WebStudio

This is beta!

Remark: In case, the webstudio will not start correctly, try to clear the local storage (https://www.leadshook.com/help/how-to-clear-local-storage-in-google-chrome-browser/)

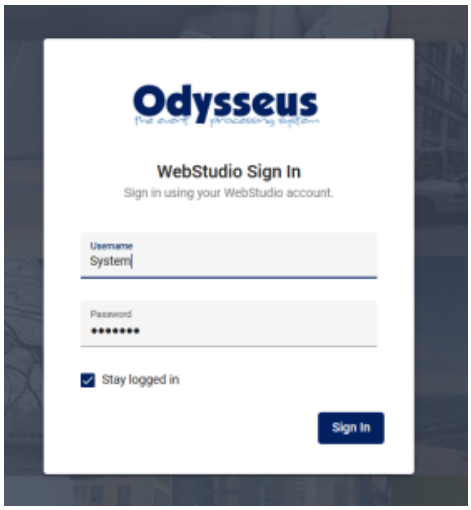
Currently, we are working on a web based studio for Odysseus servers. This studio can access many different servers.

- Navigationbar
- Web-IDE
- Installation

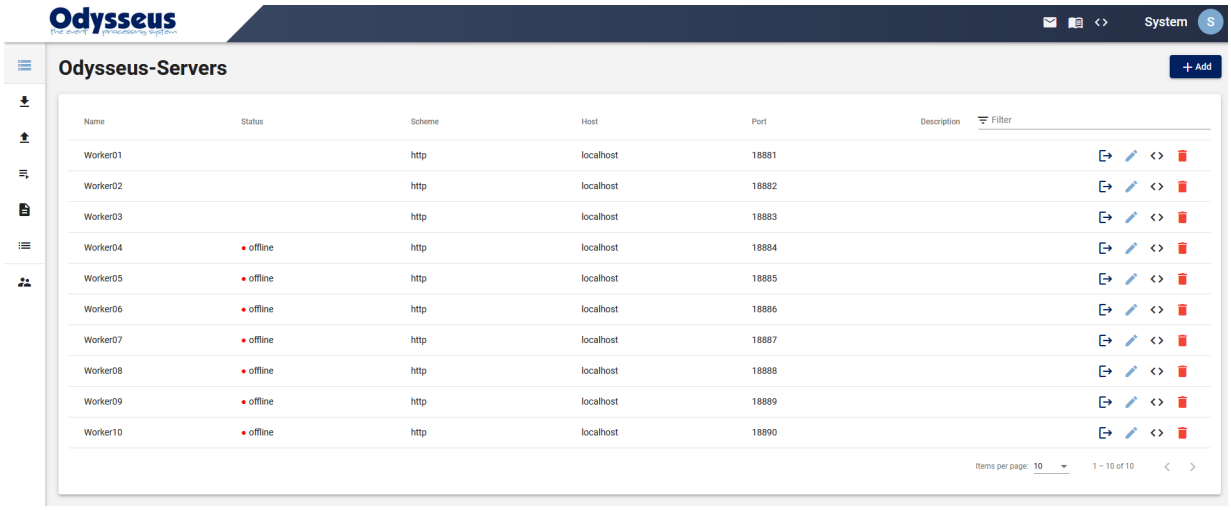
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See below for installation issues.

After installation you could call the frontend e.g. with http://localhost:4200/ and then you will see the login screen. This is the login screen for WebStudio (not for Odysseus). Although, the default, if not changed, are "System" and "manager". too.



