Smart-Space Working Group Activity Overview in 2011-2012

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Smart Space Working Group Mission

Mission of the Smart Space Working Group is as follows:

- Creation and prototyping of solutions based on principles of the **smart spaces paradigm** and ubiquitous computing

- Development and promotion of the **smart space solutions** for the users of **mobile devices**

- Analysis and creation of the corresponding **use cases** and **business models**

- Elaboration of other competences to provide competitive advantages for the work group members at the emerging market of **smart spaces services**

At the moment all activities of the working group are related to **Smart-M3** platform that has been developed by the Artemis JU programme in Sofia and in Finnish national DIEM project

Smart Space Working Group Members

- Sergey Balandin (FRUCT, WG co-chair)
- Jukka Honkola (Innorange, WG co-chair)
- Alexey Kashevnik (SPIIRAS, WG secretary)
- Pekka Jappinen (LUT)
- Alfredo D'Elia (UniBo)
- Yury Korolev (SPbETU)
- Dmitry Korzun (PetrSU)
- Kirill Krinkin (SPbETU)
- ~~Evgeny Linsky (SUAI)~~
- ~~Alexander Malahov (SUAI)~~
- Ilya Paramonov (YarSU)
- ~~Luca Roffia (Bologna University)~~
- Andrew Vasilev (YarSU)
- **Kirill Yudenok (SPbETU)**

- Michel Banatre (IRISA)
- **Tatiana Efimushkina (TUT)**
- Vladimir Gorodetsky (SPIIRAS)
- Alexey Koren (SUAI)
- **Evgeny Linsky (SUAI)**
- Vesa Luukkala (Nokia)
- Jari Porras (LUT)
- **Luca Roffia (Bologna University)**
- Alexander Pyattaev (TUT)
- Vladimir Sayenko (KTURE)
- Marina Turenko (FRUCT)
- **Dominici Michele (INRIA)**

Smart Space Working Group Projects: Smart Conference Service Suit

- Core SmartConference system (**SPIIRAS**)
- Integration of Blogging for conference discussions (**PetrSU**, **SPbETU**)
- Web extensions for Smart Conference System (**SUAI**)
- Smart Conference Clients for Symbian and Android (**YarSU**)
- Pecha Kucha for Smart Conference (**YarSU**)
- HiveMind for SmartConference system (**YarSU**)
- ECG/Pulse Monitoring for Smart Conference System (**YarSU**)

# Smart Space Working Group Projects: Other Projects

- **PetrSU, SPbETU, UniBo:**
  - Smart-M3 platform development
- **SPIIRAS:**
  - SmartLogistics system
  - Audio-visual support system for Mobile E-meeting Participant
- **PetrSU:**
  - SmartScribo: A Blogging Application for Smart Spaces
  - M3-Weather: A Smart-M3 Forecast Widget for Mobile Users (**completed**)
  - SmartSlog: A Smart-M3 Multilingual Ontology Library Generator
- **SPbETU:**
  - Integration Smart conference and live journal
  - Geo2Tag
- **SUAI:**
  - Academic Social Network
  - System analyzing pedestrian movement in city environment (**on hold**)
  - Building a Model of a Smart City (**on hold**)
- **UNIBO:**
  - C# KPI for Smart-M3 (**on hold**)
  - Smart Space Control Panel (**on hold**)

