Integration of RFID in Enterprise Platforms

The Internet of Things
RFID and sensors bridge the gap between virtual and real world

Bar Code

Electronic Product Code

EPC Network
- Read events are locally stored in companies` EPC storage
- Event history can be queried at the Discovery Service
- Enable track & trace for compliance, anti-counterfeiting, etc.
- We develop a benchmark using our supply chain simulator

In-Memory based EPC Network Components

Use Case: European Pharmaceutical Industry
- 15 billion packages of pharmaceuticals per year to be tracked
- Ca. 5k/2.5k Discovery Service notifications/queries per second
- Containment-relationships have to be resolved
- Other use cases: tobacco, high-value goods, ...

Business Intelligence and Supply Chain Visualization

Current Research Topics
- Analyze different Discovery Service architectures
- Reduce necessary storage space for EPC-data
- Increase write and read performance
- Define business intelligence scenarios for EPCIS servers
- Develop visualizations for supply chain management

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