The DRIVER Project: Building a European Repository Network

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Planning to cover

○ Background/Why DRIVER is needed

○ What DRIVER is doing currently

○ How to get involved – DRIVER is for everyone committed to open access repository development

– it's not just a project which ends when the EU funding runs out…

Repositories: current state of play...

- OpenDOAR lists 1292 Open Access repositories worldwide (7 Dec 08)
  - Approx half in Europe – more being set up
- Many have implemented OAI-PMH
- Some international registries exist
  - OpenDOAR, ROAR…
- Some search engines exist
  - BASE, OAIster, Google Scholar…

Across Europe...

- Few mature national repository organisations
- No previously existing trans-national repository collaboration
- Varied policies and procedures [data]
- Many repositories sparsely populated

From a user point of view…

- Fragmented information landscape
- Content can be (partly) searched and found
- Quality and reuse differ between repositories

- DRIVER providing a unified approach

The Berlin Declaration advocates:

- *Open access (free and unrestricted) to knowledge in the sciences and humanities worldwide* (October 2003)

- Needs a global, interoperable, trusted, long-term repository infrastructure

- DRIVER has built the nucleus of this infrastructure

DRIVER – *multi-phase effort*

1st phase June 2006-Nov 2007 (EU FP6)

- Community building – support & advocacy
- Textual resources (full text only…)
- Test bed infrastructure
  - Aggregator (OAI-PMH harvesting)
  - Repositories in 5 initial countries (now 19?)
  - DRIVER 'Information space' – where eg metadata cleaned, mapped, indexed
- DRIVER Guidelines

Current phase: DRIVER-II

- EU FP7
- Research Infrastructures
  - *2007-1.2.1 Scientific Digital Repositories*
- Duration: 24 months
- Timescale: Dec 2007-Nov 2009
- Test-bed > production service
- Inclusion of compound objects
- Community building

Project partners

- University of Athens (GR)
- University of Bielefeld (DE)
- CNR-ISTI (IT)
- SURF Foundation (NL)
- University of Nottingham (UK)
- UKOLN, University of Bath (UK)
- University of Warsaw (PO)
- University of Gent (BE)
- University of Gottingen (DE)

- Danish Technical University (DK)
- National and University Library (SLO)
- University of Minho (PT)

DRIVER vision

All research institutions in Europe and worldwide make their research publications openly accessible through institutional repositories

(Norbert Lossau, University of Bielefeld, DRIVER Scientific Coordinator)

DRIVER *primary objectives*

○ to build a virtual, European-scale OA network of existing institutional repositories

○ to develop open source state-of-the-art infrastructure software

– D-NET 1.0 released

DRIVER II activity areas

Organization of Digital Repository Infrastructure Providers

Confederation

Open Source Software for repository networks

D–NET

Technical Digital Repository Network Infrastructure Services

DR Infrastructure

Community Building & Maintenance

DRIVER Portal & Wiki

CAPACITIES

e-infrastructure

driver

D-NET (DRIVER Network Evolution Toolkit)

- Open source software
- Version 1.0 released under Apache License on 20 June 2008
- Software includes:
  - Repository network administration software (eg *Repository Network Manager, Resource Monitoring*)
  - End-user services (*Search*, *Browse, Profiling*)
  - Support service to local repository managers and aggregators (*Validation Tool*)

DRIVER Infrastructure

First implementation of D-NET - DRIVER European Information Space (DEIS) - maintained by the DRIVER Consortium
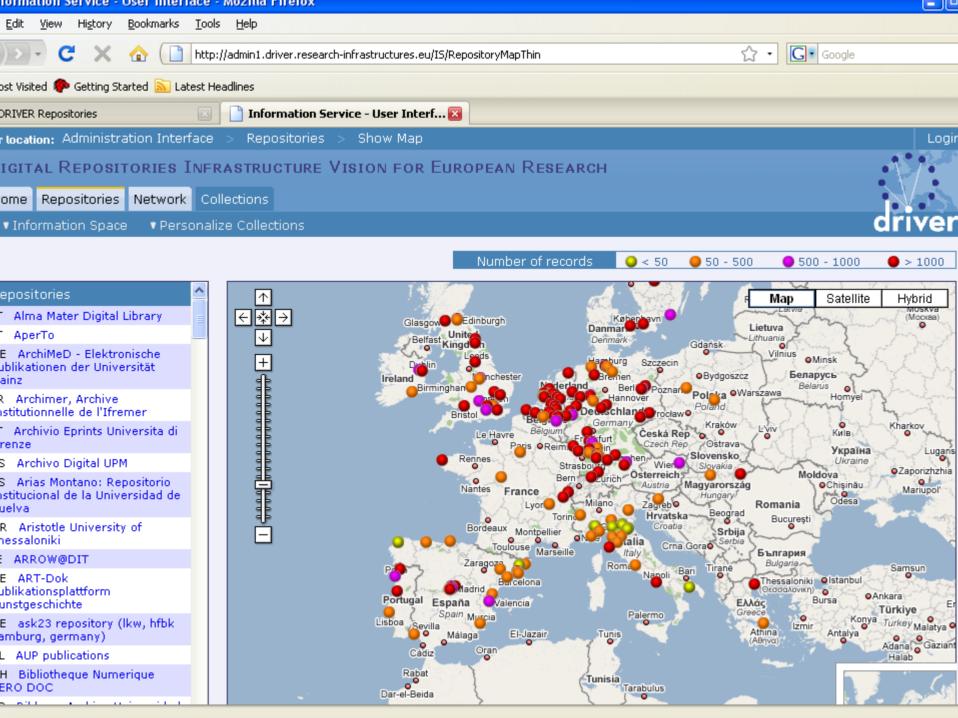
Supports 3 groups of users:

