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Abstract's presentation:

Web Gis 2.0 for the Umbri@Geo geographical infrastructure

The Geographical, Environmental and Territorial Informative Service of Umbria region has undergone in the past years a specific and deep renovation in terms of management structure, looking at the opportunities of sharing geographical information through the new communication tools of Web 2.0.

Umbri@Geo was born in this context as a web-enterprise based space specifically created for the community of generic and specialised users of geographical information; the geographical information is in fact the reference mark for sharing environmental and territorial data within the region. In this "virtual box" the tools for data usage are implemented and especially developed, as in Web GIS 2.0 and the Geoportal (a catalogue for metadata). In order to realize a widespread system of knowledge regarding the territory and the environment, we have chosen to implement Enterprise GIS, which aims to source, manage, analyse and visualise the geographical information through a distributed network.

Defining a technological partnership able to train the regional officers has been a key point in the development of EGIS, included in the ESRI ArcGIS Platform, and especially to its Server, which manages the following components:

- Central Geodatabase for data storing and managing with ArcSDE ESRI technology, SQL Server Microsoft and Oracle
- ArcGIS Server for web services publishing
- Web API ESRI and Adobe Flex for the Geoportal Viewer
- Geoportal Extension ESRI for metadata managing and publishing
- ArcGis Desktop to manage the database and author web services

Web GIS 2.0 is developed in Adobe Flex environment, to view online the dataset included in the Geodatabase. The main features of this package are the widgets (tools with specific functions), the upgraded functionalities, a general toolbar (navigation tools, print, and so on) and a reference for localizing the position on a map (viewing zone). Thanks to the availability of the development framework, it is always possible to add panels with specific functions. By doing this, in terms of scalability, the application will always follow the main agency which broadcasts the information.

The safety of the access is managed according to the highest standards of IT. When the data is published according to the OCG standards, the communication is diffuse and the information is more accessible trough many open clients and owners, provided that they follow the publication standards.

The OCG services which have been implemented for resource sharing and usage are the following: Web Mapping Services (WMS), Web Feature Service (WFS), Keyhole Markup Language (KML).

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