Self-Publishing Testbed – Report

D1.1.1

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Abstract

This report details the organization of the first course on self-publishing and the manuals written for and distributed at the course itself. The complete documentation has been made available to the public through the D-Lib Center web site (http://dlibcenter.iei.pi.cnr.it/).

Executive Summary

The course on self-publishing has started in April 2002 and it will be repeated till May of year 2003. Registration is requested as the maximum number of participants for each course is 10 persons.

The course on Self Publishing: Scholarly Publication has been held in the following dates:
10-11 April 2002
22-23 April 2002
8-9 May 2002
6-7 June 2002

The aim of the course is to facilitate moving from the current centralised, discrete publishing model, to a distributed, continuous, self-publishing model. Therefore, the D-Lib Center will make available to scholarly communities an advanced operational digital library which supports highly improved models of scientific information dissemination and access, i.e., the ERCIM Technical Reference Digital Library (ETRDL) that contains the scientific production (technical reports) of the members of the ERCIM, the European Research Consortium for Informatics and Applied Mathematics.

ETRDL offers a complete digital library service covering the needs of three types of users: authors of technical reports, information seekers, and digital library administrators. The services offered include functionality for simple and advanced search facilities; on-line controlled submission and subject classification of documents; updating and deletion of documents; and multilingual interfaces. At the same time, the system is flexible enough; a common set of core criteria guarantees interoperability between collections but there is room for differentiation at the local level. This means that the ETRDL system is defined at both the ERCIM and the local institution levels: the ERCIM collection provides common services, while each local institution customises these services, as desired, to reflect local needs.

Documentation available on the D-Lib web site:

ETRDL Search and Browse Service : User Guide

ETRDL Administration Service : User Guide

ETRDL Submit Service : User Guide

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ETRDL
Search and Browse
Service
User Guide

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ISTI - CNR

ETRDL is a digital library management system that provides access to a distributed collection of digital documents, consisting of a set of the local collections. These are published by the institutions participating in the digital library and are maintained on local servers.

ETRDL functionality regards searching and browsing ERCIM collections to retrieval existing documents, submitting new documents in a specific collection and administer the ERCIM collections via a Web user interface. The aim of this document is to present an user guide for the information seekers that want to browse the ETRDL collections and search documents in one or more selected collections..3

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1 Introduction

ETRDL is a digital library management system that provides access to a distributed collection of digital documents, consisting of a set of the local collections. These are published by the institutions participating in the digital library and are maintained on local servers.

This guide gives information on the ETRDL SEARCH and BROWSE services. In the examples, reference is made to the ETRDL system as instantiated for the ERCIM-ETRDL digital library, that provides access to a distributed collection of grey literature (technical reports, theses, workshop proceedings, pre-prints, etc.) in the areas of Computer Sciences and Applied Mathematics produced by members of the ERCIM Consortium. ERCIM requirements have influenced the definition of the user interface as for what concerns subject description and classification of documents as well as subject searching.

The ERCIM-ETRDL digital library currently provides access to collections of the following ERCIM Institutions:

- **CNR** (Consiglio Nazionale delle Ricerche - Italy),
- **CWI** (Centruum voor Wiskunde en Informatica - The Netherlands),
- **FORTH** (Foundation of Research and Technology - Hellas - Greece),
- **GMD** (German National Research Center for Information Technology - Germany),
- **INRIA** (Institut National de Recherche en Informatique et en Automatique - France),
- **SICS** (Swedish Institute of Computer Science - Sweden) and
- **SZTAKI** (Magyar Tudományos Akadémia - Számítástechnikai és Automatizálási Kutató Intézete - Hungary).

The aim of this guide is to provide a reference manual for the information seekers that want to retrieve documents from the ERCIM collections through ETRDL interface. Search and Browse services are accessible by any users.

The users of ETRDL are assumed to be moderately experienced with Web browsing. Instructions for how to use the ETRDL Search and Browse User Interface are organised in the following sections:

- Technical requirements: what the user needs to access to ETRDL.
- How to access to the ETRDL: the collections description and user interface characteristics.
- The ETRDL services: ETRDL metadata, how to retrieve document using the search service and how to explore the ETRDL collections using the browse service.

2 Technical Requirements

The user can access ETRDL via Web, this means that he/she can use which kind of computer and operating system you prefer. However, to search documents and browse ETRDL collections the user must have:

• Internet access availability

• some knowledge of Web browsing

• a Web browser such as Netscape Navigator or MS Internet Explorer having JavaScript capabilities.

As ETRDL documents have different file format (PostScript, PDF, text, HTML, TIFF) the user needs additional tools to display documents such as:

• PS viewer for PostScript documents,

• Adobe Acrobat Reader for PDF documents,

• TIFF viewer for TIFF images.

3 Access to ERCIM-ETRDL Digital Library

ETRDL provides the access to a distributed collection, consisting of the set of the local collections. These are maintained on the local servers of each partner institution. This has comported the implementation of two levels of Homepages. For the ERCIM-ETRDL digital library, a centralised access point has been provided to the system through the Web site <http://www.iei.pi.cnr.it/DELOS/EDL/ETRDL_Con/ETRDL_C.html>, whereas a local homepage is installed on each local server.
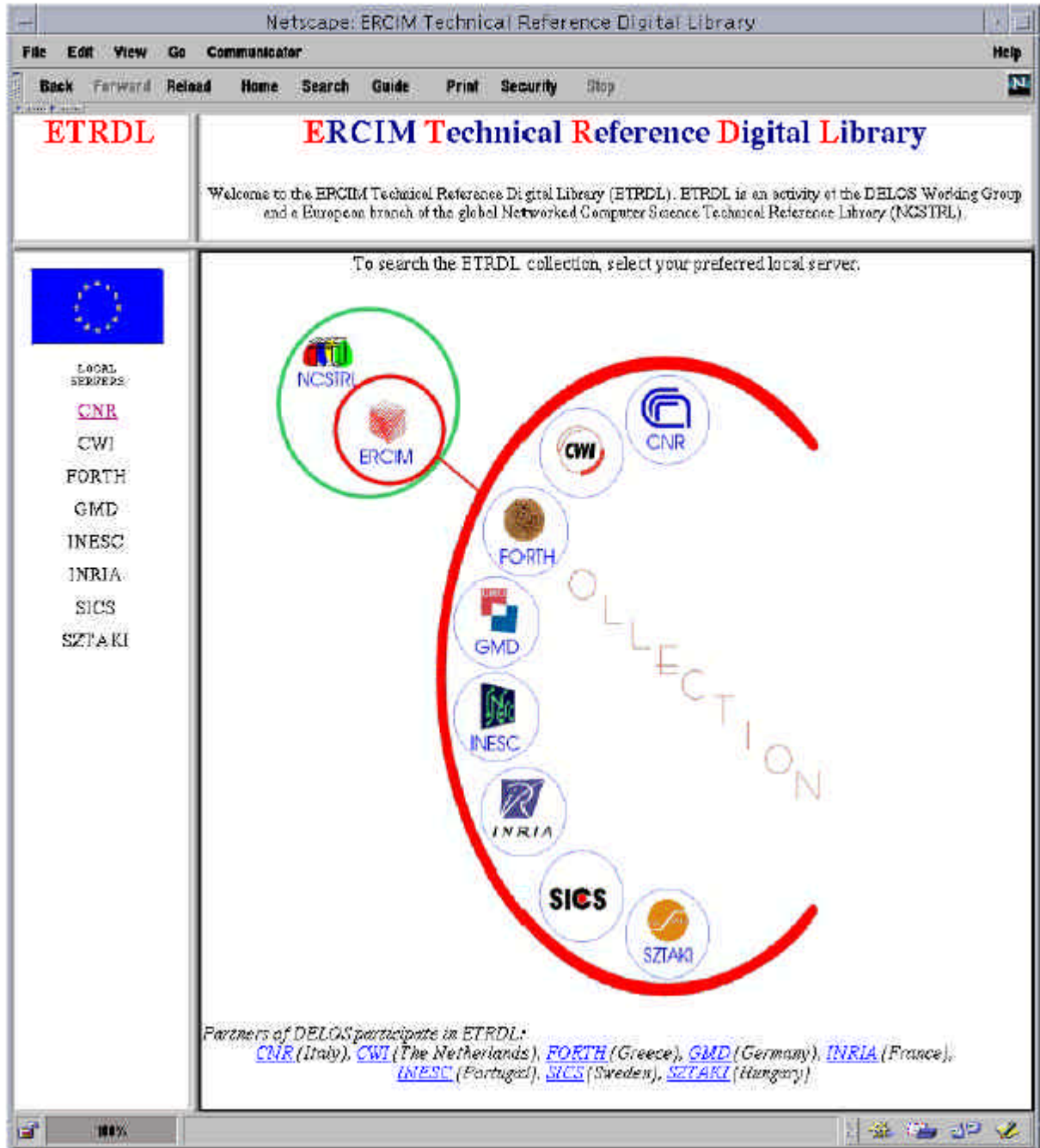
Figure 3-1 The centralised homepage.

The user who accesses the system through the centralised homepage (see Figure 3-1) can access a local server by clicking one of the Institution logos which are shown in the main picture or he/she can use the Institution hyperlink in the left frame (at present FORTH and CWI servers are not accessible). For example if the user clicks the CNR logo or hyperlink he/she accesses to the CNR local server. In Figure 3-2 the CNR local homepage is shown.

Figure 3-2 CNR homepage.

The local homepage interface caters simultaneously for two user classes: information seekers and information providers by offering two main options: search/browse any collection (these services are explained below); submit/withdraw a document to/from a local collection. From the local homepages, the search and browse functions can be activated over the ERCIM collection, or over the collection(s) of the local institution (the collections a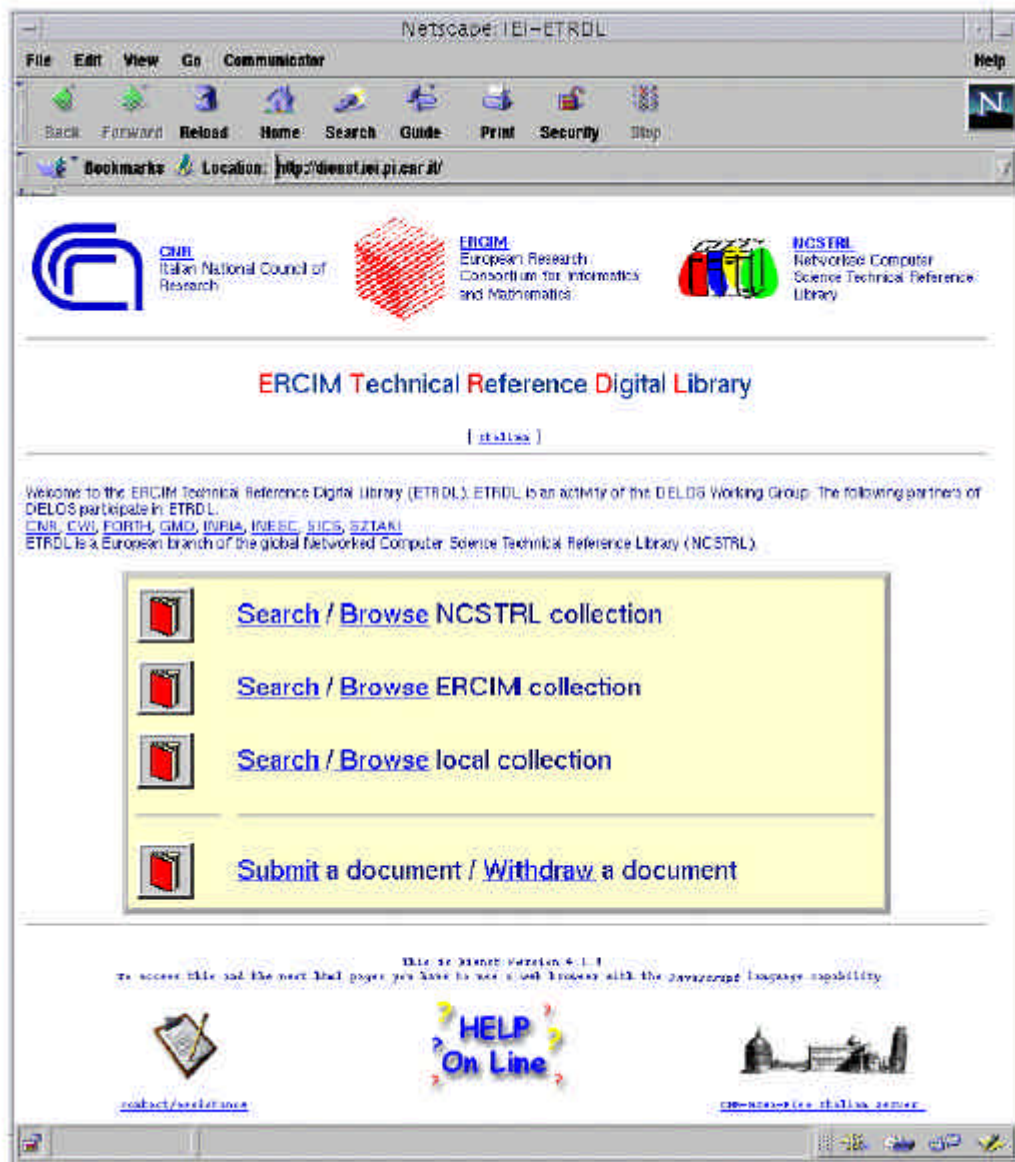re described below); access to NCSTRL collection is presently denied. Note that local collections are disjoint sub-sets of the ERCIM collection (see Figure 3-3).

NCSTRL -⸸ETRDL-⸸CNR – SICS – INRIA …..

Figure 3-3 NCSTRL, ERCIM and local collections.

In each case, the user is not only accessing a different collection (or sub-collection), but is provided with a different perspective on the information, depending on the functions that have been implemented at that particular level, this means that ETRDL services are specialised depending on the particular collection.

3.1 NCSTRL collection [NOTE: this collection is presently not accessible]

NCSTRL (pronounced "ancestral") is an international collection of computer science research reports and papers made available for non-commercial use from a number of participating institutions and archives. Some of the documents in NCSTRL are part of the technical report collections of participating institutions. For the most part, NCSTRL institutions are universities that grant PhDs in Computer Science or

Engineering, with some industrial or government research laboratories. Other documents are contents of other document archives that participate in the NCSTRL technical infrastructure. NCSTRL stands for Networked Computer Science Technical Reference Library .

3.2 ERCIM collection

The ERCIM collection consists of all kinds of grey literature produced by the participating ERCIM Institutions (technical reports, proceedings of conferences or workshops, theses, project deliverables, etc.) and is managed by a set of interoperating servers. At present, ETRDL server sites have been set up at five of the seven participants in the ERIM-ETRDL project (see Table 3-1). The user that accesses to the ERCIM collection perceives it as a federation of collections. Each collection is composed of the documents produced by a single ERCIM Institution (publishing authority) except for the CNR collection that it is a federation of collections too.

Institutions	Server URL	Server Physical location
CNR (Italy)	http://exlibris.ian.pv.cnr.it	CNR-IAN
	http://dienst.cib.na.cnr.it	CNR-IC
	http://dienst.iei.pi.cnr.it	CNR-IEI
	http://dienst.iesi.ba.cnr.it	CNR-IESI
	http://dienst.ifcai.pa.cnr.it:8080	CNR-IFCAI
CWI (The Netherlands)	**Not available**	
GMD (German)	http://ncstrl.gmd.de:80/Dienst/htdocs/index.html	GMD
FORTH (Greece)	Not available	
INRIA (France)	http://www-ncstrl.inria.fr/Dienst/htdocs/index.html	INRIA
SICS (Sweden)	http://dienst.sics.se	SICS
SZTAKI (Hungary)	http://www.szataki.hu:8000	MTA-SZTAKI

Table 3-1 ERCIM servers.

3.3 Local collection

A local collection consists of all kinds of grey literature produced by a single ERCIM Institution. A local collection can be composed of sub-collections, for example the CNR collection is composed of fifteen CNR Institutions (see the Table 3-2).