Smart Conference: Smart-M3 Platform Overview

- Smart-M3 includes:
    - SIB: Devices and software entities (applications) can publish their embedded information for other devices and software entities through simple, shared Service Information Brokers.
    - The interface for managing information in the SIB is provided by Knowledge Processors (KP)
- The understandability of information is based on the usage of the common RDF ontology models and common data formats.
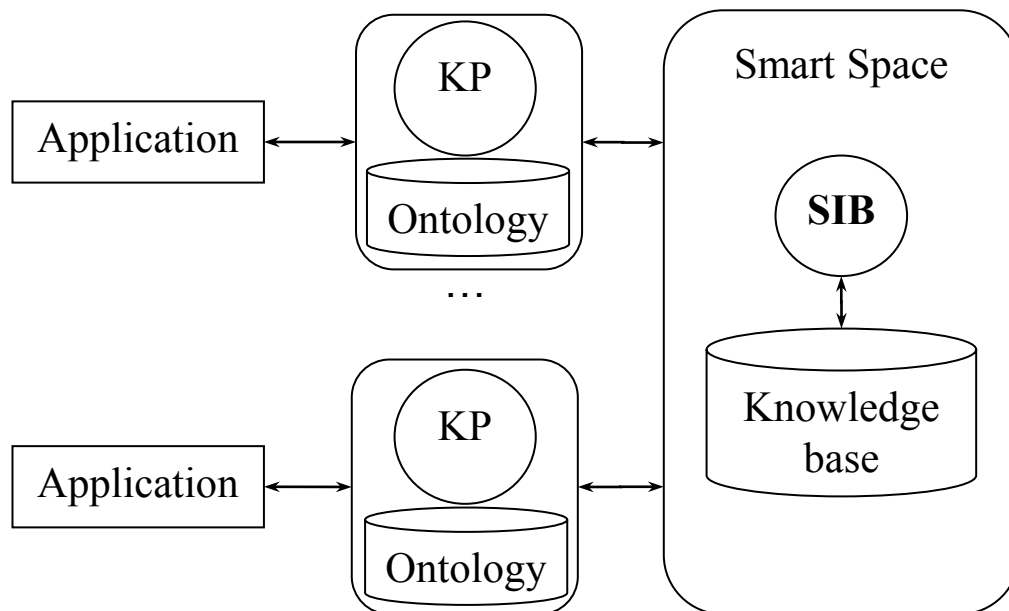
- Smart-M3 allows user KP to:
    - add,
    - remove,
    - change, and
    - subscribe,

on information in SIB.