1. *Repository managers*
2. *Service providers*
3. *Researchers, general public*

location: Administration Interface > Repositories > Show Map   Login

DIGITAL REPOSITORIES INFRASTRUCTURE VISION FOR EUROPEAN RESEARCH   driver

ome | Repositories | Network | Collections |

▾ Information Space   ▾ Personalize Collections

Number of records   ● < 50   ● 50 - 500   ● 500 - 1000   ● > 1000

epositories

Alma Mater Digital Library

AperTo

ArchiMeD - Elektronische
ublikationen der Universität
ainz

Archimer, Archive
stitutionnelle de l'Ifremer

Archivio Eprints Universita di
renze

Archivo Digital UPM

Arias Montano: Repositorio
stitucional de la Universidad de
uelva

Aristotle University of
essaloniki

ARROW@DIT

ART-Dok
ublikationsplattform
unstgeschichte

ask23 repository (lkw, hfbk
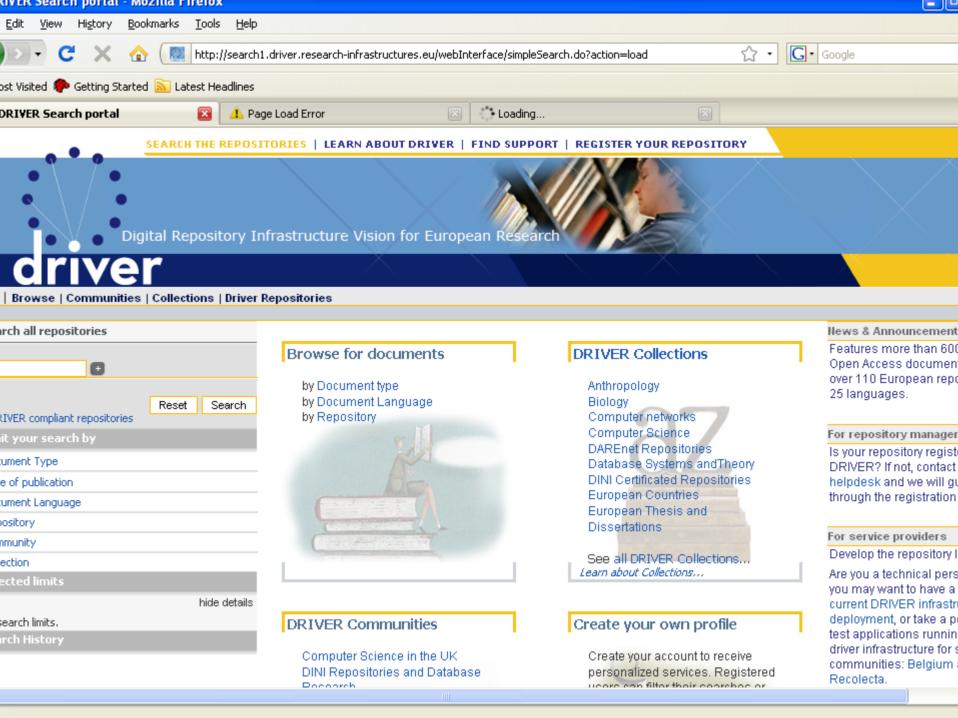amburg, germany)

AUP publications

Bibliotheque Numerique
ERO DOC

DRIVER search

- Free to use, no access control
- Search, browse
- Personalisation possible – create profile
- Search communities, collections

http://search1.driver.research-infrastructures.eu/webInterface/simpleSearch.do?action=load

Google

ost Visited   Getting Started   Latest Headlines

DRIVER Search portal   Page Load Error   Loading...

SEARCH THE REPOSITORIES | LEARN ABOUT DRIVER | FIND SUPPORT | REGISTER YOUR REPOSITORY

Digital Repository Infrastructure Vision for European Research

driver

| Browse | Communities | Collections | Driver Repositories

rch all repositories

+

RIVER compliant repositories

it your search by

ument Type
e of publication
ument Language
pository
mmunity
ection

ected limits

hide details

search limits.

rch History

Reset   Search

Browse for documents

by Document type
by Document Language
by Repository

DRIVER Collections

Anthropology
Biology
Computer networks
Computer Science
DAREnet Repositories
Database Systems andTheory
DINI Certificated Repositories
European Countries
European Thesis and
Dissertations

See all DRIVER Collections...
Learn about Collections...

