

# RELOAD project Biannual Report

February 2004

## Section Two

### 8. Project Outcomes

#### Metadata & Content Package Editor development

Since the last report of August 2003 we have continued to refine and develop the **Metadata & Content Package Editor** including many small improvements and bug fixes as a result of user feedback. The last report mentioned the release as version 1.1. The latest public release of the Editor is now version 1.1.3a and contains the following new features:

- Help files and documentation
- Improvements to underlying architecture
- Native drag and drop
- Improved User Preferences
- Many UI improvements
- Improved support for user profiles (different IMS spec versions and user vocabularies)
- Now runs on Linux (already runs on Windows and Mac OS X)

We have also made many additional improvements, including a much-improved Content Package previewer, and developments to the Editor, but are awaiting finalisation and integration with the work being done by Aloha at Calgary University and ADL (see below). The improvements to the underlying engine architecture are very important since the "Reload Engine" is being adopted by other projects such as the TELCERT project (see below) and by other developers worldwide.

#### SCORM Runtime Player development

We have released the **SCORM Runtime Player**, which now stands at release version 1.1. This standalone tool, again written in Java and running on Windows, Linux, and Mac OS X can open and "play" an ADL SCORM 1.2 package in the user's native Browser. This version is based on a single-user local-server (Tomcat) driven model, though we have received feedback from a user in Japan who has adapted it for a multi-user environment. SCORM data tracking information is stored in XML format and this may be used in a host runtime system. Additionally, the tool allows the user to view all the underlying data-model information – this is useful for debugging and development work. As it stands the tool can be used in the following ways:

- A SCORM standalone runtime player
- A development tool allowing developers to "see under the bonnet" of SCORM packages
- A SCORM runtime engine

We have been informed that it is being widely used internationally, and again seems to be increasingly adopted as a reference standard. Some users have reported that the tool has increased their understanding of SCORM and led them on to develop their own SCORM tools. Other users have taken the RELOAD SCORM Engine and incorporated it into their own systems, whilst others are happy to use it as a SCORM Player.

Note – the current player only supports SCORM version 1.2. The development work being undertaken by ADL and other parties will result in the support of SCORM2004 (a.k.a SCORM 1.3) at a later stage in the project.

## Open Source, SourceForge, CVS and other development tools

We have enabled the CVS (Concurrent Versions System) repository at SourceForge. This means that all source code is hosted at this public repository with read-access granted to everybody and write-access granted only to Reload developers. This has improved working practices between the developers and allowed the latest changes to source code to be immediately available to interested developers. This move to CVS came about as a result of the collaboration with Aloha at Calgary University (see below) and means that developers can work much more efficiently.

We have explored new development tools and options in line with our adopted philosophy of Open Source Software. We now use the Eclipse tool ([www.eclipse.org](http://www.eclipse.org)) for Java development and are investigating the possibility of using it as a framework for software delivery. This ties in with developments in the TELCERT project (see below).

## Worldwide adoption and third-party development

We continue to receive a great deal of positive user feedback by word of mouth and by e-mail. The Reload Tools Suite has become, it seems, a reference standard implementation with many users reporting successful usage of the tools and plying us with offers of further collaborations and contributions. We were informed by a vendor from Taiwan at the SCORM International Plugfest in Zurich that "all the content developers in Taiwan use Reload". We sense that the user feedback we are getting is just the tip of the iceberg and that the Reload tools are used **very** extensively. (A Google search of the word "Reload" will place our project website as the first "hit").

Third-party development based on the Reload tools to date includes:

- ADL SCORM2004 additions to the Editor. ADL themselves took an interest in the Reload Project last July and offered to contribute SCORM2004 (1.3) additions to the Editor. This work is nearly finished and should be made available quite soon. It means that the Editor will be able to support IMS Simple Sequencing. This ties in with IMS Learning Design which uses Simple Sequencing.
- Bespoke tailoring of the Editor for the UkeU. Some work was undertaken to allow improved support for Content Packaging profiles in the Editor. This allows the UkeU to use a custom profile for their packaging requirements.
- VDEX Editor – ICBL at Heriot-Watt University have developed a VDEX Editor based on the Reload Engine. Whether we can incorporate this work into the main Reload tool is hard to say at this stage, since the integration would require more development time that we cannot spare at the moment.
- Aloha, Calgary University, are currently developing improvements to the Metadata Editor – profiles, a better form view, and improved Vocabulary support. This collaboration is ongoing and we should see the fruits of their labours in March/April 2004.
- HarvestRoad, Australia – integration of Reload with repositories. Again, a work in development.
- TELCERT – this Framework VI project managed by the Open Group and with partners including Ufl, UkeU, Sun, Apple and several universities is building on the work done on the Reload Engine.

