

# GRAPPLE: Integrating Adaptive Learning into learning Management Systems

## Current Educational Frameworks

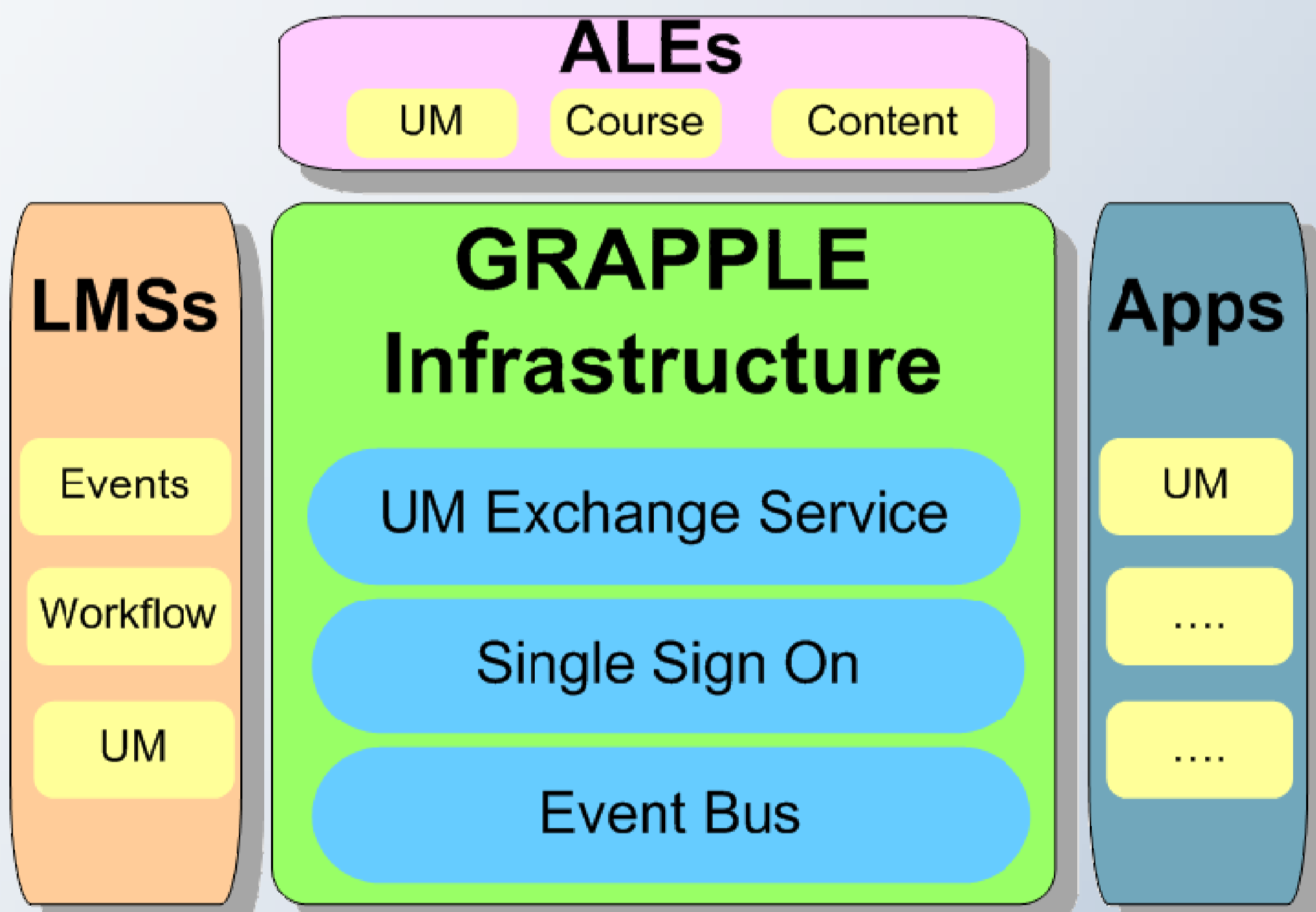
