



**1st Public Workshop
IP Daidalos**

The Daidalos Methodology

**Jürgen Jähnert
Leader WP1 - Architecture
University Stuttgart**

Methodological Approach – Scenario-based design



- ▶ Definition of two key scenarios
 - Mobile University
 - Automotive
- ▶ Continuous evolution of scenarios
- ▶ Requirements extraction
- ▶ Requirement consolidation w.r.t. other key dimensions
 - Security
 - Broadcast
 - Business
 - Standards (Daidalos technical environment)

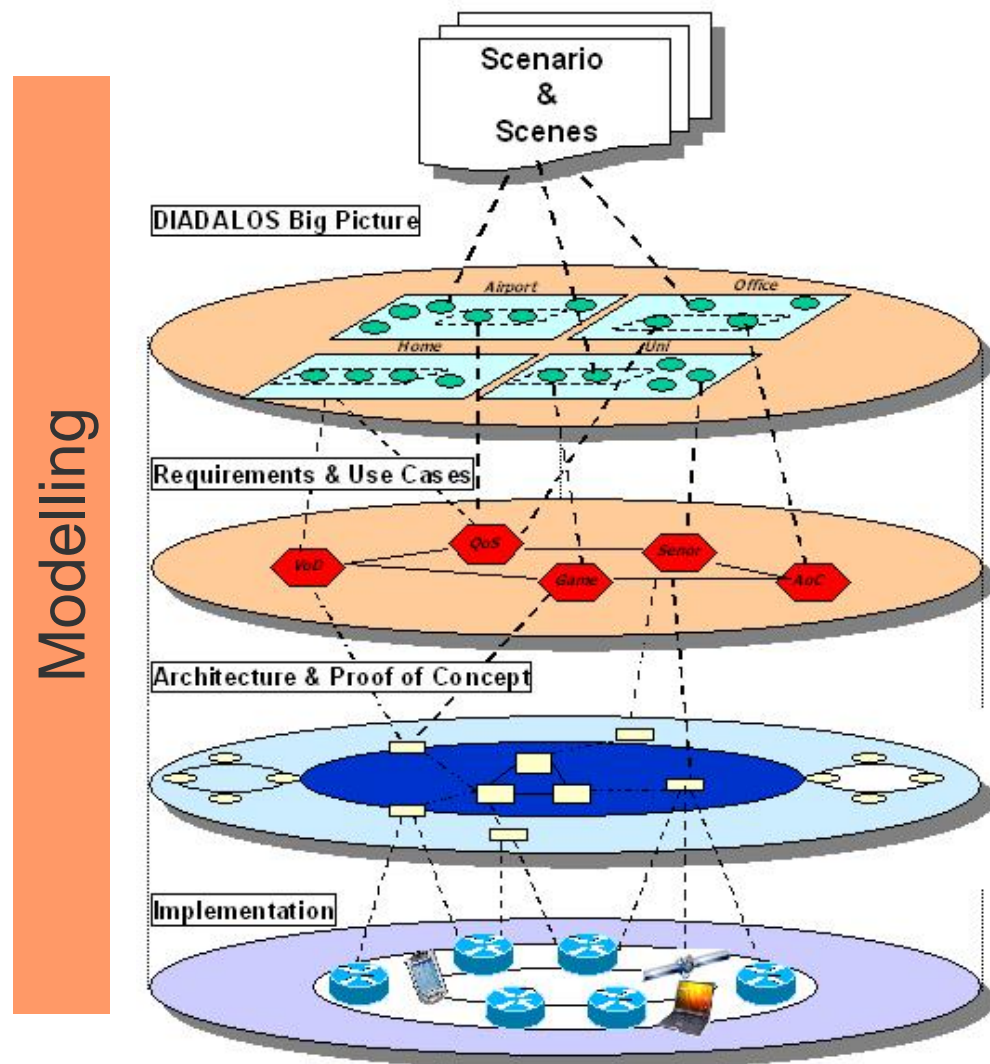
- ▶ Modelling (of scenarios)
- ▶ Architectural design
- ▶ Modelling (Architecture)





