

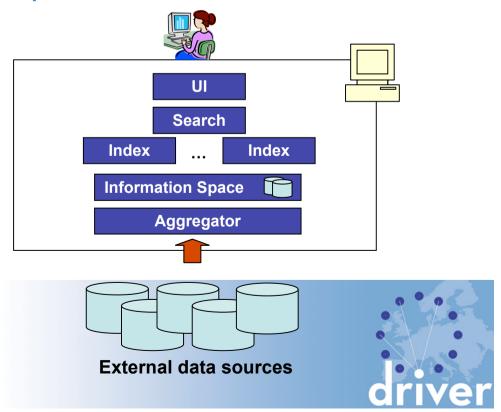
"European Information Space: Infrastructures, Services, and Applications Workshop"

Paolo Manghi ISTI-CNR

paolo.manghi@isti.cnr.it

#### DRIVER Infrastructure

- Targets VREs addressing "data integration"
  - Examples in Europe: DARE (NL), BASE (DE),
     PUMA (IT), DART Europe, etc.
- In order to
  - Overcome high
     maintenance costs,
     low degrees
     of scalability, and
     data sharing



#### DRIVER Resource KITs

- DRIVER middleware currently outsources two application paradigms
  - Data aggregation KIT
  - End-user functionality KIT
- Open to other application paradigms



# DRIVER Data Aggregation KIT

- Harvesting tools
  - Easy "harvesting" of heterogeneous external data resources
- Aggregation tools
  - Data manipulation: e.g. enrichment, modification, transformations
  - Definition of *Information Spaces:* new data, of higher quality
- Data storage and access outsourcing
  - Automatic management of data storage and data access (sharing, replication, indexing, etc)

### DRIVER End-User functionality KIT

- User Interfaces
  - Automatic adaptation to different Information
     Spaces features
- User profiling tools
  - Acquiring and exploiting user interest info
- User Community management
  - Enabling and easing the process of data selection activities
- User Recommendation mechanisms

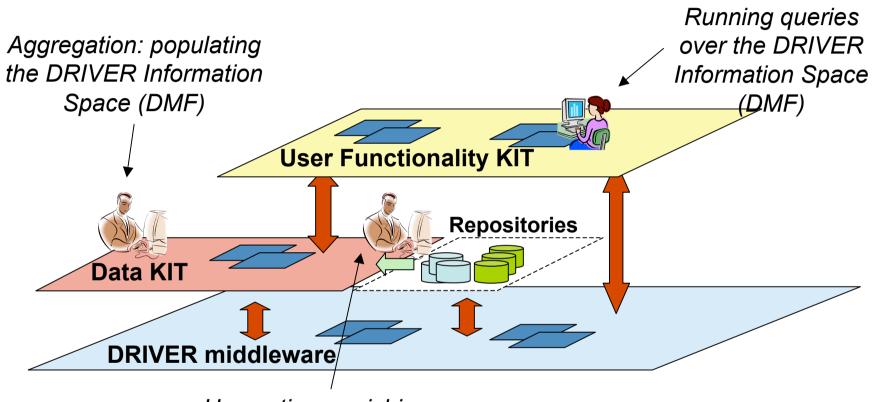


## DRIVER European VRE

- European VRE for Open Access publications
  - Harvests content from European Repositories
    - Now: 51 Repositories for a total of 250.000 Open Access documents
    - Soon: up to 73 Reps by the end of the year
  - Maintains one European Information Space
    - DRIVER Metadata Format (DMF)
- Other VREs are to join DRIVER in the near future
  - Adding new content
  - Sharing existing content



#### DRIVER infrastructure: the DEMO



Harvesting: enriching DRIVER with content from OAI-PMH Repositories



#### **DEMO** links

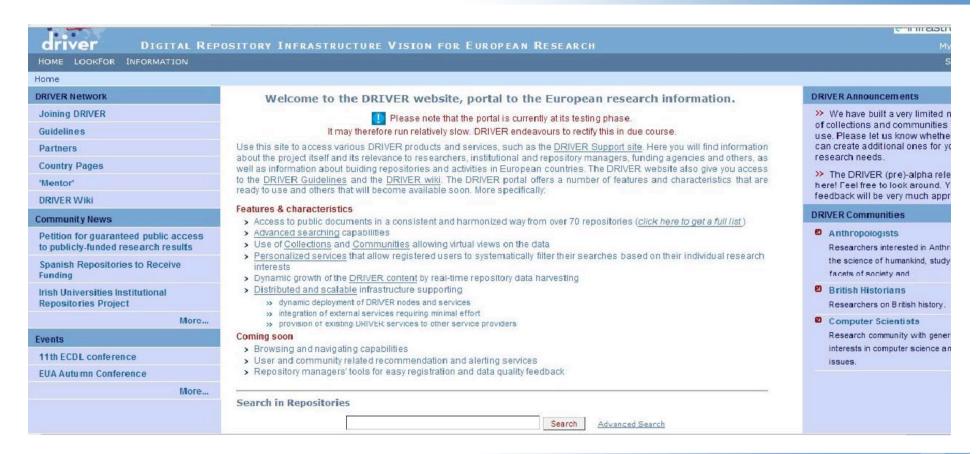
- http://search1.driverrepository.eu/webInterface/
- http://driver10.isti.cnr.it/
- http://129.70.12.42:8007/cgibin/ASmanager.pl