Smart Conference: Introduction

- Intelligent system based on Smart-M3 platform for automation of the conference management processes
- It provides conference participants with the following possibilities:
  - control of presentations using mobile devices without any connection cables;
  - change profiles using mobile devices and share it to the smart space;
  - access information about another participants (information on profiles and presentations);
  - independent browsing of presentations of other participants;
  - see current presentation on the projector screen and on the own mobile device;
  - see conference agenda on the whiteboard screen and on the mobile device;
- Also the system includes automated scheduling system which shows remaining time for the current participant and reminders to presenters when the presentation time is over
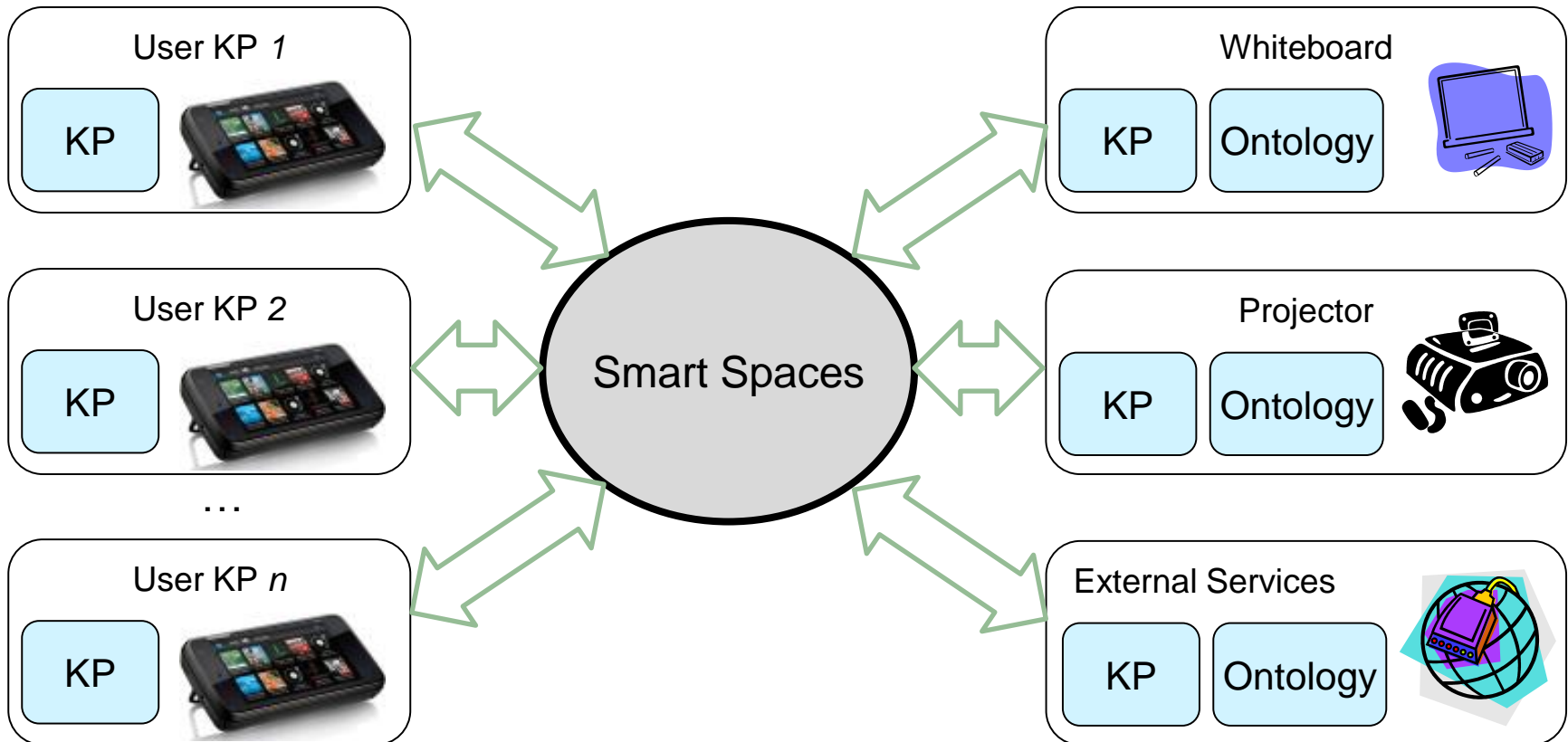
Smart Conference:
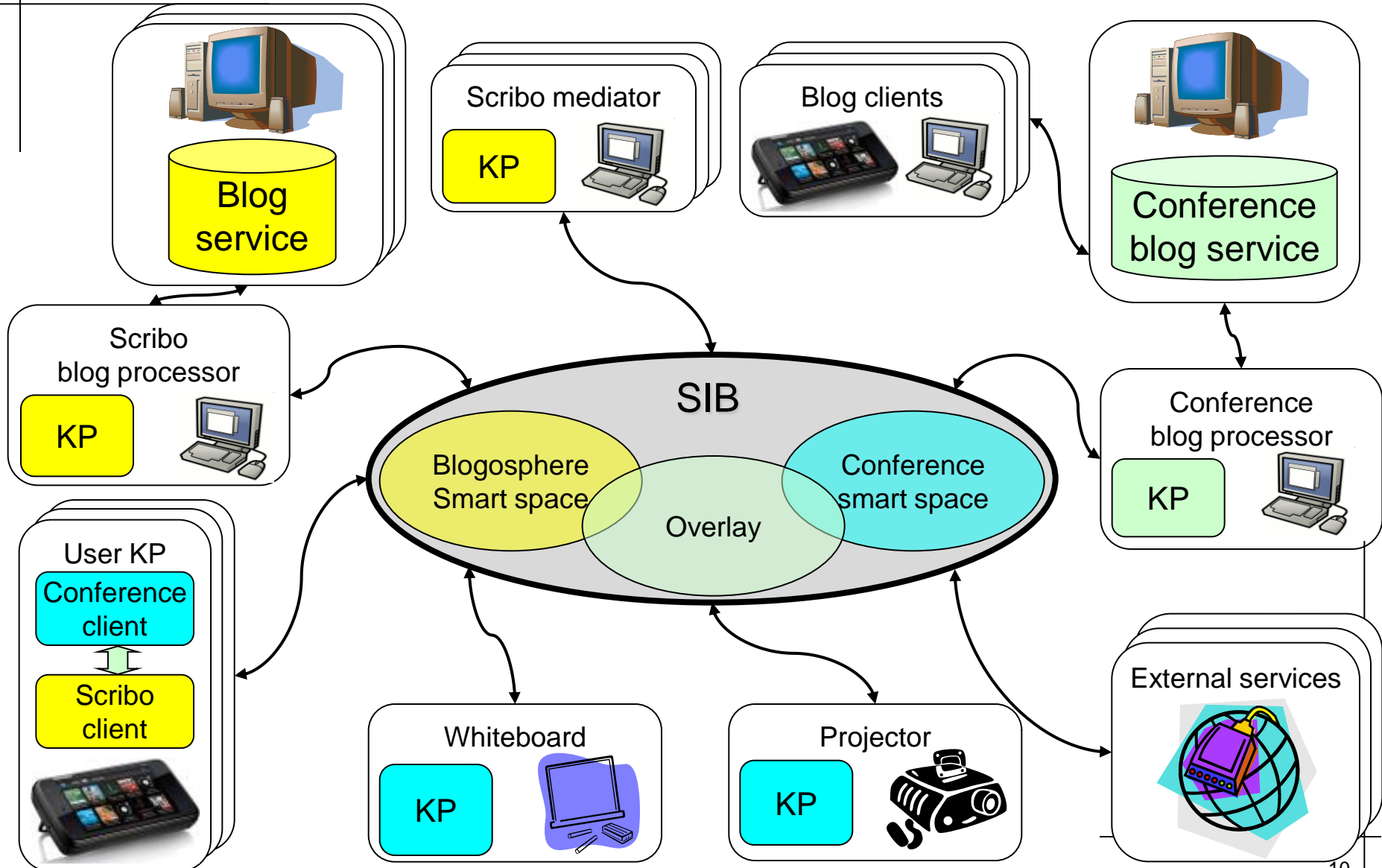# General Architecture Developed by SPIIRAS

