



e-Portfolio Interoperability

Mahara

We will be implementing the LEAP2A interoperability standards around the Mahara e-Portfolio system. Mahara is an open source e-portfolio, weblog, resume builder and social networking system, connecting users and creating online learner communities and is designed to provide users with the tools to demonstrate their life-long learning, skills and development over time to selected audiences.

Mahara is a stand-alone system that can be integrated into a wider virtual learning framework, and is designed to work alongside Learning Management Systems to enhance and complement a learner-centred approach. The Mahara team has also been heavily involved in the Moodle community and, in a sense, we see Mahara as a 'sister' application to Moodle although the two systems are not required to go together.

Project Partners

The **University of London Computer Centre (ULCC)** has provided IT services for the education and public services sector over the last 40 years and provide a range of services at regional, national and international levels. ULCC is an official partner to the Mahara project and are supporting a number of Mahara implementations within their "personalisation of learning" framework across the UK.

The **University of Glasgow** is one of the world's top 100 universities undertaking leading-edge, internationally-competitive research while offering a challenging student-centred learning environment. The University of Glasgow have implemented Mahara alongside their successful Moodle VLE as a tool to assist in Personal Development Planning, in which material is accumulated in an individual portfolio.

Catalyst IT provides core development, maintenance and quality assurance services to the Mahara project and is one of the world's largest open source specialist companies. Catalyst is also an official Moodle Partner, developed the Eduforge platform and has a wide range of capabilities and experience in open source technologies.

Development License

Mahara is released as Open Source software under the GNU GPL version 3 or later, <http://www.gnu.org/licenses/>. Development work carried out during the project is intended to be released under a similar Open Source license, which will be determined during the course of the project.

System Information

All items are stored in Mahara as 'artefacts', which can be presented to potential audiences as 'views', where a view can be considered a structured collection of artefacts. As a modular system, artefacts can be added as plug-ins and currently these include files, blogs, user profiles, and CV details. All artefacts will contain the following metadata:

- Title
- Artefact Type
- Owner
- (Optional) Description
- Date of creation
- Date of last modification
- File size or number of posts (blogs)

As an Open Source system all information is freely available and the full source code is available for download from the Mahara site (<http://mahara.org>). Any number of demonstration user accounts can be provided for the support of this project with access to live systems and their interface. As part of the project we will also make available documentation on database schemas and their relationship to the user interface.

Practice Scenarios

Between the project partners we will be able to draw on a variety of scenarios across the educational and public sectors in the UK. In addition to the scenarios listed in the PIOP (http://wiki.cetis.ac.uk/LEAP2A_practice_scenarios) which form part of existing Personal Development Planning and Learning Space implementations we could possibly add:

- A potential competency-use or transition case involving entry to employment, where Mahara will be supporting jobseekers to present themselves and their skills to potential employees, outside of traditional education environments.
- An 'Informal Learning' scenario:
 - Case A. Mahara will be supporting students with learning difficulties to present, share, and discuss work with peers and supporting tutors. As these students may not be following structured programmes, and will have a range of learning difficulties, a personalised e-portfolio system is considered more suitable to support learning than a VLE.
 - Case B. Entry to employment both in the above jobseeker context and more specifically within the 16-18 e2e work schemes also tend towards the collation of informal learning activities, which again may fall outside the structure of a VLE.
- Use of Mahara within vocational learning as a 'reflective journal' for students on off-campus, practical placements.

Interoperation Scenarios

The focus will be on enabling an individual user to transfer their portfolio collation between e-portfolio systems provided by different institutions/systems. This may cover all or one of the existing interoperation scenarios listed in the PIOP (http://wiki.cetis.ac.uk/LEAP2A_interoperation_scenarios). Additionally the following scenario will be of high importance:

- A student has used Mahara at University or College to build up an e-portfolio including views that can be used to support job applications. Having left the educational institution the former student now requires the views exported to be taken away in a form that can be viewed without specialist tools.

Users

We will be able to draw on various user groups throughout the project based on the different case scenarios.

ULCC are currently supporting Mahara systems available to around 50,000 users, although take up is not expected to be that high in the first year. Supported institutions include Further Education Colleges, Charities supporting CPD and Employment services and Work Based Learning providers. Additionally ULCC currently support Moodle implementations for institutions totalling over 300,000 learners, the majority of whom will be considering Mahara as a suitable e-portfolio solution.

The University of Glasgow's Mahara System is closely tied in with the Moodle VLE. The University has 15,397 undergraduate and 4,621 postgraduate students (2007-2008 figures) and Moodle is used by the majority of modules/courses taught across all nine faculties, and by almost every student. During the 2007-2008 session Moodle was used by approximately 20,000 students and 2,000 staff. Mahara was made available to all students and staff as an e-portfolio and PDP tool at the start of the current semester, via a link on the front page of each faculty's Moodle installation. Although Mahara has only been available to students for three weeks, there are already 1,313 users of the system.

Project Team

ULCC

Mick Kahn, Head of Application Services, will act as project director as well as being responsible for allocating time and resources within ULCC.

James Ballard will act as a co-ordinator for the partnership to collate together appropriate documentation and act as the main contact for progress reports and dialogue with wider project partners. James formerly worked with Barking College as a learning technologist, before joining ULCC in June 2007 and his expertise lie in working with the latest learning technologies predominantly using Open Source. James has been involved in the DfES ICT Test Bed Project and more recently as a consultant to BECTA's e-portfolio requirements workshop and has established himself as a leading practitioner regarding practice and potential.

University of Glasgow

Lorna McEachan, Director of the Learning and Teaching Centre, will be responsible for allocating time and resources at the University of Glasgow.

Niall Barr will perform testing and provide a standalone LEAP2A viewing tool based on the IMS CCRReader. Niall has been working with interoperability standards for several years and has implemented several IMS specifications. He has also been involved in a number of IMS working groups including QTI 2.0 and 2.1, Tools Interoperability 1.0 and the Common Cartridge. Niall is a Moodle contributor and lead developer on the open source APIS QTI 2.0 project, originally funded by JISC, and on the IMS backed CCRReader project.

Howard Miller will perform testing and provide technical support. Howard is a Moodle Core Developer and has been in charge of installing and configuring Moodle and Mahara at the University.

