

## LTI in Action

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Durham Blackboard Users' Conference  
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**ceLTic**

Creating Environments for Learning  
using **Tightly Integrated** Components  
A JISC-funded project

### ceLTic projects

- **ceLTic I**
  - Creating Environments for Learning using Tightly Integrated Components
  - JISC funded (July 2010 – Dec 2011)
- **Aim**
  - Integration of elearning applications with VLE/LMS using IMS Learning Tools Interoperability
- **ceLTic II**
  - **Developers:** Creating Environments for Learning Through Instigating a Community of Developers
  - **Sharing:** Creating Environments for Learning and Teaching with Infrastructure Constructed for Sharing
  - JISC funded (June 2012 – May 2013)
- **Aims**
  - Evaluation of using LTI as a means of providing shared services
  - Developing mechanisms for embedding WebPA within institutions
  - To support and encourage developers to make use of LTI
- **Website**
  - <http://www.celtic-project.org>



### Topics for Workshop

- Demonstrate some real applications which use LTI to highlight:
  - differences between a building block and LTI
  - LTI features available in Learn 9 core and the BasicLTI building block
  - latest developments in the LTI specification

3

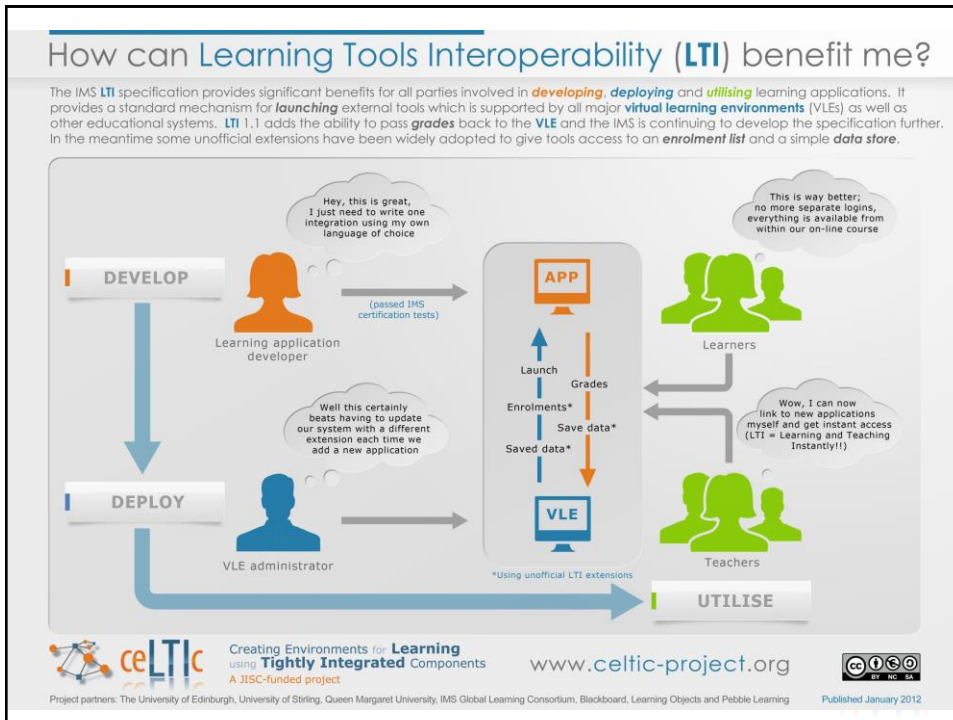


### Find Tools which Support LTI

- IMS Website
  - IMS certification status page  
<http://www.imscert.org/>
  - Certified Tools catalogue  
<http://developers.imsglobal.org/catalog.html>
  - Edu App Center (not all LTI!)  
<https://www.eduappcenter.com/>
    - Turnitin
    - Scribblar
    - Atomic Learning

4





## LTI Versions

- LTI 1.0 Basic LTI (May 2010): Launch
- LTI 1.1 (March 2012): Outcomes service
- LTI 1.1.1 (August 2012): Mentor role
- LTI 2.0 (January 2014): REST/JSON, registration process, tool settings service, service discovery for tool consumer and tool provider services
- LTI 1.2 (Public Draft, April 2014): service discovery for tool consumer services
- Content-Item Message 1.0 (Public Draft, April 2014)
- Outcomes Management 2.0 (Public Draft, December 2014)

### Summary: Benefits Developer

- Developer
  - Single implementation supports any VLE that supports LTI (e.g. Blackboard, Canvas, Desire2Learn, Moodle, Sakai)
  - LTI support is added to your application (in language/IDE you are familiar with)
  - It is a simple specification to implement

7



### Summary: Benefits Admin

- VLE Administrator
  - No code (building block) added to VLE
  - Simply define LTI tool and make available to tutors (in appropriate menu)
  - Potential to add applications quicker (still need due diligence)
  - Simple to set up:
    - URL
    - Consumer key (unique identifier)
    - Secret (secures)

8



### Summary: Benefits Teacher

- Teacher
  - Can add own tools (dependent on how administrator has configured system and/or institution policy)
  - All graded activity outcomes can be held in Grade Centre (this is also plus for students)
  - Everything managed from within VLE (as the LTI tool can appear to be just another tool in the VLE)

9



### Summary: 3<sup>rd</sup> Party

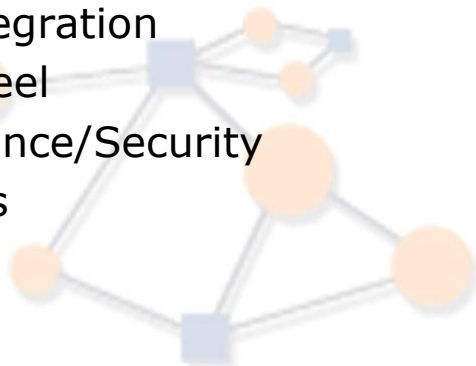
- Why LTI support is an important question to ask of any 3<sup>rd</sup> party application vendor
  - No code added to VLE
  - Potentially quicker to add new tools
  - Switching VLE vendors
  - Instructors can add tools (depending on implementation but Blackboard allows this)
  - Write once (developers)

10



### Building Block/LTI

- Install
- Tight integration
- Look-n-feel
- Performance/Security
- Upgrades

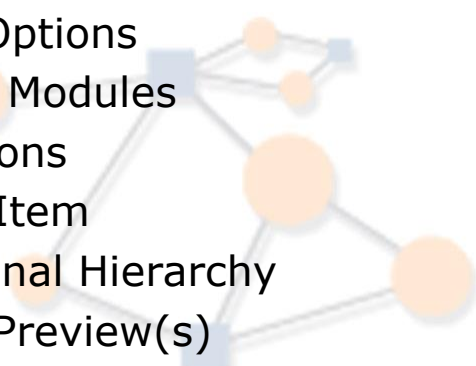


11



### Core LTI/B2 LTI

- Placements
- Display Options
- Learning Modules
- Installations
- Content Item
- Institutional Hierarchy
- Student Preview(s)
- Course Copy



12



## Questions?

- ceLTic project:
  - <http://celtic-project.org>
- IMS website:
  - <http://www.imsglobal.org/lti>
  - <http://developers.imsglobal.org>
- Contacts:
  - [s.p.booth@stir.ac.uk](mailto:s.p.booth@stir.ac.uk)
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13

