



Open Access to Grey Resources

Nancy, France 5-6 December 2005 INIST-CNRS
Seventh International Conference on Grey Literature

Assisting scientists to make their research results
world wide freely available: an experience begun in
the 90s

Stefania Biagioni

Institute of Information Science and Technologies (ISTI)
Italian National Research Council (CNR)





NCSTRL
Networked Computer Science Technical Reference Library

Contents

- The beginning
- The state of the art
- The evolution
- Conclusions





An experience begun in the 90s

1996 CNR (ISTI) is appointed as coordinator of the “Ercim* Digital Library Initiative” and is given the task of creating a research community in the Digital Library (DL) field in Europe.

One of its activities** is setting its own DL up to assist scientists to rapidly access, disseminate, manage and preserve over long term their intellectual output, in digital format, world wide over the web.

*European Research Consortium for Informatics and Mathematics

**project funded by: ERCIM and DELOS Working Group on DL (ESPRIT Long Term Research Programme - LTR No. 21057)



An experience begun in the 90s (cont.)

1996-97 Ercim Librarians and Members of DL WG meet in Budapest and in Pisa and decide to build the the **ERCIM Technical Reference Digital Library**

as a specialized sub-collection of

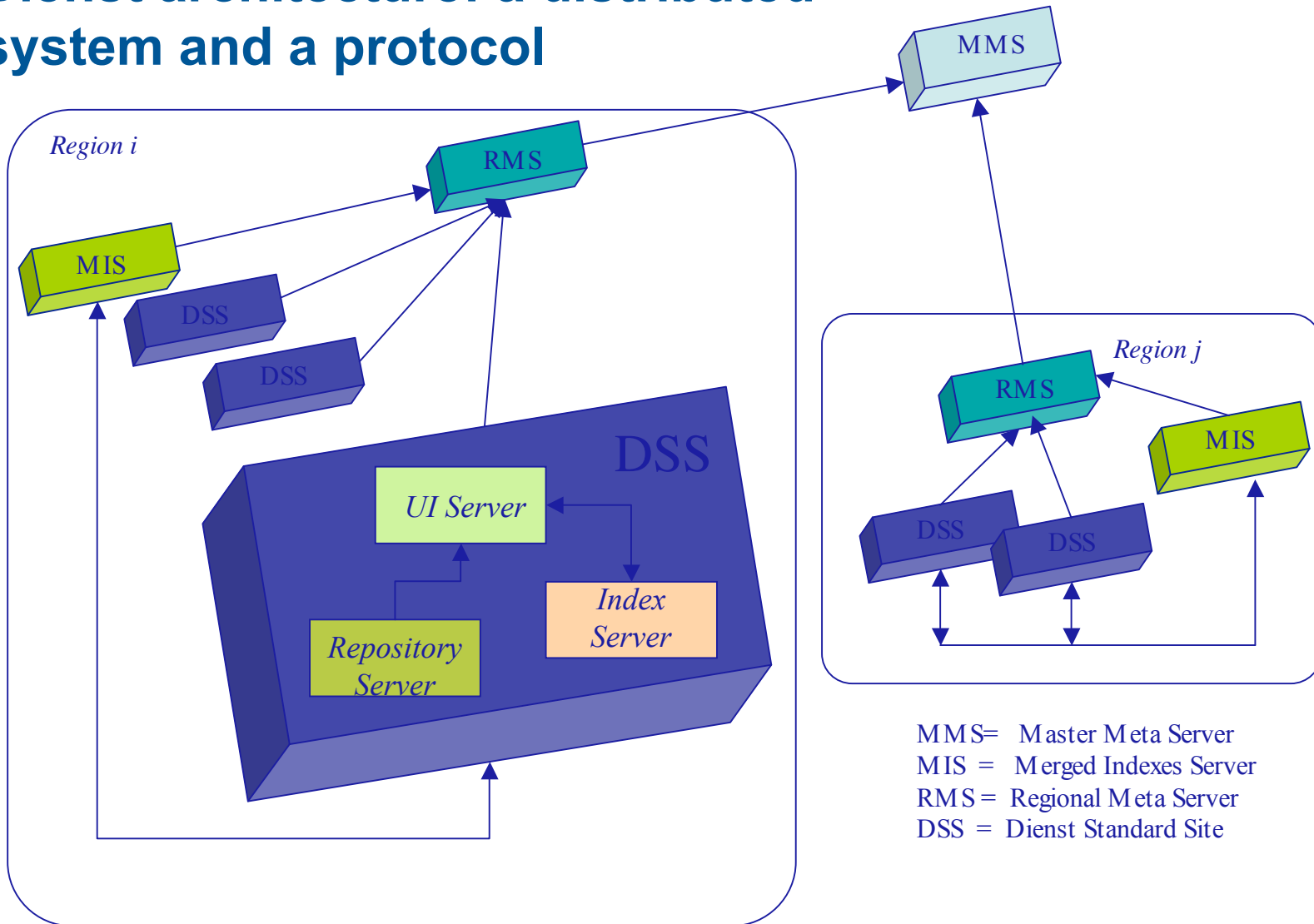
NCSTRL - U.S. Networked Computer Science Technical Reference Library

