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OpenAIRE

The Open Scholarly Communication & Scientific Information Infrastructure for Europe

OpenAIRE Interoperability Workshop @ Minho, Portugal, Feb 7-8, 2013









OpenAIRE

- Characteristics
 - A policy driven project
 - Horizontal infrastructure
- OpenAIRE 2009 2012
 - Implementing the FP7 OA pilot- Links to EC funding
- OpenAIREplus 2011 2014
 - Supporting OA in all Europe Links to <u>all</u> European funding
 - Providing links to data
- Point of reference for Open Access in Europe
- Expanding to European Scientific Information Infrastructure





Human PARTICIPATORY DESIGN Technical



Human infrastructure

Research is globalizing, policy implementation is at the local level



+ 5 Associate
Countries

Challenge - Aggregate at a global level this local information, taking into account sociocultural & regional differences of the communities involved

- 32 National Open Access Desks
 - Diverse national research environments
- OA advocacy through targeted activities
 - Reach out to researchers, organizations, infras
 - Helpdesk, workshops, training
- European network of people sharing experiences & best practices







Technical Infrastructure

Multifaceted endeavour

24x7
OPERATIONAL
SYSTEM SINCE
2010

Number of unscheduled downtimes = 0

Building on existing efforts in the scholarly communication and OA domain

- Publication and research data repositories/data infrastructures
- Open Access Journals
- Funders' systems
- Authoritative registries
- Usage data from repositories
- 3rd party services

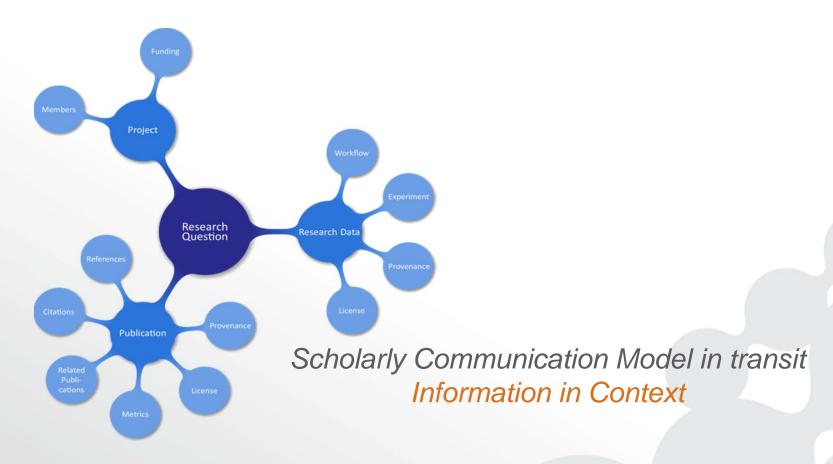




ARCHITECTURE & DATA MANAGEMENT



Supporting the "new" publication



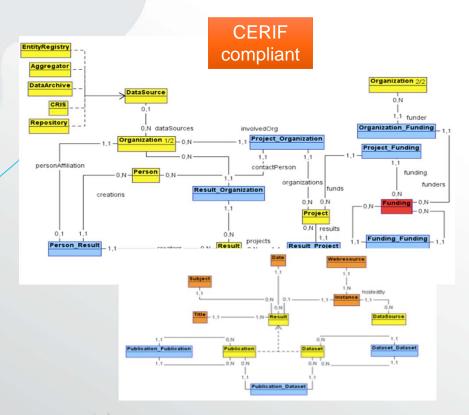






The OpenAIRE data model

Main entities and relationships



- Research results & licences
 - Publications
 - Research data (datasets & databases)
 - •
- People
 - Authors, Pls
- Research organizations
- Funders and funding schemes
- Data Sources
 - Repositories, aggregators, registries, CRIS







Get support (NOADs)



Deposit Publications & data



Visualize - Manage **Enhanced Publications**



Search & Browse



Research impact Citations, usage statistics











Link Classify

Text Mine

De-duplicate Cite



APIs



OpenAIRE HUB

Metadata

Usage data

on publications

6,500,000 OA publications 350 validated repositories

Guidelines for Publications



Publication repositories

Institutional & Thematic

Open Access Journals

Guidelines for Funding Info

CRIS Systems

EC funding National funding

ResearchID (ORCID, ..)

