

SITGAWEB: AN INTRANET WEB MAPPING TO GENERATE THEMATIC MAPS ON-DEMAND.

Manuel Gallego and Berta Roman

SITGA, Xunta de Galicia

Ctra Santiago-Noia, km 3, A Barcia

Santiago, 15896 A Coruña, Spain

Phone: + 34 981 545 817

Fax: + 34 981 542 564

email: mgallego@xunta.es

On the northwestern part of Spain, in the region of Galicia, the regional government has available a GIS to storage and maintenance of geographic information sets, called SITGA (Land Information System of Galicia). This was designed more than eight years ago as a basic tool, which supports the cartographic works necessary to territorial planning and management.

The objective of this project is the development of a mapping server to allow any user to create his thematic map, with the features he wishes and with the more convenient data for his work. So it can not be considered a simple delivery map server but it's a powerful mapping tool which allows the user to design his maps by himself, to visualize them and to do "cut and paste" in his documents.

The project had three main objectives:

- to provide an specialized and easy to use tool at users who are non-experts in cartography.
- to reach many users at minimal costs and easy to update frequently.
- to save time when generating thematic maps.

When an user connects to the SITGAWEB, he can carry out the following functions:

- a statistical cartographic visualization of data and results, including exploratory data analysis.
- generating and modifying the map legend.
- to obtain additional information on objects via lexical (alphanumeric) and spatial queries.
- navigation with respect to the theme involved (thematic navigation) as well as spatial navigation (e.g. zoom and locator).
- printing of generated maps.
- remote printing of the existent maps.

The site contains all kind of geographical data, such as topographic maps, statistical data, orthophotos, satellite images, land cover maps, forest and agricultural maps, infrastructure maps, etc.

The main users are the technical people of regional administration departments, such as planners, engineers, architects, surveyors, etc., who belong to a private data network (intranet), and their daily work is based on the use of geographical data. They aren't specialized in GIS technology, but they need a lot of geographical and statistical data.

Users can obtain maps with extensive manipulation capabilities: the functionality of these maps go beyond simple query functions. The user is invited to interactively specify the parameters and variables of the map display that is generated on demand (e.g., the map projection, colors of the map legend, or the feature classes to be shown).

The major goal of this project is to allow technical people to produce thematic maps in a computer environment, and to allow them to analyze the different characteristics of the data represented on these maps by using querying and animation tools.