with extended functionality to meet the needs of a European Digital Library service

using **Dienst** technology (in collaboration with US Cornell University)

which allows: **networked access** to a globally distributed collection of grey resources and **on-line services** to assist scientists in publishing their work results, to review papers and administrate the repositories

Dienst architecture: a distributed system and a protocol





the first prototype (1997-1999)

Partners

CNR - Italy

CWI - The Netherlands

FORTH - Greece

GMD - Germany

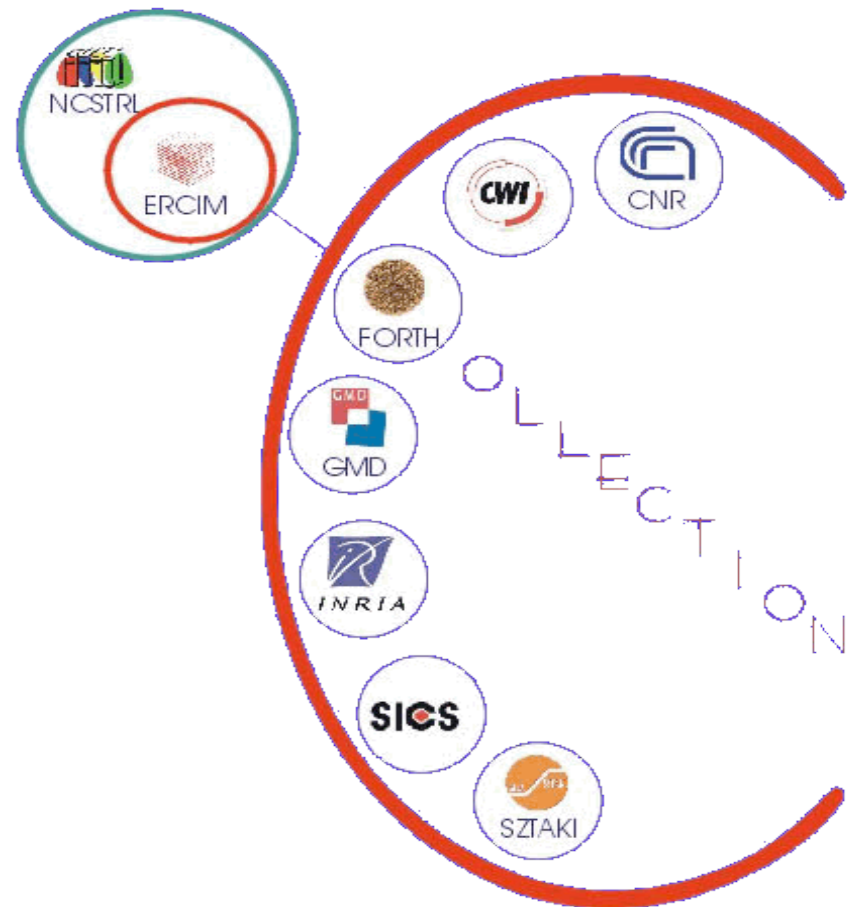
INRIA - France

SICS - Sweden

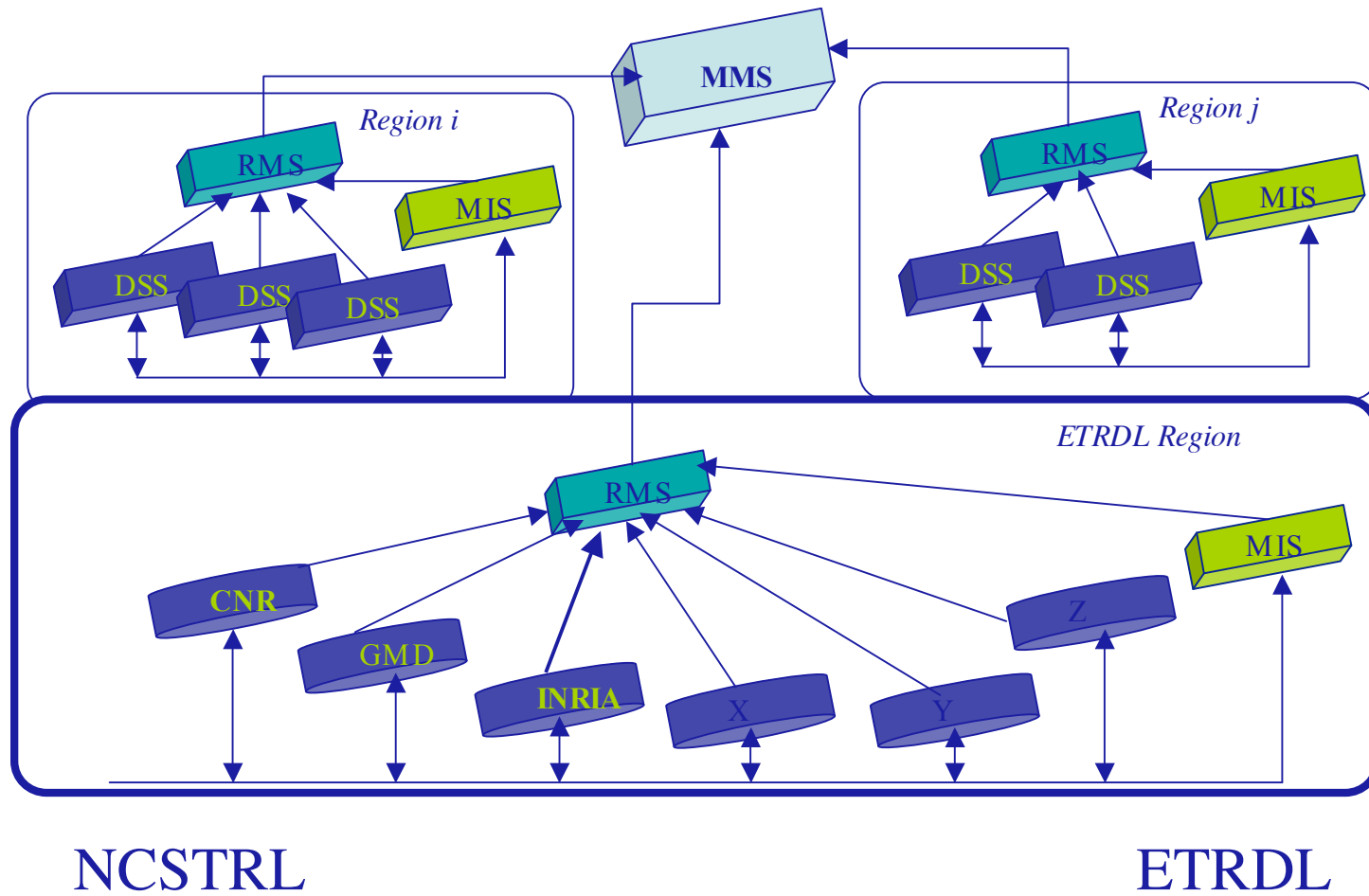
SZTAKI - Hungary

**FIMU - University of Masaryk
(Czech Republic)**

(<http://dienst.isti.cnr.it>)



