

«Archeologia e Calcolatori» and the OAI-PMH

<http://soi.cnr.it/archealc/>



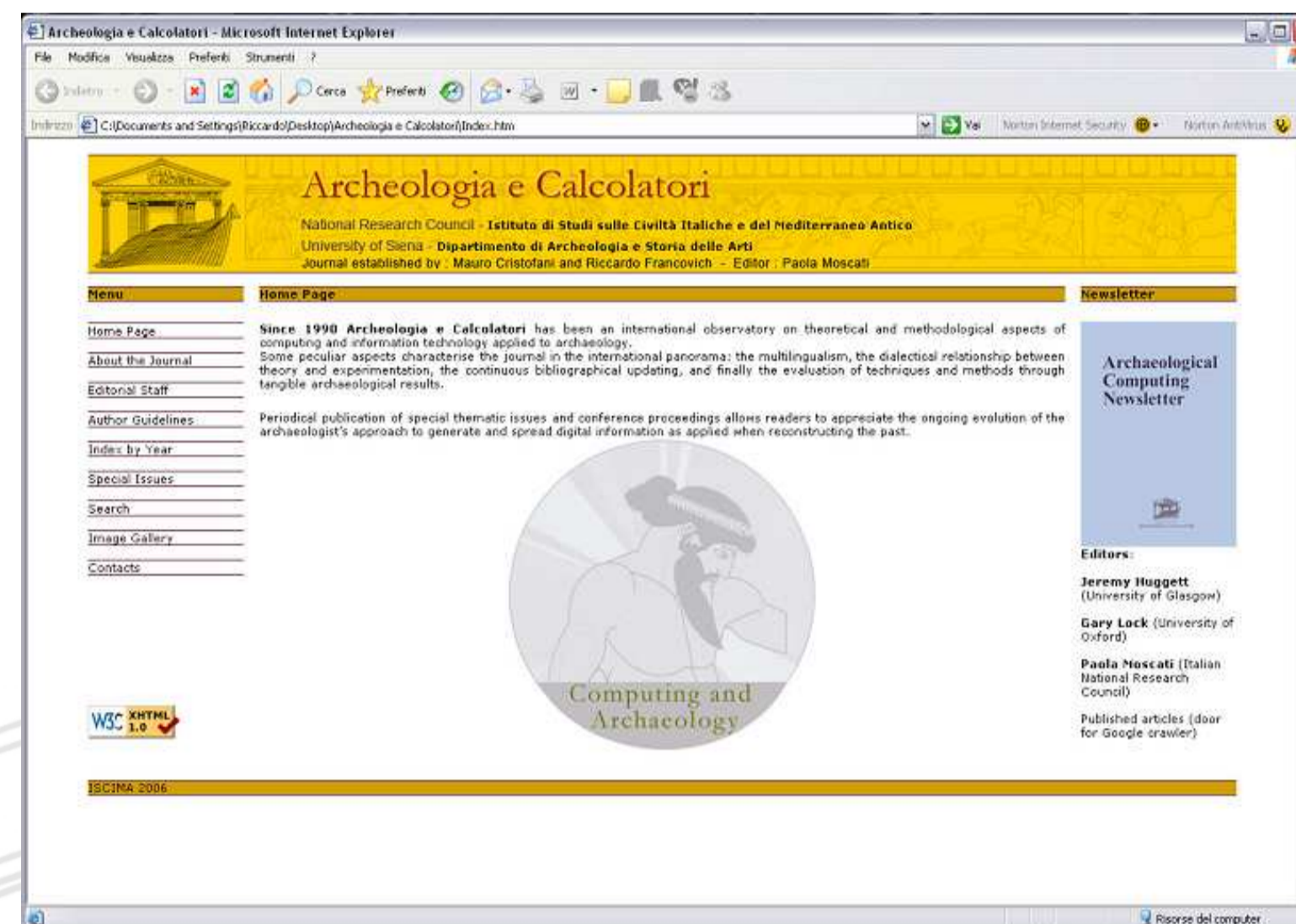
Archeologia e Calcolatori

«Archeologia e Calcolatori» is an international journal established in 1990 by Mauro Cristofani and Riccardo Francovich and edited by the CNR-ISCIMA, under the scientific direction of Paola Moscati.

Since 1990 «Archeologia e Calcolatori» is an international observatory on theoretical and methodological aspects of computing and information technology applied to archaeology. Some peculiar aspects characterise the journal in the international panorama: the multilingualism, the dialectical relationship between theory and experimentation, the continuous bibliographical updating, and finally the evaluation of techniques through tangible archaeological results.