The next screen you see, is the list of connected servers. You will need to add servers manually. The list of connected servers will be stored for further sessions on the server of webstudio. The sceeen could look like:

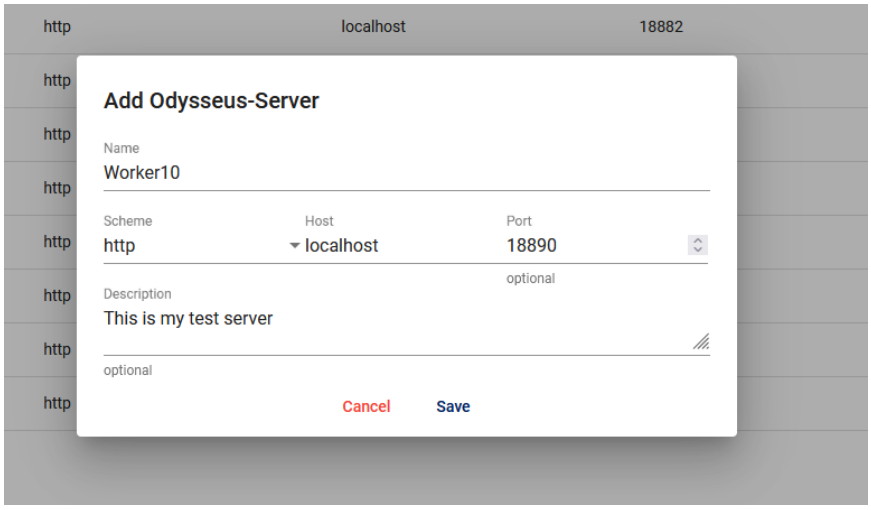


Where most of the servers are not connected 😉 When connected servers are available it looks like:

Name	Status	Scheme	Host	Port	Description
Worker01	online	http	localhost	18881	
Worker02	online	http	localhost	18882	
Worker03	online	http	localhost	18883	
Worker04	online	http	localhost	18884	
Worker05	online	http	localhost	18885	
Worker06	online	http	localhost	18886	
Worker07	online	http	localhost	18887	
Worker08	online	http	localhost	18888	
Worker09	online	http	localhost	18889	
Worker10	online	http	localhost	18890	

Items per page: 10 1 – 10 of 10

To add a new server, use the Add button on the top right of the window:

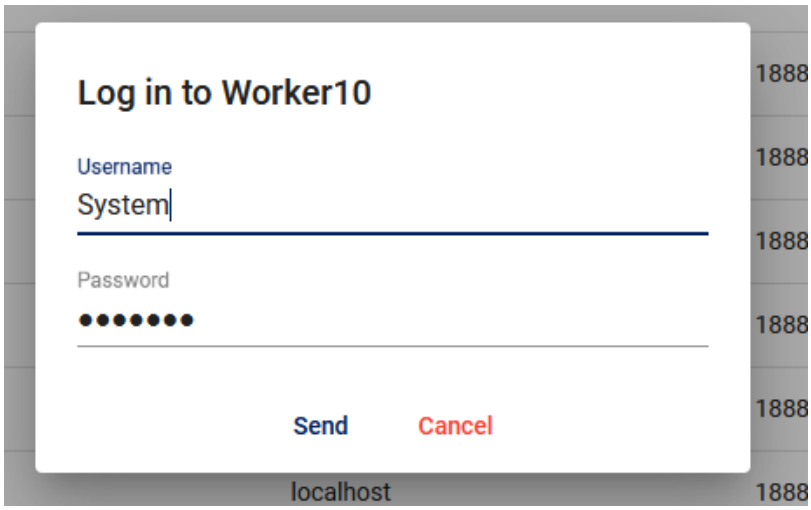


And the new server is added at the end of the list:

Worker09	online	http	localhost	18889	
Worker10	online	http	localhost	18890	This is my test server

Items per page: 10 1 – 10 of 10

Maybe you will need to switch to the next screen, to see the server. Now you are connected to the server, but not logged in. Use the  button to log in.



This is the login of the server you connected (default as always is "System"/"manager").

