

Клиент Интеллектуального Зала SmartRoom на платформе Android

Тематика: Социальные приложения

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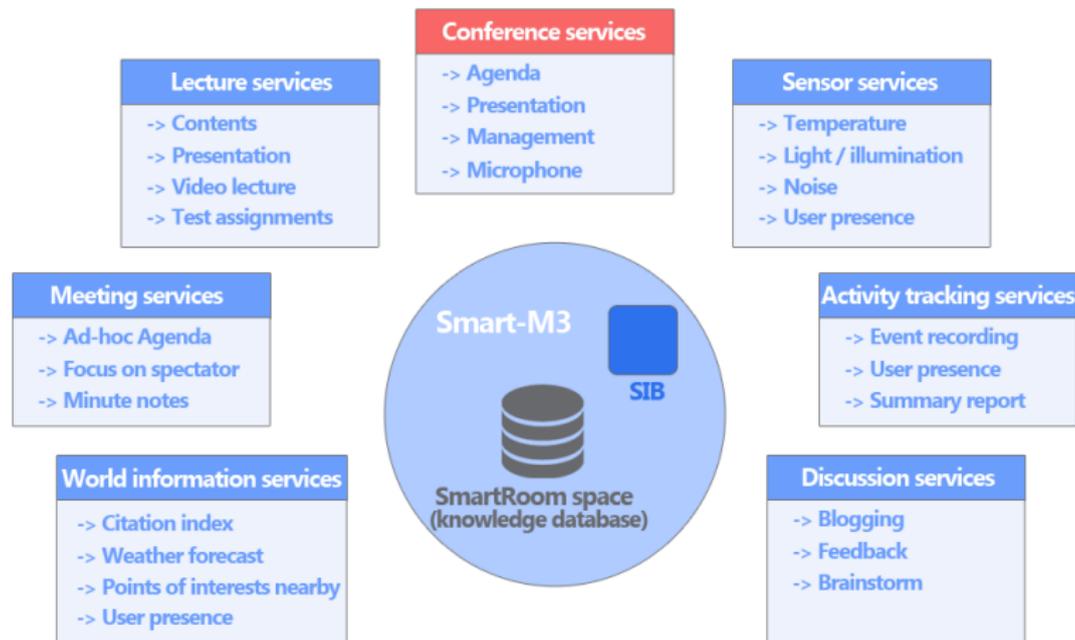