- Open Alpha release on DRIVER Information Space, final release by the end of the year
- Operates over the DRIVER Information Space and DMF documents
- It includes many functionalities, such as user registration and profiling, collections and communities, others will be introduced soon, such as browsing or user private collections
- From here we can search the whole information Space or focus on a subset by using collections
- For example:
  - we run the guery: "american election"
  - Select the second document
  - Show the DMF: data cleaning, repository info, country
  - Enables definition of collections not only content-based but location-based
  - Show the document splash page
  - Get back to the search page and leave it there (it will be used for the same query)
- Move to the administrative interface, from which we can manage all infrastructure resources
- For example: monitoring of Nodes/Services and Repositories, thus external resources
  - New instances of the services can be added or removed and the infrastructure will keep the VRE's operative by expliting the
    resources currently available
- We can also register a new Repository
  - New repositories are registered and put in "pending" mode, waiting for validation from an administrator
  - The validation of a repository to be harvested requires the allocation of storage space, of indexes, and the notification to the
    administrators that will have to configure the harvesting operation
- For example we can validate the Repository British Library as we know it contains documents related with "american election" to see the immediate effect of the harvesting
- Open Aggregator in other Browser TAB
- These effects can be tracked down through the list of data structures created by the infrastructure
- Run again in the first tab the same guery



# Home page





# Query results





### DRIVER Metadata Format

HOME LOOKFOR INFO	RMATION	SUPPORT
Occument Information		
THE RECENT US ELEC	TION AS AN INFORMATION SYSTEM CASE STUDY	
CREATOR(S):	Heng, Michael S.H.;	
Description:	This paper adopts an information systems perspective to study the recentAmerican presidential election. The election may be seen as a decision makingprocess to choose the leader to represent the wishes and interests of the people. Thesystem supporting the process is an information system, with information technology,inputs, outputs, users, human operators, procedures, assumptions, and goals. Theinformation system is supposed to serve as an objective instrument to support the decision making process of political election. But its functioning is deeply embedded in the political life, with its history, institutions, procedures, norms and strengths andflaws. The output of the system is thus a good enough answer, rather than the mostaccurate answer. All these aspects feature prominently in the recent election. Inaddition, the impasse in Florida reveals several problems; the more important ones are(1) the controversy surrounding voting cards that not clearly punched (2) the use ofoutdated technology, (3) the tension between democratic ideal and legal and political expediency.	
Publisher(s):	Vrije Universiteit Amsterdam	
CONTRIBUTORS(S):	5	
REPOSITORY		
NAME	DSpace at Vrije Universiteit Amsterdam	
LINKS	Repository Info   Repository's web site	
COUNTRY	NL NL	
INSTITUTION		
SUBJECT(s):	history; L86; political expediency; truth; meaning; American presidential election.; interpretation; socially embedded; procedures;	
TYPE(S):	Research paper	
LANGUAGE(S):	English	
Doc Link:	View this document	
Model:	OAI;	
METADATA FORMATS:	oai_dc;	
PUBLICATION DATES(S):	2004-01-05	
COLLECTION DATES(S):	2007-10-07T08:09:19Z	

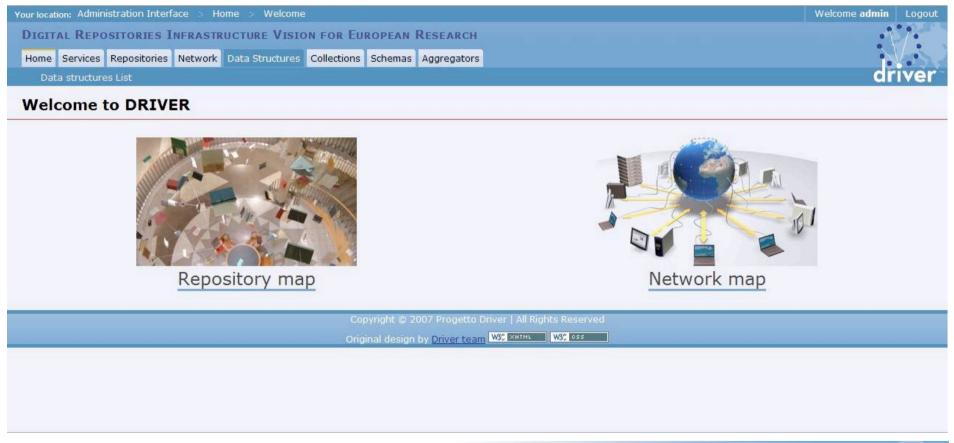


#### Virtual collections





#### Administrative interface





# Repository management





## Node and Service management





# Repository registration and validation





# Repository harvesting and aggregation



DRIVER Aggregator Manager - OAI Admin Panel

List of Repositories

Repository Information

Identify - ListSets - ListMetadataFormats

#### Harvesting

Nr.	Format unit	Status	Last Harvesting Date	Harvestingtype	Harvesting schedule
1	oai_dc	inactive	2007-10-28T17:25:46Z	REFRESH	WEEKLY

#### **Aggregating**

Start aggregating Test Mapping Re-Feed				
Repository:	British Library Research Archive			
Repository ID:	14-a8a2cc8b-b42c-442f-a67c-a5a3fde13c34_UmVwb3NpdG9yeVNlcnZpY2VSZXNvdXJjZXMvUmVwb3NpdG9yeVNlcnZpY2VSZXNvdXJjZVR5cGU=			
Usprocting	17_303ddb3_b31d_400h_3f4b_3d741d993f10_9C5vdmVzdClu70lug3BbbmNlDEN97VNvdV1i7VMv9C5vdmVzdClu70lug3BbbmNlDEN97VNvdV1i7VD5cCll=			