Daidalos Overall Methodology

- Two stories
- Building Blocks
- Requirements
- Architecture
- Implementation





The Scenarios

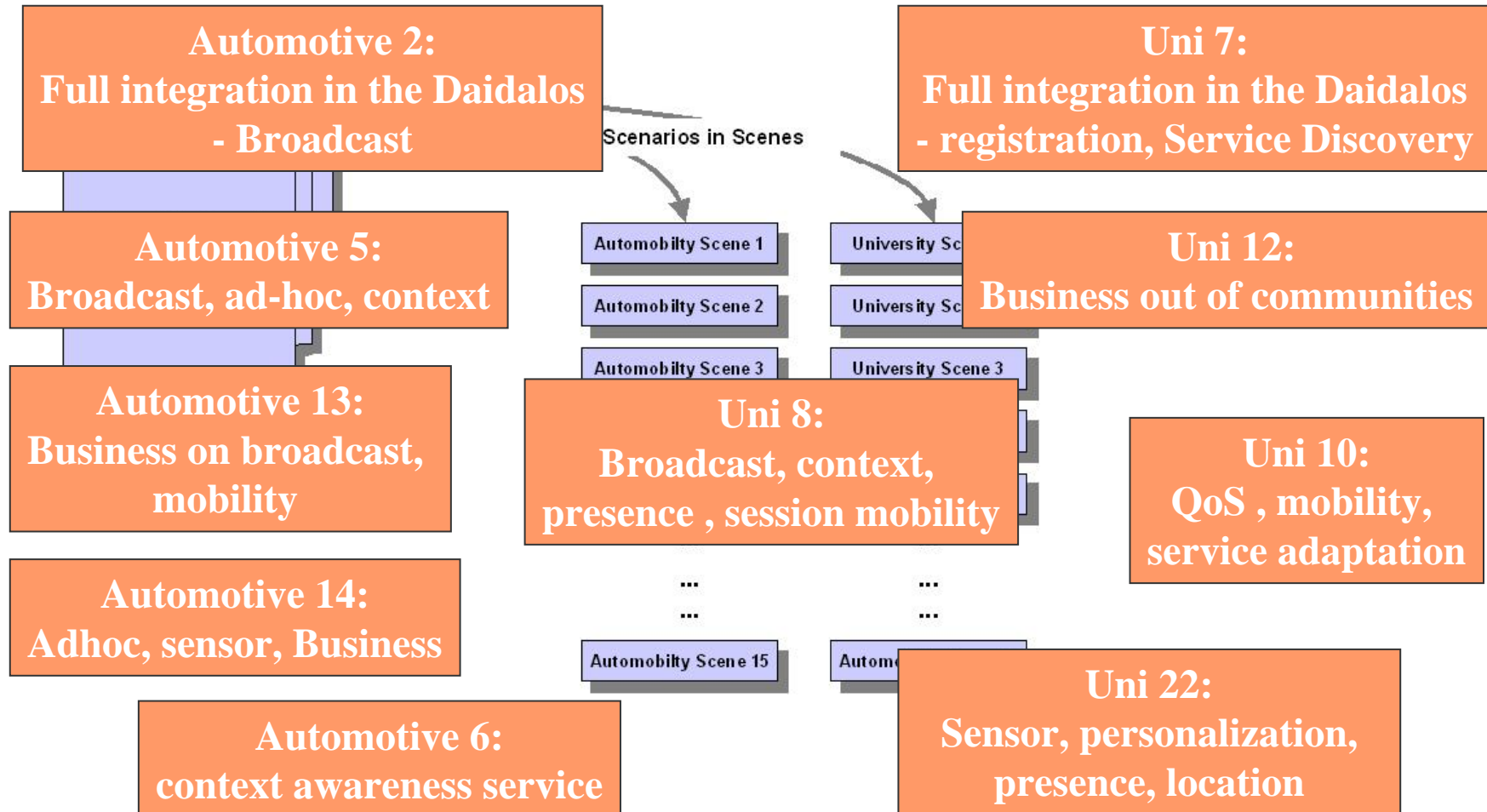
- ▶ Mobile University
 - Big network, back-end systems, federation,...

- ▶ Automotive
 - Fast moving users, ad-hoc, sensors, moving networks...



Key scenes

Special Focus



... others will follow in year 2/2nd phase



The Mobile University Story



Friends

- Identity
- Defined Relationship
- ...