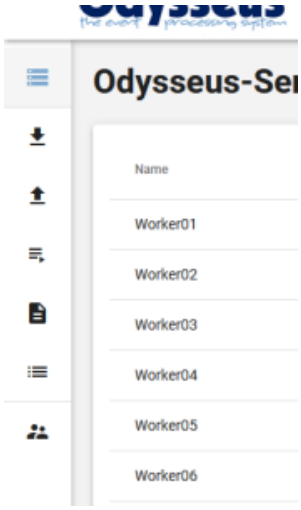
You will see the connected status with: . This button can be used to log out again.

With  you could

- edit the server information
- Call the Web-IDE for this server (see below)
- Remove the server from the list

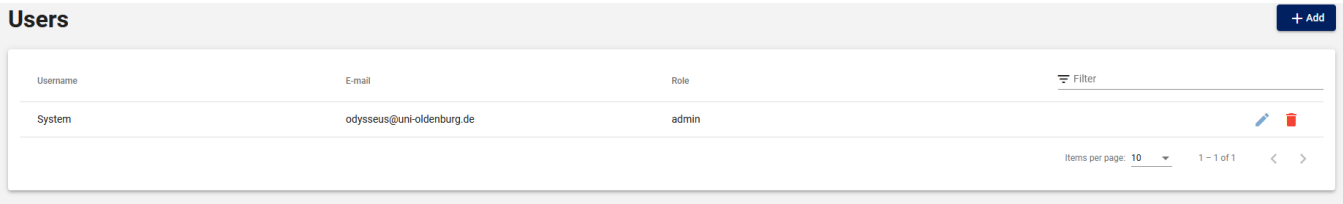
Navigationbar

On the left side, you see the navigation bar:



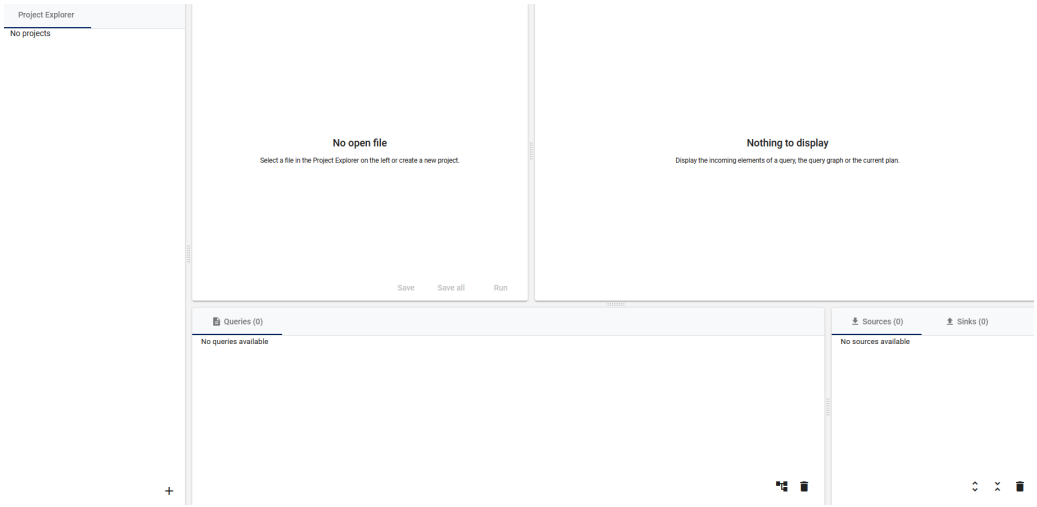
Here you could see (from all servers in a common list) the

- Defined sources and streams
- Defined sinks
- Defined queries
- Logs from the different servers
- Lists: Due to a bug, this button may currently not work in any cases.
- Users from the Web-Studio. Here you can change the users of the web studio, especially change the password or add new users



Web-IDE

Web-Studio provides an IDE for query development (quite simpler than the corresponding Odysseus Studio)



Remark: In case of problems, a corrupted local storage could be the reason. So, in this case is always a good idea to delete the local storage (e.g. for firefo or chrome). Sometimes, this is only successful, if webstudio is stopped.