Participant's Software   Smart Space   Services

Smart Conference: Multi Service Architecture

Blog service

Scribo mediator
KP

Blog clients

Conference blog service

Scribo blog processor
KP

SIB

Blogosphere Smart space

Overlay

Conference smart space

Conference blog processor
KP

User KP
Conference client
Scribo client

Whiteboard
KP

Projector
KP

External services

Smart Conference: Ontology
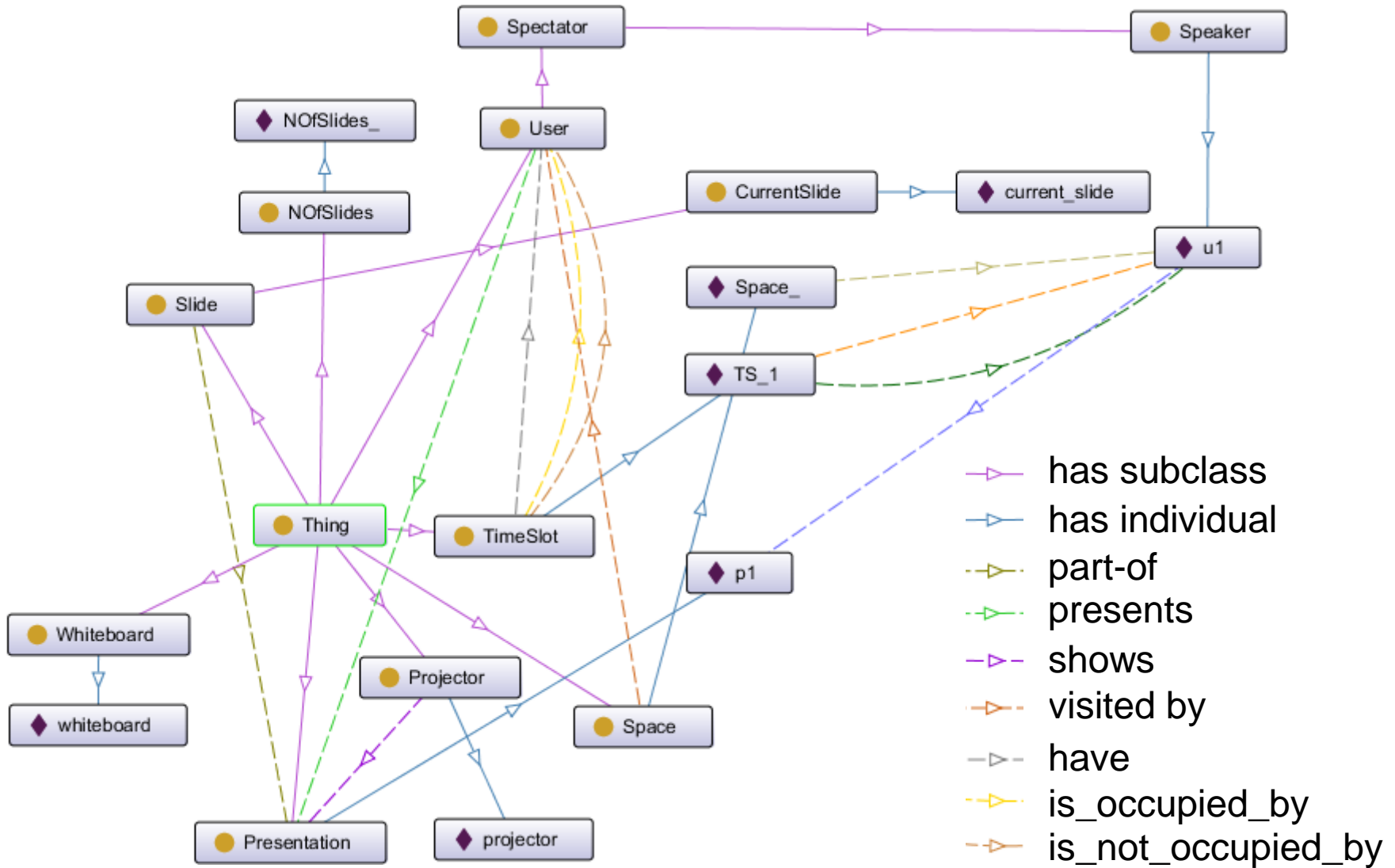
Smart Conference: Whiteboard Interface