Periodical publication of special thematic issues and conference proceedings allows readers to appreciate the ongoing evolution of the archaeologist's approach to generate and spread digital information as applied when reconstructing the past. Since 2004, the «Archaeological Computing Newsletter» (<http://www.gla.ac.uk/archaeology/acn>) has resumed regular publication as a supplement to «Archeologia e Calcolatori».

To increase the visibility and diffusion of the journal data archive, a project for digitalisation and web diffusion of its content has been started in 2004 and an OAI-PMH (Open Archive Initiative-Protocol for Metadata Harvesting) repository of published articles has been implemented.



Implementing OAI-PMH

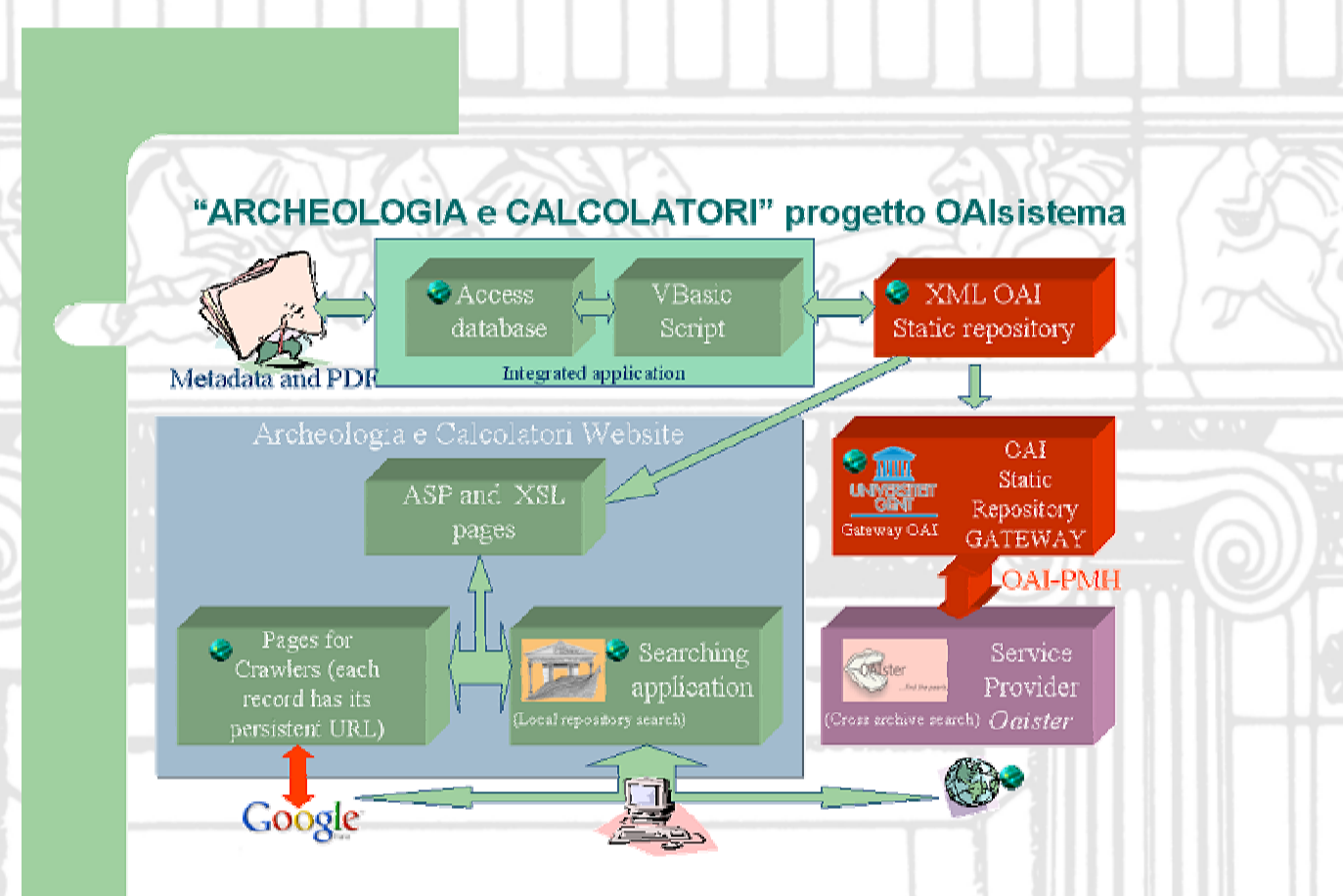
OAI-PMH is a technology based on metadata harvesting. It aims at creating the basis for cross-archive search by centralised services.