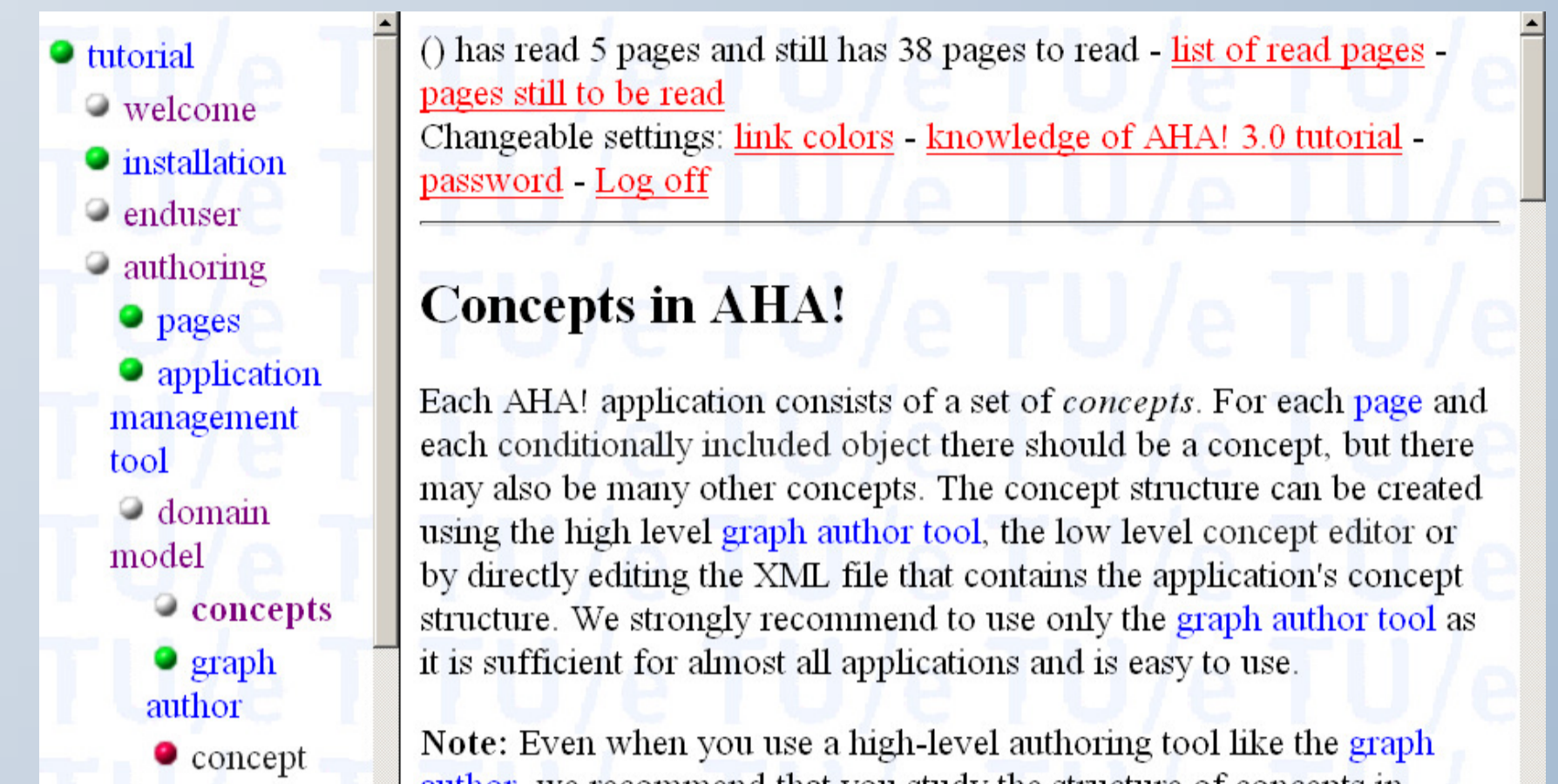
Currently two complementary types of systems: Adaptive Learning Environments (ALE) and Learning Management Systems (LMS)

