Technical strand: Introducing LAMS V2.0: Under the hood

Ernie Ghiglione
Macquarie University, Sydney, Australia

*Intended audience for technical strand:*
This is a technical seminar and we strongly recommend a solid understanding of object-oriented programming. Since LAMS is a Java based application, Java programming experience is welcome, however, not required. In the technical strand we will unveil all the technical aspects of LAMS 2.0 and cover LAMS’ modular architecture placing special emphasis on tool creation, using the LAMS tool contract. After this workshop attendees will be able to follow the LAMS modular architecture to create collaborative LAMS tools.

*Prerequisites for the technical strand:*
Delegates attending the technical workshop should bring their own laptop. During the conference, participants will receive a LAMS 2.0 Workshop Package with all the software and necessary tools you need to start the technical workshop strand. It is important that technical strand delegates install all the required software and tools before the workshop. If attendees encounter any problems setting up the software and tools, please contact the ernieg@melcoe.mq.edu.au
Program for the Day

Introducing LAMS 2.0 under the hood

- Architecture
- Technologies used and their place in the puzzle
- LAMS Core
- LAMS 2.0 Tool Contract
- LAMS Tools

Introducing LAMS 2.0 under the hood

- Authoring
- Monitor
- Learnerv
- Admin
- Other LAMS services

LAMS Installers and Administration

- Using LAMS Installers and upgraders
- General System Maintenance
- Performance tuning
- Integrations

LAMS Tool Creation Hands-on

- Before you start a LAMS tool:
- Guide to a good pedagogically sound tool
- Starting a tool from scratch
- Using existing tools within LAMS
Using the LAMS tool’s template
Creating your data-model
Designing your authoring screen and the LAMS Tool contract
Your learner pages
Monitoring learners’ progress and LAMS Monitor
Making your tool “Group Aware”
Exporting your tool content
Exporting Portfolios
Data Inputs and Outputs

Using external tools within LAMS

- The LAMS Tool wrapper
- Wrap up and further resources

Biographical notes
Ernie is the LAMS project manager. Ernie has been involved in various open source projects in e-learning before. He has developed parts of the .LRN Learning Management System, specially the Learning Object Repository, content delivery platform, one of its assessment engines, the IMS Content Packaging, IMS Metadata and SCORM implementation. Prior to managing e-learning projects, Ernie led large enterprise software development in the US, the Netherlands and India for five years. He holds an MSc BSc Management Information Systems (magna cum laude) from New York University and a Master of Software Engineering from the University of Sydney.

Contact
Ernie Ghiglione
Macquarie University E-Learning Centre Of Excellence
Macquarie University, Sydney NSW 2109
Email: ernieg@melcoe.mq.edu.au