

Open Access Repository System for Forced Migration Online

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Introduction

Based at the Refugee Studies Centre (RSC), University of Oxford, Forced Migration Online (FMO) is a web-based portal providing extensive scholarly resources on the situation of forced migrants worldwide. Established in 2002 it is freely available and is used by academics, researchers, students, policy makers and practitioners. FMO hosts a 'digital library' repository that comprises over 220,000 pages of resources on forced migration issues. Many of these resources are rare or unique. In addition, FMO hosts many published items, including, uniquely, the full back runs of the five leading academic journals in the field. FMO is also the sole host of other discrete special collections, such as the full text of materials referenced in the Sphere Project's handbook *Humanitarian Charter and Minimum Standards in Disaster Response*. Other resources include an organisations directory, photos, videos, podcasts, and specially commissioned thematic and geographic research guides. These resources have a global focus and while some of the documents date as far back as 40 years, new items are being added constantly. FMO was developed with funding from the Andrew W Mellon Foundation and is currently supported by the Department for International Development (DFID).

With new funding provided by the Joint Information Systems Committee (JISC), the Open Access Repository System (OARS) project aims to enhance and consolidate the software platform on which FMO is built. This 18 month project, due to be completed in March 2009, will make FMO technically easier to manage, as well as rendering the repository globally interoperable with other open systems, including the University of Oxford's institutional repository. By employing open source software (which was not available when FMO was first constructed), this project seeks to ensure FMO's long-term preservation.

The main objectives of the OARS project are to:

- a) Create a new repository that can eventually store and serve all types of content, not just text-based items
- b) Make the repository compatible with the University's institutional repository
- c) Enable metadata and content to be harvested by other higher education institutions (e.g. via OAI-PMH, the Protocol for Metadata Harvesting)
- d) Reduce software and hardware maintenance costs, due to the migration to open source and the move towards a single management interface
- e) Improve prospects for long-term preservation of the content

The scope of the OARS project is to construct the new repository with new user and management interfaces, and migrate the current full text documents and back runs of key journals to it.

Why replace FMO's repository?

At the time of constructing the FMO portal (during 2001 and 2002), there were no suitable open source technologies that could be used to develop its key components, so by necessity they were implemented using proprietary software. This has resulted in making the overall management of FMO difficult, as it involves working with multiple interfaces. It also limits the accessibility of the content. For example, the key components have independent search interfaces and there is no facility to search across the entire portal, whilst the content within most of these components cannot be located directly from external search engines such as Google. Furthermore, data, metadata and services within FMO cannot be shared with other repository systems. More importantly, because of the use of proprietary software solutions that are not fully open with regard to accessibility, many of our users from countries where Internet connectivity is limited or unreliable are not always getting the best value from the important content available within FMO.

The FMO team decided that if we could remove as far as possible the dependency on the proprietary

operating system and software currently in use, we could not only enhance FMO to become far more discoverable and accessible to a much wider community of users and contributors, but also ensure the long term preservation of its content.

Project Methodology

For the repository we chose the open source software platform Fedora (Flexible Extensible Digital Object Repository Architecture), provided by Fedora Commons. We initially chose Fedora because virtually any kind of content can be stored and managed, and the repository will work as part of an extensible framework of service components, which means we will have the option to add as yet unknown extra functionality as and when the Fedora community develops it. A second and compelling reason is that Fedora is the repository system used by the Oxford University Research Archive (ORA) – the University's institutional repository. From the outset we were committed to making our content compatible with this. In fact, during consultations with ORA it was decided that they would provide the Fedora storage mechanism for us, which means that our content will now be embedded directly into the institutional repository, providing maximum preservation.

The first phase of the project involved consulting with ORA and with other institutions that have developed, or are currently developing, repositories using Fedora. Knowledge gained from these consultations helped in the preparation of functional and technical specifications for the repository development. We also established a network of advisors, comprised of representatives of higher education (HE) institutions in the UK. Students, researchers and academics from universities and colleges form the backbone of FMO's user community. There are currently at least 21 centres and departments based at British universities that conduct teaching and/or research into issues around migration, human rights, integration or conflict studies. We sent them all a brief questionnaire about their usage, opinions and expectations of the enhanced FMO. Based upon the responses received we established a network with these institutions. This represents the first time that such a network between this large group of similarly focussed academic departments and centres has ever been established. The input from this network will be very important for the FMO portal's redevelopment and enhancement.

The second phase is now in progress and is the lengthiest one. This is the core of the actual software development and will consist of:

- a) constructing the new repository with its associated management and user interfaces
- b) testing the repository and interface components
- c) migration of content from the existing to the new repository
- d) testing of the migrated content
- e) integration of the new repository and interface with the existing FMO portal

By storing our content within the institutional repository we will gain the additional benefit of making it directly accessible from the University's Library Catalogue. This will be very useful for our students and staff. An IT consultancy company is undertaking the software development. Also, a consultant is undertaking an independent evaluation of the actual development process, including the interplay between the OARS team, the ORA technical team and our IT consultants. This will complement the evaluation by the OARS team, which includes testing of the new repository, its interfaces and the migration of existing documents and journal issues. For the user interface evaluation we have gathered together half a dozen or so people for whom we have scripted a walk through of the user interface. This is to be conducted on both the existing and new user interfaces for comparison. A similar script will be used by members of the OARS team for the evaluation of the management interface.

The final phase will involve documenting and evaluating the whole process, and producing final reports for JISC. The project will share with our network of HE partners and other projects the open standards used and lessons learned, hopefully informing them so that they can make their own systems more open.

The future

This project is the beginning of the 'opening up' of the content within the FMO portal. We are actively

seeking funding to move the remaining content of FMO into the new repository. These include specially commissioned research guides (peer reviewed guides to topics and regions written by experts), a searchable directory of over 1500 organisations connected with forced migration, a substantial collection of over 500 images with associated metadata, and a growing collection of videos and audio podcasts.

Links

OARS project website

<http://oars.forcedmigration.org/>

OARS project page on JISC website

http://www.jisc.ac.uk/whatwedo/programmes/programme_rep_pres/repositories_sue/oars.aspx

Forced Migration Online

<http://www.forcedmigration.org/>

Refugee Studies Centre

<http://www.rsc.ox.ac.uk/>

Department of International Development

<http://www.qeh.ox.ac.uk/>

Oxford University Research Archive

<http://ora.ouls.ox.ac.uk/>

Fedora Commons

<http://www.fedora-commons.org/>

The Sphere Project

<http://www.sphereproject.org/>

Department for International Development (DFID)

<http://www.dfid.gov.uk/>

The Andrew W. Mellon Foundation

<http://www.mellon.org/>