

BeAPartJS

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1. Introduction

BeAPartJS is a platform independent implementation of a C# application BeAPart. The software allows to configure a technical system with measures (sensor, actor values) and events (failure codes). It does not simulate behavior.

2. Usage

2.1. Background

BeAPartJS is developed for NodeJS and provides a http-Server and a TCPClient. The HTTP-Server will deploy a Webpage with the application. Changed values will be send from the Web-Application, to the webserver. The webserver will pack the data to a binary buffer and is transmitting the data via TCP.

2.2. Prepare

For the following steps it is assumed that nodejs (nodejs.org) is installed.

- Extract the zip-File in a Folder of choice
- Open a Terminal / Console in that folder
- Check if nodejs is available
 - o Type: `node -v`
The command should return a version number
- Install dependencies
 - o Type: `npm install`

After Installation a folder called `node_modules` should show up in the project folder.

2.3. Starting

Open a Terminal / Console in the BeAPart-Js Folder (where the `main.js` is located)

To run the application type

```
> node main
```

The application will start a Webserver providing you the application as website.

Open your Browser and visit the URL `localhost:8080`

The website can be used as long as you don't close the terminal which will shutdown the server as well.

If required: You can pass as second argument a different port if 8080 is already in use. The webpage will then be available under that port (instead of 8080)

```
> node main 4242
```

3. Organization

Folder	
/	Application files (Server)
/client	Website to display (Client)
/data	Application Data (config.json and images)

4. Remarks

Currently the application requests always a file called "config.json" in the data folder where you can configure the application