

Advantages and Integration Environments of NaturalGIS

NaturalGIS the complement that enables any GIS system to understand natural language



NaturalGIS allows you to easily find the geographic information of your GIS system quickly and effectively using natural language. NaturalGIS is a connector which includes language technology to make it easy for users to find information in your GIS systems, so that the system accommodates to the user's natural language and not vice-versa.

Advantages of NaturalGIS

NaturalGIS offers the important advantage of making the GIS systems more user-friendly and accessible to any type of user who does not need to be an expert on Geographic Information Systems.

Interface in natural language

NaturalGIS makes it possible for GIS systems to adapt to your own language and not vice versa, so that users do not have to select from multiple windows in order to get the map containing the data they are looking for.

For example, with **NaturalGIS** users will be able to query with these words:

- subway stations in Brooklyn

and the GIS system will return the map of Madrid with all the subway stations in Argüelles. Users trying the previous natural language query will **save 7 clicks** when selecting the various windows if there is not a natural-language based interaction.

Other examples of natural language queries are:

- bus stops on Times Square
- how many ambulances are there on route at this moment?
- how many faulty traffic lights are there on 5th Avenue?

Managing semantic relations

NaturalGIS allows you to add your own synonym dictionary and establish semantic relations by means of the DataNet component included with it. For example, using *DataNet* you will be able to establish a synonymy relation between the phrases "subway entries" and "subway stations".



Spell checking

NaturalGIS includes the best Spanish spell checker in the market, *DataSpell*, with over 3 million words which have been linguistically validated, not including proper names. *DataSpell* detects spelling errors and suggests the right query to prevent your query from being unsuccessful because it will not retrieve any map at all.

Integration environments

NaturalGIS is integrated with the web platform from ESRI's ArcGIS family.

Using standards like XML and based on interoperable web services, Eptisa and Bitext have developed a connector for the ArcGIS platform which allows for natural language interaction with the GIS system. The integration with GIS has been developed by Eptisa and Bitext based on the 10-year experience in the field of international software development consulting.

Application environments

NaturalGIS is specially suitable for those GIS environments requiring a quick reply capability, and open access to any type of user. This product is particularly useful in the following fields:

- Public Administration.
- Defense
- Utilities
- Transport
- Geomarketing