Dienst --> ETRDL region





additional functionality to meet the European needs

- Multilingual information access
 - user interface localization
 - different character set manipulation
 - cross language search
- Search and Browse
 - Browsing extensions by subject (ACM, MSC, Free keywords)
 - Search extensions by subject, date, language, type
 - more complex query structures
- Services
 - submission, withdrawal
 - administration



Multilingual information access and submission

The image displays a collage of overlapping Netscape browser windows, illustrating the multilingual access to the ETRDL (European Technical Reference Library) website. The windows show the website's interface in different languages:

- Italian:** Shows logos for CNR (Consiglio Nazionale delle Ricerche, Italy), ERCIM (European Research Consortium for Informatics and Mathematics), and NCSTRL (Networked Computer Science Technical Reference Library).
- Swedish:** Shows logos for SICS (Svensk Institute of Computer Science) and ERCIM.
- French:** Shows logos for INRIA (Institut national de Recherche en Informatique et en Automatique, France) and ERCIM.
- Hungarian:** Shows logos for MTA SZTAKI (Magyar Tudományos Akadémia Számítéstechnikai és Automata-informatikai Kutatóintézete) and ERCIM.

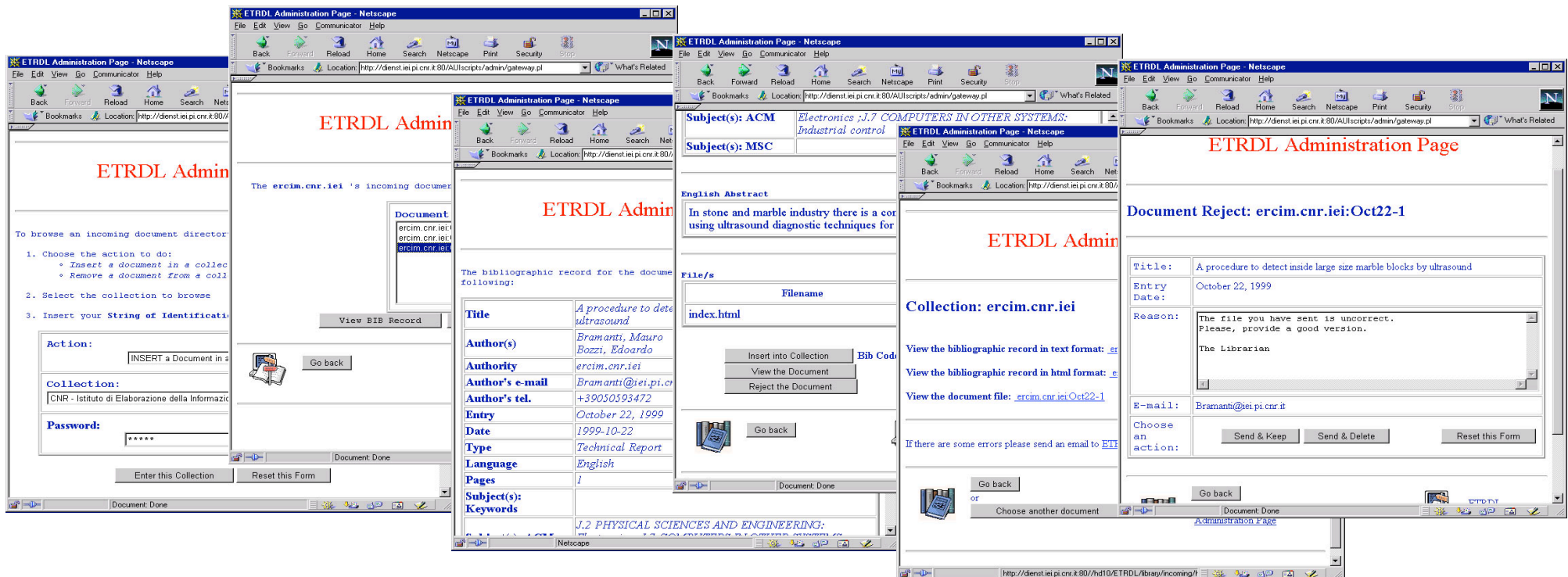
The Hungarian window prominently features the text "ERCIM Digitális Preprint Könyvtár (ETRDL)" and lists search options in Hungarian: "AQUA Kísérleti keresőfelület", "Keresés / Böngészés a teljes NCSTRL gyűjteményben", "Keresés / Böngészés az ERCIM gyűjteményében", and "Keresés / Böngészés a helyi gyűjteményben". It also includes a search bar and navigation links.



