

# Development of Cross-Platform Smart-M3 Knowledge Processors using SmartSlog SDK

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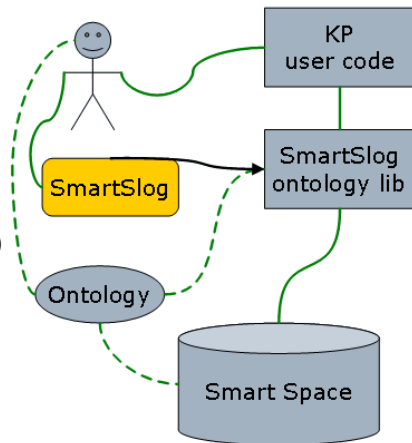
13<sup>th</sup> FRUCT conference  
April 25, 2013, Petrozavodsk, Russia



# SmartSlog SDK

- Library generator for **Smart Space ontology**
- SmartSlog versions: ANSI C, C#
- Mapping OWL to code (C, C#)
- High-level communication primitives (session, subscription ...)

KP programmer can think in abstract ontology terms!



# SmartSlog ANSI C Version

Platforms with ANSI C support:

- Linux-based (Ubuntu, OpenSuse, Meego, ...)
- Windows
- Symbian
- Android
- Mac OS
- others ...



# SmartSlog C# Version

Platforms with .NET support:

- Windows OS (desktop, server) with .NET 4.0 framework
- Windows Phone OS 7/8 versions

Different KPI support, now available:

- **C\_KPI** (PetrSU)
- **C# KPI** (UniBo)



# Windows®

# SmartRoom and SmartSlog

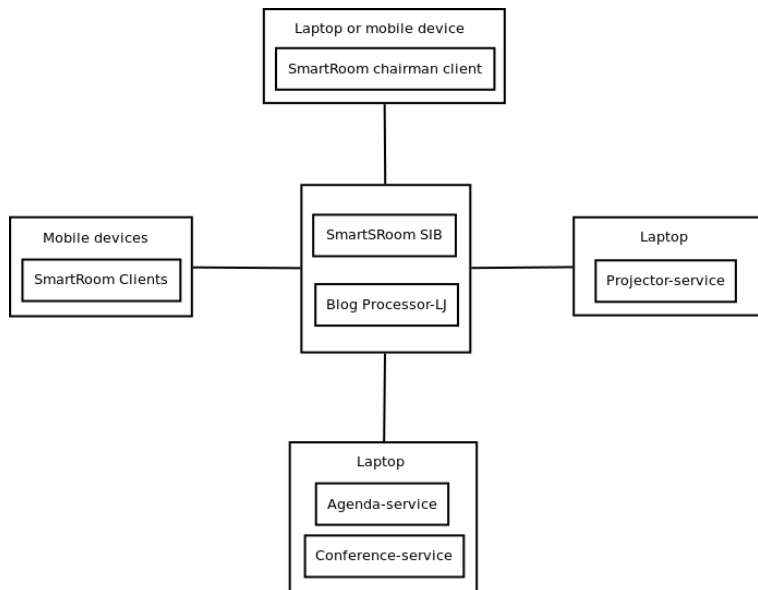
For automating conferences, meetings,  
and lectures

- Many services
- Many devices
- Different OSes and Platforms
- Ontology-driven development

**SmartSlog as an advanced toolset  
for Smart-M3 application development**

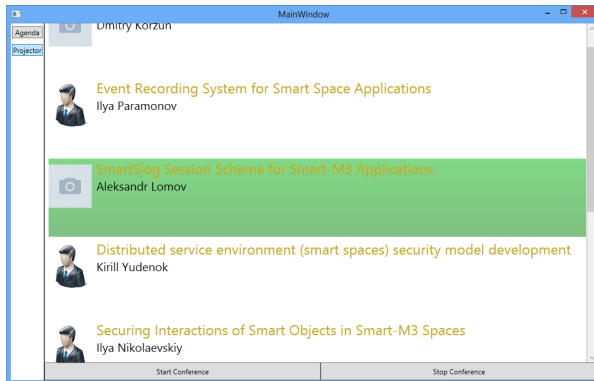


# SmartRoom scheme



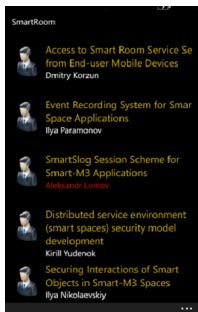
# SmartRoom Services

- Projector-service:  
Ubuntu OS, ANSI C; Windows OS, C# with C\_KPI
- Agenda-service:  
Ubuntu OS, ANSI C; Windows OS, C# with C\_KPI
- Conference-service: Ubuntu OS, ANSI C



# SmartRoom Conference Clients

- Mobile (smart)phones:
  - ▶ Windows Phones: WP 8 OS, C# with C# KPI
  - ▶ Symbian: ANSI C with Qt and C\_KPI
  - ▶ other platforms and mobile devices are in progress
- Chairman client laptop on Windows: C# with C\_KPI





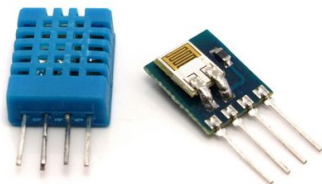
# SmartRoom Sensors Support

**Raspberry Pi** is a credit-card-sized single-board computer

- Soft-float Debian Wheezy OS v3.2
- SmartSlog ANSI C
- Simple sensors usage

**Arduino** is a single-board microcontroller

Used with external devices (laptops, Raspberry Pi, etc.)



# SmartRoom Conference Graph