Dani and Maria



Scene7: Joining the Campus

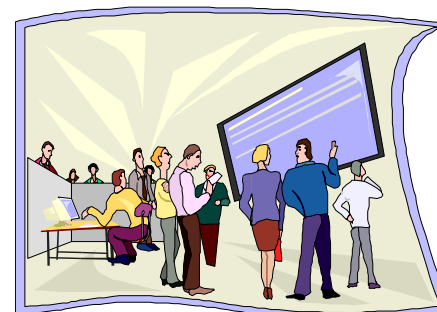
- Mobility
- Registration
- Service Discovery
- Network Configuration
- Location Service



- Learning
- Multimedia
- QoS



- Location Service
- Reservation
- Context
- Business



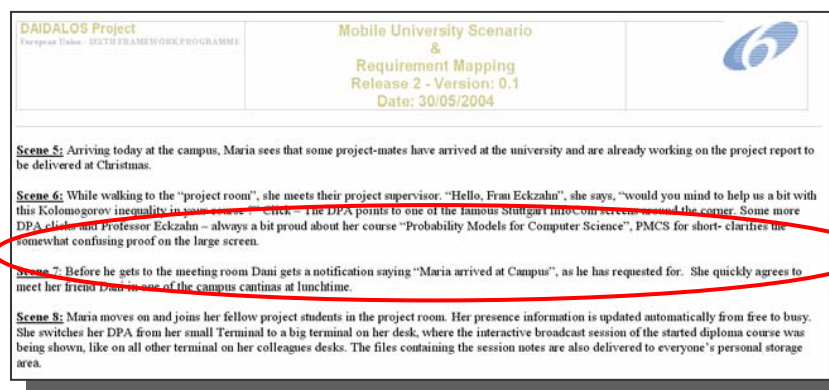
- Session Mobility
- Heterogeneous networks





Mobile University Scene 7

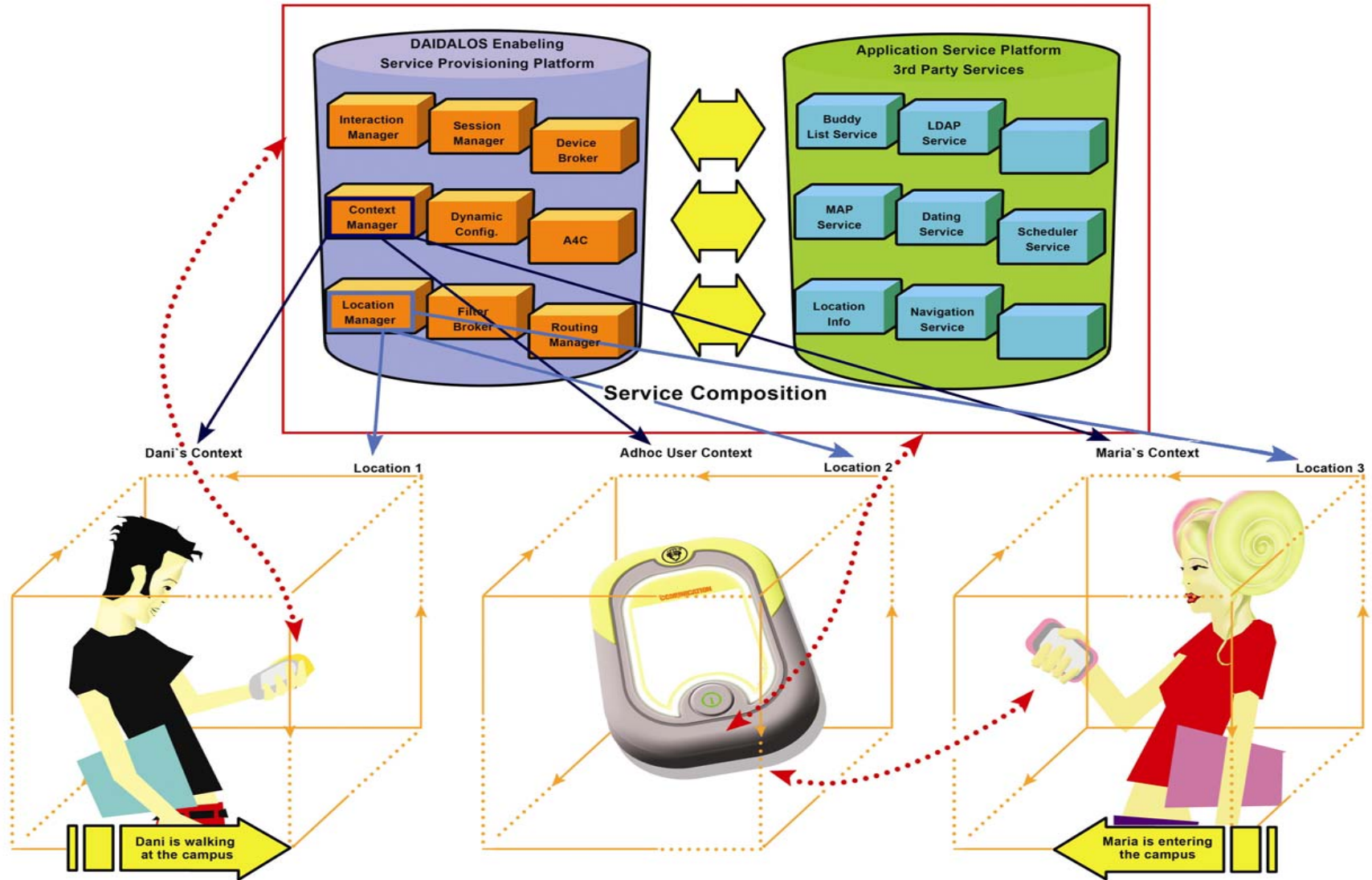
Non-technical description from a user perspective