Currently, there could be some problems, when running den WebStudio on a Mac (especially an M1). In this case, a better option would be to run the WebStudio on a linux based pc. Access can be done from MaxOS without any problems.

Installation

The following information is directly included from: https://git.swl.informatik.uni-oldenburg.de/projects/API_APPS/repos/webstudio/browse

Webstudio

Official webclient for managing and organizing multiple Odysseus-Server.

Run with Docker

You need to have Docker Compose installed. It is shipped with Docker Desktop.

Run with official Images

You can run the Webstudio with the official images on Docker Hub. There are images for the frontend and for the backend.

You need to place the file docker-compose.yml under `docker-compose.yml` on your filesystem. After that you can run `docker-compose up` from an terminal in the directory you placed the `docker-compose.yml`. This will download all necessary images and will create an docker network to run the Webstudio. After the startup you can access the Webstudio on `http://localhost:4200/`.

Important: When using webstudio with linux, you will need to create some folders BEFORE running docker-compose:

If you checked out this repository you can also switch to folder deploy and just run `docker-compose up` from there.

Remark: You can also use the latest development versions. For this, change inside the docker-compose file the image tag from latest to dev-latest or use this file docker-compose.yml

Run in development

If you want to make changes to the source files and then run the Webstudio with Docker Compose, you just need to run `docker-compose up --build` from the root directory.
This will build the images for the backend and frontend based on the source files. You can edit the Dockerfiles for each and build your own images.
Please have a look at the official docker documentation for further information about docker.

Contribute information

The Webstudio consist of an backend and an frontend. See below for more informations on how to contribute.

Prerequisites

Node.js

To contribute an develop you need to have Node.js installed. Its recommended to use the last long time support (LTS) release
but its also compatible with at least 18.14.x which is also an LTS release. Node.js is used to run the development server for frontend and backend. Node.js is shipped with the packet manager npm which is used to manage the dependecies of the Webstudio.

MongoDB

To persist the data the backend uses MongoDB. To install MongoDB locally follow the steps in the official documentation. The Webstudio was tested and developed with MongoDB 6 Community Edition.

You could also use the compose file inside the folder dev-mongo to install/start mongo for development

Odysseus

In folder odysseus-example is an example for some Odysseus nodes that can be used for testing.

Angular

You should install angular cli
npm install -g @angular/cli

Frontend

The frontend was generated with Angular CLI version 15.0.0.
Navigate to the folder `frontend` to execute the following commands.

Clear local storage

The frontend uses states which are persisted in the local storage of your browser. If you switch between Webstudio instances (eg. from production to development) you should clear the local storage of your browser to avoid errors.

Development server

The first time you have to run `npm install` to install the dependencies. If you use Windows you might have to run `npm install --unsafe-perm` if the process gets stuck.
If all dependencies are installed you can run `npm start` or `ng serve` for a dev server.
Navigate to `http://localhost:4200/`. The app will automatically reload if you change any of the source files.

Code scaffolding

Run `ng generate component component-name` to generate a new component. You can also use `ng generate directive|pipe|service|class|guard|interface|enum|module`.

Build

Run `ng build` to build the project. The build artifacts will be stored in the `dist/` directory. Use the `--prod` flag for a production build.

Running unit tests

Run `ng test` to execute the unit tests via Karma.

Running end-to-end tests

Run `ng e2e` to execute the end-to-end tests via Protractor.

Further help

To get more help on the Angular CLI use `ng help` or go check out the Angular CLI README.

Backend

Navigate to the folder `backend` to execute the following commands.

Development server

The first time you have to run `npm install` to install the dependencies. If you use Windows you might have to run `npm install --unsafe-perm` if the process gets stuck.
If all dependencies are installed you can run `npm start` for a dev server. The app will automatically reload if you change any of the source files.

License

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