OpenAIRE dashboard for repository managers: from repositories for repositories

Pedro Príncipe, University of Minho, pedroprincipe@sdum.uminho.pt; Natalia Manola, University of Athens, natalia@di.uoa.gr

Session Type
- Poster

Abstract
OpenAIRE is the European Union initiative for an Open Access Infrastructure for Research which supports open scholarly communication and access to the research output of European funded projects and beyond. Thanks to infrastructure services, objects in the graph are harmonized to achieve semantic homogeneity, de-duplicated to avoid ambiguities, and enriched with missing properties and/or relationships. OpenAIRE data sources interested in enhancing or incrementing their content may benefit in a number of ways from this graph. This paper presents the OpenAIRE dashboard for data providers which performs the realization of an institutional repository Literature Broker Service for OpenAIRE data sources. The Service implements a subscription and notification paradigm supporting institutional repositories.

Conference Themes
- Supporting Open Scholarship, Open Data, and Open Science
- Managing Research Data, Software, and Workflows

Keywords
Repositories, OpenAIRE, Open Access, Data providers

Audience
Repository managers and administrator, Librarians, data source providers.

Background
One of our major services for Open Science is to aggregate content from many different sources from Europe and beyond. OpenAIRE infrastructure applies cleaning, transformation, disambiguation processes, and identify relationships among all research entities: publications, data, funding, researchers, organisations and data sources. OpenAIRE is developing a publication brokering service where the repository managers will be able to register and get notifications for any updates/differences on the content provided to OpenAIRE.

Poster content
OpenAIRE populates, cleans, and enriches a graph of objects relative to publications, datasets, people, organizations, projects, and funders aggregated from a variety of data sources. The OpenAIRE graph is a great opportunity for repository managers to improve their repository collections, as it may feature information that is not otherwise available to them. The OpenAIRE Literature Broker Service will offer subscription and notification functionalities explicitly targeting their needs. By exploiting the provenance information
tracked by the OpenAIRE infrastructure, it will be possible to subscribe to "enrichment" events and be notified whenever OpenAIRE enriches a publication metadata record with new properties (subjects, citation list, research initiatives) or new relationships to projects or datasets. By enriching with relationships and analyzing the information space graph, the service will also be able to notify repository managers about "addition" events whenever a publication metadata record relevant for that repository is aggregated from another data source.

Institutional repositories are interested to acquire metadata that improves their collection of metadata records
- Enrichment: enrich the records they already have with extra metadata information
- Addition: add to their collection records that are “related with” the repository, i.e. they should/could be part of their collection

**Subscriptions**
- Repository managers can subscribe to the service to receive notifications about records “assigned to them” and specify
  - Topics: enrichment [more | new].X or addition.Y
  - How to be notified: RSS feed, email, APIs, etc.
  - When to be notified: instantly, every K days
  - Criteria on record fields (predicate)
- Repository managers can test their subscription by searching the collection of potential notifications

**Notifications**
- OpenAIRE recommended repository APIs for metadata ingestion (e.g. SWORD project); software modules for known platforms will be considered (e.g. DSpace, Eprints)
- email to the repository managers
- RSS feeds

The service avoids redundant notifications by keeping a history of delivered notifications.

**Conclusion**

The realisation of the OpenAIRE Literature Broker Service has been accelerated, in accordance with a revision of the project priorities that regarded this service strategic for the OpenAIRE infrastructure. The OpenAIRE broker services will be available via a specific dashboard for OpenAIRE data providers. The OpenAIRE repository dashboard will substitute the current validator service. Dashboard functionalities include, registration and validation, monitoring of aggregation process, metadata enrichment and fixing via notification, statistics and usage statistics. The OpenAIRE Broker Service implements a subscription and notification paradigm supporting institutional repositories willing to: (i) learn about publication objects in OpenAIRE that do not appear in their collection but may be pertinent to it, and (ii) learn about extra properties or relationships relative to publication objects in their collection.

**References**

