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Selected Works Page as a Comprehensive Tool for Promoting Faculty Research

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Available at: https://works.bepress.com/yuan_li/1/
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Introduction

Selected Works (SW) page is a personal research page for collecting, preserving, and promoting faculty research, developed as an integral part of the Institutional Repository (IR) of the University of Massachusetts Amherst, which serves as an open access information portal to increase visibility, usage and impact of both ongoing and accomplished research of included faculty members. ScholarWorks team create SW pages and ingest citations for each faculty by using a newly developed workflow, which takes advantage of technologies, such as Web Services, schema transformation and batch import, and is much more efficient than a traditional workflow (500 items/person*hour V.S. 20 items/person*hour). In addition to highly improved content ingesting efficiency, embedding ResearcherID in SW pages greatly enriches the information on the pages by providing more research metrics, such as article citing accounts, h-index, co-author collaboration network, etc. Therefore, each faculty has a SW page as a comprehensive tool for promoting their research.

Workflow

Volunteer staff, IR Staff, Student Workers at Libraries
Ingest Citations

Web Services, XSLT Transformation, Batch Import

Self-archive full-text pre-published versions

Selected Works page

Batch import

IR (ScholarWorks)

Facility, RA/TA, Administrative Staff at Departments

Web of Science

Internal Communication

Researcher ID

Workflow Diagram:
- Volunteer staff, IR Staff, Student Workers at Libraries ingest citations.
- Web Services, XSLT Transformation, Batch Import are used for handling self-archive full-text pre-published versions.
- Selected Works page is created using batch import.
- Internal Communication facilitates the connection between different steps.
- Researcher ID is embedded to enrich the information.

Web Services

A Web service is a software system designed to support interoperable machine-to-machine interaction over a network. It has an interface described in a machine-processable format (specifically WSDL). Other systems interact with the Web service in a manner prescribed by its description using SOAP messages, typically conveyed using HTTP with an XML serialization in conjunction with other Web-related standards.

WSDL: Web Services Description Language.


Schema Transformation

All search results are exported in XML in the Web of Science (WOS) format. In order to use the batch import XML function in Digital Commons (DC), the xml file is transformed from the WOS format to the DC format by using an in-house developed XSLT stylesheet.

Batch Import

In order to ingest data efficiently, the Digital Commons platform provides two methods for batch import data: batch upload XML and batch upload Excel. We use the approach of batch uploading XML to batch import data into our IR (ScholarWorks) and move all data from ScholarWorks to SW pages using the “Collect bepress Content” tool.

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