Institutions	Server URL	Server Physical location
Area della Ricerca (Palermo)	http://dienst.ifcai.pa.cnr.it:8080	CNR-IFCAI
Istituto CNUCE (Pisa)	http://dienst.iei.pi.cnr.it	CNR-IEI
Istituto di Analisi Numerica (Pavia)	http://exlibris.ian.pv.cnr.it	CNR-IAN
Istituto di Cibernetica (Napoli)	http://dienst.cib.na.cnr.it	CNR-IC
Istituto di Elaborazione dei Segnali e delle Immagini (Bari)	http://dienst.iesi.ba.cnr.it	CNR-IESI
Istituto di Elaborazione della Informazione (Pisa)	http://dienst.iei.pi.cnr.it	CNR-IEI
Istituto di Fisica Cosmica con Applicazioni all'Informatica (Palermo)	http://dienst.ifcai.pa.cnr.it:8080	CNR-IFCAI
Istituto di Linguistica Computazionale (Pisa)	http://dienst.iei.pi.cnr.it	CNR-IEI
Istituto di Matematica Computazionale (Pisa)	http://dienst.iei.pi.cnr.it	CNR-IEI
Istituto di Ricerca sulle Onde Elettromagnetiche (Firenze)	http://dienst.iei.pi.cnr.it	CNR-IEI
Istituto di Studi sulla Ricerca e sulla Documentazione Scientifica (Roma)	http://dienst.iei.pi.cnr.it	CNR-IEI
Istituto di Tecnologie Didattiche e Formative (Palermo)	http://dienst.ifcai.pa.cnr.it:8080	CNR-IFCAI
Istituto per le Applicazioni Telematiche (Pisa)	http://dienst.iei.pi.cnr.it	CNR-IEI
Istituto per la Matematica Applicata (Genova)	http://exlibris.ian.pv.cnr.it	CNR-IAN
Istituto per le Applicazioni della Matematica e dell'Informatica (Milano)	http://exlibris.ian.pv.cnr.it	CNR-IAN

Table 3-2 CNR servers.

3.4 The multilingual user interface

The ETRDL has a bilingual user interface, as most local servers maintain interfaces in English and in the local language. When the user accesses an ETRDL local homepage the system shows him/her the English user interface. Depending on the local server selected, the user are given a choice of language. To switch to the local language user interface he/she must click on the hyperlink below the title of the homepage. (see Figure 3-4).
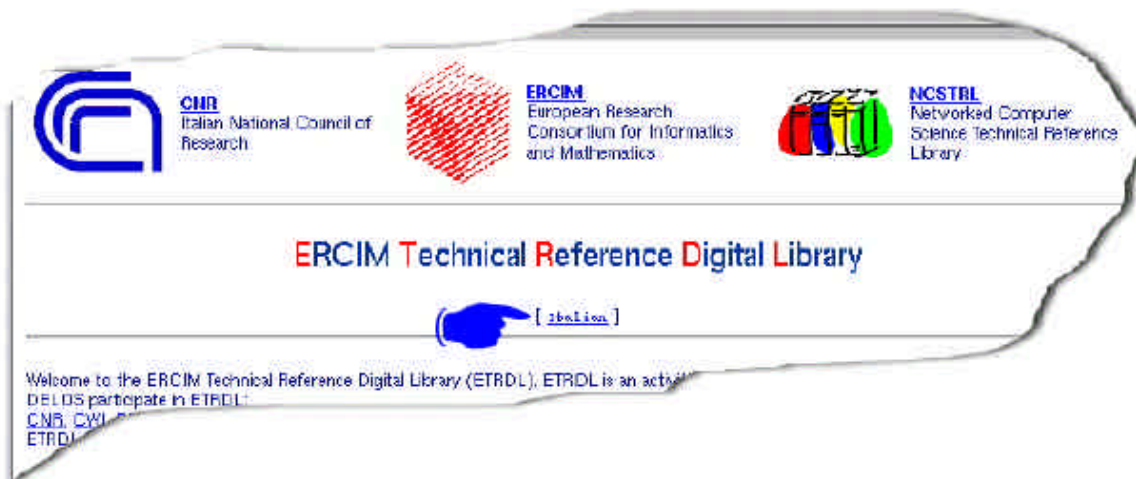
Figure 3-4 Choose local language user interface.

For example, if the user accesses to an Italian CNR server he/she can switch to the Italian homepage that appears as shown in Figure 3-5.

Figure 3-5 The Italian version of the ETRDL homepage at CNR site.

3.5 The ETRDL on-line help

ETRDL on line help is available by clicking on the "HELP" button at the bottom of the homepage (see Figure 3.5). This documentation is directed to four different kind of users: the system administrators, the digital library administrators, the information seekers and the information providers. System administrators are involved in the installation and configuration of the system and digital library administrators are involved in the management of the ETRDL documents (Figure 3-6).
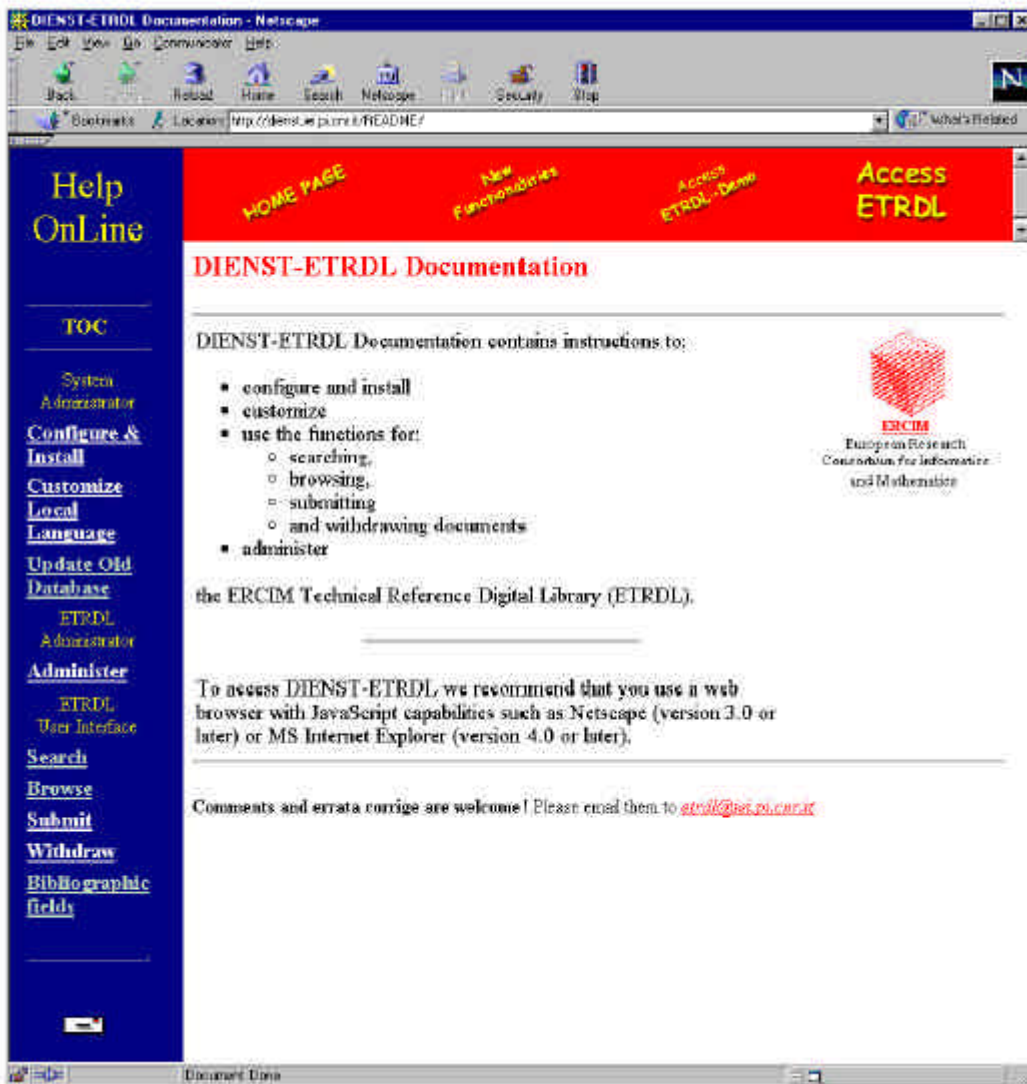
Figure 3-6 ETRDL help on line and documentation. The homepage**.**

During the search session users can access the help document directly from the search page as shown in Figure 3-7. Depending on the chosen language for the interface the user can access the on-line helps either in English or local language.
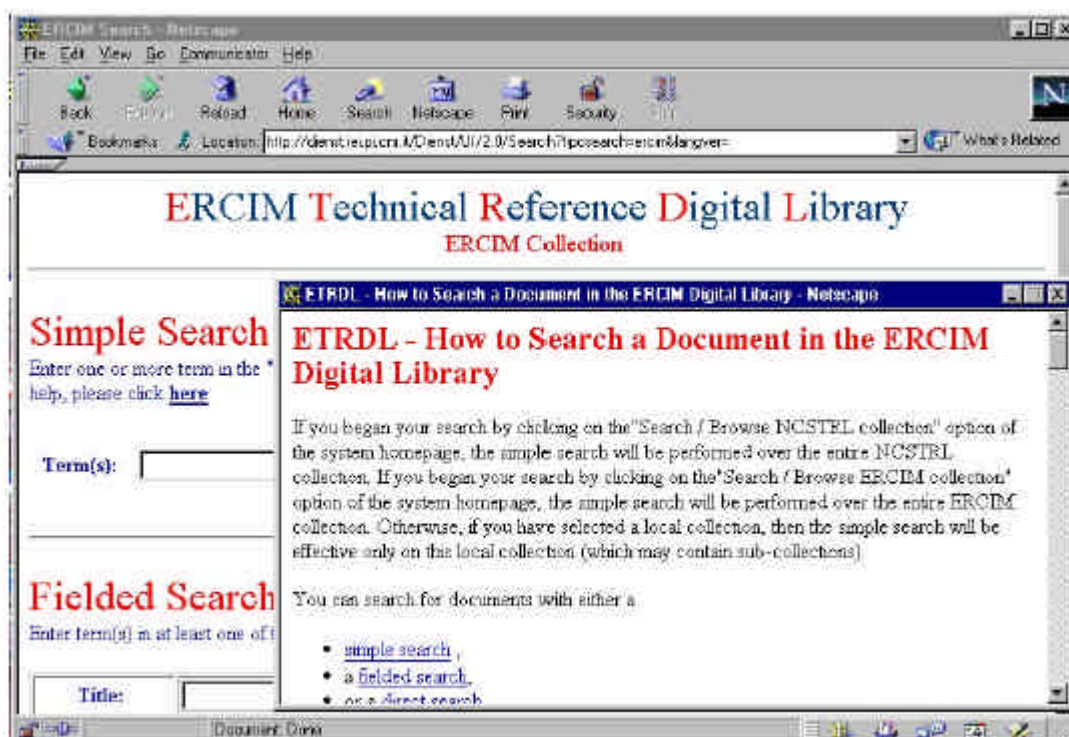
Figure 3-7 Search procedure help on line.

4 ETRDL Services

There are three main classes of ETRDL services:
1 Search and browse
2 submission/withdrawal of documents
3 DL administration
The ETRDL *search and browse service* offers functionality such as subject searching and browsing, moreover provides users with a basic cross-language search functionality. The *submit/withdraw service* aims at assisting the authors by providing facilities to classify their documentation (using classification schemes for both computer science and the mathematics) quickly, easily and correctly. The *administration service* assists the librarians by providing mechanisms to manage the digital documentation efficiently.

In this document search and browse services are described. The search and browse services are different depending on the collection selected (NCSTRL, ERCIM or local). The user can choose to search over the entire ERCIM collection or select one or more specific Institution (publishing authority) to restrict the information space. Indeed, the browse service allows to explore a single publishing authority: this helps the user to realise which kind of information he/she can retrieve from a certain publishing authority.

For more information about the submit and the administration services please refer to Submission and Administration guides, respectively.

4.1 ETRDL Metadata
In the ERCIM and Local collections each document has a common metadata description associated. This description is based on the Dublin Core metadescription standard.

Title, author and abstract are the basic metadata elements used by search and browse services. The full ERCIM-ETRDL metadata set comprehends the following additional elements: abstract in local language and its language, subject (free keywords, ACM and MSC codes/descriptors), type, year and language of the document.

The user can employ the ACM Computing Classification [ACM98] and/or the AMS Mathematics Subject Classification [MSC91], and/or free keywords to represent subject terms for document classification during the submission procedure and for retrieval when querying the system.

The ACM and AMS schemes are accessible on-line and can be browsed during both retrieval and submission; codes with associated descriptors can be selected and inserted in the appropriate fields.

Authors must enter codes/descriptors from at least one classification. Searches are performed on all three fields by default.

4.2 SEARCH service

ETRDL offers three kinds of search service to satisfy the needs of different kinds of information seekers: novice users, expert users and librarians. Information seekers can search for documents with either a:

• simple search,

• a fielded search,

• or a direct search.

4.2.1 Simple Search

Simple search is the first approach to query the ETRDL collections. This service is simple to use and similar to the most popular search engines functionality. Simple search consists of a single field in which the query terms are entered and two buttons: one to activate the search, the other to clear the field of previously entered values. The query can consist of one or more words. The terms entered in this field are searched in all indexed bibliographic fields and are always "Ored " together. The search request will be performed over all publishing authorities of the selected collection (NCSTRL, ERCIM or local).

4.2.2 Fielded Search

The fielded search form for the ERCIM/Local collection has four logical components:

• The bibliographic fields: Title, Author, Abstract and Abstract in other language with a selector to specify the language, Subject. The selector for the language of the second abstract is only operating if a value is entered in the other abstract field.

• Two radio buttons to specify whether the values entered in the fields should be "ANDed" or "ORed".

• Three selectors to refine the search according to Type, Year, Language.

• A menu to select one or more collections on which to perform the search, and a check box to select all collections.

The following picture shows the ERCIM fielded search form (Figure 4-1). By default, the local fielded search form is equal to the ERCIM one except for the collections list. By the way each institution can customise it to match its own requirements. This is true also for the other local services.

Figure 4-1 The ERCIM fielded search form.

The ERCIM/Local user interface has two buttons: the first starts the search and the second clears the values entered in the fields.

Search criteria are based on the following rules:

1) To specify search criteria based on bibliographic fields, it is necessary to fill in at least one of the keyword fields listed below and activate either the AND or the OR button to determine the relationship between the fields. The default value is OR.

2) Words entered in any single bibliographic field are ANDed by default. Other criteria can be used according to the rules specified in the *Rules for bibliographic keyword matching* paragraph.

3) The field semantics available in the fielded search is the following:

• Author, Title, Abstract have a obvious means

• Local Abstract - Words in the local language abstract of a document. The user can specify a language otherwise the terms entered will be matched with all possible languages other than English. The selector for the language of the second abstract is only operating if a value is entered in the local abstract field.

• Subject - Subject search is possible using:

> • Free keywords, or
> • Codes/descriptors of the ACM (Association for Computing Machinery) Computing Classification System (CCS), Version 1998, or
> • Codes/descriptors of the AMS (American Mathematical Society) Mathematics Subject Classification (MSC), Version 1991.

As far as possible, the user should use standard vocabulary from the discipline. As the CCS allows the use of proper names as "implicit" descriptors, he/she may enter names of programming languages (e.g., "C++") or of people.

4) If the user wishes to refine the search results according to type, year, or language, he/she has to fill in one or more of the following fields:

• Language - Select a language from the pulldown menu.

• Type - Select a type from the pulldown menu.

• Year - Enter a year (e.g.: 1998).

The search criteria will be rejected if the user does not enter a value in at least one bibliographic field and select at least one collection.

4.2.3 Direct Search

Direct search consists of a text entry field in which the unique document identifier can be entered to access that document directly and two buttons: one to active the search, the other to clear the field of previously entered value. The use of this kind of search is directed especially to the librarian users because it need the knowledge of the document identifier.

4.2.4 Rules for bibliographic keyword matching

Words that the user enters in any bibliographic keyword field (Author, Title, Abstract, Abstract in other language, Subject) are matched to bibliographic entries according to the following rules:

> 1) Each string that the user enters matches any word in the respective field that begins with the respective string. For example, the string "comp" matches "computer", "computation", "comprehensive", etc.
> 2) Words entered in the same field are "ANDed" by default. For example, if you enter "computer vision" in the abstract field, the search will return documents that have both the words "computer" and "vision" in their abstracts.
> 3) The user may also use logical connectors AND and OR explicitly within fields. For example, if the user enters "robotics or vision" in the abstract field, the search will return documents that have the word "robotics" or "vision" in their abstracts. If the user enters "robotics and vision" in the abstract field, the search will return documents that have both the word "robotics" and "vision" in their abstracts. Finally, the user may use parentheses to group words. For example, if the user enters "Gries or (Teitelbaum and Field)" in the author field, the search will return documents authored by "Gries" or by "Teitelbaum" and "Field".