Administration service

Partners are responsible for implementing their own administrative procedures.

Here below we show the default system interface.





Today: it is an operational service

- **ETRD** is an institutional repository which collects, manages and disseminates documents of CS and Maths (actually working at CNR) integrated in the context of library information systems

moreover, exchanges metadata with centralized CNR grey literature database

Together with **PUMA-DL**, a special instantiation to collect published works with controlled access, realizes the bibliography of some CNR Institutions

- **ETRD-DEMO** has been set up for training courses



Today: special instantiations in the field of Marine Biology

- **MeCME DL - Mediterranean Coastal Marine Environment** is a Digital Library made up in order to collect multidisciplinary documentation concerning scientific studies in the Mediterranean coastal areas and in particular in the Southern one, including also specific studies on Taranto Gulf. (Library of the Institute Talassografico “A. Cerruti”- IAMC-CNR) <http://mecme.isti.cnr.it>
- **LVDL - Laguna di Venezia DL** is a multidisciplinary archive created in order to collect the multidisciplinary documentation arising from the scientific studies on the Lagoon of Venice. (Vallisneria Library, Palazzo Grassi and Hydrobiological Station in Chioggia, Geology, Paleontology and Geophysics Library (University of Padova) Naturalistic Observatory of the Lagoon and the Natural History Museum of Venice, Department of Environmental Sciences of the Ca' Foscari University of Venice). <http://laguna.isti.cnr.it/>



Evolution: migration to OpenDLib (<http://www.opendlib.com>)



OpenDLib: the new OAI, compliant DL service system, developed at ISTI following the experience made with ETRDL

- allows to create a digital library easily, according to the requirements of a given user community, by loading or harvesting the content to be managed



Evolution: migration to OpenDLib



OpenDLib is a federation of services which offers:

Main functionality of a digital library

submission, description, store, access, distribution, long term preservation, peer-review, administration

Users management service:

registration, maintaining of users profiles, authentication, authorization

Personalization service:

construction and dynamic modification of personalized virtual views of the information space

Infrastructure service

shared management and dynamic configuration of services



Evolution: migration to OpenDLib



Type of documents:

- a powerful and flexible document model capable to represent
 - multi-edition, structured, multimedia documents that can be disseminated in multiple manifestation formats
- and allows any document to be associated
 - with multiple metadata descriptions in different formats and include semantic relationships with other documents and parts of them

Virtual collections:

- Information space is organized in collections
- Collections are virtual and dynamically defined by authorized users
- Collections content is updated automatically
- Access rules and services may be associated to a collection

First prototype: ETRDL powered by OpenDLib, search service

The screenshot displays the ETRDL search interface in a Mozilla Firefox browser. The main window shows search results for the query 'pagano'. The results are presented in a table-like format with columns for 'rank', 'handle', 'version', 'dc:creator', 'dc:date', and 'dc:title'. Two results are visible, each with a 'view this document' button. A 'Manifestation' window is open, showing DublinCore cataloging information for the selected document. A 'Document viewer for ercim' window is also open, displaying the 'ARCA Target Configuration Interface Manual' by Baldacci, Maria Bruna and Pagano, Pasquale, dated May 4, 1999 and 1997-06-02. The interface includes a sidebar with navigation links (Home, Community, Information space, Search, Browse) and the OpenDLib logo. The browser's address bar shows the URL 'http://metabib.isti.cnr.it:8000/'.