Scene 7: Before he arrives at the meeting room Dani receives a notification saying "Maria arrived at Campus", as he has requested. *He invites her to meet*, she quickly agrees to meet her friend Dani in one of the campus cantinas at lunchtime.



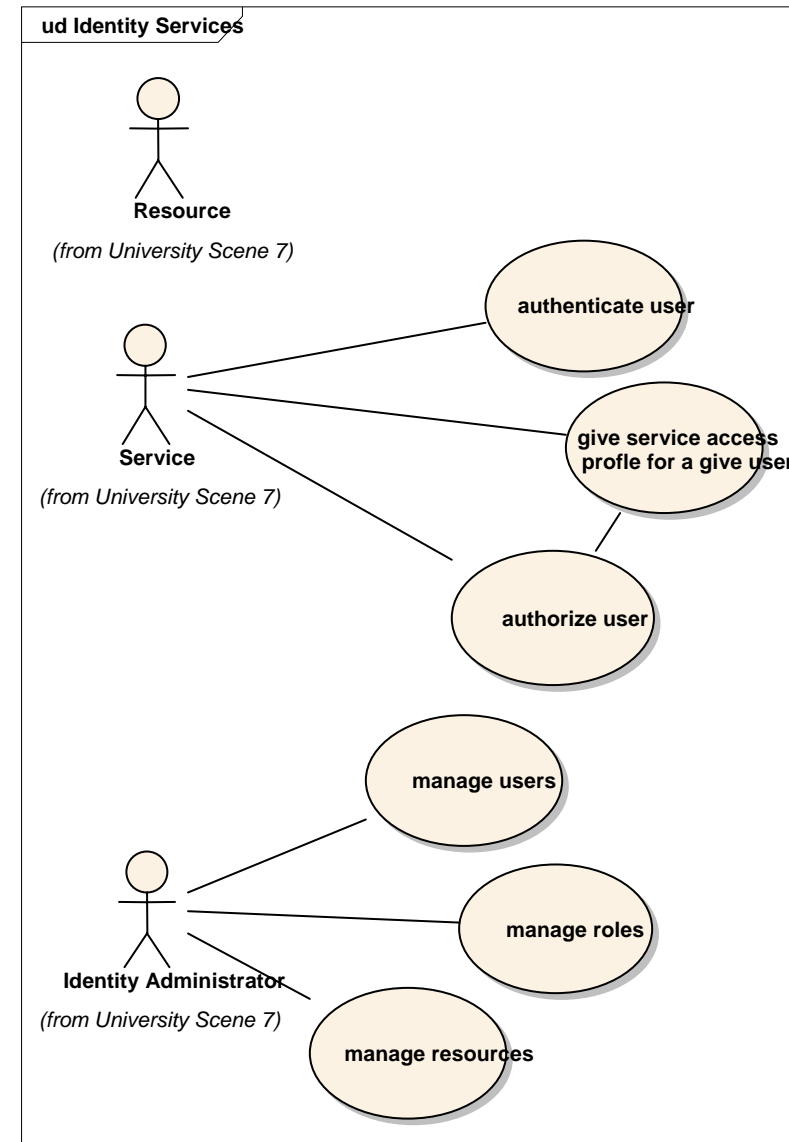
Scene 7 - Key building blocks





Modelling

- ▶ Telelogic TAU
- ▶ SDL/UML tool
- ▶ Specification using UML
- ▶ Validation and verification





The Mobile University Scene 7



Scene7: Joining the Campus

- ▶ Mobility
- ▶ Registration
- ▶ Service Discovery
- ▶ Network Configuration
- ▶ Location Service





Validation and Verification using TAU

