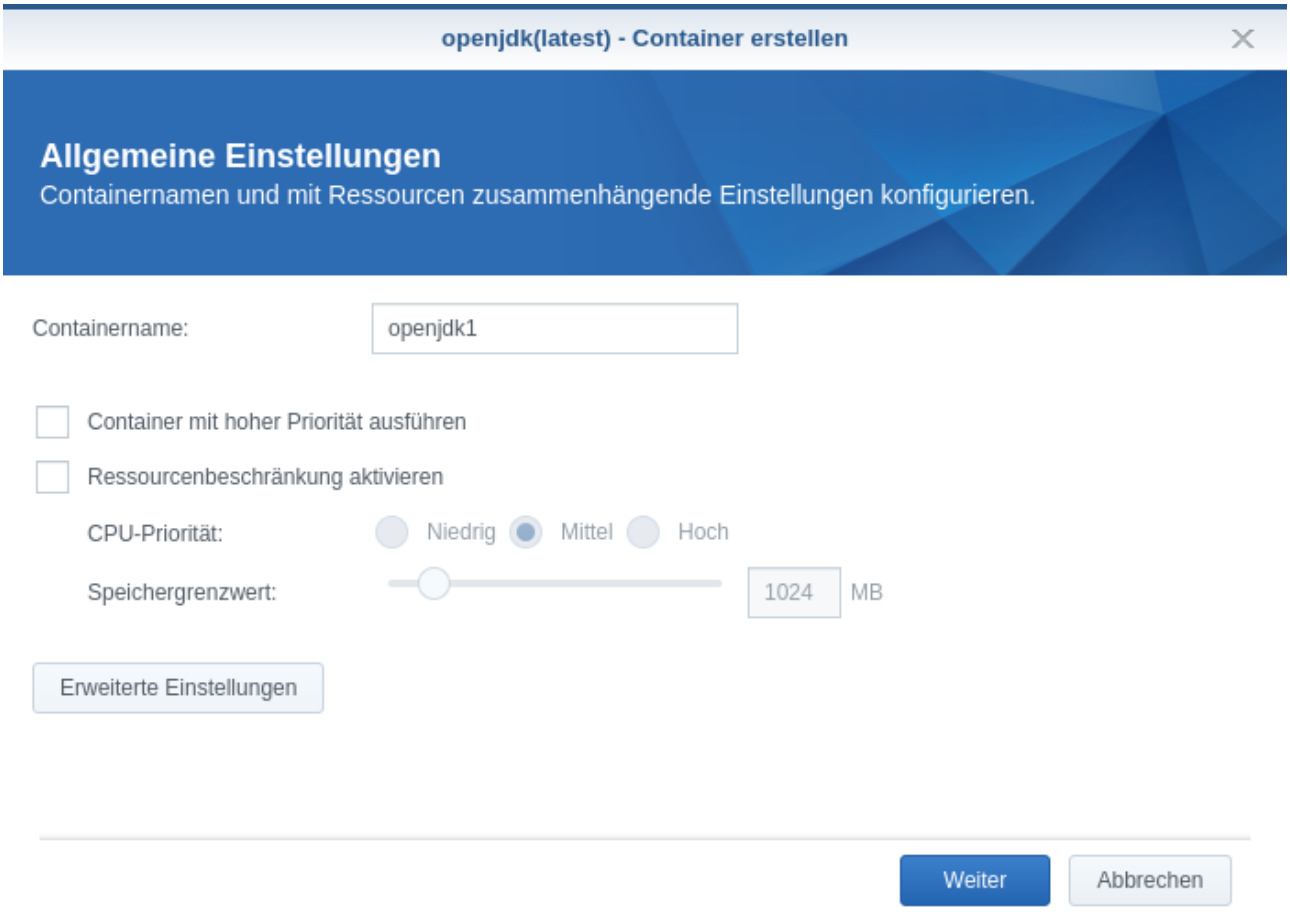
2. Download the openJDK container



3. Create a new container from this image



4. Give this container a name to your likings and click on the 'Advanced Settings' button



5. Mount your folders and files to the docker container. It is also a good idea to change this to "read only" mode, as this program does not change these files

6. Change the ports to your liking

7. Go to the environment tab and paste this as command to run:

```
java -jar /opt/classificator/app.jar '--server.port=8081' '--
knowlegde_base=/opt/classificator/knowledgebase'
```

Finally, run this container. You can access the webui by going to `http://your-nas-ip:your-port` For example `http://192.168.0.3:8081`

