University of Padova
http://www.unipd.it

Institute of Science and Information Technologies
http://www.isti.cnr.it/

IAMC-CNR
Costal Marine Environment Institute
http://www.cnr.it/istituti/

LV and MeCME Digital Libraries:

Two open doors to the acquatic sciences documentation

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LVDL
http://archimede.isti.cnr.it/

MeCME
http://istiserv.isti.cnr.it/

The world of web communication offers new opportunities to scientific communities making it possible to easily share information and documentation on their own scientific studies and research by implementing open access disciplinary and thematic repositories, able to overcome linguistic diversity and geographic distances.

The Vallisneri Library of the University of Padova, the Costal Marine Environment Institute of Taranto and the Institute of Science and Information Technologies of the Italian National Research Council have started a collaboration in order to promote the exchange and dissemination of aquatic sciences information and to give open access to the results of the research activities.
Two Digital Libraries have been created by the three Institutions in order to collect documents such as reports, technical reviews, graduate and undergraduate thesis, that often remain unpublished and thus become difficult to trace for the scientific community engaged in the environmental study and conservation:
the first, a digital thematic library called *LVDL Laguna di Venezia Digital Library*, collecting published and unpublished documents arising from scientific studies about the Lagoon of Venice;
the second, created following the example of LVDL and the prototype pattern, called *MeCME Mediterranean Costal Marine Environment Digital Library* collecting multidisciplinary documents concerning scientific studies in the Mediterranean Costal areas and in particular the Southern one, including specific studies on the Taranto Gulf.
Both the DLs cover up similar fields of interest and classify the documents according to the same semantic descriptors (ASFA Thesaurus, Library of Congress Classification, free keywords).

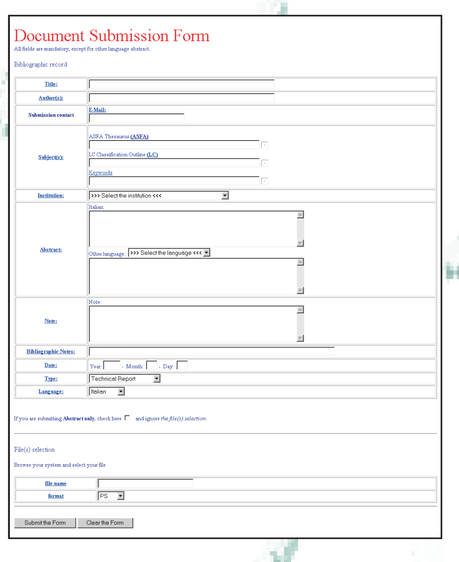
Both the DLs, hosted on a CNR server in Pisa, are a personalized extension of the previous system ETRDL (ERCIM Technical Reference Digital Library http://dienst.isti.cnr.it) based on the Dienst protocol of the Cornell University-US.

SYSTEM FUNCTIONALITY

1. *Multilingual access*

One of the most interesting features of the system is the crosslanguage querying functionality, which operates as follows:
- the title is always provided both in the original language and in English
- the use of keywords, descriptors and classification codes is always in English, making it possible to retrieve documents in other languages as well
- the abstract is provided in Italian (mandatory) and in the original language; the Italian papers' abstracts are always accompanied by an English version.

2. *Submission and administration services*



The submission of new documents in a specific collection and the administration of DL collections are managed by the Library staff through a Web interface.
Through the **Document Submission Form** each document is descripted with a set of metadata mapping on Dublin Core standard.
Three levels of semantic descriptors are provided:
- ASFA (Aquatic Sciences and Fisheries Abstracts) Thesaurus
- LC (Library of Congress) classification
- free keywords.

Different kinds of documents can be recorded such as technical reports, graduate and undergraduate thesis, maps, data set, preprint, bibliography, etc.
Whenever possible the full text of the documents is provided. The system supports different file formats (pdf, doc, txt, html, jpg, ps, tiff, gif).

SEARCH AND BROWSE SERVICES

Users begin the search by clicking on the Search/Browse options in the system homepage. Options for browsing the collection according to author, year and semantic indexes are available for each collection.

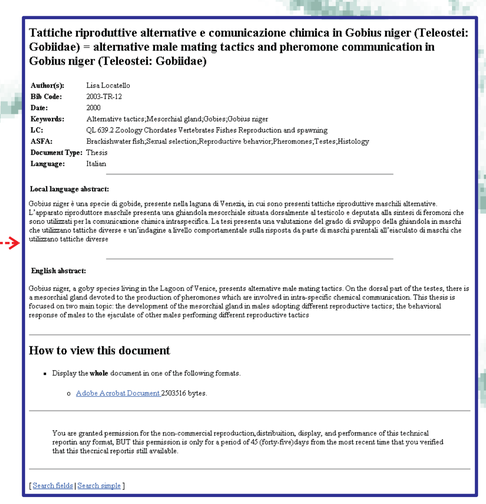
Users can search for documents with either a Simple Search, a Fielded Search and a Direct Search.

The three levels of semantic descriptors should help subject-based search of both specialised and not- users.

The multilingual access functionality enables the search for and retrieval of documents written in wide range of language.

The result page shows the bibliographic description of the document and the file download option.

Final result



FUTURE DEVELOPMENTS

Next step of the project is to make the DLs powered by the OpenDLib system www.opendlib.com . OpenDLib is a software system, developed at ISTI, that provides DL functionality, customizable according to the requirements of a given user community, supporting explicit submission or harvesting of the content, with an open access to content and services regulated by specific policies. OpenDlib stores new types of digital objects as multimedia, structured, annotated and multilingual enriching the possible forms of remote collaboration among the members of a community of interest.

The aim is:
1) to promote new collaborations with academic or research public and private bodies in step with increase in the number of collections

2) to create a common Web site giving access to different digital libraries, all concerning the topic of Mediterranean aquatic sciences.