OpenDOAR

Metadata on data





Guidelines for Data Providers



Data repositories Data Journals



OpenAIRE - DRIVER merge

... to go live in the next months

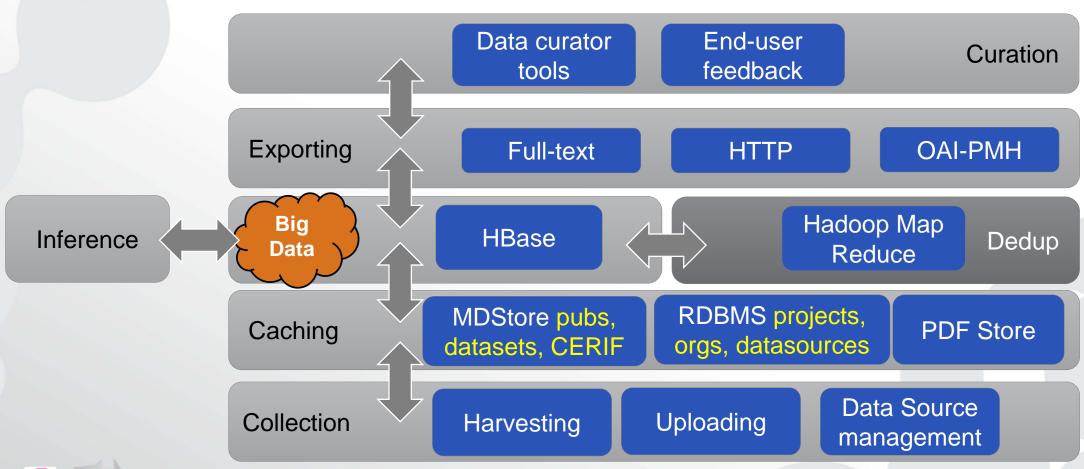
- Repositories + OA Journals
 - ~400
- Publications
 - ~ 6,600,000 OA + non-OA if related to a project
- Persons
 - ~ 60,000,000
- Projects
 - around 26,000 from FP7 and WT
 - + member states...
- Organizations
 - ~50,000 from OpenDOAR and CORDA







Data Management Services

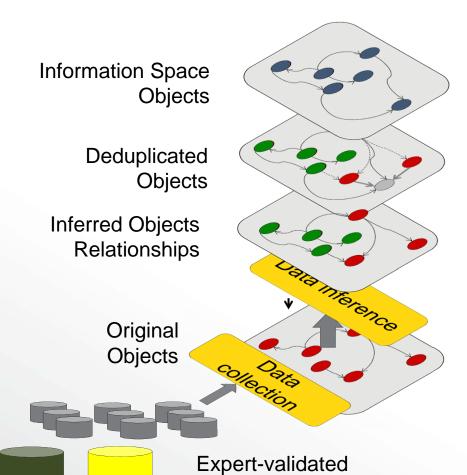








Data Flow



Objects





OpenAIREplus

Data Sources:

Repositories, CRISs, Data archives, entity registries

Zenodo

SERVICES



Researchers

...except for the usual benefits of Open Access



- One stop-shop for deposition publications & data
 - Identify local or thematic repository
 - Deposit in CERN repository for "homeless" researchers
 - ZENODO
- Mechanisms to link publications to projects & data
 - Harvesting and aggregation
 - Manual through the portal
 - Automated through crawling and text mining (repositories, ArXiv, UKPMC, Lib DBs, ...)
- Alerts and Notifications
- Online curation







Data Providers

... interoperation through internationally accepted guidelines



- Different levels of compatibility
 - Publication, funding, research data
 - Usage statistics (impact)
- Get back enriched information
 - Links to funding and research data
 - Aggregated statistics
- Enrich content through notifications about publications in other repositories
- Use of the OpenAIRE back end services for content enrichment