ИТ-Планета

20 сентября, Крым, Россия



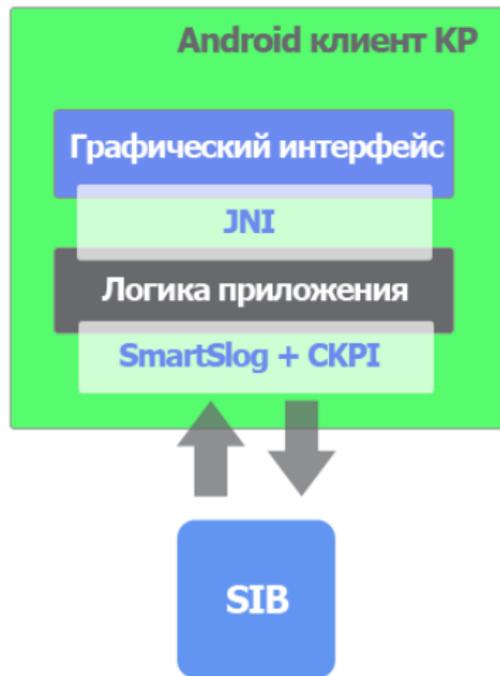
Сервисы системы SmartRoom



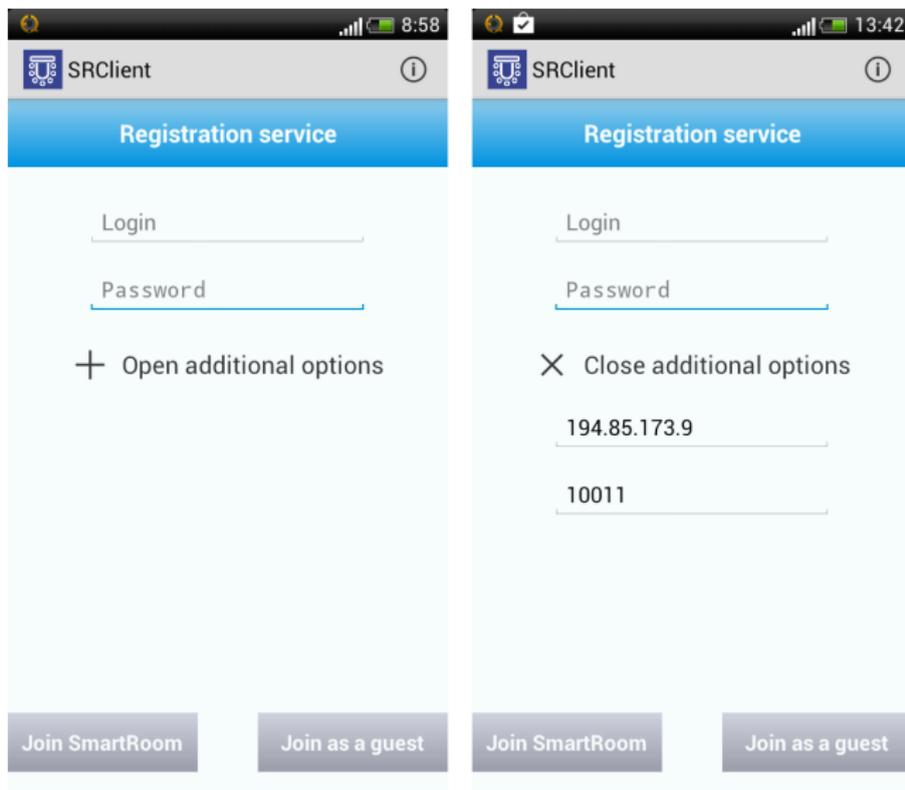
- Централизованное хранилище данных (SIB)
- Множество мобильных клиентов

Архитектура клиента

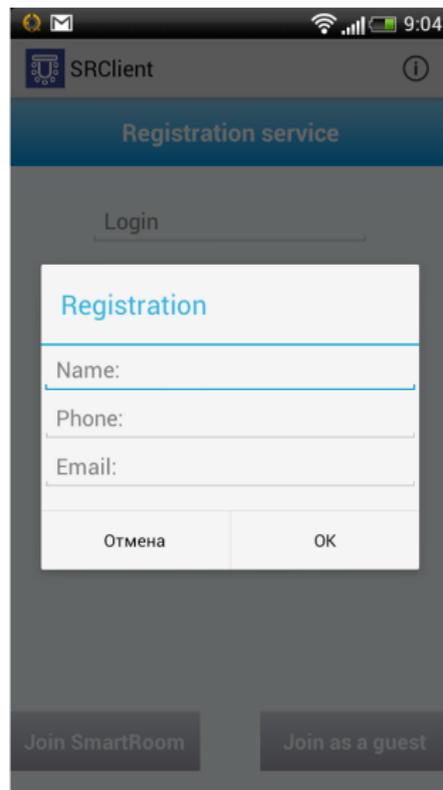
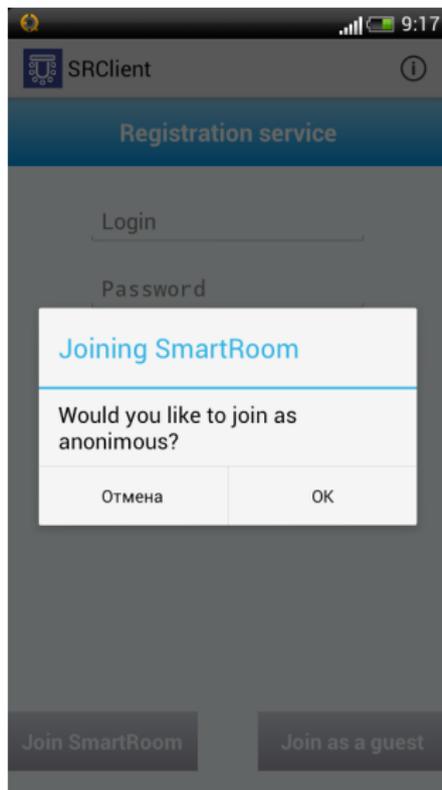
- **Графический интерфейс** реализован на Java с помощью Android SDK
- **JNI** позволяет запускать C/C++ код из Java
- **Логика приложения** реализована на языке C с помощью Android NDK
- **SmartSlog** поддерживает реализацию на уровне онтологий:
 - ▶ публикация и извлечение данных
 - ▶ механизм подписки
 - ▶ проверка состояния соединения