### LMS

- Key features: registration, course enrollment, workflow, content delivery, etc
- Example Systems: Sakai, Caroline, Moodle, Clix, Learn eXact/...

### ALE

- Key features: guidance (link adaptation), content adaptation, adaptation to arbitrary XML data, etc
- Example Systems: AHA!, KBS-Hyperbook, APeLS, WINDS



## GRAPPLE Infrastructure

Broker for cooperation between LMS and ALE

- E.g. to tightly integrate presentation and functionality of LMS and ALE

Functionality of the infrastructure includes

- Single sign on
- Exchanging distributed user information including dealing with issues like privacy and trust

Also possibility to open up to other applications

## Specific Focus Areas

### UM Services

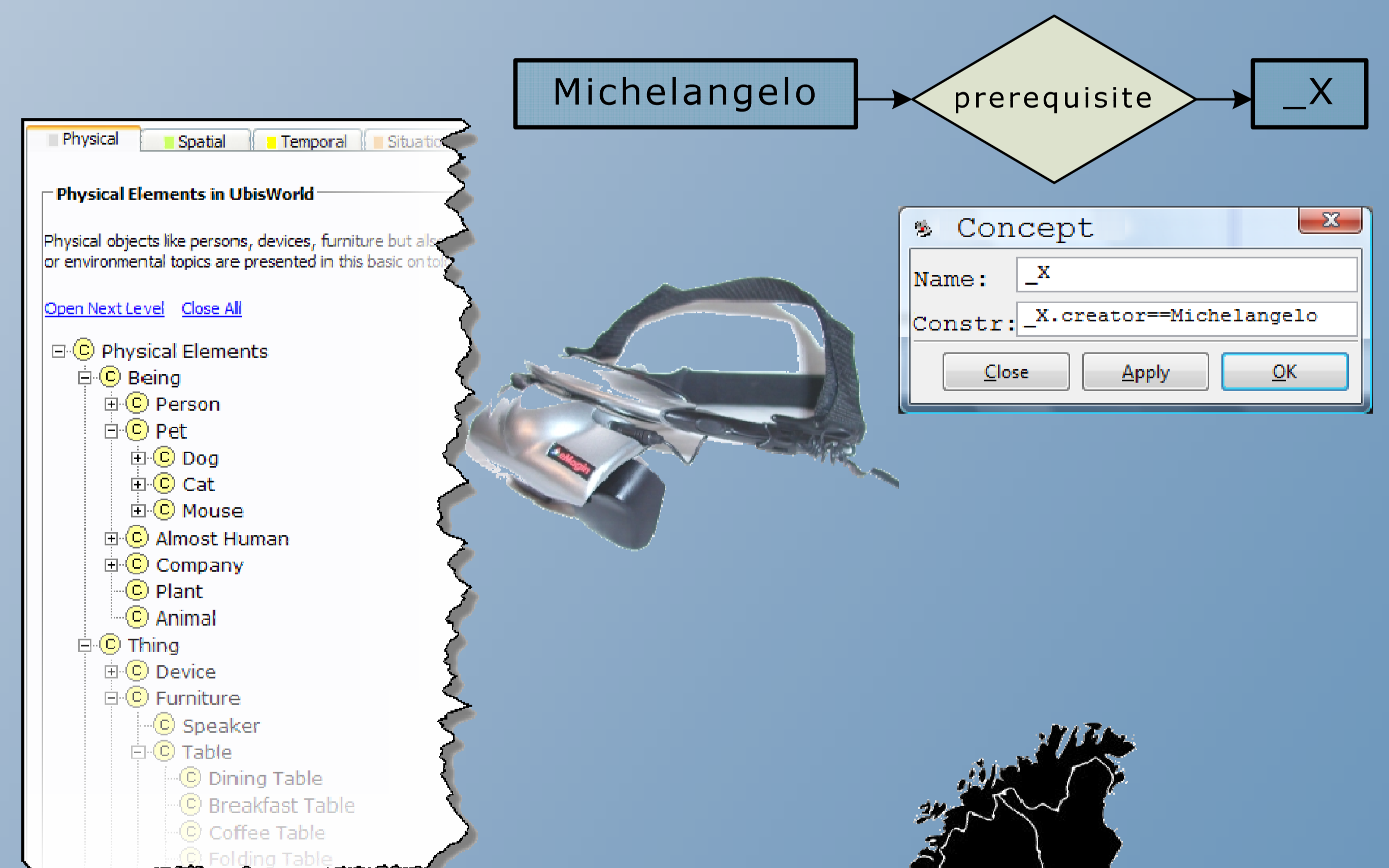
- Core user model ontology
- Forward and Backward reasoning over user models
- Conflict resolution and dealing with privacy and trust