DRIVER Communities

Computer Science in the UK
DINI Repositories and Database
Research

Create your own profile

Create your account to receive
personalized services. Registered
users can filter their searches or

News & Announcement

Features more than 600
Open Access document
over 110 European repo
25 languages.

For repository manager

Is your repository regist
DRIVER? If not, contact
helpdesk and we will gu
through the registration

For service providers

Develop the repository

Are you a technical pers
you may want to have a
current DRIVER infrastr
deployment, or take a p
test applications runnin
driver infrastructure for s
communities: Belgium a
Recolecta.

Repository registration

○ Target Group
  – Repository Managers
○ Policies
  – Registration
    1. Open / through website
    2. Recommendation by country correspondent
    3. Pro-active inclusion by DRIVER
  – DRIVER Guidelines / Validation process

DRIVER Guidelines

- Needed for building high-quality services
- Standardise record quality in harvested IRs
- Based on DINI-certificate, DAREnet, ePrints UK
- Very lightweight
- v.2 just published
- Guidelines include:
  - OAI-PMH protocol guidelines (eg use of 'sets' that identify collections of full-text – since not all full text…)
  - Metadata requirements for repositories (since Dublin Core interpreted in different ways…)

Validation tool – why?

- Automation of DRIVER guidelines
- Self-test for repository managers via portal
- Inclusion in 'clean' aggregration
  - Added value services build only on validated records
- Influence ranking of search results

- NB: Not essential to comply with guidelines to join DRIVER, but provide general good practice for IRs anyway

An open infrastructure…

○ D-NET software can be configured and used by other communities

– to deploy new services on top of existing infrastructure

– to deploy a new DRIVER infrastructure to serve other communities

○ Configured services can run in same environment

– applications can share services

• Recolecta, DART - access subset of info space

D-NET configuration: Recolecta

D-NET configuration: DART Europe

D-NET configuration: Belgium

Next version of D-NET…

○ 'Enhanced publications'
- Type of complex object
- Publication with 'additional materials' eg datasets, images, video, software, annotations
- Explicit links between components (each has own persistent identifer)

○ Demonstrator of EPs - uses OAI-ORE

○ Technology watch, includes:
- Interoperability [eg ISO OOXML…]
- CRIS
- Long term preservation

Mentor service

- For repository managers/developers
- Peer support – one-to-one advice and guidance
- Share best practice and experience
- Potential 'mentees' submit request to DRIVER mentor service:
    - http://www.driver-support.eu/mentor.html
- Mentor service identifies mentor with relevant expertise (if consider that existing online resources cannot meet needs)

DRIVER Portal and Wiki

- Portal
  - Access information and support
  - www.driver-community.eu
- Wiki
  - Contribute to DRIVER community
  - www.driver-support.eu/pmwiki

DRIVER Portal

DRIVER wiki

DRIVER Confederation of European Repositories

- An organisation which will exist beyond the duration of the DRIVER project
- Initial focus on Europe, but with international alliances from the beginning
- Confederation partner types:
  - Consortium – funded by DRIVER project
  - Network – provide content
  - Correspondent – various eg software providers, subject communities, research/funding organisations
- Launch planned for October 2009
- Advisory Board set up (LIBER, Istanbul)
- Need to establish a new, independent legal body or merge with an existing organisation?

How does DRIVER relate to national repository communities?

- National communities are usually represented by country 'correspondents'
  - One institution or a group of institutions takes responsibility to build a national repository community (eg DARENet, SHERPA, OA-Netzwerk, Recolecta, HAL)
- Country correspondents may eg:
  - Maintain national repository information on the DRIVER wiki
  - Organise repository events in their countries
  - Translate repository guidelines and other relevant information into national languages
  - Build up national data aggregators, clean data, offer additional services

How does DRIVER relate to international repository communities?

○ DRIVER sees its mission as
  – Catalyst for a global repository infrastructure
  – Develop and maintain the European repository infrastructure node

○ DRIVER already liaises with institutions and initiatives from the majority of European countries, the US, Canada, Latin America, China, Japan, India and Africa

○ DRIVER has signed MoUs with SPARC Europe, LIBER, eIFL, Recolecta Spain, OA-Netzwerk Germany and DRF Japan

Find out more at OAI6…

○ DRIVER tutorial @ OAI6, Geneva

  – 17 June 2009, 0900 – 1130

○ Programme focus on how to get involved in DRIVER, to include:

  – Confederation

  – Registration/validation

  – Guidelines for data providers

  – Tools for service providers

  – Mentor service

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- DRIVER II Project
- http://www.driver-community.eu/

- Supported by European Commission

- Available for re-use -