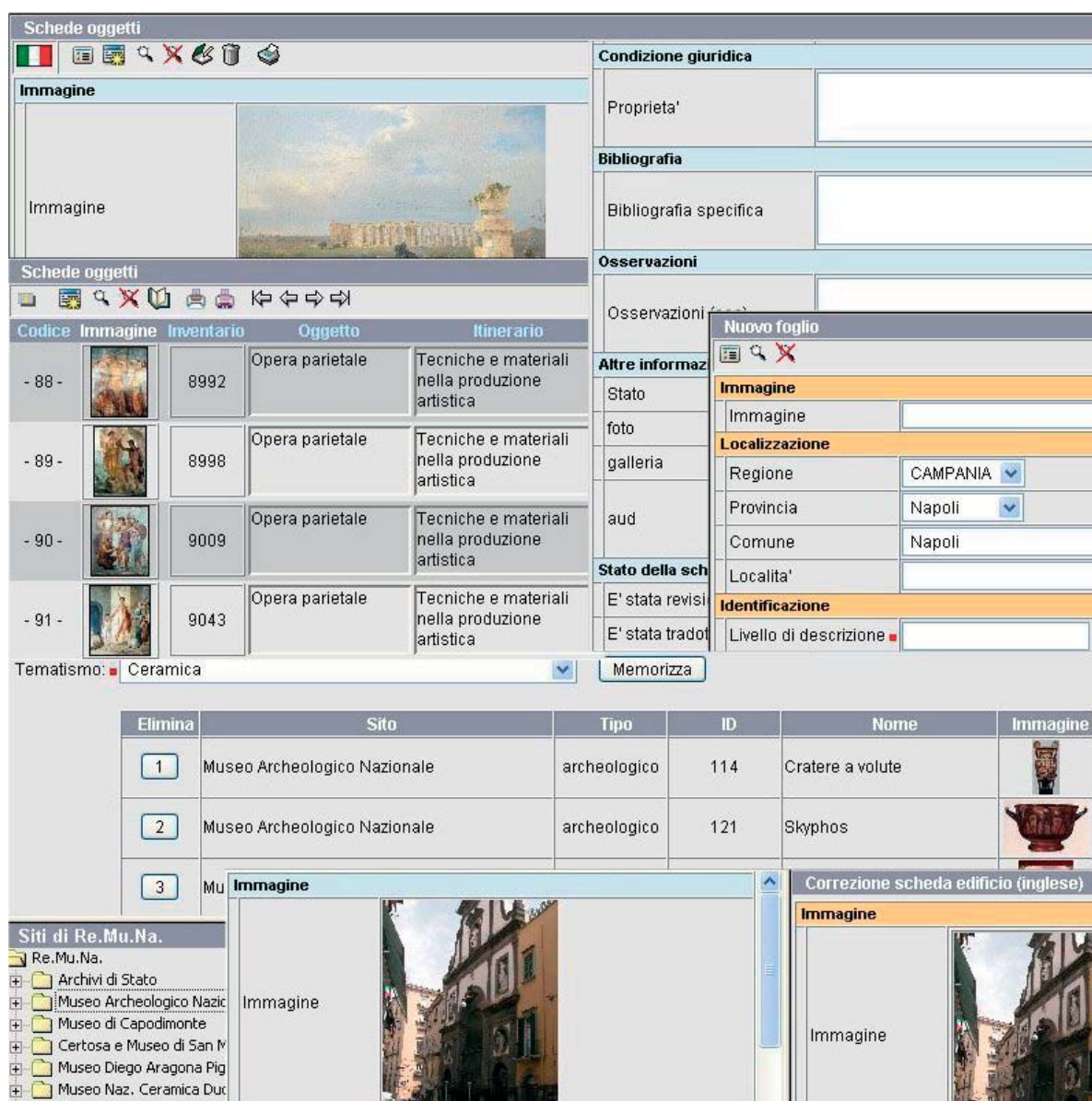# Octapy CMS

The Michael Project and the Octapy platform CMS in the Regional Portal for Culture in Campania