Note: The user should not use short, common words or single letters in the bibliographic keyword fields (e.g., "a", "for", "in", "of", "s", "the", etc.). Words with high frequency, such as "use", "well", etc, are considered to be common words as well, and are automatically discarded. The user will be asked to re-enter his/her search if the keyword he/she enters matches too many words in the database.

4.3 Retrieved documents

The results of a search are first displayed in summary - the number of documents found is displayed for each publishing authority. The documents found are listed publisher by publisher and the title, the author(s) and

the document identifier of each document are displayed. The picture below shows the results of a search (Figure 4-2).
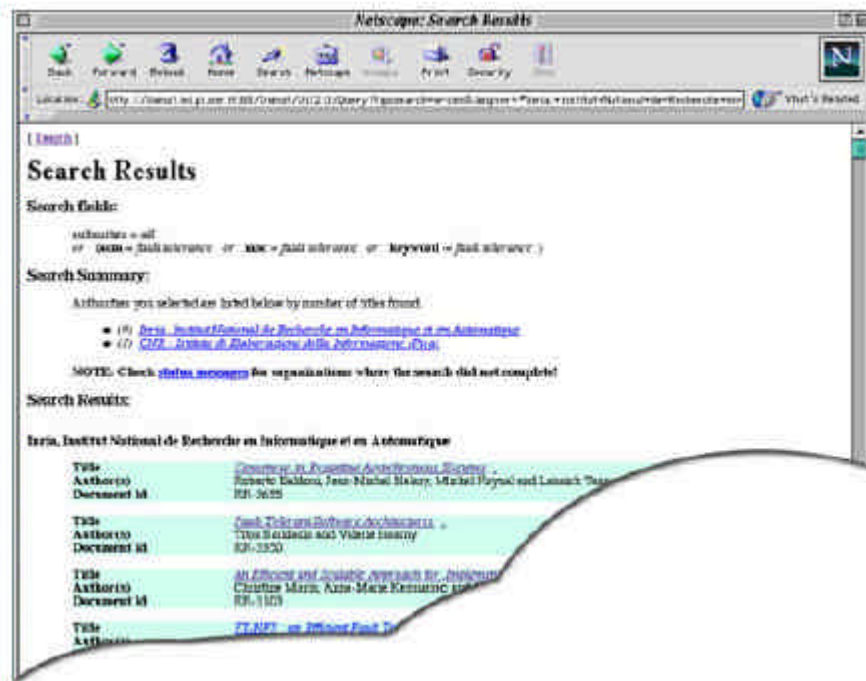

Figure 4-2 Search results.

By clicking on a given document the user can view its bibliographic description: the title, the author(s), the document identifier (Bib-Code), the date, the subject fields (free keywords, ACM, MSC), the type, the language, the abstract and the local language abstract if exist (see Figure 4-3). If the author, during the document submission, has inserted the document file in one of the accepted format, the user can view it.
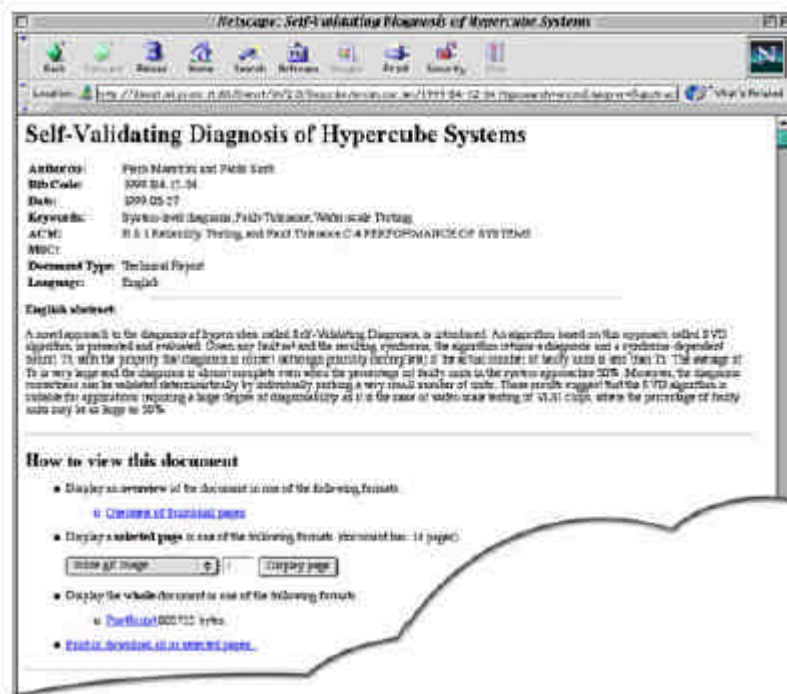

Figure 4-3 Display of a selected document.

Depending on the file format, the user can choose to display an overview of the document (the whole document in thumbnail format, or page by page, see Figure 4-4) or display the entire document using the suitable viewer. He/she can also download and/or print out the whole document or a range of pages.
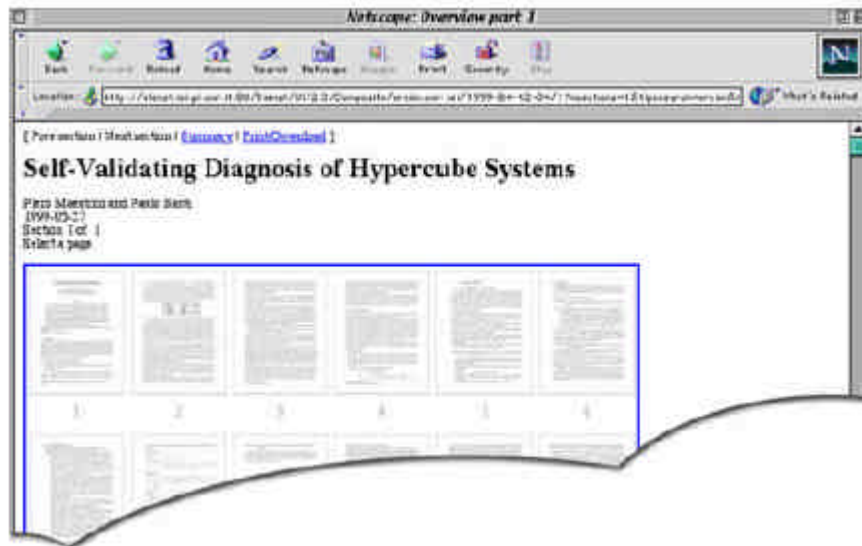
Figure 4-4 Display of document thumbnails.

4.4 BROWSE service

The browse function is used to acquire an idea of the content of the collections of the separate ERCIM and NCSTRL Institutions. This function in ETRDL has been extended with respect to NCSTRL where the user can browse the collections only by year or by author (see Figure 4-5). On the other side, the user can browse the ERCIM collections also by subject classification (see Figure 4-6).
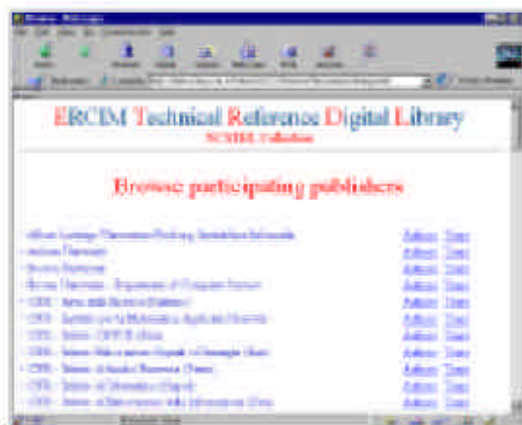

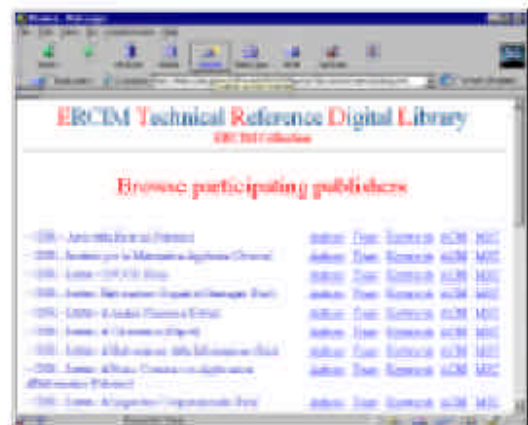**Figure 4-5 Browse** the NCSTRL collection.

Figure 4-6 Browse the ERCIM collection.

A document is selected and viewed by clicking on it with the mouse. Selected documents are displayed as explained in the Retrieved documents section and can be downloaded and then printed.

4.4.1 Browse by Authors

The user can choose to browse all authors or browse a range (e.g. from M to O) or browse a single letter. After the user has made his/her choice the system shows him/her an ordered list of authors. For each author the list of his/her document is shown. For each document, the title, document identifier, and date are shown. The user can click on the title to see the document.

4.4.2 Browse by Years

The user can choose to browse all years or browse a range or browse an single year. After the user has made his/her choice the system shows him/her an ordered list of years. For each year a list of documents is shown. For each document, the title, document identifier, authors and date are shown. The user can click on the title to see the document.

4.4.3 Browse by Keywords

The user can choose to browse all keywords or browse a range (e.g. from M to O) or browse a single letter. After the user has made his/her choice the system shows him/her an ordered list of keywords. For each keyword, a list of documents is shown (title, document identifier and date). The user can click on the title to see the document.

4.4.4 Browse by ACM codes and descriptors

The user can choose to browse all ACM codes or browse a range (e.g. from M to O) or browse a single letter. After the user has made his/her choice the system shows him/her an ordered list of ACM codes. For each codes, a list of documents is shown (title, document identifier and date). The user can click on the title to see the document.

4.4.5 Browse by MSC codes and descriptors

The user can choose to browse all MSC codes or browse a range (e.g. from M to O) or browse a single letter. After the user has made his/her choice the system shows him/her an ordered list of MSC codes. For each code, a list of documents is shown (title, document identifier and date). The user can click on the title to see the document.

5 References

[ACM98] ACM (Association for Computing Machinery) Computing Classification System (CCS), Version 1998
(http://www.acm.org/class/1998)

[DublinCore] Dublin Core Metadata Element Set: Resource Page
(http://purl.org/metadata/dublincore)

[ETRDL] S. Biagioni, J. Borbinha, R. Ferber, P. Hansen, S. Kapidakis, L. Kovacs, F. Roos, A.M. Vercoustre, (1998). "The ERCIM Technical Reference Digital Library". In ECDL'98 Proceedings, Crete, Greece, September 1998, pp.905-906
(http://www.iei.pi.cnr.it/DELOS/EDL/ETRDL98.html)

[ETRDLdemo] ETRDL Demo Decription: Handout distributed ERCIM 10th anniversary, Amsterdam, 4-5 November,1999
(http://www.iei.pi.cnr.it/DELOS/EDL/handout99/handout99.html)

[MSC91] AMS (American Mathematical Society) Mathematics Subject Classification (MSC), Version 1991
(http://www.ams.org/msc/home.html)

ETRDL
Administration
Service
User Guide

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1 Introduction

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This guide gives information on the ETRDL ADMINISTRATION Service.

In the examples made to illustrate the service, reference is made to the ETRDL system as instantiated for the ERCIM-ETRDL digital library, that provides access to a distributed collection of grey literature (technical reports, theses, workshop proceedings, pre-prints, etc.) in the areas of Computer Sciences and Applied Mathematics produced by members of the ERCIM Consortium.

The ERCIM-ETRDL digital library currently provides access to collections of the following ERCIM Institutions:

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- **FORTH** (Foundation of Research and Technology - Hellas - Greece),
- **GMD** (German National Research Center for Information Technology -Germany),
- **INRIA** (Institut National de Recherche en Informatique et en Automatique -France),
- **SICS** (Swedish Institute of Computer Science - Sweden),
- **SZTAKI** (Magyar Tudományos Akadémia - Számítástechnikai és Automatizálási Kutató Intézete - Hungary),
- **University of Masarick** (Czeck Republic).

The aim of this guide is to provide a manual reference for the ETRDL information administrators who manage documents and collections by checking the correctness of incoming document, inserting new documents in the ETRDL repositories, rejecting incorrect documents, and withdrawing documents, if requested. We suggest to the administrators to read in advance the ETRDL Search/Browse User Guide, for general information, and the Submit User Guide to know which formal requirements any document to be inserted must respond to.

ETRDL administrators can administer one or more collections. The administration procedure can be performed via the Web user interface but it can also be performed by shell commands. Even if the Web-based procedure is moreuser-friendly than the other, both procedures will be presented in this guide. The administrator of a ETRDL collection is assumed to be experienced with Web browsing. The administrator who wants to perform the shell command procedure must be experienced with the Unix operating system.

This document is organised in the following sections:

- Useful information: technical requirements to administer the ETRDL collections.
- How the incoming directory and the repository are organised.
- How to access to ETRDL: collections description and user interface characteristics.
- ETRDL metadata: syntax and semantics of bibliographic records; the bibliographic code or document identifier.
- The administration procedure via web user interface.
- The administration procedure via shell commands.

2 Useful information

In this section the user can find useful information about technical requirements necessary to administer the ETRDL collections. Moreover a brief introduction to the on-line help is given.

2.1 Technical Requirements

The user can access ETRDL via Web, this means that he/she can use which kind of computer and operating system he/she prefers. In order to administer ETRDL collections the user must have:

• Internet access availability

• some knowledge of Web browsing

• a Web browser such as Netscape Navigator or MS Internet Explorer having JavaScript capabilities (we suggest to use Netscape Navigator).

• some knowledge of Unix shell commands

• some knowledge of document editing under Unix operating system.

ETRDL documents have different file format: PostScript, PDF, text, HTML, TIFF. To check the correctness of document inserted by the authors, the administrator needs the following tools to display documents:

• PS viewer for PostScript documents,

• Adobe Acrobat Reader for PDF documents,

• TIFF viewer for TIFF images.

2.2 ETRDL on-line help

ETRDL on line help is available at http://dienst.iei.pi.cnr.it/README. This documentation is directed to four different kind of users: the system administrators, the digital library administrators, the information seekers and the information providers. System administrators are involved in the installation and configuration of the system and digital library administrators are involved in the management of the ETRDL documents. An access to ETRDL from this site is also provided. In Figure 1 the ETRDL Administer help on line section is shown. The user can access this section by clicking on the "Administer" hyperlink on the left menu.
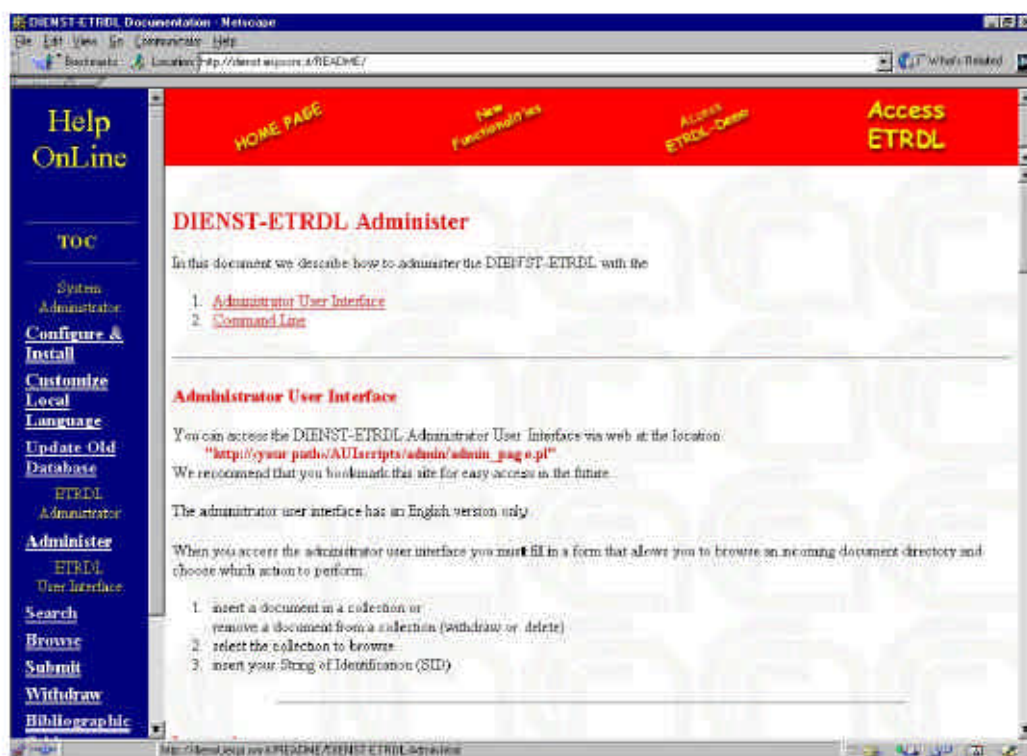

Figure 1 - ETRDL administer help on line documentation.