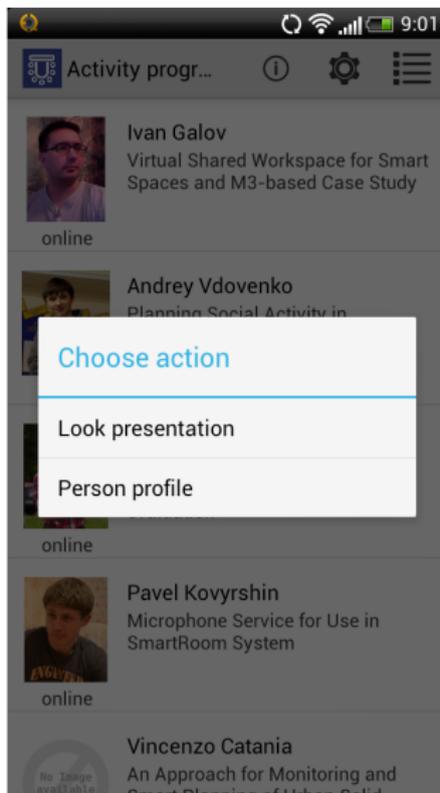
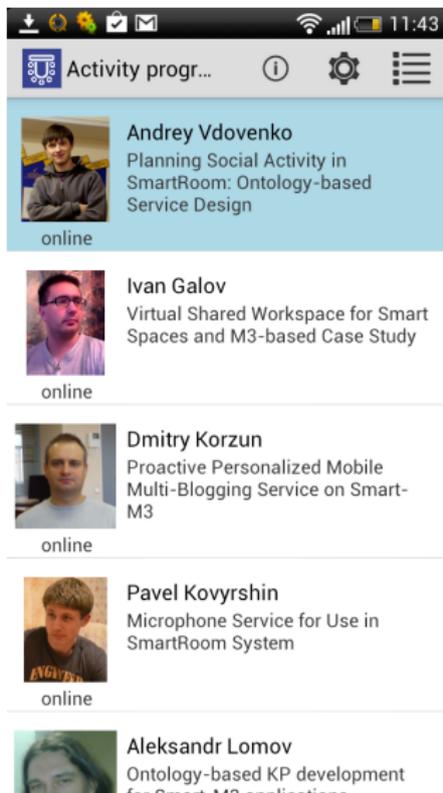
Меню регистрации



