Integrating research output in UPC repositories

Antonio Juan Prieto-Jimenez (antonio.juan.prieto@upc.edu), Yolanda Cacho-Figueras (yolanda.Cacho@upc.edu), Ruth Iñigo-Robles (ruth.inigo@upc.edu), Anna Rovira-Fernández (anna.rovira@upc.edu), Jordi Serrano-Muñoz (j.serrano@upc.edu)

Universitat Politècnica de Catalunya. Servei de Biblioteques i Documentació
Jordi Girona Salgado 31
08032 Barcelona, Spain
http://bibliotecnica.upc.edu

Introduction

In 2007, the Universitat Politècnica de Catalunya (UPC) started a strategical Project for the University called DRAC (Descriptor de la Recerca i l'Activitat Acadèmica or Academic Activity and Research Descriptor): the main goal of which was the development of a new information system for managing, evaluating and publishing the research output. The Library participated in the project from the beginning. The other two partners were: OTRDI (the office manager of the research output) and UPCnet as the technological partner.

DRAC, the new software, has the following applications: the main one is that academics can develop a curriculum following the national standard for presentation to national and regional administrations. It is also the tool that allows research groups to publish their output on the Internet.

DRAC utilities and purposes

DRAC is a web-based application which tries to reduce the cost of filing the information the University requires from academics. DRAC is also a tool that:

- Presents research groups on the web (researchers names, department affiliation, main activities and research projects, etc.).
- Calculates and evaluates the research output of researchers, researchers groups and also UPC departments and other research centers. Depending on their research results, departments get economic resources from the University.
- Allows research groups to publish their output on the Internet.

Developed in Java technology. Now only available via web, but we are working on allow modifications to exchange and access from/to other applications using Service-oriented architecture (SOA) technology and integrate with others university information systems.

Integration with DSPACE

DRAC is integrated with Upcommons (DSpace), the institutional repository of the University (http://upcommons.upc.edu/), held and maintained by the Library.

UPCommons is a DSpace application the goals of which are to organize and preserve the intellectual heritage of the University, and to offer a tool to publish their academic and scientific works in open access to the university community.

Both systems are running with single sign-on (SSO) that allows skip from one system to another with a single authentication, sending the pass to another system the necessary information through HTTP protocol submit.

For research publications content is organized around communities which correspond to research groups. Before the implementation of this project, archiving the output research was not mandatory. Although, by September 2009, there were more than 2.400 publications archived.

The integration model

Academics upload the information concerning their research activities. Every time academics introduce a publication (a journal article, a conference paper or a report) the system requests a DOI, or an URL (if the paper has already been published on the web) or ask for the full-text (preprint or postprint) which is immediately added to UPCommons.

We use in the integration, the Configurable Submission functionality that allows configurable workflows since DSpace version 1.5. Two steps have been created: If the researcher wants to upload a document goes to the process of submit within a collection of DSpace previously defined into specific workflow. From this, the review process is pending.

Each researcher receives support from a subject specialist librarian who: reviews the reference of the publication in DRAC provides advice on publishing rules and copyright updates and curates the metadata in UPCommons publishes in UPCommons the full-text of journal articles or conference papers when there are no copyright restrictions.

The validate information in DRAC, is transferred to UPCommons DRAC through a HTTP post method, and includes the metadata validation and also a form, where the users or librarians can add more metadata that not covered by DRAC.

Once published, the document is automatically mapped to defined communities UPCommons of each research group or department related o the authors (Image 1).

DRAC   UPCommons

DSpace "special" collection – Submission workflow

After new publication form → HTTP POST (with id drac) → Upload files → License → Completed

DRAC   UPCommons

Revision Drac submissions

After revision form → HTTP POST (with id drac and metadata revised) → Revisión form → Completed
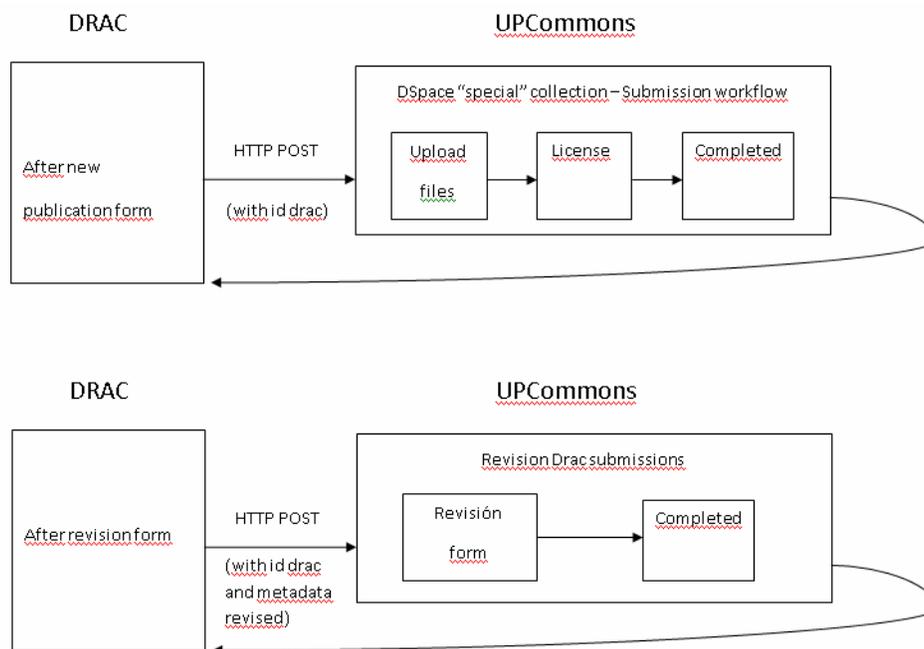
Image 1. Relationship between applications

Mandate and support

In October 2009, the launch of DRAC took place. At the same time, the University approved its Open Access Mandate, assigning to the Library the responsibility of making the service visible on the Internet —providing there are no copyright restrictions— and also preserving all the academic publications.

Before October 2009, a considerable effort to promote open access and explain the benefits of open access to the university community and to the UPC governance was done by librarians, using the following reasoning wider dissemination of research results; greater visibility an increase in the impact of publications; more citations of authors and publications an increase in the visibility of the institutions that authors are associated with; better institutional positioning.

Related to this project, another important service set up by the UPC Library over recent years has been the Intellectual Property Service (SEPI), through which UPC libraries offer authors (academics, students, etc.) of documents published by UPCommons information and guidance about rights and copyright policies. The SEPI website provides authors with answers to common FAQs on the creation, dissemination and publication of academic and research works. The service is complemented by other UPC services, such as the Legal Office (legal advice), the Technology Transfer Centre (industrial property) and Edicions UPC (which deals with the copyright of the material it publishes).

The aim of this paper is to present not only the technological and political aspects of this project but also the organization of the library staff and also the feedback of academics about this integration. It will also describe the University's commitment to preserve and publish scientific knowledge.