UK RepositoryNet+ Factsheets

SWORD endpoints and SWORD-mediated content ingest

What it is

SWORD (Simple Web-service Offering Repository Deposit) is a protocol for delivering contents into repositories[1]. There are two different SWORD versions available, 1.3 and 2[2]. Contents transferred into IRs via SWORD may be metadata-only items or metadata-plus-digital-object ones. In order to be able to ingest these, repositories need to feature SWORD endpoints. These are SWORD servers often included by default in repository platforms that must be activated and will allow them to receive SWORD-mediated content transfers, for example from the Repository Junction Broker[3] or from BioMed Central automated article deposit[4].

Running a SWORD endpoint

Most recent versions for standard repository platforms include a built-in SWORD server. EPrints (versions 3.2 and higher)[5], DSpace (versions 1.6 and higher) and Fedora (versions 2.x and higher) have all adopted SWORD as a default protocol for providing interoperability. **DSpace** provides instructions for enabling and configuring the built-in SWORD 1.3 server on DSpace 1.8 at http://bit.ly/XFWpHz. **EPrints** wiki for EPrints 3 plugins also contains an explanation on how to run a SWORD client, http://wiki.eprints.org/w/SWORD (text to be updated). Finally, instructions for installing SWORD 1.3 on a **Fedora** platform are provided at https://wiki.duraspace.org/display/FCSVCS/SWORD-Fedora+1.2.

Configuring a repository for ingesting content via its SWORD endpoint

Besides running SWORD endpoint, IRs need to carry out several config updates in order to be able to receive and ingest the delivered packages. UKRepNet has carried out preliminary transfers into EPrints and DSpace test repositories and is able to provide technical support for enabling SWORD endpoints on specific versions of both platforms[6] to institutions willing to test the RJ Broker transfer service.

The Repository Junction Broker (RJB) and DSpace metadata sets

The RJB can be operated as a 'Lite' service to ingest basic metadata sets-plus-objects into the standard metadata set at IRs via DSpace default importer. This 'Lite' service makes use of SWORD 1.3. The more comprehensive 'Full' RJB service envisions delivery of additional

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[1] See Stuart Lewis's presentation at the Mar'2013 RSP webinar on SWORD, http://bit.ly/10wnnQE

[2] See 'SWORD 1.3 vs SWORD 2' at the Open Access Repository Junction blog, http://bit.ly/14SuDHk

[3] EDINA Repository Junction Broker, http://edina.ac.uk/projects/RJB_summary.html, formerly OA-RJ, is to become a content delivery service to be shortly offered by the RepNet.

[4] BMC Automated Article-Deposit, http://www.biomedcentral.com/libraries/aad

[5] EPrints 3.2 runs SWORD v1.3 and EPrints 3.3 runs SWORD v2.

[6] Patches are available for EPrints 3.2 and DSpace 1.8, but will gradually cover all running versions

metadata into IRs, including FunderID, GrantID/ProjectID and embargo period when applicable. This Full RJB service –which relies on SWORD v2– will meet RIOXX (plus major stakeholder) requirements, but won't be able to be deployed until the RIOXX application profile has been successfully implemented on IRs.

Use cases for SWORD-mediated content ingest

The RJ Broker 'Lite' service has already been successfully tested on test EPrints, DSpace and Fedora repositories at EDINA. After previous enabling of their SWORD endpoints, test metadata+item transfers have used SWORD 1.3 protocol to deposit packages into EPrints 3.3, DSpace 1.8.x and Fedora 3.6.2. Live tests are currently under way in cooperation with institutions running DSpace (Imperial College) and EPrints (City University London) institutional repositories.

The SWORD endpoint enabling process shouldn't just be tested for the different versions of the most common repository platforms, but it would also make sense to promote having SWORD endpoints available on top of CRIS Systems in order to service those institutions where the CRIS acts as the master system, often overwriting the repository content.