The GRAIL tool in real situations

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Used authoring tools

• Reload LD editor:
  – All the specification covered
  – Hard to use
  – Requires deep knowledge of specification

• Collage
  – Pattern based
  – Designed for collaborative learning flows
  – Nothing to do out of pattern
The design process

• Is the theatre metaphor valid?
• How difficult is to capture a course?

- Most of issues in a real course can be mapped to IMS-LD
- But it requires a deep specification knowledge
- The theatre metaphor does not cover a lot of scenarios
- Interaction with other tools is poorly defined
The deploy process

- How difficult is to deploy a course?
  - If it is a well-done design, the deployment has almost no work
    - Better with LMS support
  - Deployment is not enough. Management is also required
    - Better with LMS support
First example: Computer architecture subject

- Regular course part of a degree
- Synchronism difficulties
  - Theory and practice run in parallel, but not synchronized.
  - The theatre metaphor does not apply
- Properties to finish activities
  - Harder to use, but allow to manage all from a monitor
- Conditional contents with css
  - The key feature to conditionally deliver contents
First example: Computer architecture subject
Working experience: Grid Computing

- Experience in collaborative pedagogical models
- Three Spanish universities involved
  - UVA, Carlos III and UOC
  - Four members per university
  - PhD students involved in the course
- Synchronous experience
  - Requires collaboration between partners
  - Collaborative tools, communication tools
  - High use of external tools
Working experience: Grid Computing

• File properties
  – Can be used to exchange documents between users

• Properties for grouping purposes
  – As an alternative for using roles
  – Role grouping is not well defined.
  – Management requisites increases

• .LRN integration from the user point of view
  – All tools and resources in the same platform
  – But not from the administrator point of view
Demo

Students

Experts

Partners

All

Teacher

Read

Discuss

Assign

Control

Discuss

Control

Discuss

Track

Assign

Control

Discuss

Track
Future developments for GRAIL

Possible improvements, derived from real experiences
Main current problems

• Authoring problems
  – Not easy to design a course
    • High knowledge of the specification required
  – Re-design of a course
    • Changes in contents
    • Structural changes

• Integration with tools
  – Not easy to use in conjunction with other tools
  – Integration with specifications poorly defined
Current integration

OACS Tools
- Forum
- ACS-Mail Lite
- Bulk mail
- Ajax chat
- Assessment
- LORS
- File-storage

IMSLD specific
- Asynchronous conference
- Notifications
- Sendmail
- Synchronous conference
- QTI
- Repository
- SCORM

Other specifications
- Other tools
Current Integration

**GRAIL**
- Parsing package
  - QTI resource
- Running course
  - QTI resource

**Assessment**
- Process package request
  - Object_id
- Manage package request
  - URL
- Parse and store
- Display and manage

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Standards Integration

• QTI
  – Useful for conditionally sequence contents depending on test results.
  – Specified at IMSGlobal

• SCORM
  – Allow reuse of already done Learning Objects
  – Not defined yet
Integration with other tools

• .LRN features able to be integrated:
  – Calendar
    • IMSLD events and timing properties can be published as calendar events.
  – Evaluation
    • Like QTI results, evaluation data can be mapped as IMS-LD properties
  – File-Storage
    • all packaged files stored in the file-storage
    • Names are not clear, so it’s not really useful
Integration with other tools

• Information taken from social networks
  – Track info from other users
    • Results, attempts, time expended
  – Contents rating
    • How other users consider resources
  – Awareness in LD
    • Where are other users?
    • What other users are doing?