The I-WIRE Project
Integrating the Institutional Repository with a Portal Environment
Tracey Andrews, James Colhoun, Louise Harrington, Scott Hill

Project Overview
The I-WIRE project’s objective is to develop a submissions and metadata workflow and toolset, integrated into a Portal environment, for the submission, indexing, and re-purposing of research outputs into Cardiff University’s Institutional Repository - ORCA, Online Research @ Cardiff. This will help place the deposit of research outputs at the heart of the research process and encourage author self-deposit. When fully developed, ORCA will deliver increased visibility and impact for the University’s published research, and play a critical role in preparations for the REF.

The Technical Challenge
Cardiff University’s Modern IT Working Environment (MWE) has been built using IBM’s WebSphere suite of applications, with SOAP being the integration method of choice.

ORCA is an implementation of the EPrints repository software which has no existing SOAP interface.

The main technical requirement is to create a quick deposit tool that can be hosted by the MWE and provide opportunities for further integration with research related processes and data.

Integration Options for Deposit
SOAP - Simple Object Access Protocol
The preferred integration method for the IBM based Portal, however the only available EPrints plug-in for SOAP retrieves small amounts of data and does not support inserting content.

Direct Database Communication
This would require changes in the Portal if the database schema changed, and would also by-pass the business rules and error handling normally carried out by the EPrints software.

EPrints Import Scripts
The scripts can be run on the command line, however, there is no user feedback or real-time import.

SWORD - Simple Web-Service Offering Repository Deposit
The accepted standard for creating repository deposit tools and facilitates deposit to multiple repositories with feedback on completion. JISC-funded, undergoing constant development, and comes out-of-the-box with EPrints.

Conclusion
All four options have been investigated and tested. The project is moving forward using SWORD for the deposit process, supported by EPrints 3.2 API and REST interface for data retrieval.

The design phase of the project has investigated further integration, with the CrossRef, RoMEO and Web of Science web services, in order to meet some of the user needs around simplifying the entry of data.

Further Information
www.cardiff.ac.uk / iwire
iwireproject

I-WIRE is funded by JISC Information Environment Start-Up and Enhancement Programme

This illustration shows the key systems and interfaces that make up the I-WIRE solution.