Search Results:

rank	handle	version	dc:creator	dc:date	dc:title
73% ★★★	ercim.cnr.iei/1997-ARCA-TI4-TIM	1	Baldacci, Maria Bruna Pagano, Pasquale	May 4, 1999 1997-06-02	ARCA Target Configuration Interface Manual
73% ★★★	ercim.cnr.iei/1997-ARCA-TI4-TID	1	Baldacci, Maria Bruna Castelli, Donatella Pagano, Pasquale	May 4, 1999 1997-05-26	ARCA Target Configuration Interface Design Document

Manifestation:

DublinCore cataloging information/

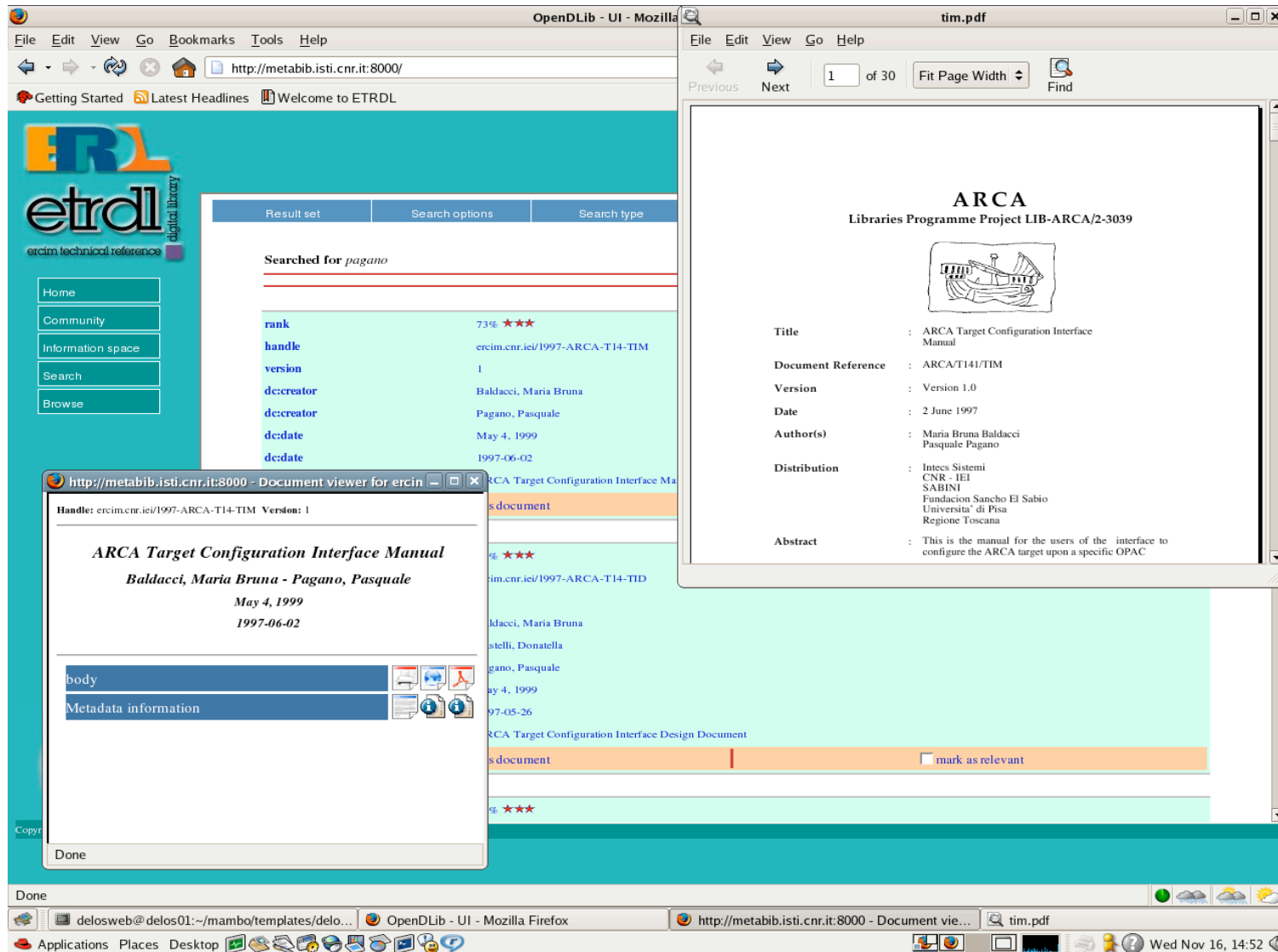
dc:creator Baldacci, Maria Bruna
dc:creator Pagano, Pasquale
dc:date May 4, 1999
dc:date 1997-06-02
dc:description This is the manual for the users of the interface to configure the ARCA target upon a specific OPAC.
dc:language English
dc:subject H-5-2 User Interfaces
dc:subject C-2-2 Network Protocols
dc:subject D-2-2 Design Tools and Techniques
dc:title ARCA Target Configuration Interface Manual
dc:type Text,EC-deliverable

