

EPrints 3.0: New Capabilities for Maturing Repositories

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Abstract

There are now a large number of repositories in the world, contributing a significant amount of content to the world's scholars and scientists. The landscape has changed since the emergence of the Open Archiving Initiative: as well as Open Access, we have seen Multimedia Scholarly Collections, Teaching, Scientific Data, Preservation, Research Management and Assessment emerging as key drivers for repository adoption and development across the world. A new version of the EPrints repository software has been developed to address the growing demands on repositories to accommodate a wider variety of digital objects and metadata, to integrate with a wider range of services and applications and to support higher deposit rates to serve the needs of the whole institution. Already described by one reviewer as "a significant milestone towards ideal repository software", EPrints 3.0 provides new features for well-managed, high quality, high value repositories.

Keywords: repositories; EPrints; digital libraries

1 Introduction

There are now a large number of repositories in the world, contributing a significant amount of content to the world's scholars and scientists. The EPrints platform was developed as an outcome of the Open Archiving Initiative in 1999. This movement is still gaining momentum, as there are many institutions across the world that have yet to commit to providing a service for the dissemination and curation of their scientific and scholarly materials.

The landscape has changed since 1999: as well as Open Access, we have seen Multimedia Scholarly Collections, Teaching, Scientific Data, Preservation, Research Management and Assessment emerging as key drivers for repository adoption and development across the world.

EPrints has responded to the diversification of the repository ecology thanks to the flexibility and adaptability of its software platform (designed for easy customisation at every level) and its metadata and data management facilities (not limited to one schema or standard profile). Examples of EPrints repositories that support each of the agendas listed above can be seen at the Exemplars pages¹ at the EPrints web site.

In developing the latest version of EPrints (version 3.0) we responded to the community's requests for increased interoperability with other services and applications, improved user experience of depositing & managing a wider range of digital objects and better open source development opportunities. EPrints v3 is a more effective and efficient platform to underpin any kind of repository, and has recently been described as "a significant milestone towards ideal repository software" (Ariadne 50, January 2007).

All repositories aim to provide high quality information services to enable (or improve) administrative, scholarly or research tasks based on high quality records of research/scholarship. These tasks impose high standards of metadata and data curation – acquisition, transformation, maintenance and dissemination. Consequently repository managers face two challenges with their faculty staff: firstly in encouraging them to regularly deposit their research outputs or artefacts, and secondly in remedying deficiencies in the metadata provided.

The new EPrints software addresses the apparently irreconcilable issues of low-impact-deposit and high-metadata-quality by making data entry easier to get right. Firstly, a range of importers allow existing objects to be imported from other services or data sources. Secondly, when editing newly imported (or freshly created) objects, intelligent metadata assistance is provided for key information items. Auto-completion on the author names field means that a complete creator (surname, forenames, title and email address or staff ID) may be

¹ <http://www.eprints.org/software/examples>

entered in as little as three keystrokes and a menu choice. Not only does this lead to less effort for the depositor, it also means that author names are complete and consistently referenced throughout the repository. Other assistance means that the official journal name will always be used together with its ISSN and publisher and that the project identifier assigned by the item's funding agency can be relied on and that duplicate deposits are avoided.

Beyond these specific user interface features, the aim of EPrints is to fulfill three key objectives:

1. The *High Quality Repository*: a repository where the object metadata and object data is complete, correct and consistent – a repository where data entry is easy, errors and omissions are minimised at source and an ongoing quality management process is facilitated;
2. The *High Value Repository*: a repository whose items can be used and reused in many contexts for many tasks – not only dissemination and information discovery but also administrative reporting, bibliography management, CVs, institutional portals, the Semantic Web and desktop and webtop applications (such as Microsoft Office and Google Maps);
3. The *Well Managed Repository*: a repository that supports efficient curation and reporting of the objects that it manages, that supports effective monitoring and feedback of the workflow processes and operators who enact the workflow, and whose configuration and management is possible by the librarian manager rather than the technical system administrator.

As Open Access mandates from funding agencies and Research Assessment activities (both institutional and national) impose external deadlines with real financial consequences for failure to deliver then significant challenges emerge for staffing the repository processes that are needed to satisfy them, EPrints provides the solution for an enterprise repository that collects scholarly and scientific materials from thousands of its faculty staff and researchers without imposing onerous demands on individual researchers, library staff or information services.