



AEE Vertical Domain Presentation



Ambient Energy Efficiency (energy monitoring)

- Thales (FR)
- Bull (FR)
- INP-Grenoble (FR)
- EDF (FR)
- UJF (FR)
- AICIA (ES)





Components and Technologies

- Technical challenges
 - Embedded OSGi runtime to be run on constrained devices
 - Integration and utilization of heterogeneous sensors/actuators

- Used technologies
 - µJonas as underlying framework providing OSGi + iPojo
 - Device abstraction/integration based on ROSE + 6LowPan
 - Light-ESB data processing provided by CILIA
 - Monitoring and data analyses provided by Jasmine

- OS@ml Commons
 - Device abstraction compatibility and extension
 - Data processing: aggregation, filtering, storage



Use case Scenarios

- User stories
 - Energy efficient building monitoring

- Business case
 - Buildings must reduce their energy consumption (and produce if possible!)
 - End-user involvement in energy efficiency process
 - Easy deployable solution for global analysis and monitoring

- Innovations
 - Small-sized footprint OSGi runtime
 - All IPv6-enabled devices: TCP/IP available on sensors and actuators
 - Multi-protocol device discovery and integration
 - Lightweight monitoring solution