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In Brief

Project StORe

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Project StORe is one of twenty-five projects supported in the UK by the JISC (http://www.jisc.ac.uk) Digital Repositories Programme, which aims to bring together people and practices from across the domains of research, learning, information services, institutional administration and records management, for the purpose of ensuring maximum coordination in the development of digital repositories.

Project StORe (http://jiscstore.jot.com/WikiHome) has as its principal aim the design of bi-directional links from Source to Output Repositories, with the objective of generating new levels of discovery, dissemination and curation for the products of academic research. The ability to move seamlessly from source (data) repositories to output (publications) repositories, and vice versa, is expected to introduce new opportunities for researchers to explore a level of detail that cannot be reproduced in publications, to examine and validate experiments reported in published papers, and to identify how and to what extent their published research has been used by other researchers. Most conspicuously, an automatic association of research publications with their source data will considerably amplify the scope for accessing, disseminating and sharing research output.

This two year project is focused upon disciplines within the scientific research community: archaeology, astronomy, biochemistry, biosciences, chemistry, physics and social policy/political science. Investigation into these disciplines is being conducted from seven research-intensive UK universities, with astronomy made the subject of a joint study by Edinburgh and Johns Hopkins University, Baltimore (http://jiscstore.jot.com/OrganisationAndManagement). A survey of researchers working in these disciplines has been undertaken to describe actual workflows and norms in their use of source and output repositories, the identification of functional enhancements to repositories they consider to be desirable, and specific problems encountered during their use of repositories. From this survey, and the business analysis being conducted upon it, a technical specification of functional enhancements will be developed, leading to the construction of a set of pilot middleware for enabling bi-directional links. During the test and proving phase, links will be established between the UK Data Archive (http://www.data-archive.ac.uk/), as source

repository, and research papers stored in the institutional repositories of the London School of Economics and the University of Essex; but the middleware will be designed according to the cross-discipline requirements identified from the survey, with a view to eventual application across a broad range of disciplines.

The StORe survey found that the proposed bi-directional link was considered signally advantageous by 85% of the researchers who responded, but attitudes were tempered by a range of cultural and organisational barriers to deposit in both source repositories and institutional output repositories. Prevalent were concerns over perceived increases in workload, frustration with bureaucratic processes and uncertainty with respect to the protection of intellectual property. At a more technical level, repositories were often judged inconsistent in coverage and in the quality and appropriateness of their metadata. However, researchers found considerable consensus in the identification of core, generic metadata requirements, and many agreed that, given the size and complexity of most research data, links to/from processed data rather than raw data would be more achievable. Accordingly, completion of the project in August 2007 assumes delivery of a solution that is not entirely technological.