## Immediate future developments

We are now focussing on the development of the Learning Design Editors. We have started this later than planned due to the time taken managing third-party contributions, but feel that we now amassed a substantial core of "background work" for future development allowing us to once again quickly move forward.

**Aims for the next 6 months:**

- Learning Design Implementation:
  - Environment & Services
  - Roles
  - Activities
  - Activity Structures
  - Acts / Role-parts
  - Plays and Methods
- Incorporate ADL's SCORM2004 work into the existing Editor
- Incorporate Aloha's Metadata Editor work into the existing Editor
- Release new versions of Editor and SCORM Player with new contributions
- Collaborate with TELCERT project
- Implement support for IEEE Metadata spec (presently we support IMS Metadata spec)

**9. Use of JISC Subscription Collections and NLN Materials**

Not applicable.

**10. Intellectual Property Rights**

Not applicable at this stage

**11. Use of JORUM**

As a Strand B project this is not directly relevant, except that we have demonstrated that RELOAD produced content packages can be uploaded to the repositories, and downloaded packages can be manipulated within RELOAD.

**12. Evaluation**

To date evaluation of RELOAD has been through feedback from the user community, which has been extremely enthusiastic. User comments and suggestions have been responded to in subsequent releases. We plan to continue to gather feedback via our website and from SourceForge discussion lists in the coming period.

**13. Dissemination**

As a software project, dissemination activities include supporting users of our software and reaching new (and potential) users of our software.

**Software Support**

During this period, the main software output of this project, the RELOAD Editor reached version 1.1, with new additions making it feature complete. At this point, help files were added to the software, along with a user guide and exemplar content. These materials have been updated as new versions of the RELOAD tools appear and in light of feedback from the user community.

**ad hoc Dissemination and Support**

We provide support by email to a wide group of users, many of whom wish to promote the use of RELOAD across their institution. We are also in close contact with other X4L projects, other JISC projects and related projects throughout the UK education sector.

**Web-based Dissemination**

The project web site provides access to all software and support materials created by the project. In the last two months, the web site has undergone a fundamental re-design. The new structure should prove to be more flexible as the tools provided by the RELOAD project proliferate (as Learning Design editors start to appear) and reflects the growing base of support material available for our user community.

A video presentation, summarising the facilities and potential of the RELOAD Editor was prepared for the JISC X4L project web site.

### Face to Face Dissemination

In the past six months, RELOAD has been presented at the following events

- 8th CETIS EC-SIG, LTScotland, 28th August 2003. Reload staff were involved in two demonstrations, a general demonstration of the tool, and an Interoperability Demonstration, presented in tandem with Intralibrary and LTScotland showing end to end interoperability of educational content. This presentation was complemented by an article on the CETIS web site.
- 9th CETIS EC-SIG, University of Manchester. RELOAD has a regular 45 minute slot at the EC-SIG events which we find is a useful way of keeping in touch with our core user group.
- SCORM International Plugfest, Zurich Feb 2004. With the adoption of RELOAD code by ADL to form the basis of their SCORM 2004 editor, RELOAD is well known within this key user community. Reload attended this event (the first outside the United States of America) delivering a workshop and networking with international users of the tools.
- INTER-REGIONAL WORKSHOP ON LEARNING MEDIA DESIGN AND DEVELOPMENT, held at the International Labour Organization in Turin. We were invited to give a one day workshop as part of this two week course involving 15 participants from 9 countries. The main benefit of this event was that it provided us with an opportunity to develop and test a full day set of workshop materials for future use.
- "Elearning Content - Approaches to Creating, Repurposing and Sharing", 10th February 2004. Reload was demonstrated at this event organised by JISC-RSC West Midlands, as preparation for a whole day workshop in March.

RELOAD continues to attract national and international attention from within the Learning Object and Standards community. At present, most interest is from developers and early innovators, though as time goes on, and with the release of the Learning Design tools, this community is likely to expand and become less specialised.

Current work concentrates on finalising help and support files for the other main software produced by RELOAD, the SCORM 1.2 Player. We also have further face to face dissemination planned - through JISC RSC West Midlands and at the LTSN Centres Conference (with TOIA and JORUM). Work is currently underway with the X4L Dissemination officer and programme manager to develop a standalone interoperability demonstration of TOIA, JORUM and RELOAD. Preparation of support materials for the Learning Design software currently in development will be a key element of the next period, These tools are eagerly anticipated by a diverse community.