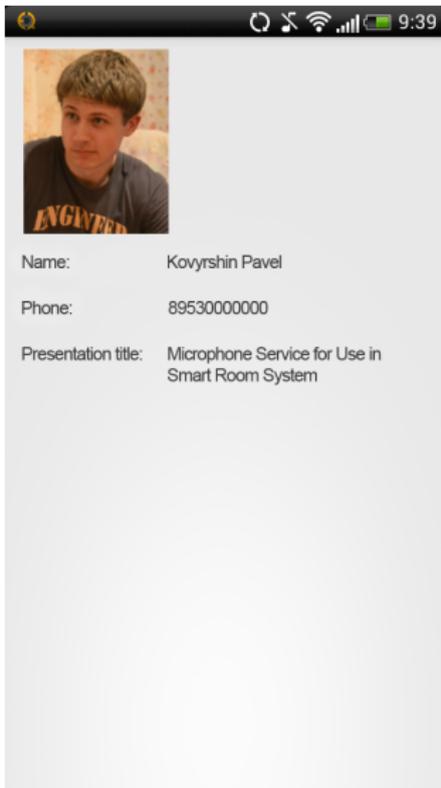
Анонимный участник или гость



Интерфейс сервиса Agenda



Профиль и презентация участника



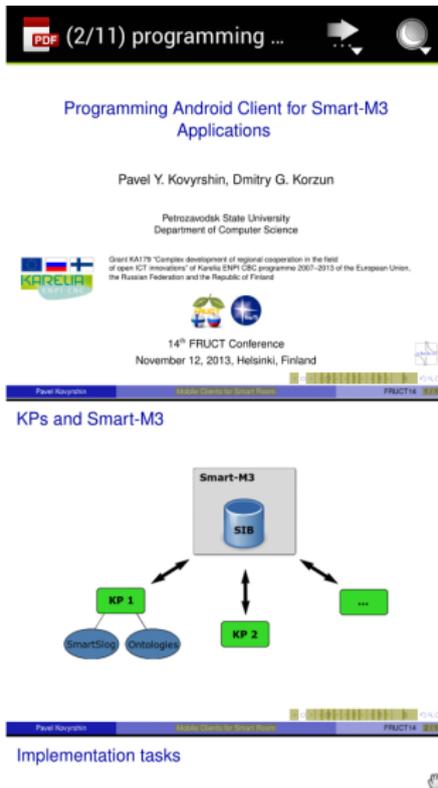
9:39



Name: Kovyrshin Pavel

Phone: 89530000000

Presentation title: Microphone Service for Use in Smart Room System



PDF (2/11) programming ...

Programming Android Client for Smart-M3 Applications

Pavel Y. Kovyrshin, Dmitry G. Korzun

Petrozavodsk State University
Department of Computer Science

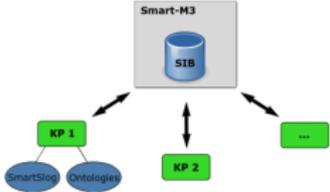
Grant KA179 "Complex development of regional cooperation in the field of open ICT innovations" of Karelia EMU CSC programme 2007-2010 of the European Union, the Russian Federation and the Republic of Finland.



