Extension of a middleware to connect machine data from an external platform and simulation tools

Initial Situation

At the chair fml the digitalization of the construction site is also investigated in the field of construction logistics. A central point for increasing efficiency in construction projects is the application of process simulations before and during construction. Detailed modelling of individual construction processes can provide recommendations for action in real time, taking machine data into account.

Objective

In a previous project, a concept was developed for an interface between real-time machine data and simulation. This concept is now to be expanded to include an API gateway, another RESTful microservice to an external machine data platform, and a microservice for preprocessing the data (e.g., by using ). The necessary data is already available. The new services should make use of the existing service discovery components. Optionally, a corresponding front-end is to be set up to specifically control input variables of the simulation.

Requirements

- Reliability and commitment
- Independent and structured way of working
- Open and communicative manner

Contact

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