Research Managers

... tools to measure impact; Aggregated statistics for research



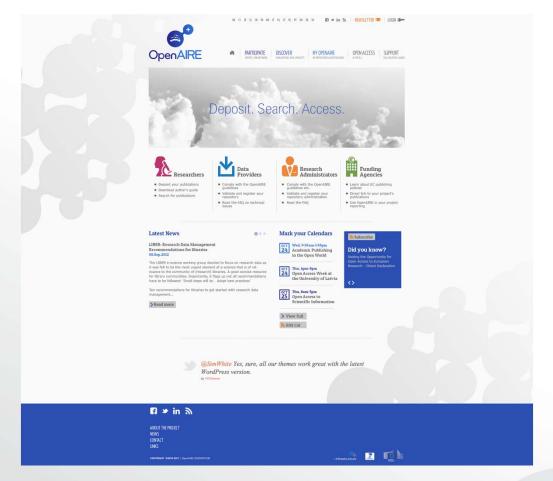
- National funders/infras
 - What is the output/impact of your country
- Institutional research admins
 - Link to CRIS systems
 - Output and impact of institution
- Open Access evaluation
- Statistics on projects/scientific areas/countries/institutions
- Advanced tools for science trends







OpenAIRE in practice









OpenAIRE A publication view

Developing Camille, a text editor for Rodin Bendisposto, Jens, Fritz, Fabian, Jastram, Michael, Leuschel, Michael, Weigelt, Ingo, (2001) JOHN WILEY & SONS LTD English Computer Science, Software Engineering user tag1 , user tag2 → DOI, → PubMedID, → OtherID Initially, the Rodin platform for Event-B did away with a textual representation for models. In this paper, we explain why a textual representation was required after all and we present the semantic-aware text editor Camille for Rodin. We explain the design choices of Camille, such as splitting the syntax into two-levels for machine and formula syntax. We also describe the challenges, such as synchronizing the textual representation with the Rodin database, and how they were overcome using an EMF abstraction layer. Copyright (C) 2011 John Wiley & Sons, Ltd. Related Data Related Publications Related Data No related data. Stay tuned!



Download from repositories









Going beyond FP7 and EC



Browse Document Language Project English (507823) UNKNOWN (4072) Undetermined (372027) HADRONPHYSICS2 (538) French (106177) ELISA (435) Spanish (62690) UNILHC (416) Italian (41170) MASSTEV (302)

Funder

FP7 (43154)

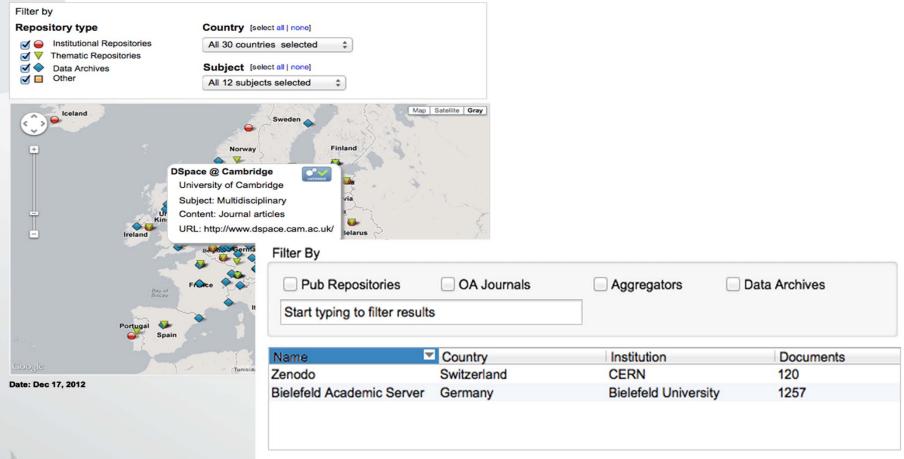
Wellcome Trust (4012)







Support multiple types of data sources









Working with other services

Step 2: Identify & Select Publications

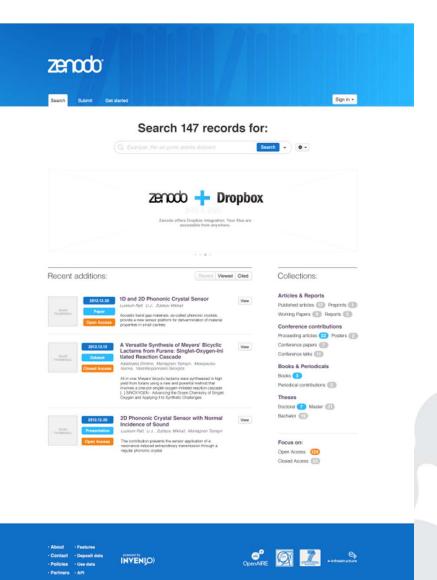
Projects:	
CHESS	A deep validation process for open document repositories
	Manola, Natalia (2008)
Publications:	A functionality perspective on digital library interoperability
No selected publications. Use the form below to	manola, Natalia (2010)
Identify Publication	A survey of context-aware cross-digital library personalization
Enter ORCID (eg. 0000-0002-5914-6747) Identify	Manola, Natalia (2011) Select
Source:	Select
Open Access Publications (Searching in Drive	An infrastructure for managing EC funded research output: The OpenAIRE project
ODI (Resolved via crossref.org)	Manola, Natalia (2010)
ORCID (Resolved via ORCID)	Select
Proceed	Architecture for a Collaborative Research Environment Based on Reading List Sharing
	Manola, Natalia (2010)
AIRE LA CORRESPONDE DE LA CORR	Select
AIRE Interoperability Workshop @ Braga, Feb 7-8, 2013	







