
Modularization for HRP

Project idea for FoF-ICT-2011.7.1

About Us

Research Institute for Operations Management (FIR)



RWTHAACHEN
UNIVERSITY

RWTH Aachen

- founded in 1870
- 31.500 students
- 8.000 mechanical engineering students



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RWTHAACHEN

Research Institute for Operations Management (FIR)

- founded in 1953
 - 150 employees
 - 45 research assistants
-
- 40 publicly funded projects each year
 - 60 projects with industry customers each year
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- Service Management
 - Information Management
 - Production Management



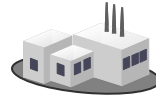
Project idea (1/2)

Output

- IT-architectures, standards and control mechanisms for energy aware and agile factories

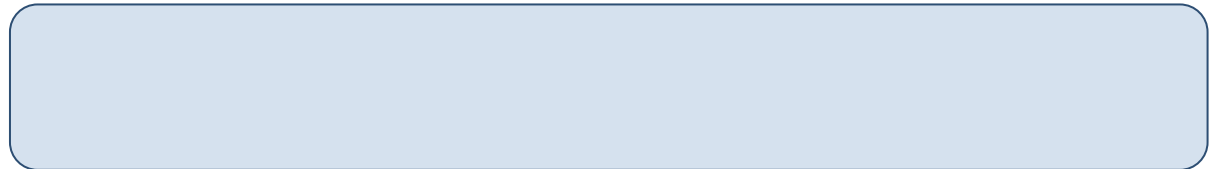
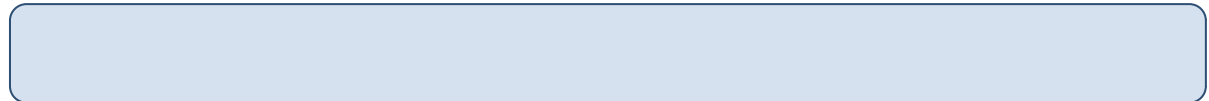
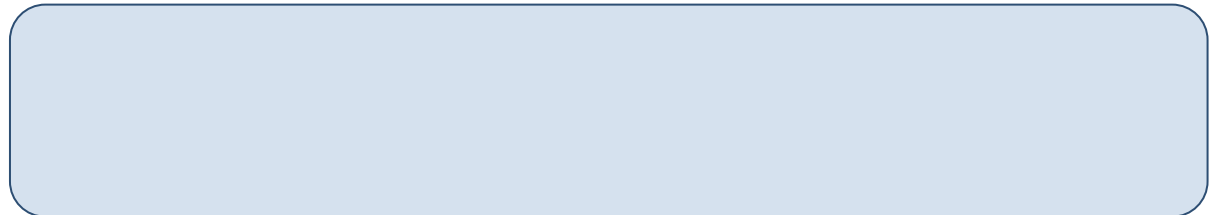
Objectives

- Plug and play architecture for the integration of smart objects and sensors
- Agile adaption to changing business requirements through cloud-based services



Approach / components

- Event-driven architecture
- Modularization of business services for enterprise cloud
- Agent-based event processing network
- Standardization of interfaces and communication



Project idea (2/2)

What FIR can offer

- Expertise in reference modeling for production planning and control; AutoID / Smart Objects technology; software architecture design
- Access to German ERP System and technology providers (Auto-ID, Sensor Networks, Complex Event Processing)
- Enterprise integration center as test bed (end of 2012)

Relevant projects

- inTime
- IMS2020
- Tool-East



WZL
RWTHAACHEN
Factory planning
Real production


Logistics arena



HCIC
Human-Computer
Interaction Center

fir
RWTHAACHEN
Innovation Labs

Potential research partners

- Use case partners in production & logistics (make-to-order, engineer-to order production)
- Solution provider / integrators
- Software providers (ERP-Systems, Complex Event Processing, Middleware etc.)
- Hardware providers (IT-infrastructure, sensors, auto-ID etc.)
- Standardization bodies

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