### Authoring Tools

- CAM: Conceptual Adaptation Model
- High level authoring -> Translating to specific Engine rules

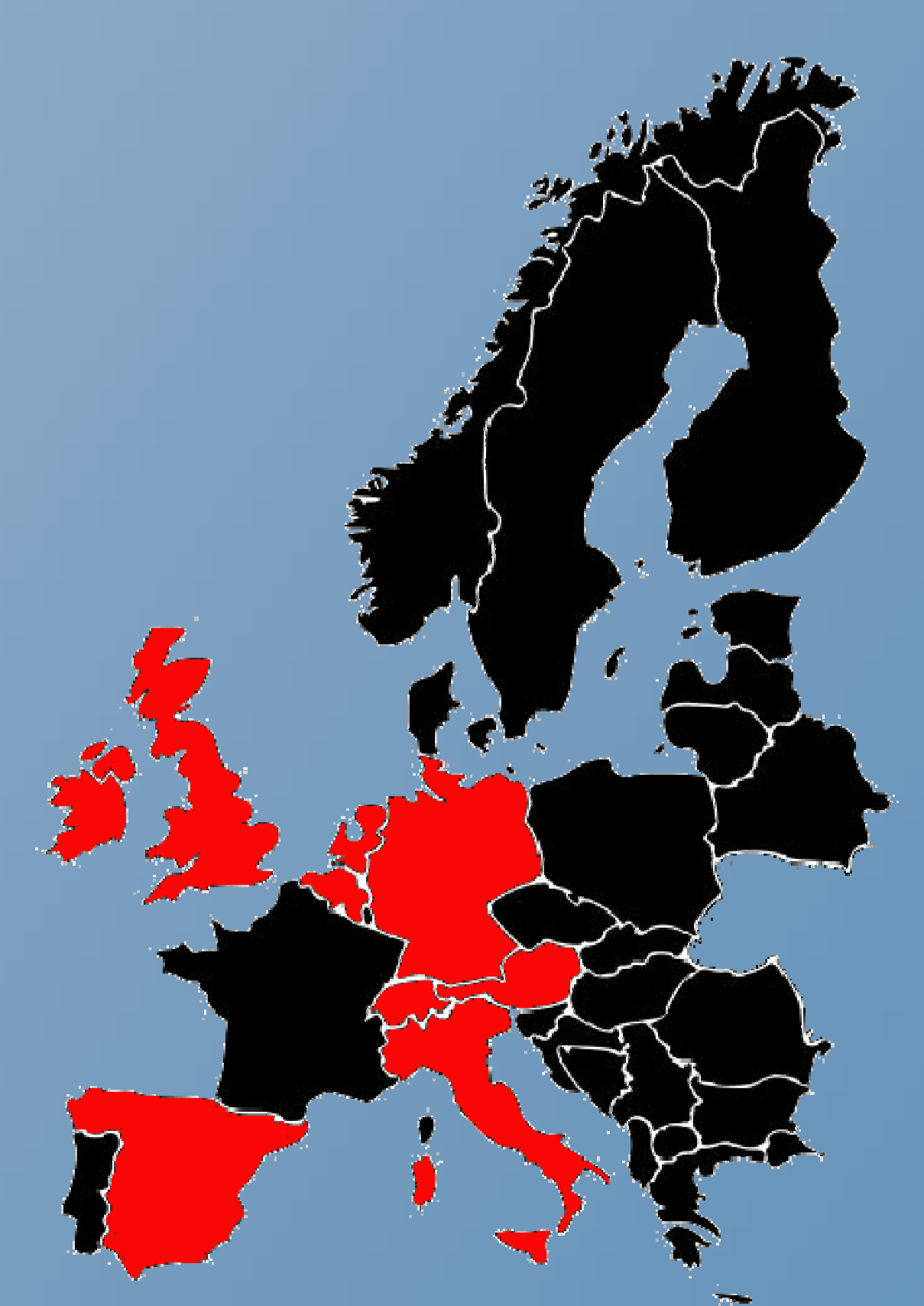
### Application Areas

- Virtual Reality Learning
- Adaptive Simulation



## about us

- 3 year FP7 STREP project: Feb 2008 - Jan 2011
- 15 partners from 9 countries
- budget: 5.3 M€, subsidy 3.85 M€
- coordinator: Eindhoven University of Technology



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