CMS: an "intelligent" system for treating multimedia data

The boom in the number of information archives available on Internet, using a whole range of formats, requires increasingly sophisticated modes for organizing and managing multimedia data, if users are to be able to find them easily and select the most appropriate. The CMS (Content Management System) is a new paradigm of memory preservation and archive interrogation. By focusing on access to information rather than physical storage media it solves the problem of treating multimedia contents, introducing an "intelligent" system for indexing, managing meta-data and searching for contents, whether singly or structured in "collections".

Research into interoperable systems and the Information System for Cultural Resources in Campania

In recent years increasing importance has been placed on the problem of interoperability between the various information systems for managing and cataloguing contents. These systems are only able to communicate if they use common standards for meta-data, such as those created for the MICHAEL and DUBLIN CORE projects. Accordingly the Octapy CMS has adopted the DUBLIN CORE standards for meta-data while adhering to the international Open Archive Initiative. Since it respects the OAI communication protocol governing heterogeneous meta-data standards, it can also be interrogated by searches using MICHAEL meta-data. It is this enhanced "flexibility", benefiting cooperation between systems, which led to the choice of Octapy in the development of a new technological and information platform. Created by the Istituto di Cibernetica of the Consiglio Nazionale delle Ricerche, Napoli, in conjunction with the Direzione Regionale per i Beni Culturali e Paesaggistici in Campania, this platform is designed to operate in parallel with the MICHAEL system in cataloguing "multimedia collections" and creating the specialist web site *www.napolibeniculturali.it*. This has already been tested in the Project "ReMuNa: Rete dei Musei di Napoli", as the core of the Regional Portal *www.campaniabeniculturali.it*, which in turn is linked to the national Culture Portal.
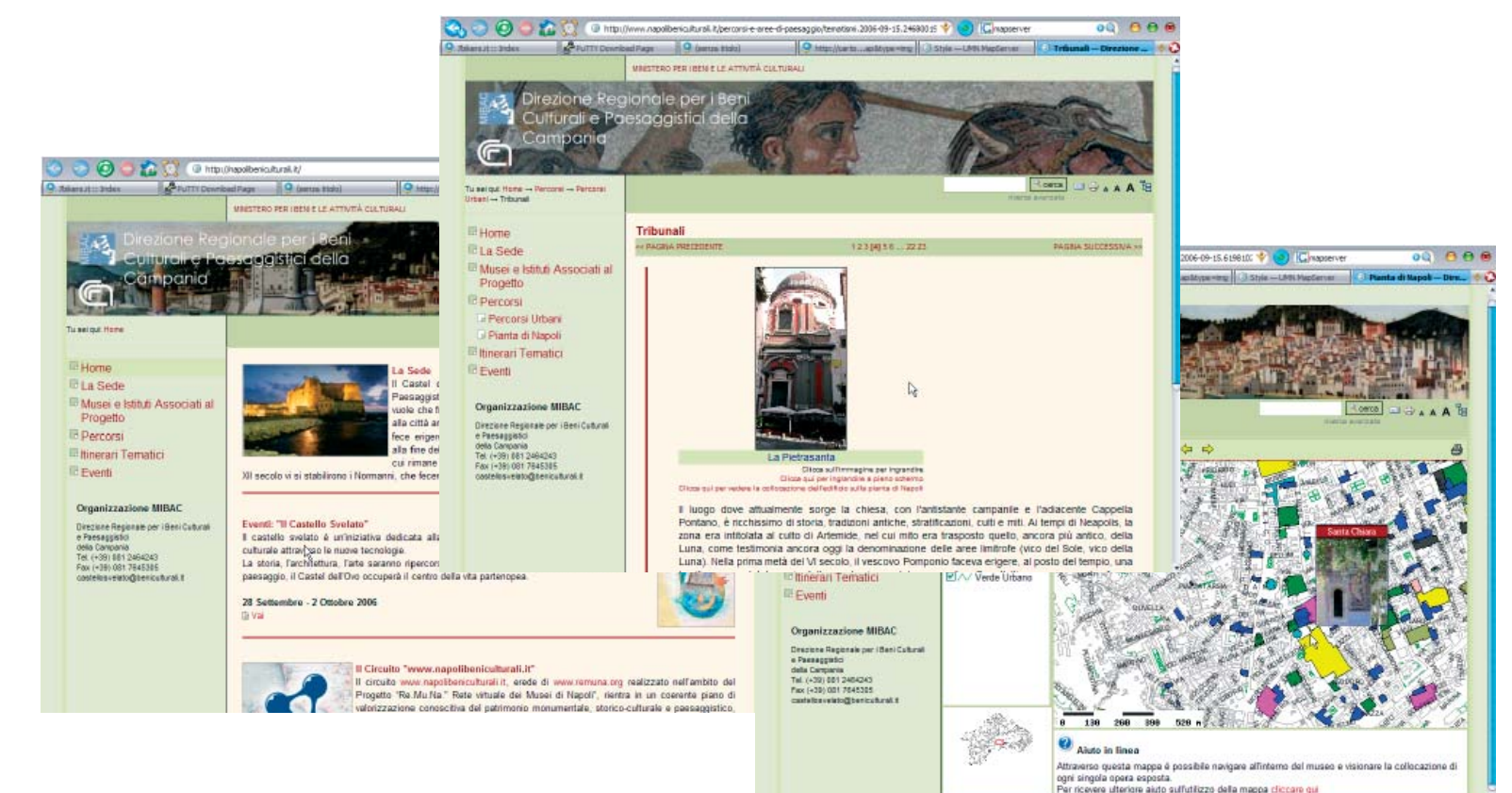
Cultural Resources: a frontier for research and experimentation in new information technologies