3 Managing ETRDL Collections

As introduced in section 1, examples in this guide make reference is to the ETRDL system as instantiated for the ERCIM-ETRDL digital library; this library provides access to distributed collections of grey literature (technical reports, theses, workshop proceedings, pre-prints, etc.) in the areas of Computer Sciences and Applied Mathematics produced by members of the ERCIM Consortium. The ERCIM-ETRDL digital library consists of three main collections (NCSTRL, ERCIM, Local – however, note that NCSTRL collection is presently not accessible) and for each collection some services are provided. The search and browse services are available on all the above collections even if some differences exist depending on the specialisation of services. The submit and withdraw services are available only on local collections.

A local collection consists of all kinds of grey literature produced by a single ERCIM Institution. Each ERCIM institution has created its own collection by setting up a repository of bibliographic description and digital documents.

From the perspective of the architecture, ETRDL realizes a federation of digital libraries, this means that a ETRDL digital library is composed of many instances of the same system (ETRDL). Each ERCIM institution has installed an instance of the ETRDL system. Each instance provides the search, browse, submit and withdraw services over the local repository(ies) and interacts with other ETRDL instances by providing the search and browse services. Each repository is managed by an administrator who inserts, removes and updates the digital documents and their bibliographic descriptions.

Institutions	Server URL	Server Physical location
Istituto di Cibernetica (Na)	http://dienst.cib.na.cnr.it	CNR-IC
Istituto CNUCE (Pi)	http://dienst.iei.pi.cnr.it	CNR-IEI
Istituto di Elaborazione della Informazione (Pi)		
Istituto di Linguistica Computazionale (Pi)		
Istituto di Matematica Computazionale (Pi)		
Istituto di Ricerca sulle Onde Elettromagnetiche (Fi)		
Istituto di Studi sulla Ricerca e sulla Documentazione Scientifica (Roma)		
Istituto per le Applicazioni Telematiche (Pi)		
Istituto di Elaborazione dei Segnali e delle Immagini (Ba)	http://dienst.iesi.ba.cnr.it	CNR-IESI
Area della Ricerca (Pa)	http://dienst.ifcai.pa.cnr.it:8080	CNR-IFCAI
Istituto di Fisica Cosmica con Applicazioni all'Informatica (Pa)		
Istituto di Tecnologie Didattiche e Formative (Pa)		
Istituto di Analisi Numerica (Pv)	http://exlibris.ian.pv.cnr.it	CNR-IAN
Istituto per la Matematica Applicata (Ge)		
Istituto per le Applicazioni della Matematica e dell'Informatica (Mi)		

Table 1 - CNR servers.

A local collection can also be composed of sub-collections. At present only the CNR collection is composed of sub-collections. Each sub-collection corresponds to a repository of a single CNR Institutions. In Table 1 the fifteen CNR institutions owning a repository are shown.

A ETRDL instance can manage one or more repositories. For each instance one or more administrators can be declared by defining suitable access rights over the repository. Moreover, an administrator can manage one or more repositories. In Figure 2 some possible cases are shown: an administrator that manages one repository stored on a server (Server 3), an administrator managing two repositories on the same server and an administrator that manage two repository, the first stored on Server 1 and the second stored on Server 2. The access to the repositories is filtered by an access control list (ACL).
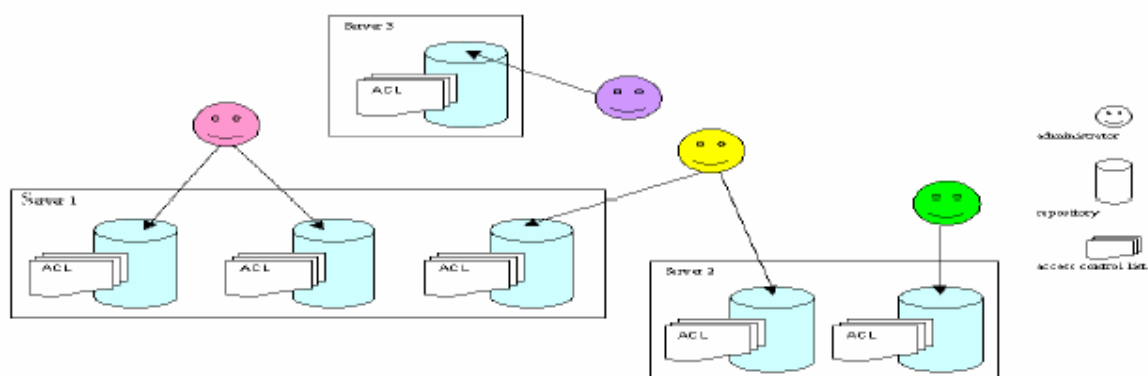
Figure 2 - Administrators and repositories.

The fifteen CNR repositories are distributed over five instances as shown in Table 2.

Institutions	Repository name	Administration page
Istituto di Cibernetica (Na)	ercim.cnr.ic	http://dienst.cib.na.cnr.it/AUIscripts/admin/admin_page.pl
Istituto CNUCE (Pi)	ercim.cnr.cnuce	http://dienst.iei.pi.cnr.it/AUIscripts/admin/admin_page.pl
Istituto di Elaborazione della Informazione (Pi)	ercim.cnr.iei	
Istituto di Linguistica Computazionale (Pi)	ercim.cnr.ilc	
Istituto di Matematica Computazionale (Pi)	ercim.cnr.imc	
Istituto di Ricerca sulle Onde Elettromagnetiche (Fi)	ercim.cnr.iroe	
Istituto di Studi sulla Ricerca e sulla Documentazione Scientifica (Roma)	ercim.cnr.isrds	
Istituto per le Applicazioni Telematiche (Pi)	ercim.cnr.iat	
Istituto di Elaborazione dei Segnali e delle Immagini (Ba)	ercim.cnr.iesi	http://dienst.iesi.ba.cnr.it/AUIscripts/admin/admin_page.pl
Area della Ricerca (Pa)	ercim.cnr.areapa	http://dienst.ifcai.pa.cnr.it:8080/AUIscripts/admin/admin_page.pl
Istituto di Fisica Cosmica con Applicazioni all'Informatica (Pa)	ercim.cnr.ifcai	
Istituto di Tecnologie Didattiche e Formative (Pa)	ercim.cnr.itdf	
Istituto di Analisi Numerica (Pv)	ercim.cnr.ian	http://exlibris.ian.pv.cnr.it/AUIscripts/admin/admin_page.pl
Istituto per la Matematica Applicata (Ge)	ercim.cnr.ima	
Istituto per le Applicazioni della Matematica e dell'Informatica (Mi)	ercim.cnr.iami	

Table 2 - Administration page addresses and repository names.

3.1 ERCIM-ETRDL Metadata

The most important task of the information administrator is checking the correctness of the incoming bibliographic records.

In the ERCIM and Local collections each document has associated a common metadata description (bibliographic record). This description is based on the Dublin Core meta description standard [Dublin Core].

ERCIM requirements have influenced the choice of how to represent the subject of documents. To this purpose, the user can employ the ACM Computing Classification [MSC(] and/or the AMS Mathematics Subject Classification [MSC91], and/or free keywords to represent the subject of documents both during the submission procedure and for retrieval when querying the system. The ACM and AMS schemes are accessible on-line and can be browsed during both retrieval and submission; codes with associated descriptors can be selected and inserted in the appropriate fields.

The user can employ the *locabstract* field to add the abstract in other language than English during the submission procedure. In such case the user specifies the language by fill in the *loclanguage* field. As ERCIM is a multilingual community, this field helps user to retrieve documents querying the system using his/her own language.

For checking the correctness of the bibliographic records, the information administrator Table 3 shows the bibliographic fields used in the ERCIM-ETRDL digital library. The first column contains the field label, the second one explains the contents of the corresponding field and gives the syntax for it. Examples of correct contents are given for each field.

Bibliographic label	Description of bibliographic field and its permitted value
BIB-VERSION::	This field must be set to CS-TR-v2.1E value
ID::	This field contains the document identifier specified with the following syntax: CollectionName//DocId Example: ID:: ercim.cnr.iei//1999-B4-27-11
PAGES::	This field contains the number of pages of a PS document, for other file formats the value must be set to 1. If no documents have been inserted, the value must be 0.
ABSTRACT::	This field contains the abstract of the document. All documents, whatever their language, must have an abstract in English.
ACM::	This field is a subject field and contains a ACM code with its descriptor and must be repeated for each ACM code/descriptor assigned to the document: add an ACM:: field for any ACM code/descriptor. If the document has no ACM codes/descriptors the ACM: field must not appear in the bibliographic record. The ": " symbol must be inserted between a coded descriptor and an uncoded one. Example: ACM:: D-1-5 Object-oriented Programming Example: ACM:: D-1-3 Concurrent Programming: Distributed programming
AUTHOR::	This field contains the name of an author of the document. For each author use the following syntax: Last-Name, First-Name Example: AUTHOR:: Rossi, Francesco AUTHOR:: Di Paternò, Maria Grazia If there is more than one author, use the following syntax: Lastname1, First-Name1 and Firstname2, Lastname2 and Firstname3, Lastname3 and … Example: Rossi, Mario and Bianchi, Paolo, and Verdi, Carlo
DATE::	This field contains the publication date. The format is Year (four digits) Month (two digits) Day (two digits) as defined in ISO 8601 (Date and time format). Example: DATE:: 1998-11-16
EMAIL::	This field contains the e-mail address of the person to be contacted with respect to the document. Example: EMAIL:: carlo@iei.pi.cnr.it
ENTRY::	This field contains the date of submission to the system. The format depends on operating system settings.

Bibliographic label	Description of bibliographic field and its permitted value
KEYWORD::	This field is a subject field and contains uncontrolled terms, e.g. relatively new concepts, proper names of systems, etc., chosen freely by the author or the compiler of the bibliographic record (normally in English). This field may be repeated. Example: KEYWORD:: Distributed digital library
LANGUAGE::	This field contains the language in which the document is written. Accepted values are the following: Dutch, English, French, German, Greek, Hungarian, Italian, Portuguese, Spanish, Swedish. The correct form of the values is checked by the SUBMIT service. The default value is English. Example: LANGUAGE:: Italian
LOCABSTRACT::	This field contains, if appropriate, an abstract for the document in the source language.
LOCLANGUAGE::	This field indicates the language in which the local abstract is written. Accepted values are the following: Dutch, English, French, German, Greek, Hungarian, Italian, Portuguese, Spanish, Swedish. The correct form of the values is checked by the SUBMIT service. LOCLANGUAGE:: Spanish
MSC::	This field is a subject field and contains a MSC code with its descriptor and must be repeated for each MSC code/descriptor assigned to the document: add an MSC:: field for each MSC code/descriptor. Example: MSC:: 11K50 Metric theory of continued fractions
REVISION::	This field contains the date and the comment of the revision. This field is automatically added to an existent bibliographic record when the withdraw operation is performed. Example: REVISION:: November 5, 1999; Withdrawn
TEL::	This field contains the telephone number of the person to be contacted with respect to the document.
TITLE::	This field contains the title of the work as assigned by the author and should include the complete title with all the subtitles, if any. Example: TITLE:: Real-Time Multiprocessor Systems: Performability Evaluation
TYPE::	This field contains the type of publication as assigned by the issuing organisation. Accepted values are the following: Technical-Report, Thesis , EC-deliverable, Proceeding, ERCIM-News, Preprint Project-Report Example: TYPE:: Proceeding
WITHDRAW::	This fields contains the reason of the document withdrawal. This field is automatically added to an existent bibliographic record when the withdraw operation is performed. Example: WITHDRAW:: Pubblicato su ACM Transactions on Mathematical Software, 23 (1997) 16-31
END::	This field indicate the end of bibliographic record and must contain the same values as the field ID::.

Table 3 - Bibliographic fields used by ETRDL.

3.2 Library directory structure

The procedure to add a new document to a collection consists of two main steps: first the author submits the digital document with its bibliographic description to the system, then the administrator checks for correctness the inserted data and inserts the document and the bibliographic description in the collection.

Therefore the data inserted by the author are not stored directly in the repository but they are stored in a temporary storage called "incoming" directory. The directories structure is shown in Figure 3. When the author performs the submit procedure a bibliographic file is created and stored in the "incoming/bib" directory together with an HTML file that is used in the administration procedure. If the author submits also the digital document, this file is uploaded and stored in another directory under the "incoming" one according with the type of the document. For example if the author submits a PS file, this will be stored in "incoming/ps" directory. If the author inserts some Tiff files or some HTML files representing a single document, the system creates a directory under "incoming/tiff" or "incoming/html", respectively, where these files will be stored. The first HTML file inserted by the author is considered to be the main file and the system renames it as "index.html".

The system associates a temporary name to the incoming files or directories. This name is composed of the collection name, the date of the submission and a progressive number.

A bib file name example is ercim.cnr.imc:Oct28-2.bib; a PostScript file name example is ercim.cnr.iei:Nov09-4.ps; a directory name example is ercim.cnr.cnuce:Sep17-1.

Figure 3 - Library directory structure.

The "withdrawn" directory stores the compressed document file of withdrawn documents.

3.3 Repository directory structure

When the administrator inserts the document into a collection, the files move from the incoming directory to the repository one. Normally the root of the repository is called "Data Bases" and contains one or more subdirectories each of which stores the documents of a single institution. An example of the repository structure is shown in Figure 4.
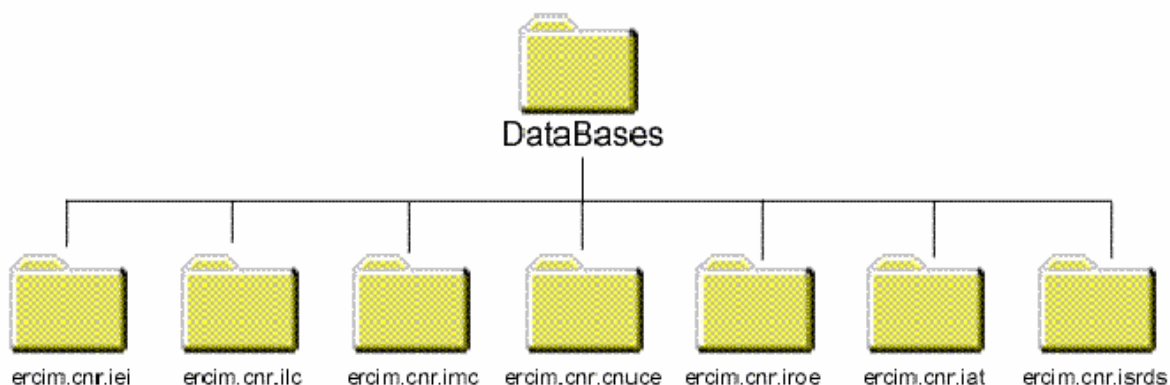

Figure 4 - The CNR-IEI repository directory structure.

4 How to administer ETRDL via the web-based user interface

The administrator can access the ETRDL Administrator User Interface via web at the locations shown in Table 2. The administrator user interface has an English version only. Figure 5 shows the ETRDL Administration Page for the collections administered at CNR-IEI.