Publication & Data repository @ CERN

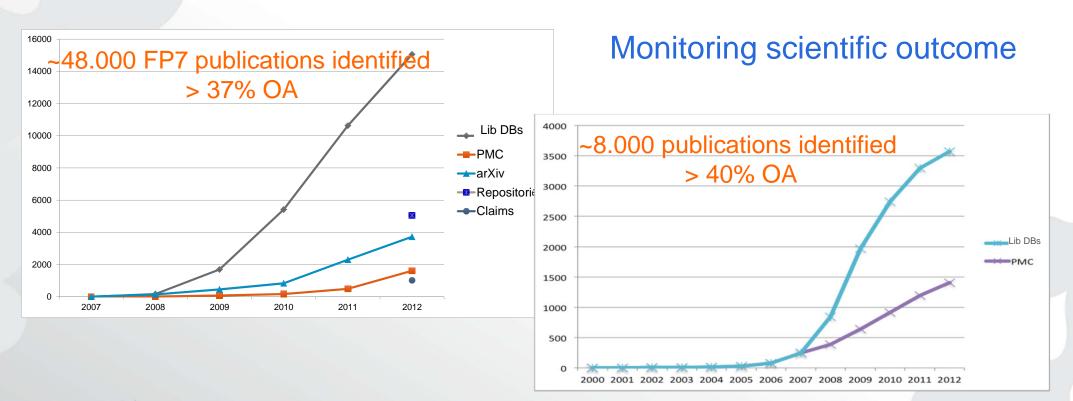








OpenAIRE Statistics as of 31-12-2012

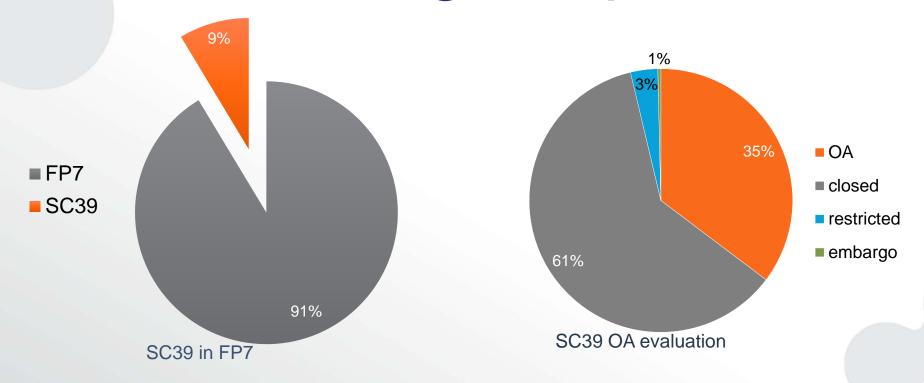








Monitoring OA policies



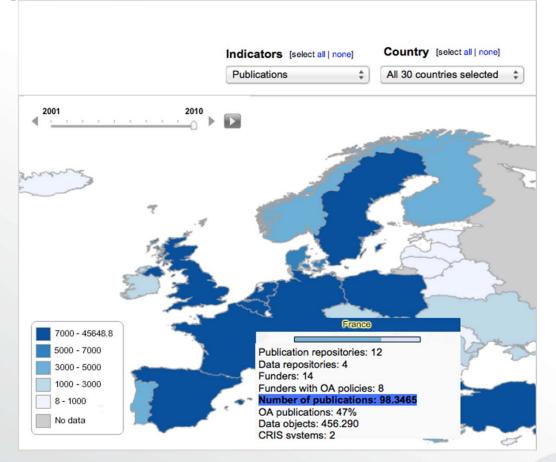
FP7 OA pilot evaluation







Aggregated, visual statistics

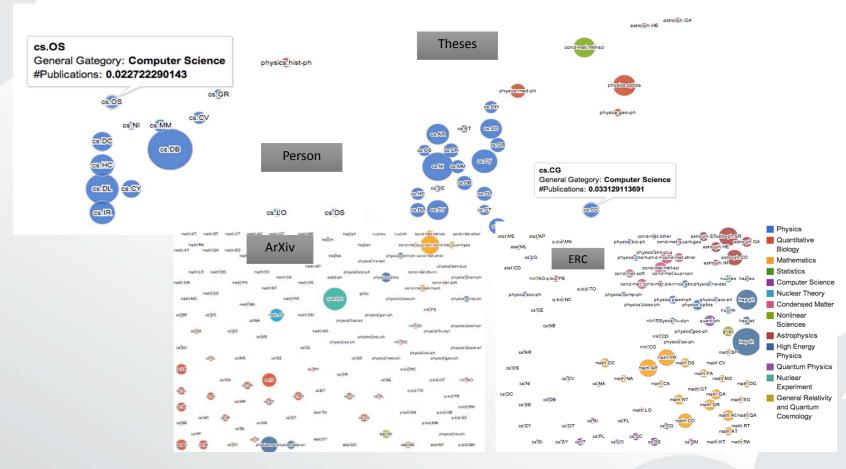








OpenAIRE Statistics based on advanced classification





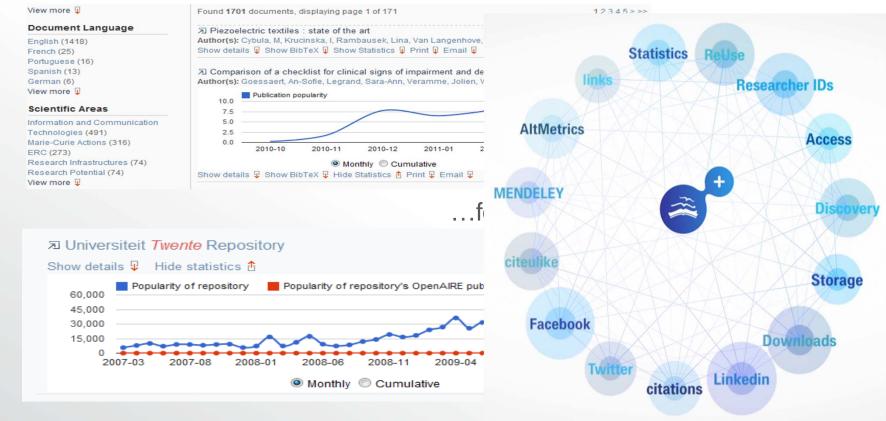




Usage statistics