Document viewer for ercim:

Handle: ercim.cnr.iei/1997-ARCA-TI4-TIM Version: 1

ARCA Target Configuration Interface Manual
Baldacci, Maria Bruna - Pagano, Pasquale
May 4, 1999
1997-06-02

document visualization



user management service

The screenshot shows the OpenLib UI in Mozilla Firefox. The main page is titled "ercim technical reference digital library" and has a navigation menu with "My actions", "Users Management", "Groups", and "Docs Management". The "Users Management" section is active, displaying a "Users rights management panel" table.

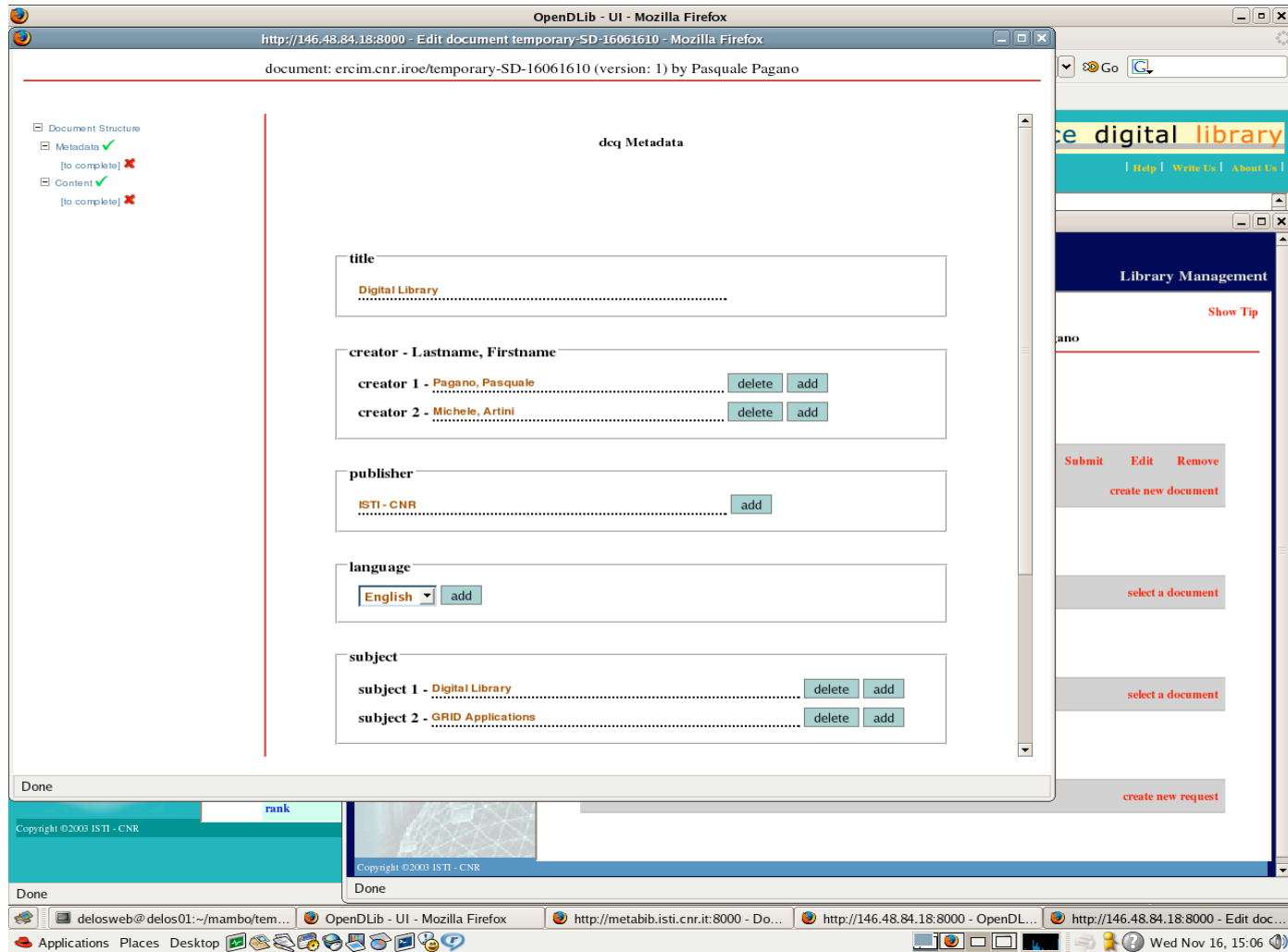
User	Authorized to administrate this DL	Authorized to administrate publishers	Authorized to approve submissions	Authorized to create collections	Authorized to review documents	Authorized to request submission to
pagano (Pasquale Pagano)	yes	ercim.cnr.iat ercim.cnr.cnuce ercim.cnr.iroe ercim.cnr.iei ercim.cnr.iit ercim.cnr.ilc ercim.cnr.imc ercim.cnr.isti	ercim.cnr.iat ercim.cnr.cnuce ercim.cnr.iroe ercim.cnr.iei ercim.cnr.iit ercim.cnr.ilc ercim.cnr.imc ercim.cnr.isti			