When the user accesses the ETRDL Administration Page he/she must fill in a form that allows him/her to browse an incoming document directory and choose which of the following actions he/she wants to perform:
1. insert a document in a collection or remove a document from a collection
(withdraw or delete)
2. select the collection to browse
3. insert the String of Identification (SID)
The SID is contained in "……/dienst/AUI/scripts/admin/.users" file.
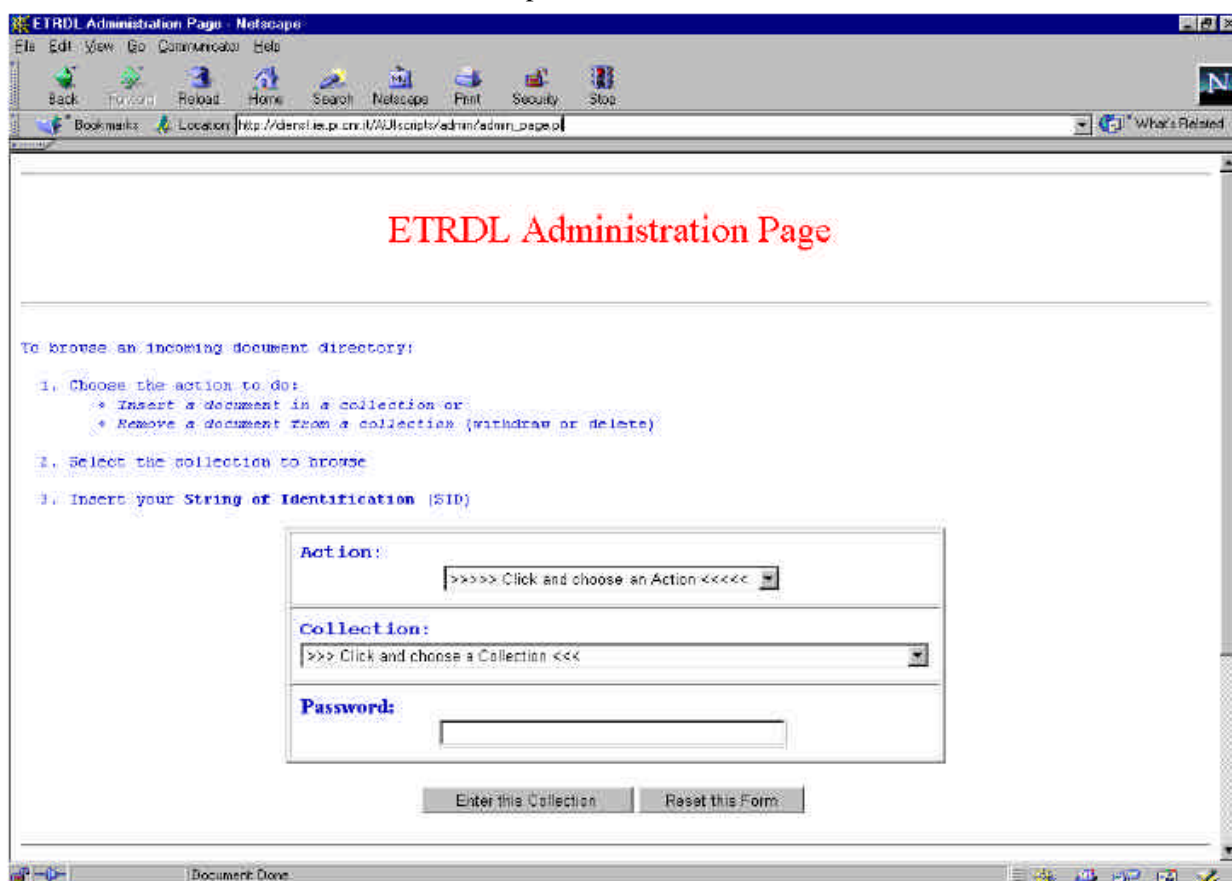
Figure 5 - ETRDL Administration Page.

4.1 Insert a document
In order to insert a document in the collection the administrator has to:
1. choose it from the list of documents that have been submitted
2. click on "View BIB Record" button.
Figure 6 shows the list of incoming documents for the ercim.cnr.imc collection.
When the administrator clicks on the "View BIB Record" button the system shows him/her the bibliographic record for the document he/she has selected. The user can select one of the following actions:
1. insert the document into a collection (first assigning it a document identifier -DocId)
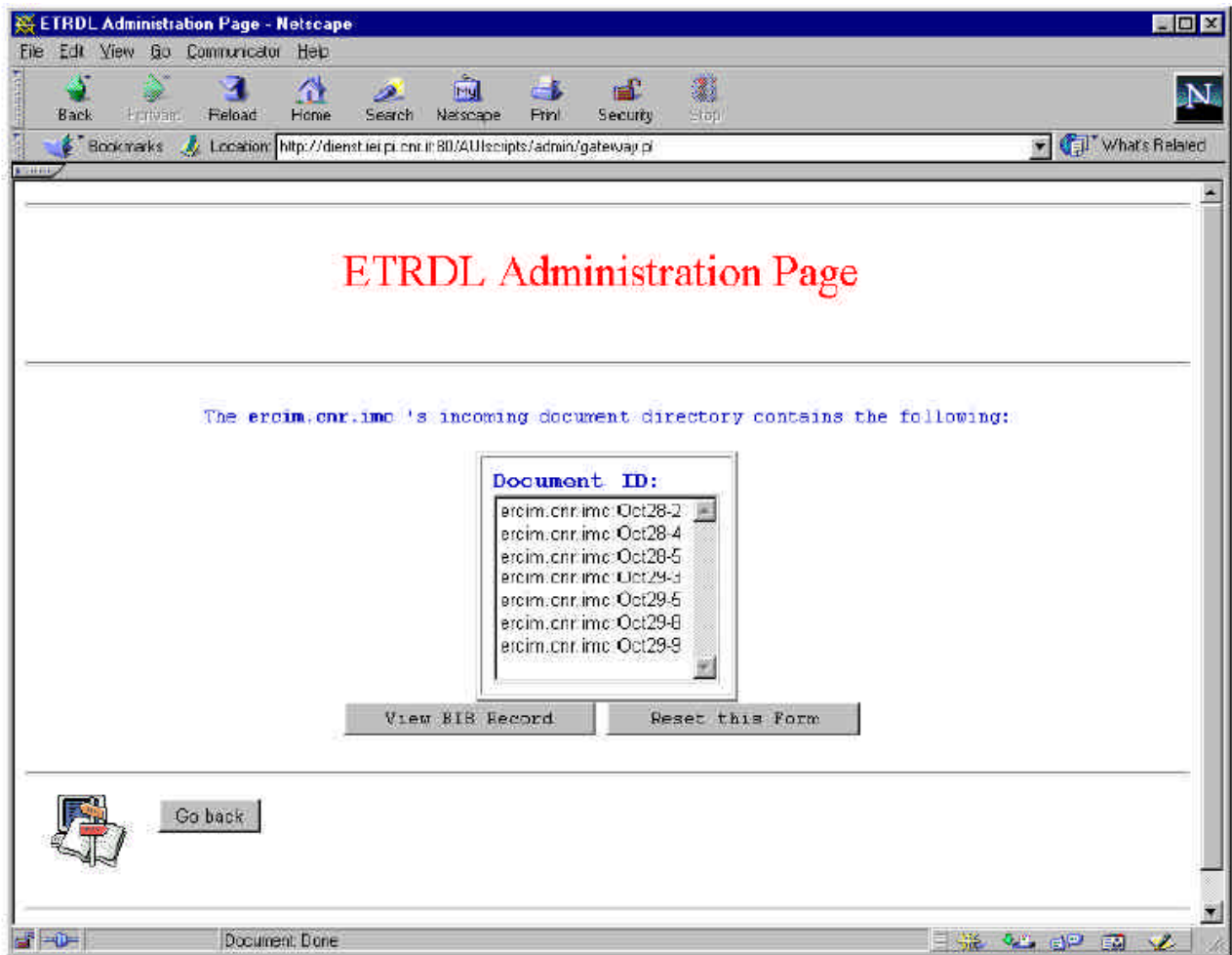2. view the document
3. reject the document.

Figure 6 - ETRDL Administration Page: document choice.

Figure 7 and Figure 8 show respectively an example of bibliographic record and the three possible actions.
When the user clicks on the "Insert into Collection" button, the insert procedure starts.
If the file associated with the bibliographic record is a postscript file, the system generates the inline gif images of each page of the document and the thumbnails.
When this procedure terminates, a link permitting return to the administration page appears.
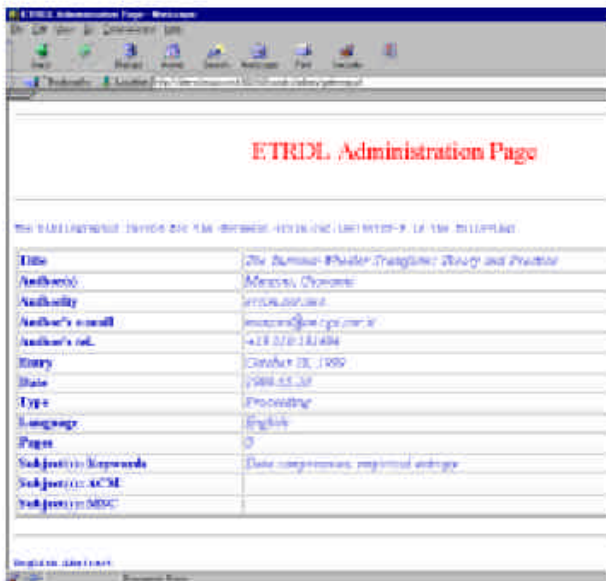
Figure 7 - The bibliographic description of an incoming document.
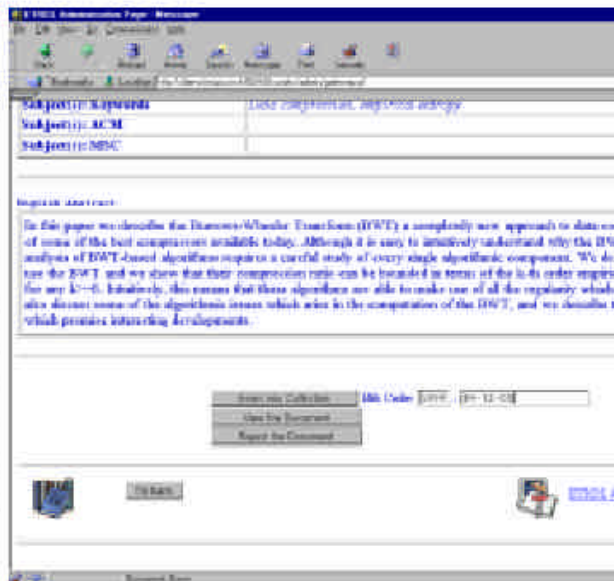
Figure 8 - The bibliographic code assignment.

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***Important not**e*. If the procedure generating the inline gif images and thumbnails fails the administrator must complete the insert procedure following the Command Line instructions (see paragraph "How to administer ETRDL via the shell commands").

The procedure fails may be caused by a malformed postscript file, by a postscript file that uses unsupported characters or by a not recoverable system error. In all these cases, the administrator must solve the problem and then complete the insert procedure by shell commands.

When the administrator clicks the "View the Document" button, the system shows a HTML page which contains two hyperlinks to the bibliographic record (in text and html format) and one or more hyperlinks to the body of the document depending on its type. The administrator has to check the bibliographic record correctness before assigning the bibliographic code and inserting the document. If the administrator finds that the bibliographic record is not correct, he/she has two choices:

• correct the errors in the bibliographic record (modifying the file ".bib",

corresponding to the selected document, in "……./library/incoming/bib") and then

assign the bibliographic code and insert the document. For example, if the

administrator is inserting the document named "ercim.cnr.imc:Oct28-2", then

he/she has to edit the following file

"……./library/incoming/bib/ercim.cnr.imc:Oct28-2.bib";

• reject the document.

When the user clicks the "Reject the Document" button, the system shows a form where the reason of the document rejection must be registered (see Figure 9). Two alternative actions can be performed:

1. send an e-mail to the author with the reason of document rejection, while maintaining the submitted document. This action is performed by clicking on the "Send & Keep" button;

2. send an e-mail to the author with the reason of the document rejection, while deleting the bibliographic record and the document from the incoming directory.

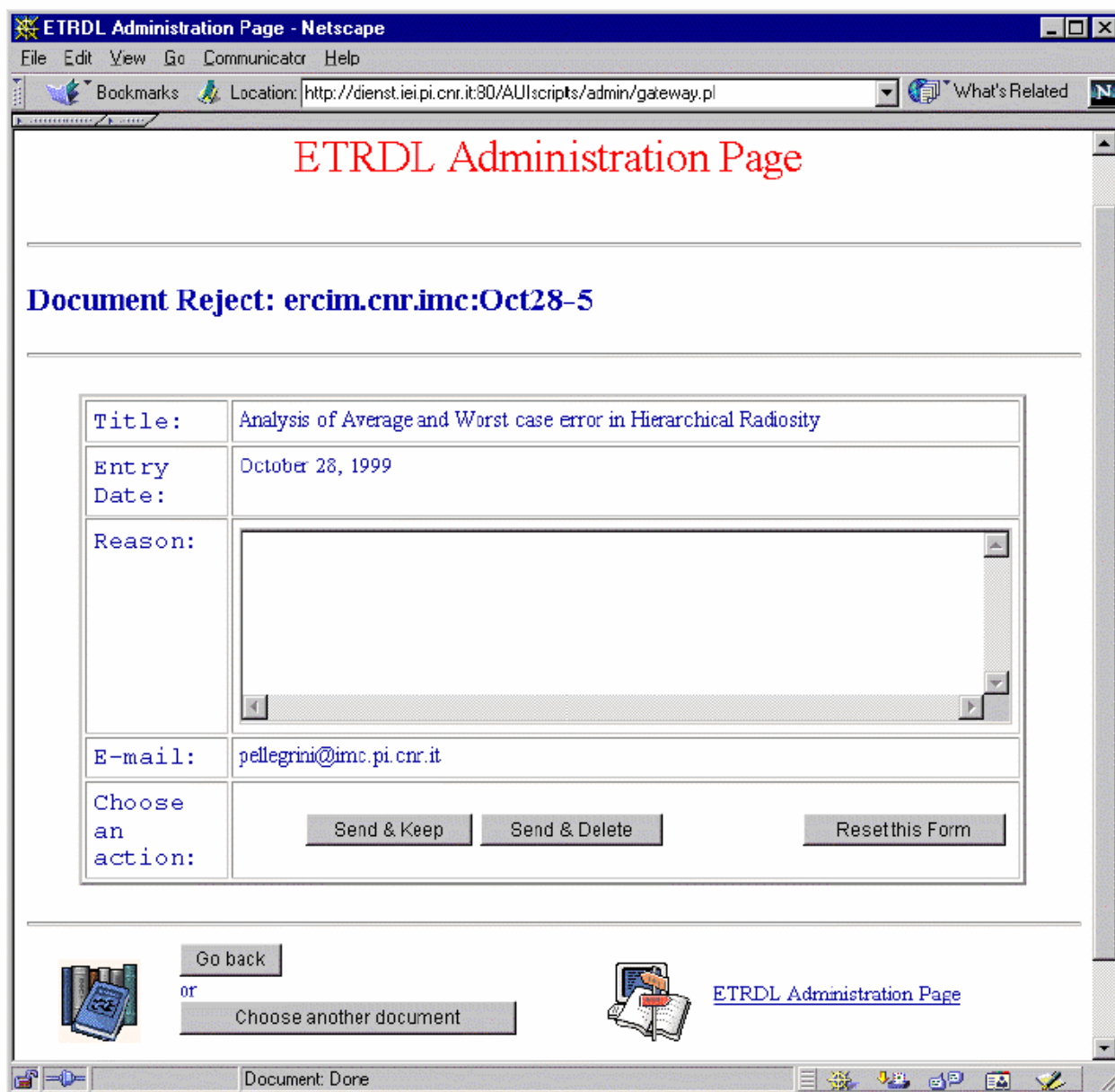This action is performed by clicking on the "Send & Delete" button.

Figure 9 - ETRDL Reject Page

4.2 Remove a document

The administrator has to remove a document from the repository if requested by the author of that document. The reasons why an author asks for document removal are for example that it has been published in a journal.

Authors send a withdraw request to the administrator via a web-based procedure that is accessible from the local homepage. The withdrawal of a document is permitted only to that user who has submitted it. The withdrawal request is essentially a mail to the administrator. This mail contains the document identifier, the reason why the withdrawal is asked for, the author e-mail address. The administrator uses these information to fill in the withdraw form at the administration page shown in Figure 10.

In order to remove a document, the administrator has to:

1. specify the identifier of the document, and

2. click on the "WithDraw Document" button and specify the withdrawal reason, if he/she wants only to make the document file unavailable to ETRDL users. The.18 administrator can also specify the new document location if the author has sent this information.

