Rich & interoperable services: can we square the circle?

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Context for the work

- TENCompetence is a big European project, coordinated by Rob Koper of OUNL
- Four years ending November 2008
- “Infrastructure for Lifelong competence development”: so 'runnable' is important.
- Open Source, standards compliant
- IMS LD a key enabling technology
- New tools for authoring running and building the context for Units of Learning
Widgets and IMS LD

- IMS LD has extremely generic services
- We make this specific by adding a parameter to “service” which calls up a specific Widget based service
- Once only integration for each platform gives you access to many services
- Integrating IMS LD services was a very challenging scenario, and has had rich spin offs for other platforms
In TENCompetence we implemented the Wookie widget engine

Default set of services provided, and bundled with IMS LD engine and player

You can import or build more widgets

Seen as W3C reference implementation

Extensions to W3C to support multi user services (forum, chat, vote...)

Wookie now handles Google Wave gadgets
An example: the relationship between Moodle and Wookie
### Weekly outline

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Status</th>
</tr>
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<tbody>
<tr>
<td>20 May - 26 May</td>
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<tr>
<td>27 May - 2 June</td>
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<td>3 June - 9 June</td>
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<td>10 June - 16 June</td>
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<td>17 June - 23 June</td>
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<td>24 June - 30 June</td>
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<td>1 July - 7 July</td>
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<td>8 July - 14 July</td>
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<td>15 July - 21 July</td>
<td></td>
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<tr>
<td>22 July - 28 July</td>
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</tbody>
</table>

### Chat

```
admin: has locked the chatroom
admin: has unlocked the chatroom
admin: joined the chat
admin: left the chat
admin: joined the chat
admin: left the chat
admin: joined the chat
admin: left the chat
admin: joined the chat
admin: left the chat
admin: joined the chat
```

This widget has been locked

Search Forums

Advanced search

People

Participants
The same chat widget in Wordpress
Other possible approaches to rich & interoperable services?

- Widgets
Chat, forum and vote running in SLeD Learning Design player
Editing widget flows

- Query a Wookie server
- Defaults available for main services
- Drag the widgets onto an environment
- Environments assigned to an activity
- Access for specific roles
- Functionality for specific roles (e.g. vote topic)
Version 2.0 of ReCourse released

- Properties editor
- Conditions editor
- Level C
- Visualiser
- ...

TEN Competence
Building The European Network for Lifelong Competence Development
Astro

- A new TENCompetence Learning Design Player
- Utilising CopperCore engine
- Replacing SLeD
- Designed with “widget” look & feel in mind
- Using Ajax
- Currently in development
Login screen
Choose a course
Here we have the Filmstrip view. User can scroll through activities.
User can hover over an activity to see more information
Double clicking an activity opens any content and tools related to that activity in a floating window.
Windows can resize, minimize, can drag, etc
The ‘Filmstrip’ has been hidden here by a user using a toggle button.
A “traditional” tree based view is also available. Clicking a node opens content in a floating window.
What can we learn from this?
1) Widgets raise opportunities for investigating practice

- VLE's obviously meet a need, but they also constrict our conversations and learning
- Widgets can make the VLE transparent
  - Doing this selectively, we can explore use of VLEs by teachers and institutions
  - Open up the VLE to remixing by teachers and learners, without the need for a new PLE
  - Could lead to a hollowed out VLE, which only deals with cohorts and institutional processes.

- Do we want this?
- What would we do with it?
2) Learning design as a predictive pattern

• What makes it so hard (and interesting)?
  – Learning Design Rules
  – Pattern languages

• Too many uncontrolled variables
  – Below the radar
    • teacher style, prior learning...
  – Lost in the ozone
    • national curricula, cultural traditions...

• Too many views
  – What is the "quality without a name"
Services are at the heart of this

• If the kind of flows that we document are not predictive, then what are they good for?
  – Orchestration (distributed Web applications?)
  – Defining & discussing the context for decisive interactions (including not captured by LD)
    • e.g. learning designs as a the context for positioning the learner

• For these purposes services are the key
  – The challenging thing to be orchestrated
  – The medium through which positioning is done
3) IMS LD is no longer the whole system: what is the context?

- LD player embedded in, say, Moodle
- One of many embeddable services
- Design can be just a link and instruction
- For complex flow of activities and tools, with multiple roles, maybe Level B processing, go to Astro
- TENCompetence contextualises LD in context of PDP, in a LifeRay portal with community functionality and role mgt.
Round in circles / upward spiral?

• We need services in LD, lets use widgets!
• Hey, maybe we can just teach with widgets
• Hmm, that's subversive, who needs LD?
  – we can deliver services on a range of platforms
  – learners can paste the services
  – what is left other than cohort management?
• But wouldn't it be great if we could script the widgets.
• Hey, let's use LD to create flows of tools
Please stay in touch

- TENCompetence open workshop in Manchester, 19th-20th November
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