Microservice Platform Ecosystem for Industry 4.0

IDP

Dauerthema[1]

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Context

Platform ecosystems and cloud technologies enable new business models and significant process improvements in the industrial sector. Predictive maintenance, augmented reality, remote maintenance and other innovative services are contributing to the digitization of the industry. However, significant sustainable added value can only be achieved in the development and construction of platform ecosystems if innovative services from different providers and platforms can be combined with each other.

This IDP should therefore contribute to the technical and organizational realization of these added values. The scope of the IDP can therefore focus on technical as well as non-technical aspects.

Task(s)

To make a significant contribution some of these task can be worked on

- Conception and development of innovative cloud services for industry 4.0
- Development of microservice architecture concepts and designs for platform ecosystems
- Research on relevant cloud industry services and their realization aspects
- Development of semantic languages or method to combine services from different platforms

Requirements

- Knowledge and interest for
  - Web development / modern architecture concepts
  - Developing applications with emerging technologies
  - Semantic web and/or Industry 4.0
  - Service science and conceptualization