An "Edit user" window is open for "pagano", showing "User rights for pagano" with radio buttons for "Authorized to administrate this DL" (selected "yes") and "Authorized to create collections" (selected "yes"). Below this is a table for "Authorities":

Name	Authorized to administrate publishers	Authorized to approve submission to	Authorized to review documents	Authorized to request submission to
ercim.cnr.imc	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ercim.cnr.iei	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ercim.cnr.ilc	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ercim.cnr.iroe	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ercim.cnr.isti	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ercim.cnr.iat	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ercim.cnr.cnuce	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ercim.cnr.iit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Buttons for "update" and "clear" are at the bottom of the edit window.

submission service



Conclusions

ETRDL powered by OpenDLib advantages:

- Metadata and documents can be reused
- OAI compliancy
- Curation: automatic migration towards new formats and metadata
- Archiving: preservation on an updated support, advanced according to current technologies
- Dynamic management of collections (also harvesting from other collections)
- Management of document relationships

Conclusions (cont.)

The experience made is a positive one

- From project phase to operational service integrated with library information services
- From original system to an advanced one
- Researchers became used to disseminate their work in a free way and associate different manifestations of documents to the same objects
- Repositories have been also used as test-bed for experimental activities

Conclusions (cont.)

Some difficulties have to be overcome yet at political, social, economic level

- Lack of coordination among different institutions
- Lack of knowledge of existing systems
- Lack of training among librarians
- Lack of being used to adopt such technology by scientists working in some fields of knowledge rather than others
- Lack of funds for involved activities

Get in touch with ...

ETRDLib / OpenDLib

Stefania Biagioni - ISTI CNR (stefania.biagioni@isti.cnr.it)

Carlo Carlesi - ISTI CNR (carlo.carlesi@isti.cnr.it)

Donatella Castelli - ISTI CNR (donatella.castelli@isti.cnr.it)

Paquale Pagano - ISTI CNR (pasquale.pagano@isti.cnr.it)

Giuseppe Romano-ISTI CNR (giuseppe.romano@isti.cnr.it)

Manuele Simi - ISTI CNR (manuele.simi@isti.cnr.it)

LVDL

Antonella Zane - Bib. Vallisneri (antonella.zane@unipd.it)

Monica Ortolan - Bib. Vallisneri (monica.ortolan@unipd.it)

MeCME

Maria Filippi - Biblioteca Talassografico "A. Cerruti" IAMC CNR
(maria.filippi@iamc.cnr.it)