14th FRUCT Conference
November 12, 2013, Helsinki, Finland

Pavel Kovyrshin | Dmitry G. Korzun | FRUCT14

KPs and Smart-M3

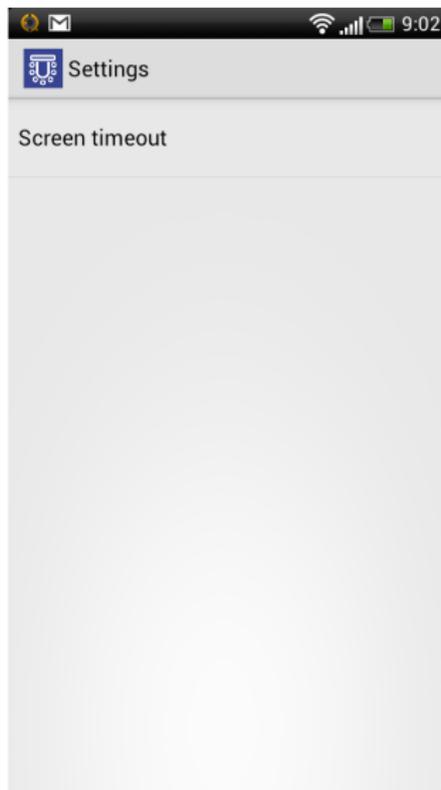
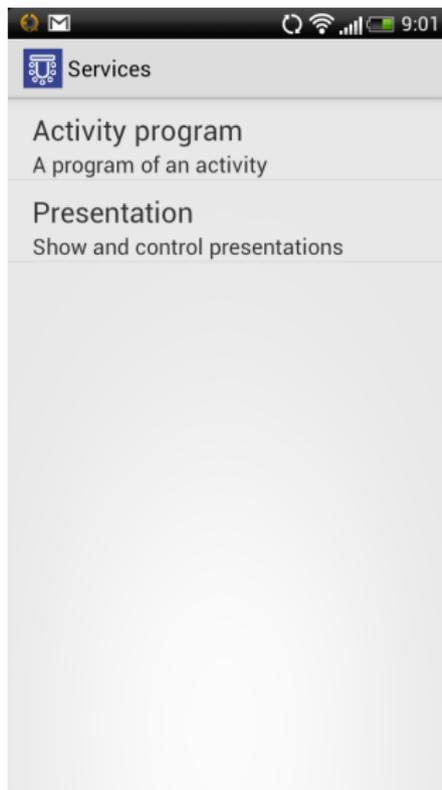


```
graph TD
    subgraph Smart_M3 [Smart-M3]
        STB[(STB)]
    end
    subgraph KPs [KPs]
        KP1[KP 1]
        KP2[KP 2]
        Dots[...]
    end
    STB <--> KP1
    STB <--> KP2
    STB <--> Dots
    KP1 --- SmartStog[SmartStog]
    KP1 --- Ontologies[Ontologies]
```

Pavel Kovyrshin | Dmitry G. Korzun | FRUCT14

Implementation tasks

Доступные сервисы и настройки



Интерфейс сервиса Presentation

The screenshot shows an Android application interface for a presentation. At the top, there is a status bar with icons for a refresh button, a checkmark, Wi-Fi, signal strength, battery, and the time 13:51. Below the status bar is a header bar with a speaker icon, the text "Andrey Vdovenko is speaking ...", and three icons: an information icon, a settings gear, and a menu icon. The main content area is a slide with a slide number "1/15" in the top left corner. The slide content includes:

- Petrozavodsk State University Department of Computer Science logo and name.
- Presenters: Andrey S. Vdovenko, Dmitry G. Korzun.
- Title: "Planning Social Activity in SmartRoom: Ontology-based Service Design".
- Project information: "This research is part of ENPI CBC Karelia grant KA179 'Complex development of regional cooperation in the field of open ICT innovations' co-funded by the European Union, the Russian Federation, and the Republic of Finland. The work is supported by project # 648-14 of the Ministry of Education and Science of the Russian Federation."
- Logos for the European Union, Russian Federation, and Republic of Finland.
- Logos for SMART and SU.
- Conference information: "15th FRUCT Conference April 24, 2014, St. Petersburg, Russia".

Navigation controls include a left arrow on the bottom left, a right arrow on the bottom right, and a microphone icon on the right side. A bottom bar contains the text "FRUCT15", "Andrey Vdovenko", and "1 / 15".