... alternative measures of impact

... for a publication



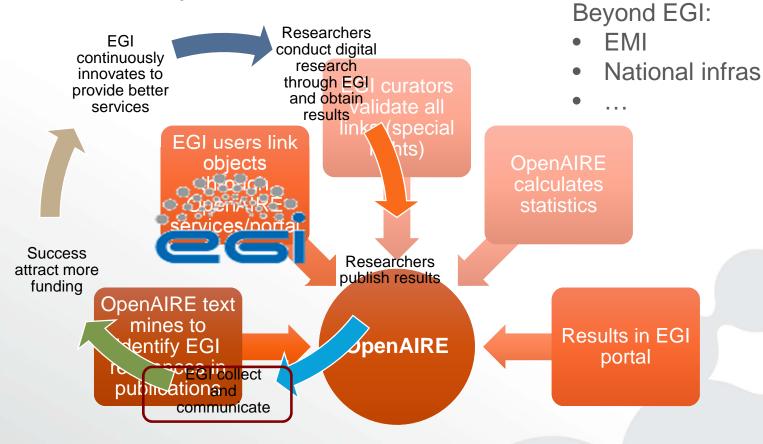






Assessing community impact

The EGI use case – used as a pilot









Thank you!

Our next meeting: Ghent Library in May 2013 – Publication – data integration models



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f facebook.com/groups/openaire



in linkedin.com/groups/OpenAIRE-3893548



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