The sector of Cultural Resources is a useful application paradigm for the CMS since by definition a cultural resource has a stratified significance and varies both in space and time and according to the cultural milieu in which it was created or produced. In fact each unit has a dual valence, both cultural and physical/material, and can thus be interpreted by means of multiple perspectives and logical/thematic connections among different categories and typologies of resources. A cultural resource is by its very nature "predisposed" for cooperative modalities of sharing and exploiting the information that represents or concerns it.

Achieving a virtual representation of shared and contextualized knowledge

The Octapy CMS makes it possible to share and contextualize documents and information, making them available to a variety of both internal and external users while leaving them safe in the original archives of the only entity entitled to manage and modify them. Moreover, by sharing the information it is possible to contextualize the cultural resource in its territory of provenance and/or the period in which it was produced.
On the strength of these attributes Octapy has had a first experimental application in the creation of the above-mentioned prototype of a Regional Portal for Culture in Campania. By linking different institutions in a distributed network infrastructure, it organizes the various multimedia "collections", making "sharing" possible and at the same time safeguarding scientific uniqueness and relevance.

Intra- and inter-museum paths of the virtual circuit

The Portal offers two research orientations. Users can consult the cultural contents in the web sites of each Museum or Cultural Institute included in the "circuit" of *www.napolibeniculturali.it* by means of "intra-museum paths", organized according to collections or groups of objects on display or else specialist themes. Alternatively they can search for contents according to multisector perspectives using "inter-museum paths", offering a cross-section of part or all of the "containers" on the circuit. Furthermore the Octapy system enables users to extend their search for multimedia contents to "containers" outside the museum circuit and to obtain a virtual contextualization of the cultural resource in its territory of provenance and/or the period in which it was produced. This operational mode has been experimented in the demonstration site for Rione Terra in Pozzuoli, linked to the site of the Museo dei Campi Flegrei, Baia, which features in the Regional Portal, making it possible to associate the objects on display with the find-place, or vice versa, by means of a dynamic inter-document link.

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