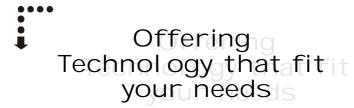


The Digital Map Ltd.

http://www.thedigitalmap.com



The Digital Map Ltda.





FProtection †





Hosting

†

«The process of inserting invisible information in the file is denoted as watermarking, and the information itself is named "watermark"

«...the avail ability of a collective catalog or Clearinghouse is fundamental for the NSDI..."

Intellectual Property Protection

The problem here is how to insert information associated to the producer, the client, the transaction date, the distributor if applicable, etc. properly embedded in the file while being unnoticed. If an illegal copy is found, and by analyzing it, it would be possible to identify the first original customer or the distributor involved through the unique serial number inserted in the file. The watermark is so inserted that it is completely unnoticeable. Only through an appropriate code and the right secret keys it will be possible to extract the secret number.



data and metadata hosting

For those interested in speed up the transition to a fully deployed National Spatial Data Infrastructure the existence of a collective catalog or clearinghouse is crucial.



This step requires the generation of the metadata, its hosting and service availability. The Clearinghouse should be operative 24x365, andbe presented at the institutional WEB page as a local service.

The Digital Map Ltd. offers as a service the creation and maintenance of metadata, hosting of the so created recods and associated database, etc. all displayed directly from the institutional WEB page.



rmanagement _j





[↑]The Technology _→

«... the clearinghouses are searching engines specialized in geographic data..."

«...you can dramatically cut digital cartography updating costs...»

GeoSpatial data Management of GeoSpatial data through a Clearinghouse

There are ongoing efforts worldwide, and in Latin America in particular, towards building a Global Spatial Data Infrastructure. One key step is the deployment of Clearinghouses, which are specialized searching engines in many aspects similars to the popular Yahoo, AltaVista, etc.

The spatial nature of the data add some complexities, requiring specially designed formats to be handled by the engines. The international nature of the service poses also additional constraints exceeding the working language.

The Digital Map Ltd. offers as a related service consultancy on the creation of Clearinghouses based upon the experience of its staff, instrumental on the deployment of the first fully spanish GeoSpatial Clearinghouse in the world.



Planimetric Accuracy Planimetric Accuracy improvement Service

Once you have digital vector cartography as well as control points properly identified in ground and the dataset, it is possible to perform more sophisticated transformations than the well-known rubber-sheeting in order to fit the former to the latter modifying all the file. Our technology is able to dramatically cut digital cartography updating costs achieving low planimetric errors at a minimum cost. In addition, it provides means to identify areas where the most significant planimetric errors are presented, providing means to correct the original cartography.





r Legacy





^rdem ↑

«... the rubber-sheeting is not reliable enough...»

«...its costs is in direct relation with the required accuracy...»



One of the key advantages of digital cartography is the possibility of linking information from different sources through a few keystrokes in the computer.

Unfortunately, such information does not necessarily share a uniform cartographic base, a problem which precludes or inhibits its integration. Manual work is unfeasible, so there is a need for semi-automatic means to achieve the desired goal in order to cut costs and delays.



Despite popular, the rubber-sheeting technology usually available in the GIS systems it is not reliable enough, and other technologies that preserve relations among represented objects are required.

Elevation Models Quality control of Digital Elevation Models

The Digital Elevation Models (DEM) are a key component of many applications. Its creation cost is in direct relation with the required accuracy, and can be very high.

So it is crucial to keep under control the error level during the production stage. From the investigations performed by our staff we have developed tools that can be easily integrated in the production chain, using the best available knowledge today.

