

## Implementing Component-Based Systems - Part II

### Task 1: Implementation of the Factory Automation application - rOSGi

So far, we have only implemented local components. In real scenarios, multiple distributed systems will have to interact. Traditionally, the production system of a company will run on a different server than the CRM system. Implement a second OSGi application that provides a rudimentary implementation of the described production system in a simulated environment. Consider at least one printing and one finishing machine (including the robot arms and the mobile robots). Connect to two systems using *Remote Services for OSGi - rOSGi* (<http://r-osgi.sourceforge.net>).

*NOTE: You can work in groups up to 3 students.*

- 1a) Implement the production system as a standalone OSGi application
- 1b) Implement the rudimentary components to handle production processes (including at least two machines, two robot arms and two mobile robots)
- 1c) Implement a small simulation for the communication across those components
- 1d) Connect the CRM system to the production system using rOSGi
- 1e) Prepare a short presentation and demo (maximum 5 minutes)!