3. click on "Delete Document", instead, if he/she wants to delete the document from the database. The "Delete Document" command removes both the document and its bibliographic record from the repository. This is an unrecoverable procedure.

The delete procedure must be used only if the same document has been inserted two times with different bibliographic code. In other cases, the administrator must use the "WithDraw Document" button.
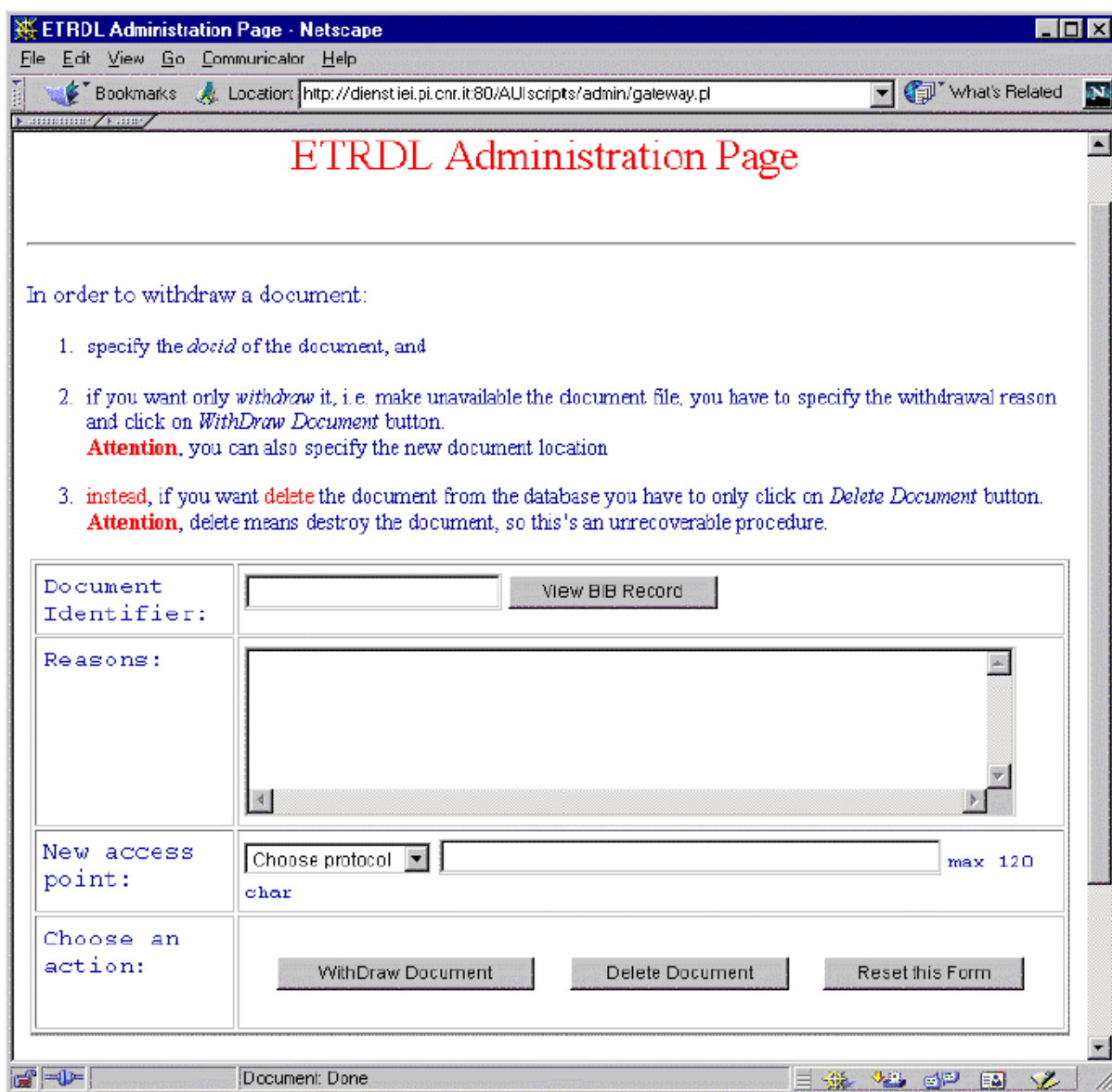

Figure 10 - ETRDL Remove Page.

5 How to administer ETRDL via the shell commands

In order to insert a new document in the digital library the administrator must perform the following steps:
1. Edit the file "...../library/incoming/bib/‹IncomingDocumentName›.bib" where ‹IncomingDocumentName› is the name that the submit procedure assigns to the bibliographic record of a new submitted document.
- substitute at line 2 the string after the double "/" with the document identifier (‹DocId›) he/she intends to give to the document
- repeat the above operation on the last line.
2. Delete the file "......./library/incoming/bib/‹IncomingDocumentName›.html". This file is used by the administration procedure via Web browser.
3. Run the command
- "......./dienst/LibMgt/install_tr parameter1 parameter2" where
   parameter1=‹CollectionName›:‹DocId› and
   parameter2=‹CollectionName›:‹IncomingDocumentName›.
   For example:
   "...../dienst/LibMgt/install_tr ercim.cnr.imc:1999-b4-10 ercim.cnr.imc: Oct28-2".

The command install_tr produces a new directory called ‹DocId› under the directory "…../DataBases/‹CollectionName›". This command moves the bibliographic record into the directory it has just created.

4. Run the command "……/dienst/Indexer/build-inverted-indexes.pl -b -n -s". This command rebuilds the index files.

5. Run the command "……/dienst/Utilities/bin/reload-data". This command make available on line the inserted document.

6. Move and Rename the document. This step is different for different document file types. The instructions for the different document file types are shown below :

PS File:

- Rename the file

"…../library/incoming/ps/‹IncomingDocumentName›.ps"

as

"……/library/incoming/ps/‹DocId›.ps"

- Move this file to

"……./DataBases/‹CollectionName›/‹DocId›/"

- Generate the Inline Gif and Thumbnails:

♦ Run the command

"…../dienst/LibMgt/db_build -docid

‹CollectionName›:‹DocId› -format inline".

♦ This command creates Inline Gif and it is optional but becomes mandatory if the administrator wants to create Thumbnails.

♦ Run the command

"…./dienst/LibMgt/db_build –docid ‹CollectionName›:‹DocId›

-format composite".

This command creates a Thumbnail Image and it is optional.

♦ Run the command

"……/dienst/LibMgt/db_build -docid

‹CollectionName›:‹DocId› -format composite_imagemap".

This command creates a Thumbnail Image Map and it is mandatory if the administrator has performed the previous step.

PDF file:

The administrator has to make no actions.

TXT file:

The administrator has to make no actions.

HTML

file: The administrator has to make no actions.

TIFF file:

Delete the directory

"..../library/incoming/tiff/‹CollectionName›:‹IncomingDocumentName›"

6 Administration: Special Services at the IEI local Server

The CNR-IEI local server is provided with the following functionality :

1. approval of the document
2. editing of the bibliographic record
3. self generation of the bibliographic code
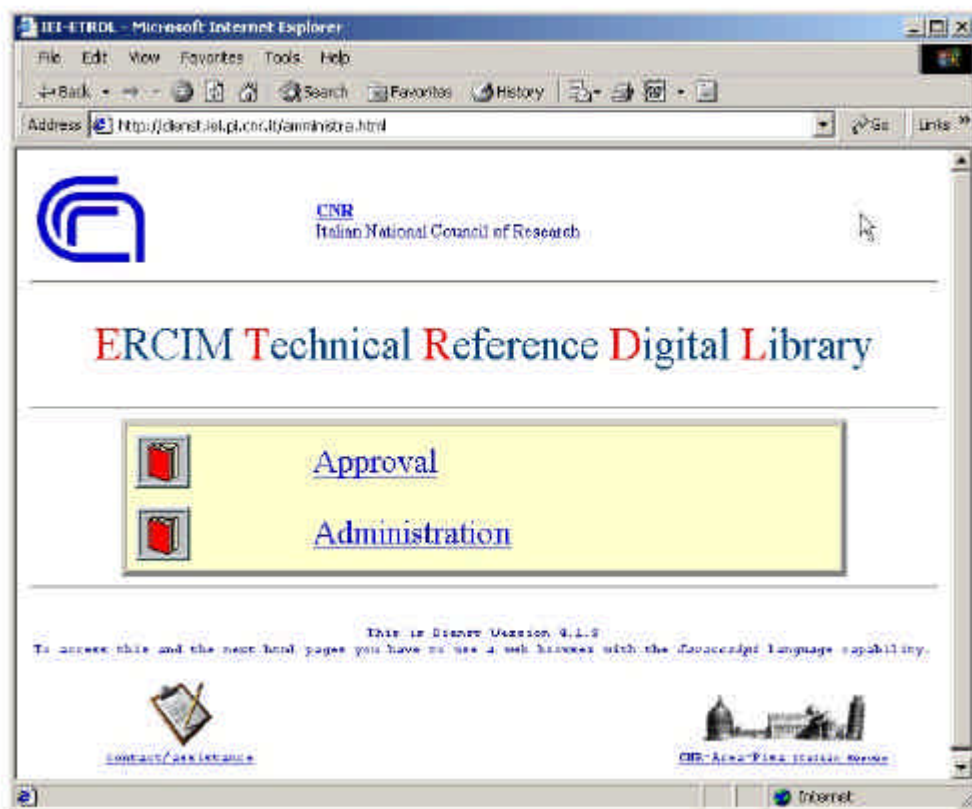
The administration page is shown in Figure 11.

Figure 11 - CNR-IEI Local Administration page.

6.1 Approval of the document

The "Approval" link goes to the revision interface. A password is requested.

Figure 12 - Approval: password

When the reviewer insert the password the system shows the list of documents to be reviewed (see Figure 6). After selecting one of the documents, the reviewer can see the selected document by clicking on the "View BIB Record" button. The system shows the bibliographic record , the abstract and the approval status in the approval field (see Figures 13 and 14). The values of the approval field may be as follows:

- "Passed: no" : the document has not been reviewed,
- "Passed: yes" : the document has been reviewed and approved.

The system offers the following options:

1. view the document
2. approve the document

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3. reject the document
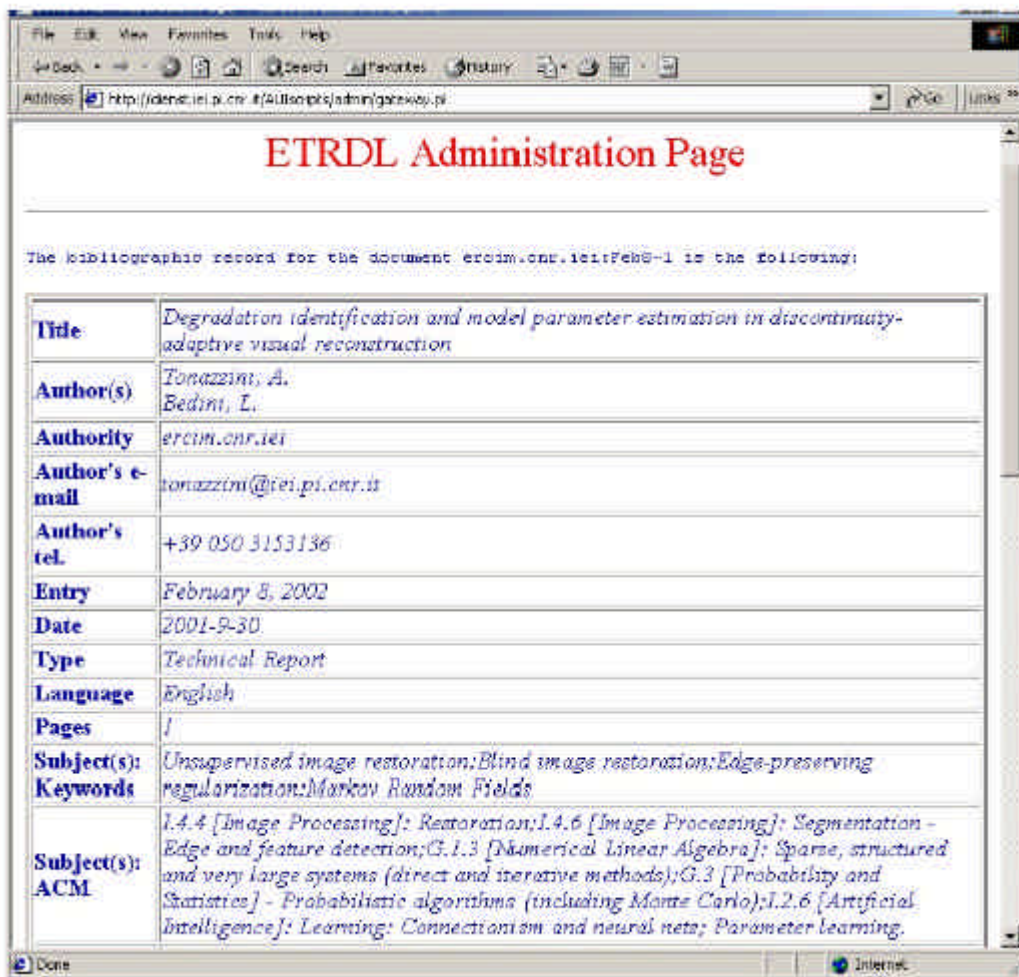
Figure 13 - Approval: Bibliographic record (1)
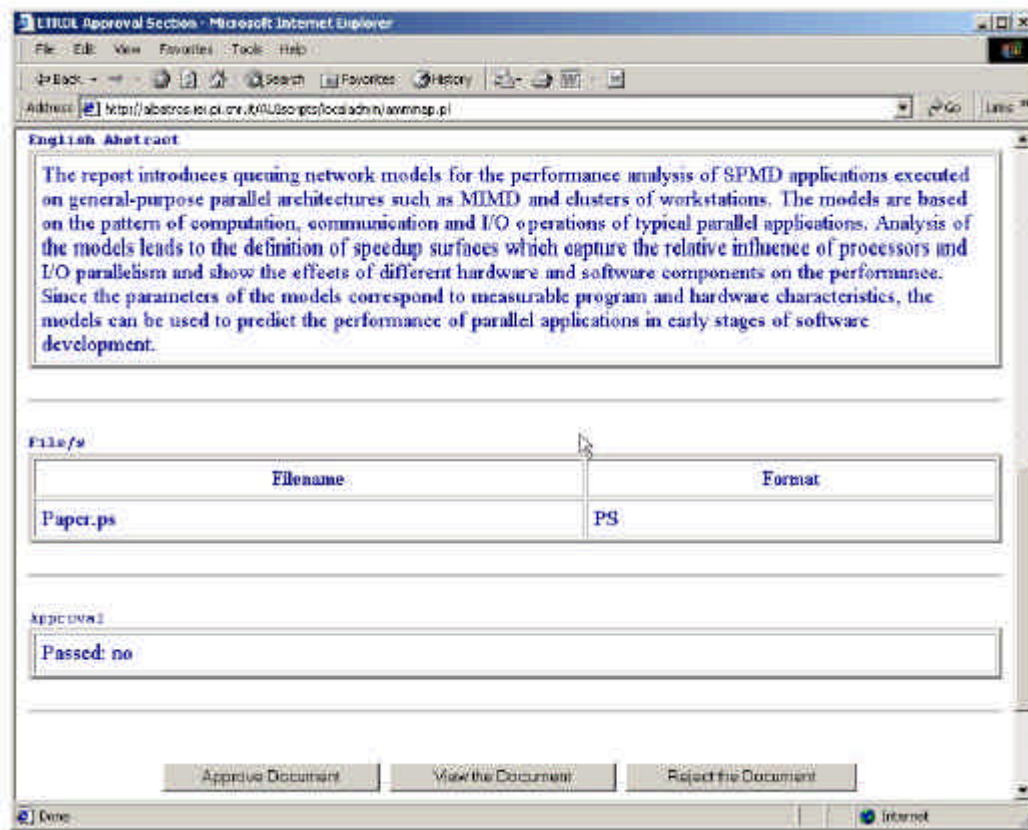
Figure 14 - Approval: Bibliographic record (2)

In case of option 1) the system allows reading the document under the control of the related application .
In case of option 2) the system updates the value of the approval field accordingly.
In case of option 3) the system allows the reviewer to communicate the reason of his/her decision by using the interface shown in Figure 15.

Figure 15 - Rejecting a document

6.2 Editing of the document

The "administration" link goes to the administration interface.