Several software applications to support OAI-PMH have been proposed and some obtained a brilliant success. However, in certain situations the deployment of an OAI-PMH conformant repository is still problematic.

Lagoze & Van De Sompel, "fathers" of OAI-PMH, in 2004 created the model *Static repository and Static repository gateway*, a simplified OAI implementation architecture for small and medium size archives.

Supporting such a model, a software solution, named OAIstistema, has been implemented for the collection of abstracts of the articles published in «Archeologia e Calcolatori», but it can easily be adapted to other cultural subjects.

The architecture of OAIstistema



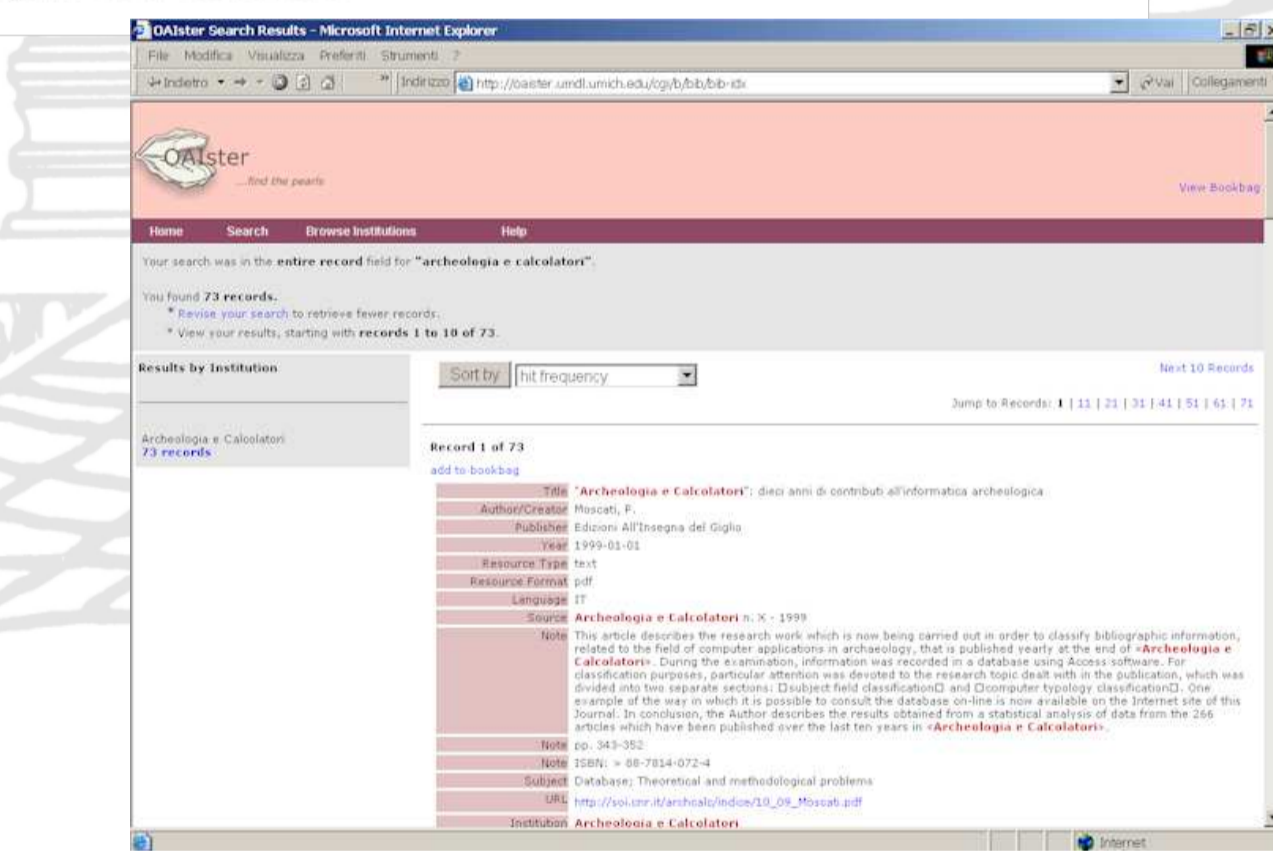
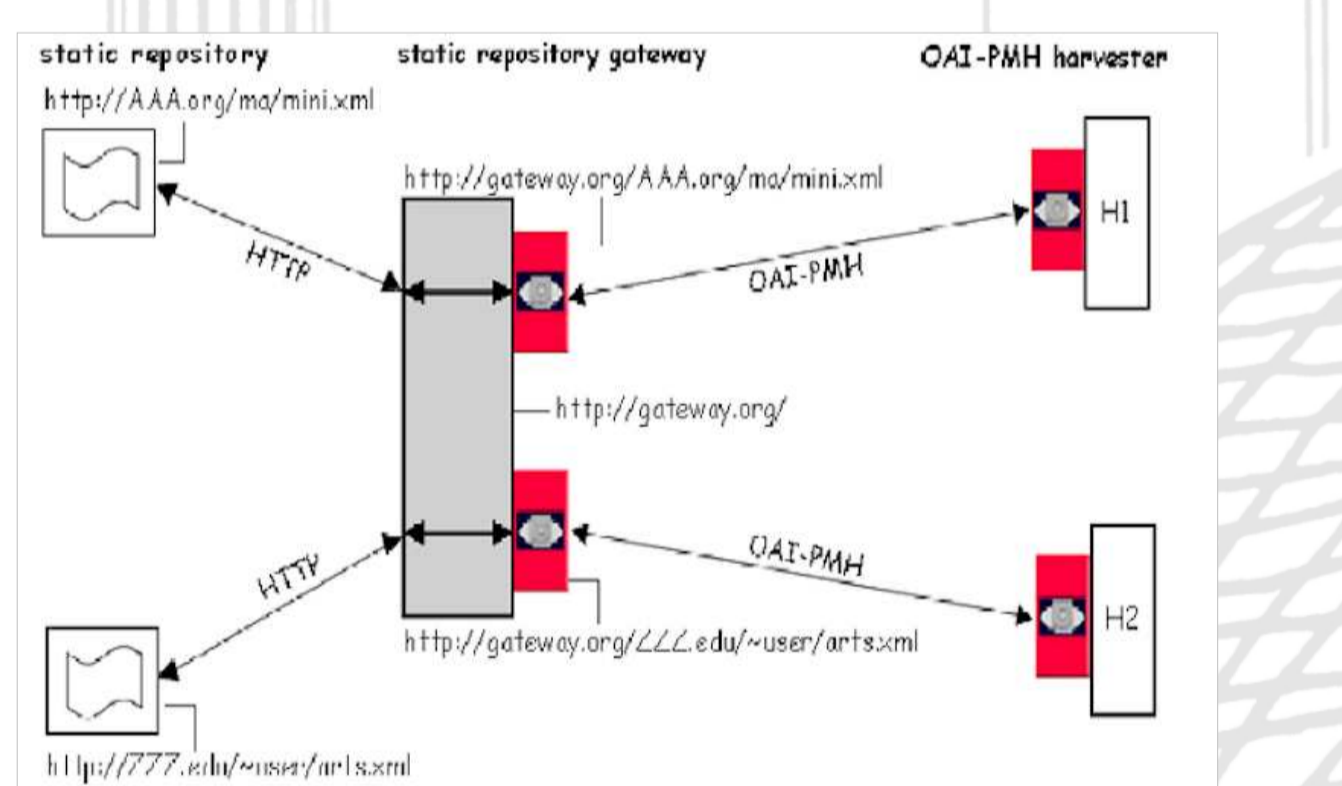
A full set of metadata has been created in accord with Dublin Core specifications to describe each article. Metadata are stored in a database and then exported as an XML file conform to the OAI Static Repository schema.

In order to be accepted on an OAI circuit, the Static Repository needs a gateway. We have been supported by the University of Ghent, that administers a gateway developed by Patrick Hochstenbach.

The Static Repository has been registered in the OAI official data provider register and successfully harvested by the main OAI Service provider: OAISTER.

Besides entering OAI, data collection has been used to produce two further services. The first is a local search engine for the website of the journal.

The second service offers to the Google spider a persistent URL for each record contained in the repository, which can be easily indexed on the web.



With the OAIstistema implementation, users have therefore three different paths to recover «Archeologia e Calcolatori» PDF articles: OAISTER, Google, and the journal local search engine.



The aim of this digital archiving project focuses on the potential use of the web and its crucial role in a new type of communication, based on the principle of shared knowledge. Technological renovation accelerates knowledge sharing and circulation, in order to create an interactive "face to face" consultation to bring the knowledge when and where it is needed in a collaborative virtual environment.