Agenda for Today

Photo	Time	Speaker	Presentation
	13:00 - 13:20	Alexey Kashevnik	Smart Space Working Group Activity Overvi...
	13:00 - 13:20	Diana Zaiceva	A Blogging Application for Smart Spaces
	13:20 - 13:40	Alexander Ronzhin	An audiovisual system of monitoring of participants in...
Loading Photo	13:40 - 14:00	Ivan Galov	Blogging in the Smart Conferenc...
	14:00 - 14:20	Aleksandr Lomov	Blogging in the Smart Conference Syst...
Speaker is absent	18:00 - 18:20	Alexan... ...lahov	Extensions for Smart Conferen...

19min

The current presentation is highlighted by yellow

This buttons allows to change the order of presenters

This buttons allows to start conference from the selected speaker

This buttons allows to stop the conference

This speaker is absent now

For this speaker photo is not available

Scheduled time for the presentation end

Full screen button

12

Smart Conference:
Main User Interface on Nokia N900 device

Agenda of the conference like in the whiteboard

The current presentation is highlighted by yellow

Participant can see the current slide in his/her mobile device

Participant can see and edit his/her profile

Participant can see information and presentation of chosen presenter

Agenda

Agenda for Today

Time	Speaker	Presentation
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13:20 - 13:40	Alexander Ronzhin	An audiovisual system of monitoring of partici
13:40 - 14:00	Ivan Galov	Blogging in the Smart Conference System