Опции сервиса Presentation

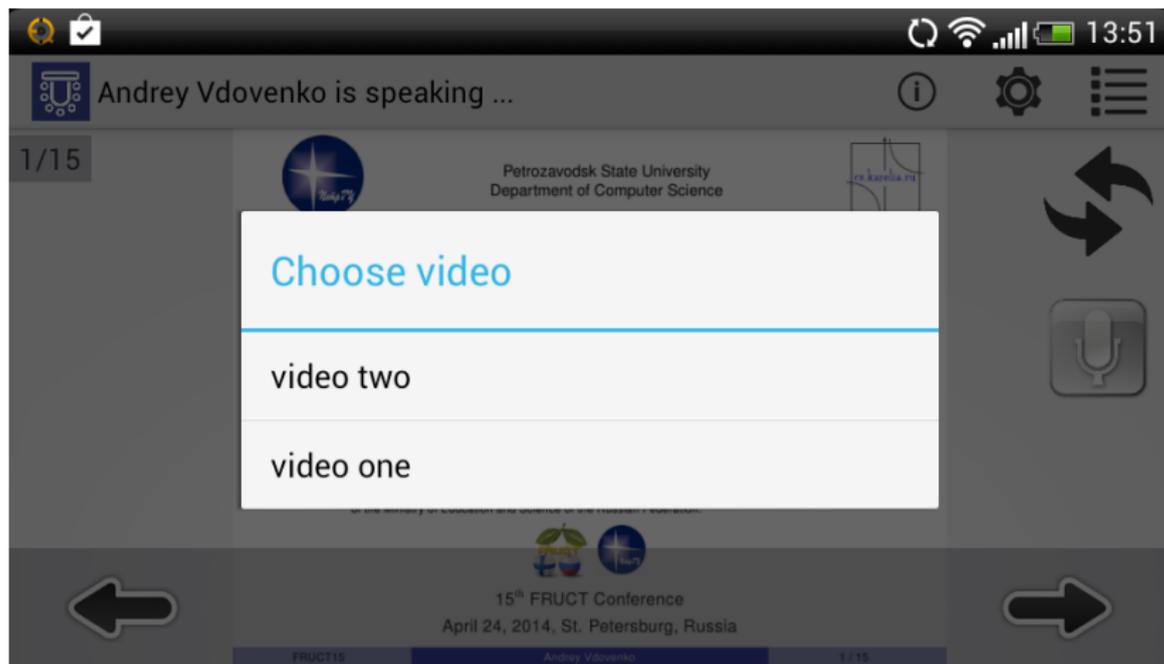
The screenshot shows an Android application interface for a presentation. At the top, a status bar displays system icons and the time 13:51. Below it, a header bar shows the speaker's name "Andrey Vdovenko is speaking ..." and navigation icons (info, settings, menu). The main content area displays a slide with the following elements:

- Slide number: 1/15
- Logo of Petrozavodsk State University (PSU) and its Department of Computer Science.
- Speaker names: Andrey S. Vdovenko, Dmitry G. Korzun.
- Title: Planning Social Activity in Smart Ontology-based Service D...
- Logos for ENPI CBC Karelia and the European Union.
- Text: "This research is part of ENPI CBC Karelia grant KA179 'Complex development of regional cooperation in the field of open ICT co-funded by the European Union, the Russian Federation, and the Russian Federation. The work is supported by project # 648-14 of the Ministry of Education and Science of the Russian Federation."
- Logos for FRUCT and PSU.
- Text: "15th FRUCT Conference April 24, 2014, St. Petersburg, Russia"
- Footer: "FRUCT15" and "Andrey Vdovenko"

A context menu is open on the right side of the slide, listing the following options:

- Show video
- Stop video
- End presentation
- Reconnect

Выбор видеоролика



Заключение

- Реализован SmartRoom клиент для Android устройств
 - ▶ Приложение является бесплатным
 - ▶ Более 50-ти скачиваний с сервиса Google Play
- Используемые технологии
 - ▶ Smart-M3
 - ▶ SmartSlog
 - ▶ Android (SDK/NDK)
- Способы коммерциализации
 - ▶ Возможность переключения между программами мероприятий
 - ▶ Ограничение количества воспроизводимых видеороликов

Sourceforge: <http://sourceforge.net/projects/smartroom>

Google Play: <https://play.google.com/store/apps/details?id=petrus.smartroom.android.srclient>

SmartRoom Wiki: <http://oss.fruct.org/wiki/SmartRoom>

E-mail: pavlin.kov@mail.ru, smartroom@cs.karelia.ru