The system offers the following options:

1. edit the bibliographic record
2. generate the bibliographic code
3. insert the document into collection
4. view the document
5. reject the document

In case of option 1) the system allows the administrator to edit the bibliographic record.

In case of option 2) the system shows a bibliographic code generated automatically:

the administrator can accept or change such a code.

Options 3-5 are described in Section 4.

7 References

[ACM98] ACM (Association for Computing Machinery) Computing Classification System (CCS), Version 1998
http://www.acm.org/class/1998

[DELOS] DELOS Working Group
http://www.iei.pi.cnr.it/DELOS/

[DublinCore] Dublin Core Metadata Element Set: Resource Page
http://purl.org/metadata/dublincore

[ETRDL] S. Biagioni, J. Borbinha, R. Ferber, P. Hansen, S. Kapidakis, L. Kovacs, F. Roos, A.M. Vercoustre, (1998). "The ERCIM Technical Reference Digital Library". In ECDL'98 Proceedings, Crete, Greece, September 1998, pp.905-906
http://www.iei.pi.cnr.it/DELOS/EDL/ETRDL98.html

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ETRDL
Submit Service
User Guide

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ETRDL is a digital library management system that provides access to a distributed collection of digital documents, consisting of a set of the local collections. These are published by the institutions participating in the digital library and are maintained on local servers.

ETRDL functionality regards searching and browsing ERCIM collections to retrieval existing documents, submitting new documents in a specific collection and administer the ERCIM collections via a Web user interface. The aim of this document is to present an user guide for the information seekers that want to browse the ETRDL collections and search documents in one or more selected collections..3

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1 Introduction

ETRDL is a digital library management system that provides access to a distributed collection of digital documents, consisting of a set of the local collections. These are published by the institutions participating in the digital library and are maintained on local servers.

This guide is addressed to the authors/librarians who want to submit their new documents to the collection pertaining to their institution via a Web user interface. Authors are assumed to be moderately experienced with Web browsing.

Instructions for how to use the ETRDL Submit User Interface are organised in the following sections:

• Preliminaries (technical and formal requirements for document submission and instructions about subject indexing and documents classification)

• User Guide (how to start and how to submit a new document to ETRDL and where to find help to do this)

• Syntax and Semantics of Bibliographic Fields (a quick reference to the syntax and semantics of each bibliographic field).

2 Preliminaries

2.1 Technical Requirements
You can access ETRDL via Web, this means that you can use which kind of computer and operating system you prefer. To submit your own documents to the ETRDL you must:
• Have Internet access availability
• Have some knowledge of Web browsing
• Have a Web browser such as Netscape Navigator (version 3.0 or later) or MS Internet Explorer (version 4.0 or later).

2.2 Formal Requirements
To submit your own documents to the ETRDL you must:
• Be an authorised member of the institutions publishing documents in ETRDL
• Have some documents to submit in digital format (PS, PDF, HTML, TXT, TIFF)

3 User Guide

In the following, examples refer to the ETRDL system as instantiated for the ERCIM Institutions. (see the companion publication "D-lib Center, ETRDL Search and Browse User Guide").ETRDL Submit User Guide
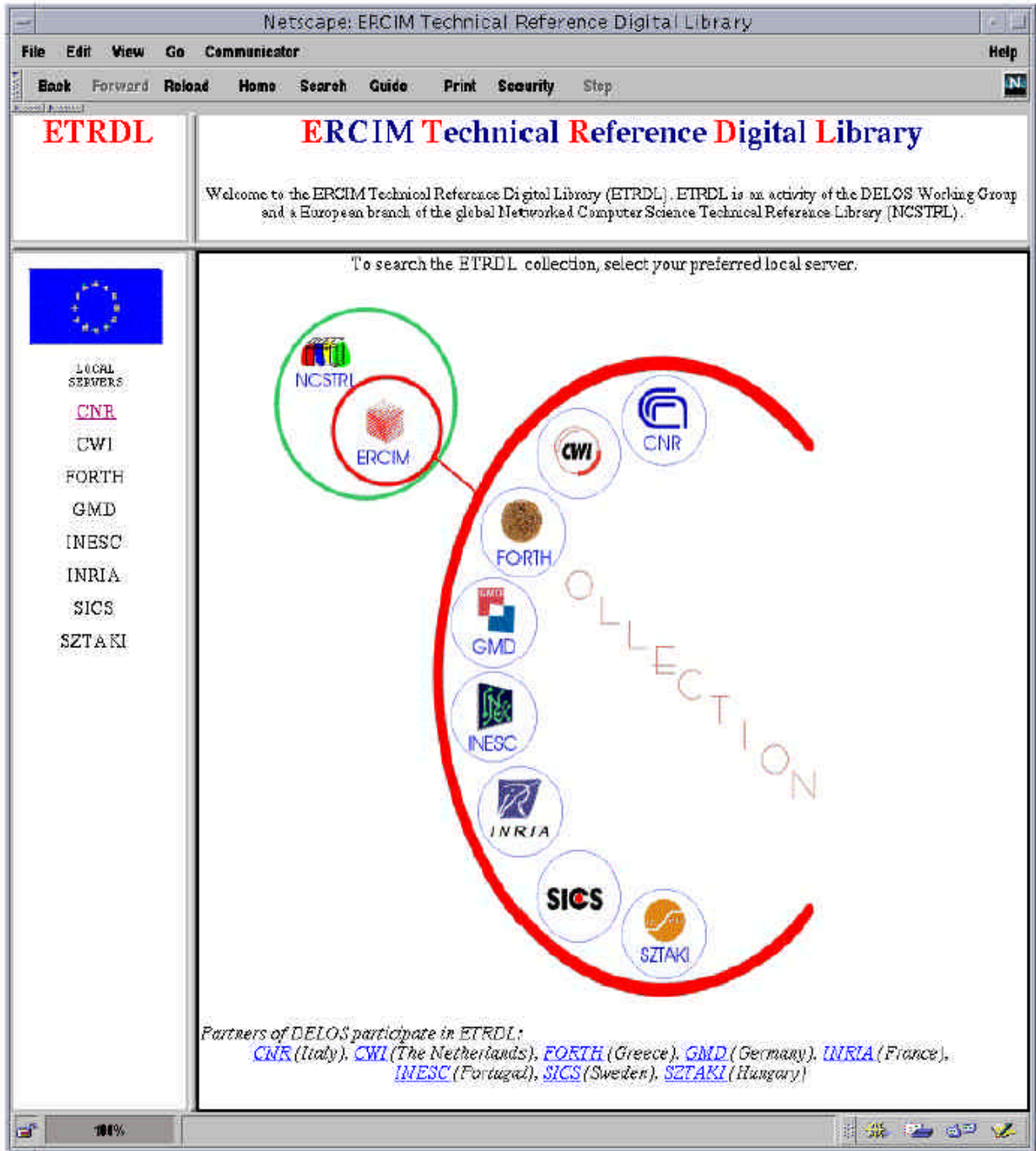

Figure 3-1 The centralised home page.

The user who accesses the system through the centralised home page can access a local server by clicking one of the Institution logos which are shown in the main picture or he/she can use the Institution hyperlink in the left frame.
For example if you are a member of GMD when you click the GMD logo or the GMD hyperlink you access to the GMD local server.
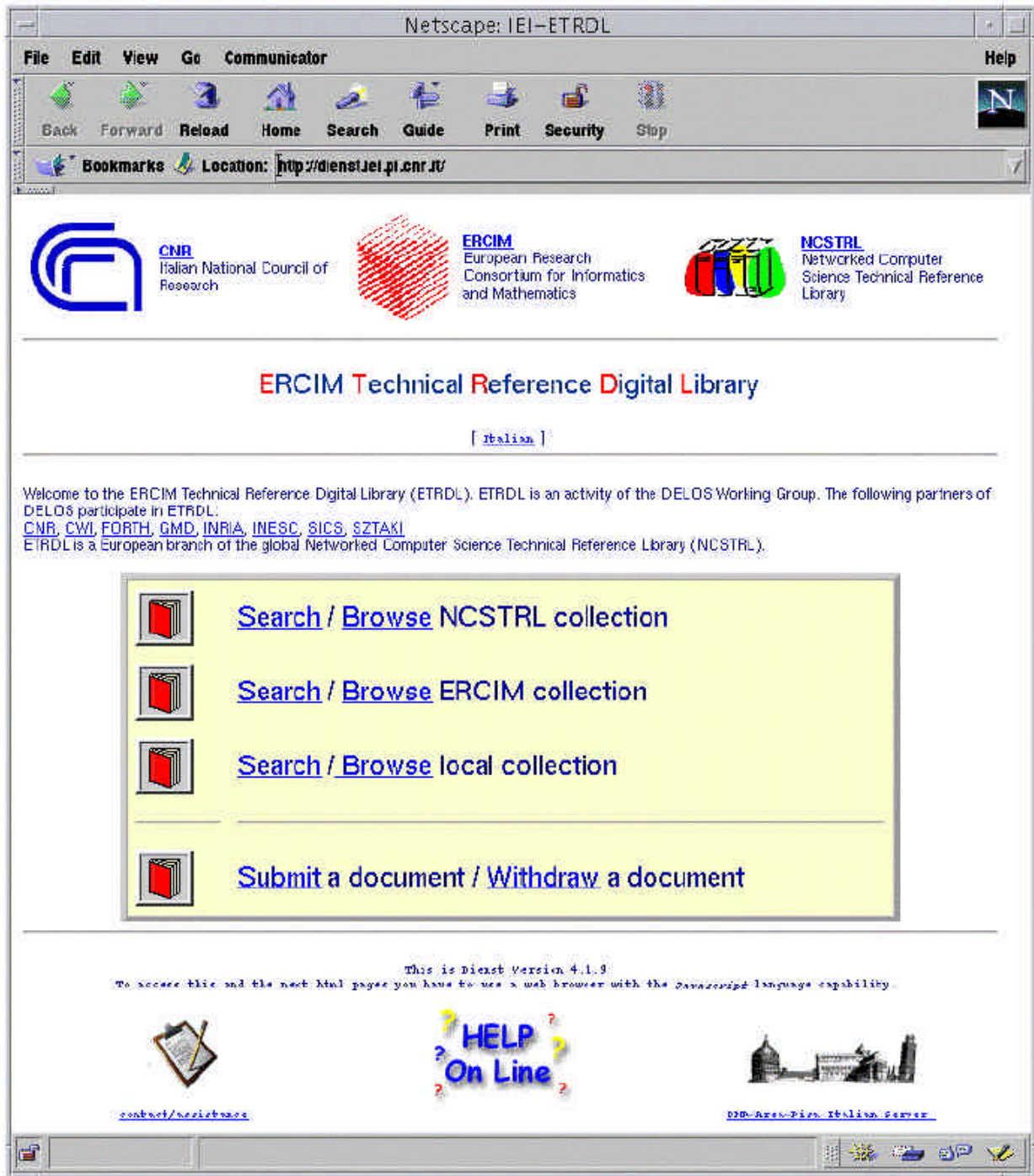
Figure 3-2 Local home page.

Depending on the local server selected, the user is also given a choice of language, as most local servers will maintain interfaces in English and in the local language.

The local home page interface caters simultaneously for two user classes: information seekers and information providers by offering two main options: search/browse any collection; submit/withdraw a document to/from a local collection. From the local home pages, the search and browse functions can be activated over the entire NCSTRL collection, over the ERCIM collection, or over the collection(s) of the local institution. In each case, the user is not only accessing a different collection (or sub-collection), but is provided with a different perspective on the information, depending on the functions that have been implemented at that particular level. When searching on the ERCIM or the local collections, the user can switch between user interfaces in English or his/her own language. On-line helps in both languages are available.

3.1 How to start.

ETRDL collection of CNR is distributed and consists of the set of the local CNR collections.

Searching and browsing these collections is possible by accessing to them from any ETRDL server.

Only authorised users can submit new documents to ETRDL. These users are members of participating institutions and they can submit their documents only to their own collection by accessing their institution server. Particularly each CNR authors must submit his/her documents by accessing a CNR server as shown in Table 1.

Institutions	ServerURL	Server Physical location
Area della Ricerca (Palermo)		
Istituto CNUCE (Pisa)	http://dienst.iei.pi.cnr.it	CNR-IEI
Istituto di Analisi Numerica (Pavia)	htpp://exlibris.ian.pv.cnr.it	CNR-IAN
Istituto di Cibernetica (Napoli)		
Istituto di Elaborazione dei Segnali e delle Immagini (Bari)	htpp://nettuno.iesi.ba.cnr.it	CNR-IESI
Istituto di Elaborazione della Informazione (Pisa)	http://dienst.iei.pi.cnr.it	CNR-IEI
Istituto di Fisica Cosmica con Applicazioni all'Informatica (Palermo)		
Istituto di Linguistica Computazionale (Pisa)	http://dienst.iei.pi.cnr.it	CNR-IEI
Istituto di Matematica Computazionale (Pisa)	http://dienst.iei.pi.cnr.it	CNR-IEI
Istituto di Ricerca sulle Onde Elettromagnetiche (Firenze)		CNR-IROE
Istituto di Studi sulla Ricerca e sulla Documentazione Scientifica (Roma)	http://dienst.iei.pi.cnr.it	CNR-IEI
Istituto di Tecnologie Didattiche e Formative (Palermo)		
Istituto per la Documentazione Giuridica (Firenze)	htpp://dienst.iei.pi.cnr.it	CNR-IEI
Istituto per la Matematica Applicata (Genova)	htpp://exlibris.ian.pv.cnr.it	CNR-IAN
Istituto per le Applicazioni della Metamatica e dell'Informatica (Milano)	htpp://exlibris.ian.pv.cnr.it	CNR-IAN

Table 1 CNR servers.

Please note that the ETRDL digital library instantiated for the D-Lib courses allows the submit service be delivered only by the CNR-IEI server. Users can submit their documents only to the CNR-IEI local library.

The ETRDL has a bilingual user interface. When you access the ETRDL local home page the system shows you the English user interface. To switch to the Italian user interface you must click on the hyperlink below the title of the home page.
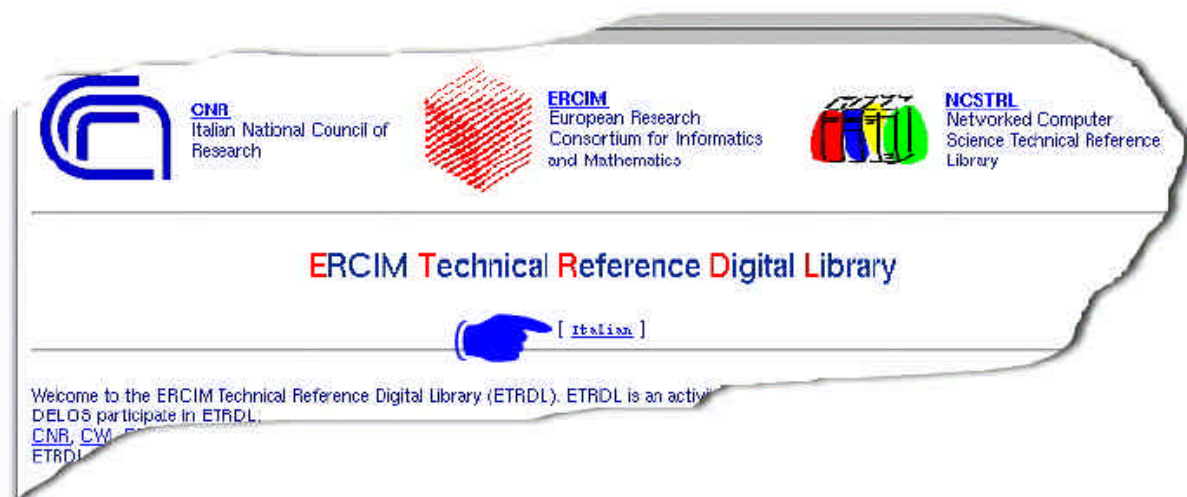
Figure 3-3 Choose local language user interface.

3.1.1 Help on line

During the document submission users can access two kinds of help directly from the submission page: the procedure help and bibliographic fields help.