Spectators | Interests

My Profile

Presenter's Profile

Current Presentation

Smart Conference: Interface for Remote Control of Presentation
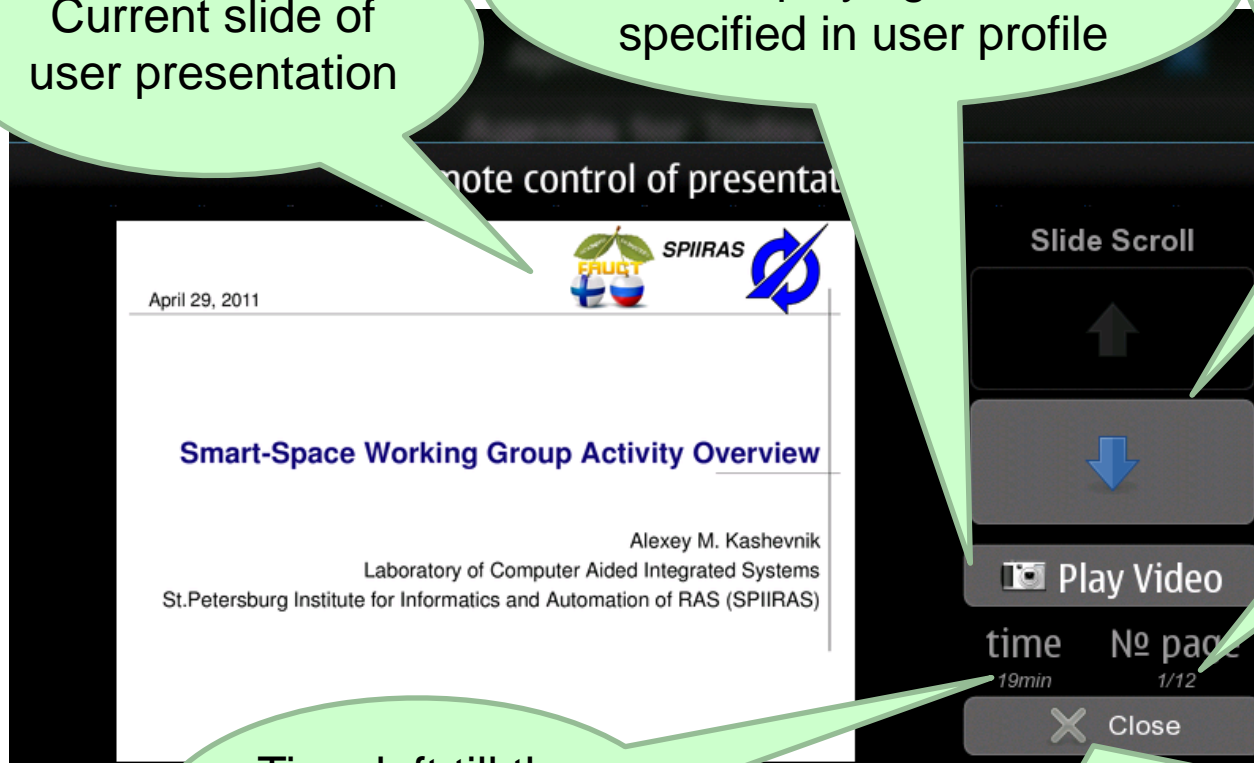

Current slide of user presentation

This button allows to start playing video specified in user profile

Buttons for presentation control

Current slide number and total amount of slides

Time left till the schedulled end of presentation

Presenter have to press this button when he/she is completed the presentation

Smart Conference: User Profile Management Interface

Refresh specified in Photo URL user's photo

Information about participant specified in user profile

Presentation information filled the same way

Path to the presenter's photo. It is needed to keep the photo in the www folder of web-server running on N900 device

Profile

Photo

Personal | Presentation

Name: Alexey Kashevnik
E-mail: alexey@iias.spb.su
Phone: +7(812)328-80-71
Interest: Smart Space WG,Smart-M3,SmartC

Language: English
Type: Speaker
Photo Url: http://192.168.0.195/kashevnik.jpg

Refresh
Save
Cancel

Blogging in Smart Conference System: List of Topics

Return to main window

Sorting topics by dates

Refresh button

Remove topics

Topics to discuss

10:33   Scribo ▼

Sort by: On date

Home

Refresh

Delete

Extensions for Smart Conference System

An audiovisual system of monitoring of participants in the smart meetiing room

A Blogging application for Smart Spaces

Multilingual Ontology Library Generator for Smart-M3 Application Development

Blogging in the Smart Conference Sy

Blogging in Smart Conference System: Discussion Interface

Home button

Discussion tree

13:07   Scribo ▼

fruct9, 2011-04-29 13:19
(no title)
Very useful presentation!
(Delete) (freeze) (screen)

fruct9, 2011-04-29 13:22
supporting a new languges
What you need to add to SmartSlog for supporting a new language?
(Delete) (freeze) (screen)

fruct9, 2011-04-29 13:2⁹
beta-release
When a beta-release of SmartSlog
(Delete) (unfreeze) (screen)

Home

Refresh

Increase

ecrease

Increase and decrease scale

Refresh button

Conclusion

- Smart space working group virtual meetings are provided in every two weeks by Fridays.

- Welcome to the Smart Space Working Group (please contact to me or Sergey Balandin if are interested in participation).

E-mail: alexey@iias.spb.su

http://www.fruct.org/smart

Thank you for Attention
Questions are Welcome

E-mail: alexey@iias.spb.su