Configuration

This is the default configuration of the application It sets the server port to 8080 and the knowledgebase-directory to `build/knowledgebase`

```
server_port: 8080
knowlegde_base: build/knowledgebase

server.port: ${server_port}

logging.level:
  root: ERROR
  com.cuupa.classificator: WARN

classificator:
  kbfiles: ${knowlegde_base}

  monitor:
    enabled: true
    logText: true
    database-name: "monitor.db"
```

Server port

The default port as in said configuration is `8080` So if you want to access the webUI on your local machine navigate to `https://localhost:8080`

```
server_port: 8080
```

Knowledgebase

This entry means, that there has to be a folder named `build/knowlegebase` beside your jar file. You can specify which knowledgebase to use, by changing it via the command line arguments (How that works will be covered by me a few lines down below).

TIP	If this entry only contains a folder name without the specific knowlegedbase, it will load the file with the highest version tag in that folder For example if you have `kb-1.0.0.db` and `kb-1.0.1.db` it'll load the `kb-1.0.1.db`

```
knowlegde_base: build/knowledgebase
```

Monitor

The monitor is enabled by default and uses the database `monitor.db`

```
 monitor:
    enabled: true
    logText: true
    database-name: "monitor.db"
```

If `enabled` is set to `true`, all events will be logged. To turn it off, set it to `false`. If `logText` is enabled, the actual analyzed texts will be logged into the database. You might want to turn it off for privacy reasons

Database name

The database name is defined via `database-name`. You can change it to your likings. It uses relative paths by default. If you want to use absolute paths, change it to

```
database-name: "C:\Users\John Doe\monitor.db"
```

Changing

Via config

If you know about programming: Great! You can change it as you like for example

```
knowlegde_base: knowledgebase/kb-1.0.0.db
```

or

```
server_port: 1234
```

Via command line arguments

If you don't, don't panic. You can run the application by typing

```
java -jar app.jar --server_port=8080 --knowledge_base=knowlegebase/kb-1.0.0.db
--classificator.monitor.logText=false
```

NOTE The first part simply runs the jar by the name "app.jar"

```
java -jar app.jar
```

NOTE This part sets the port to 8080 and overwrites the value of the default configuration

```
--server_port=8080
```

NOTE This part sets the location of the knowledgebase. You can use relative paths like

```
--knowledge_base=knowlegebase/kb-1.0.0.db
```

NOTE or absolute paths like

```
--knowledge_base="C:\Users\John Doe\knowlegebase\kb-1.0.0.db"
```

CAUTION Notice that, you need to quote the value as soon as you have spaces in a parameter

Components

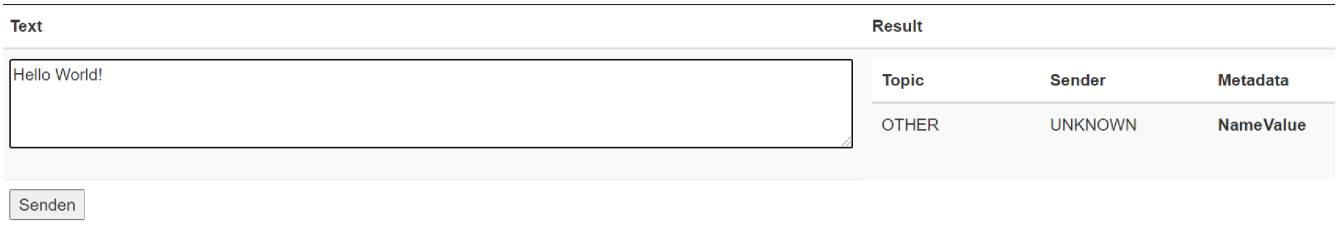
Engine

The engine is the core component of this application. It classifies the text and extracts the metadata

Using the GUI

You can use the gui exposed at `http://address-of-your-server:port`

You can type in or paste the text to the left-hand textarea, which the engine shall analyze and hit the "Submit"-Button. The result will be presented in the right-hand area



Using the REST-API

The engine exposes several methods for analyzing the input text. The most simple one receives the text as a string and returns a `List<SemantikResult>`

The endpoint-path is:

```
"/api/rest/1.0/classifyText"
```

If you want to analyze anything except plain text the method accepts any byte array and uses a combination of `PDFBox` and `Apache Tika` to extract its contents for you.

```
"/api/rest/1.0/classify"
```

TIP There's also a method for pinging the application. This method simply returns a HTTP/200

```
"/api/rest/1.0/ping"
```

Monitor