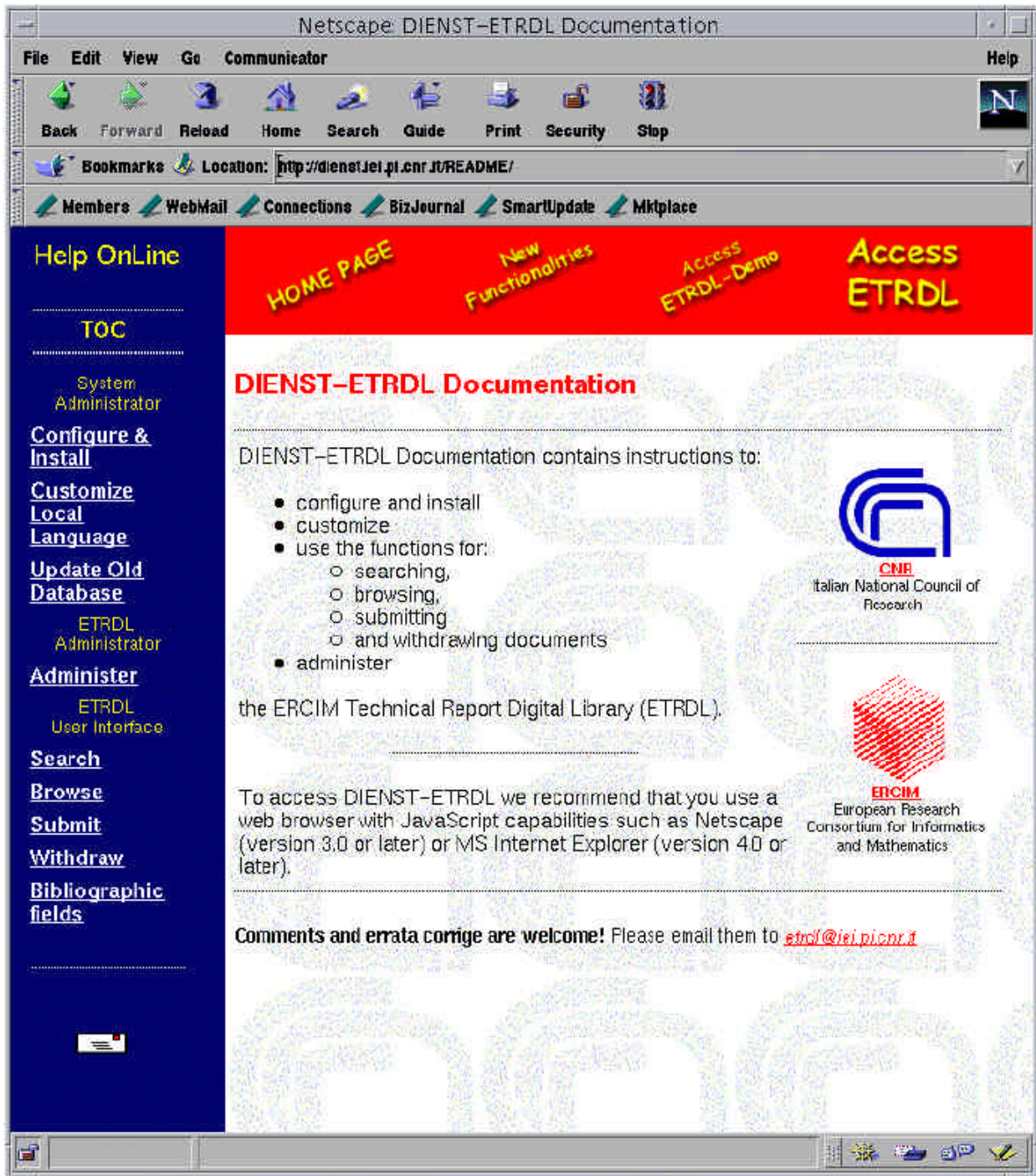
Figure 3-4 Submit procedure help on line**.**

Figure 3-5 ETRDL help on line and documentation. The home page.

3.2 How to submit a new document

Before starting the submission procedure, the author must have all required information to fill in the bibliographic record form and the document file (or files) to send to ETRDL.

Bibliographic record consists of obligatory and optional fields. Some of these fields may be obligatory or optional depending on the context.

Bibliographic fields are shown in Table 2.- (For syntax and semantics, see Sect. 4)

Obligatory fields		Optional fields
Title		Telephone
Author		Local language abstract
E-mail		Language of Local language abstract (become obligatory if the above field has been filled in)
Publisher		
Subject	Free Keywords	
	Computing Classification System (ACM)	
	Mathematics Subject Classification (MSC)	
English abstract		
Date		
Type		
Language		

Table 2 Obligatory and optional bibliographic fields.

The author can use different file formats:
- **PS**
  - ➡ A postscript level 2 file.
- **PDF**
  - ➡ An Portable Document Format file.
- **TXT**
  - ➡ A text file.
- **HTM**L, **GI**F, **JPEG**
  - ➡ One or more HTML, GIF and/or JPEG files.
  - ➡ The main HTML document must be entered as first file; automatically the system will change the name of the first file in "index.html".
  - ➡ Other HTML, GIF and JPEG files linked to the main HTML document must be at the same level directory of it.
  - ➡ Always use relative paths to link files and remember to refer the main document as "index.html".
- **TIFF**
  - ➡ One or more TIFF files.

The following section describes the steps that authors in the ERCIM community should follow to submit a document to the DL administrator. Completion of these steps will result in the presentation of the document to the system administrator for submission in the ETRDL database.

3.2.1 Submission Procedure

From the main page the user must select the "Submit a Document" option and start the submission procedure as follows:

1. Compile a bibliographic record for the new document by filling in the fields on the form presented by the system (for syntax and semantics, see Sect. 4). The system will perform an automatic check on the formal correctness of the contents of the obligatory fields. Instructions to guide the user in the correct compilation of a field can be obtained by clicking on the name of that field.
2. If a document consists of just the Abstract, click on the checkbox to move on to point No. 5.

Figure 3-6 The "Abstract Only" checkbox.

3. Select the file containing the document to be transferred to the server, using the Browse option.
4. Indicate the format of the file by using the pulldown menu. The permitted formats are:
    * PS
    * PDF
    * TXT
    * HTML
    * TIFF
5. When the form has been filled in, click on one of the following buttons:
    * Submit the form, to confirm the data and continue with the procedure
    * Clear the form, to cancel the content of all the fields.
6. If the user has chosen Submit the form, the data submitted will be displayed. In this way, the user can check that the values are correct. One of the following options must then be chosen:
    * Confirm, to send the bibliographic record and document to the System Administrator
    * Go Back, to return to the form and correct any mistakes
    * Discard, to cancel the entire document submission procedure and go back to the homepage
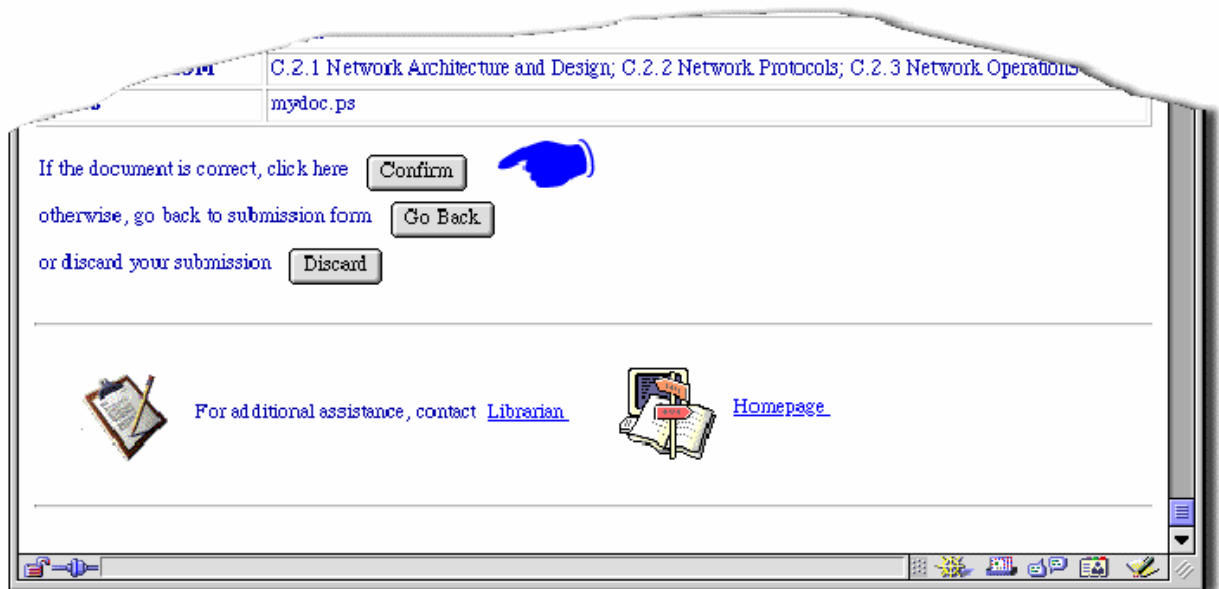   See Figure 3-7.

Figure 3-7 The summary page: "Confirm", "Go Back" and "Discard" buttons.

If the file type selected at point No. 3 is either HTML or TIFF, the system allows the user to submit a new file as follows: i) select the file using the Browse option and ii) confirm the selection with Submit a new file.

7. If the file type selected at point No. 3 is HTML, the new file can be in HTML, GIF or JPEG.
8. If the file type selected at point No. 3 is TIFF, the new file must also be in TIFF.

The procedure described above at point No.7 is recursive and is terminated using the Confirm option described in point 6.

4 Syntax and Semantics of Bibliographic Fields

In this section syntax and semantics of each bibliographic field is described. Users must read carefully this section before submit their documents in order to insert a correct bibliographic record in ETRDL.

The system will perform an automatic check on the formal correctness of the contents of the obligatory fields. Anyway, the respect of submission rules allows maintaining a digital library in which documents retrieval is easy and without misunderstanding.

Field name	Description
Title	This is the title of the work as assigned by the author. This field should include the complete title with all the subtitles, if any. **Format**: <free text> Example: Real-Time Multiprocessor Systems: Performability Evaluation Obligatory field
Author(s)	The name of the author(s) of the document. If there is one author for the document, use the following **syntax**: *Last-Name, First-Name* Example: Rossi, Mario Otherwise, if there is more than one author, use the following **syntax**: *Last Name1, First-Name1 and Last-Name2, First-Name2 and Last-Name3, First-Name3 and…* Example: Rossi, Mario and Bianchi, Paolo and Verdi, Carlo Obligatory field
E-mail	The e-mail address of the person to be contacted with respect to the document. Enter the address with the following syntax: *name@domain* Obligatory field
Telephone	The telephone number of the person to be contacted with respect to the document. Optional field

Example

Document Submission Form

To submit your *document* to the *Dienst* server via HTTP, please fill in the following form.
If you need help for any field, please click here.
All fields are mandatory, except for the telephone number.

Bibliographic record

Title:	Introduzione al multicast e alla comunicazione multimediale :
Author(s):	Bonito, Antonio-Blasco and Pobric, Damir
Submission contact	**e-mail:** a.bonito@cnuce.cnr.it **Tel.:**
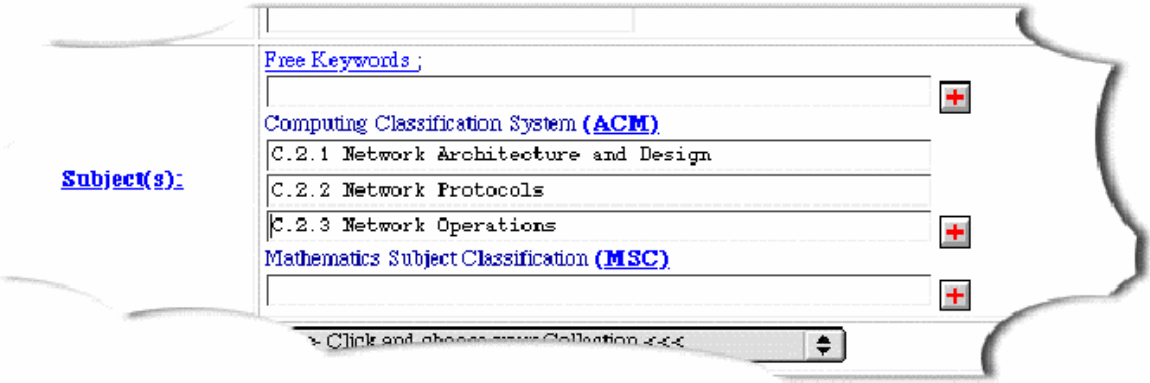
Figure 4-1 Document Submission Form: Title, Author(s), e-mail and Tel. bibliographic field.

Field name	Description
Free Keywords (Subject)	A field for uncontrolled terms, e.g. for relatively new concepts, proper names of systems, etc., chosen freely by the author or the compiler of the bibliographic record (normally in English). Each field must contain keywords for a single concept. The field can be repeated: a new field is obtained by clicking on the "+" button. **Format**: <free text> **Example**: digital libraries **ATTENTION:** at least one of three subject fields must be filled in.

Example

Free Keywords :
Digital library

Computing Classification System (ACM)

Subject(s):

Mathematics Subject Classification (MSC)

Figure 4-2 Type free keywords and the click on the '+' button to add another field.

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Field name	Description
ACM **(Subject)**	A field for classification codes/descriptors extracted from the ACM (Association for Computing Machinery) Computing Classification System (CCS), Version 1998. The field must contain a code with its descriptor. The field can be repeated to enter additional codes/descriptors: a new field is obtained by clicking on the "**+**" button. **Format**: Codes/descriptors can be copied directly from the ACM schema at (http://www.acm.org/class/1998/), using copy/paste. The ": " symbol must be inserted between a coded descriptor and an uncoded one. **Example**: D.1.5. Object-oriented Programming For more details see the **Error! Reference source not found.** General instructions for indexing and classifying documents. **ATTENTION**: at least one of three subject fields must be filled in.

Example

Figure 4-3 Copy ACM codes and descriptors from the ACM scheme and paste them in the ACM fields. Click the '+' button to add another field.

Field name	Description
MSC **(Subject)**	A field for classification codes/descriptors extracted from the AMS (American Mathematical Society) Mathematics Subject Classification (MSC), Version 1991. The field must contain a code with its descriptor. The field can be repeated to enter additional codes/descriptors: a new field is obtained by clicking on the "**+**" button. **Format**: Codes/descriptors can be copied directly from the AMS schema at http://www.ams.org/msc/home.html, using copy/paste. **Example**: 11K50 Metric theory of continued fractions For more details see **Error! Reference source not found.** General instructions for indexing and classifying documents. **ATTENTION**: at least one of three subject fields must be filled in.

Field name	Description
English Abstract	The abstract of the document. All documents, whatever their language, must have an abstract in English. **Format**: <free-text> Obligatory field
Local Language Abstract	If appropriate, please also include an abstract for the document in the source language and indicate the language using the pulldown menu. **Format**: <free-text>
Language of the "Abstract in Local Language"	Select the language using the pulldown menu. **Obligatory field**, when the "Local Language Abstract" field has been used.
Publisher	The organisation primarily responsible for the intellectual content of the resource. Please select the appropriate institution from the pulldown menu. Obligatory field

Example

Figure 4-4 Choose your collection and then type the document abstract. If your document has a two abstracts also select the language of the second abstract.

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Field name	Description
Language	The language in which the document is written. Default is English. Otherwise, please select the appropriate language from the pulldown menu. Obligatory field
Type	Indicates the type of publication (Technical Report, Thesis, EC Deliverable, Proceedings, Ercim News, Preprints, Project Reports, Others) as assigned by the issuing organisation. Please select the appropriate type from the menu. Obligatory field
Date	The publication date (normally the date of submission to the system). The **format** is *Year (four digits) Month (two digits) Day (two digits)* as defined in ISO 8601 (Date and time format). **Example:** 1998-07-22 Obligatory field

Example

Date: Year: 1998 - Month: 03 - Day: 03

Type: Technical Report

Language: Italian

If you are submitting **Abstract Only** check here ☐ and ignore the file(s) selection.

Figure 4-5 Fill in the date field and select the document type and the document language.

Field name	Description
File Name	This is the full pathname of the local file containing the document. **Example**: C:\Documents\my_document.ps Multiple files can be associated with the same bibliographic document. In this case, the file names must be entered one by one. The **file(s) will** be transferred to the remote server. If abstract only is selected, no file transfer will be executed. **Obligatory field** unless only the document abstract is being inserted.
File Format	Indicates the file type. Select the appropriate file type format from the menu. **Obligatory field** unless only the document abstract is being inserted.

Example

Figure 4-6 If you want to send your document, select your file by browsing your system and select the file format.