



Field Helper 2007 report on activities

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Introduction

Much of the background of the Field Helper project can be found in the previous 2006 project report at http://www.apsr.edu.au/fidas/fidas_report.pdf and will not be repeated here.

The project received further funding in 2007 to build on the well received proof of concept application delivered at the Sustainable Data from Digital Fieldwork Conference in December 2006.

The main focus of development work in this second year has gone into consolidating initial concepts into robust application code, with a secondary focus of demonstrating the application to broad range of potentially interested parties. As of the end of 2007 several organizations have shown some interest contributing resources to further the application although at present no commitment of funds has been made. The Archaeological Computing Laboratory (ACL) has however committed to fund the continued development of the application from internal sources having recognised the potential of a more fully developed Field Helper to assist with the delivery of other projects.

Field Helper now produces a METS package combined in a zip archive with all files described in the project. While developing this capability it became clear to the team that core concept of Field Helper as a stand alone application submitting directly into an institutional repository needed review as the need for quick preservation was often in conflict with the requirement for comprehensive metadata enrichment. Subsequently the idea of a "staging repository" has been informally discussed with many

colleagues in the repository sector and has been well received. A comparison has also been made with the ARROW program "research repository" concept. The idea simply institutes a "holding" or temporary repository with the principal role of getting primary field data off of the laptop used in the field so that it can be protected at a higher level while metadata is enriched. Field Helper continues to communicate with this repository for the purpose of "in the lab" metadata enrichment. Subsequent holding repository to final repository submissions of completed field work collections then also become much simpler. Field Helper will now directly submit to a staging repository using Fedoras directory ingest service although we would like to further refine the implementation in the coming months.

Rationale and Objective

The underlying objective of the Field Helper project has not changed since the last report was submitted. Field Workers collect increasing volumes of digital data and a simple method of metadata enrichment and subsequent repository submission appears to be in demand. Presentation of the application both informally and at conferences has very much confirmed the demand for such a method.

2007 project objectives were therefore as follows:

- To build and test a robust working model of the 2006 proof of concept application.
- To demonstrate this working model in order to secure sufficient funding to develop a far more robust product for wide open source distribution.
- To further refine our understanding of the ideas and concepts that were the impetus of the project - Field Helper is a desirable tool so the idea must fill a need.

FIDAS Activities, 2007

1. Further refinement of underlying concepts conducted by Hayes and Honeyman on a regular, weekly basis for some months in early 07. This work has resulted in a clearer specification of model and required behavior. The ideas that have come out of

these sessions and those of the previous years will be published in a paper on Field Helper in the first quarter of 2008.

2. Participation in various meetings during the year with staff from the National Library of Australia and APSR to develop the Fieldwork portfolio profile element of the Australia METS specification.
3. Significant Java development work including an overhaul of the underlying storage model to implement a Java database. This was done for pure performance reasons as XSLT processing method used in 2006 proof of concept did not scale well for handling very large datasets. As this was the first embedded Java database the programming team had implemented, programming time was greater than expected.
4. Integration of GoogleMaps functions with limited GPS file integration.
5. Development of a flexible method of adding XML snippets to property values to enable simple drag'n'tag operations to result in quite complex hierarchical MODS based metadata within a METS package.
6. The application was extensively tested on a European trip resulting in a partially successful "on the road" submission into a test bed Fedora repository.
7. As part of this trip the application was demonstrated to staff at the Max Plank Institute (MPI) in Niemegen, Netherlands. As a result a commitment was given by MPI to work on a translation layer between Field Helper outputs and the IMDI format developed by MPI. This work is expected to commence in early 2008.
8. Establishment of several working partnerships as a result of presenting the application at conferences. Many of these did not specifically involve Field Helper but arguably furthered the broader goals of APSR through fostering a greater awareness of repositories and interoperability.

In particular, as a result of the ideas raised at an early presentation of Field Helper, the ACL and PARADISEC were approached by the director of Wangka Maya Pilbara Aboriginal Language Centre to carry out work which will lead to the implementation of a community language repository in Port

Headland which will follow best digital repository best practice guidelines and make extensive use of tools, services and expertise developed by APSR partners.

9. Presentation at Clever Collections conference, November 2007. A live demonstration of GPS indexed data with location photographs collected immediately prior to the conference was given. A METS package was produced during 20 minute presentation showing Field Helper as a useable application – albeit in the hands of a user acquainted with all its early release limitations and failings.
10. Publishing of detailed online help document maintained and version managed in DocBook format (<http://acl.arts.usyd.edu.au/fieldhelper>).

Outcomes against objectives

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Outstanding issues

While there are many ideas for enhancing the basic application there are a number of issues relating to core application functionality which need to be addressed ASAP.

1. Refinement of METS output format – there is no more than a couple of days programming work to rectify some format problems. These have been discussed with Scott Yeadon and the ACL will commit to making these changes in January 08 at its own expense.
2. Some small but significant user interface work on standards compliance remains to be done to prevent user frustration. For example, “shift select” does not work correctly in the application and this makes tagging large groups of files tedious. This work will be completed by the ACL as soon as possible in the new year.
3. It is acknowledged that Field Helper does not currently scan start and end times from sound recordings and other media with a time span. This limits the applications usefulness for many research communities.

The ACL will endeavor to release a version in the early new year that will make good on all outstanding issues.

Related URL

<http://acl.arts.usyd.edu.au/fieldhelper>