Module: SWORD basics

Module overview:
This module introduces the SWORD (Simple Web-service Offering Repository Deposit) interface available in DSpace. SWORD allows remote systems (software or agents) to submit items via a common interface.

This module introduces the concepts behind SWORD along with examples where it might be used. For further technical details see the module ‘Using SWORD and DSpace’.

Module objectives:
By the end of this module you will:

1. Understand what SWORD is
2. Know what SWORD could be used for
3. Know how SWORD works with DSpace
What is SWORD?

- SWORD
  - Simple Web-service Offering Repository Deposit
  - JISC funded SWORD project
  - Common deposit interface
  - Implemented in
    - DSpace
    - EPrints
    - Fedora
    - Intralibrary
  - An extension of the Atom Publishing Protocol

SWORD

SWORD (Simple Web-service Offering Repository Deposit) is a common repository deposit protocol created by the JISC funded SWORD project. It created a standardized way of depositing content into repositories and was implemented in DSpace, EPrints, Fedora and Intralibrary.

SWORD is an extension of the Atom Publishing Protocol.
Scenarios

Scenario 1 – Simultaneous multiple deposit

- Deposit to multiple repositories at once

I want to submit my paper to my local repository, my funders repository, and to a subject based repository all in one go

Scenario 1 – Simultaneous multiple deposit

A researcher may wish to deposit an item to multiple repositories at once:

- Local institutional repository
- Funders repository
- Subject repository
Scenario 2 – Deposit by lab equipment

In order to remove the human from the loop, you may wish to configure modern hi-tech lab equipment to deposit their data straight into a repository.
Scenario 3 – One-click deposit

Researchers may wish to deposit to a repository directly from their word processor software. If a SWORD client was built into a word processor it could be used to do this.
How SWORD works within DSpace

- DSpace has a module structure
  - dspace-sword is a module

- SWORD accepts packages
  - Files + METS manifest file
    - Metadata in SWAP format

The dspace-sword module

DSpace is built using a modular structure. Each module adds a new piece of functionality such as a user interface. Other modules include the JSP user interface, and the XML user interface (Manakin), and the OAI-PMH interface.

SWORD deposits

In a default configuration DSpace will accept certain packages for deposit. The packages must be a collection of files zipped up together with a manifest file encoded in METS (Metadata Encoding and Transmission Standard) with the metadata in SWAP (Scholarly Works Application Profile) format.

New package types could be supported through the use of the standard DSpace packager functionality.
Credits

- These notes have been produced by:
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  - Repository Support Project
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