

Croatian Roads Integrates GIS Countrywide Using Intergraph



INTERACTIVE WEB INTERFACE PROVIDES UP-TO-DATE SPATIAL DATA TO CROATIAN ROADS EMPLOYEES

THE CHALLENGE:

Croatian Roads, a national transportation agency responsible for managing 6,800 km of state roads across the territory of Croatia, needed a way to integrate all data from various existing information systems into one integral solution, making it accessible to more than 500 employees in 14 branch offices countrywide. All departments within Croatian Roads access this data on a daily basis, and there are three levels of users within the enterprise. Most employees are read-only users that view the collected data and use it for their particular needs. Specialists in some departments use desktop GIS to create specific reports, and two GIS administrators continually update the road database with both alphanumeric and spatial data. To aid them with this integration project, Croatia Roads procured the help of TEB Informatika, a long-term Intergraph® partner who had successfully implemented their original information systems in 2001.

THE PROJECT OBJECTIVES:

- Integrate existing data from separate systems into one central system using GIS technology
- Provide data access to each Croatian Roads employee, with no additional costs for software licenses

THE SOLUTION:

Croatian Roads began using GIS technology for several projects a number of years ago – from planning to maintenance activities. For the integration of their disparate systems, TEB Informatika recommended a Web-based GIS intranet solution using Intergraph's GeoMedia® technology, which included GeoMedia Professional, GeoMedia WebMap, GeoMedia Transportation Manager, GeoMedia Transportation Analyst, and IntelliWhere® On Demand. Croatian Roads was already using GeoMedia as the platform for several of their individual systems, mainly in client-server architecture. The need for integration of all their existing systems was crucial, and was the driving force of the project.

PROFILE:

Name: Croatian Roads

Web site: <http://www.hrvatske-ceste.hr>

Hrvatske Ceste, or Croatian Roads, is a state-owned company, established by government decree in 2001 as part of the country's Ministry of Transport. The company is responsible for administering more than 6,800 km of the country's state roads, and assists county and local authorities with their road programs and preparation of technical documents. It is also responsible for maintaining the central road database for all categorized roads in the Republic of Croatia.

KEY BENEFITS:

- Easy access to up-to-date GIS data from separate systems through a single map-based and interactive Web interface
- Data and report sharing for Croatian Roads' employees enterprisewide.

PRODUCTS USED:

- GeoMedia
- GeoMedia Professional
- GeoMedia WebMap
- GeoMedia WebMap Professional
- GeoMedia Transportation Manager
- GeoMedia Transportation Analyst
- GeoMedia Grid
- IntelliWhere OnDemand

The Web-based intranet solution combines the GIS data from all existing systems – including the basic road database system integrated with Traffic IS, Meteo IS, and other subsystems fulfilling specific functions throughout the company – into a single interface with a simple, interactive map and legend, enabling users to easily access, visualize, and analyze the data as needed. The solution was designed for the enterprisewide use of Croatian Roads' employees by offering an easy-to-use interface that provides access to up-to-date GIS data and enhanced analysis capabilities that enable optimization and major enhancements of the entire system.

The new system also grandfathered in reporting queries from the individual systems, so Croatian Roads employees did not have to recreate these queries. Rather, they simply have to click on the map, and the new system displays all the GIS data associated with that image. Prior to the integration, all this data and reporting information was only available to particular departments or employees who needed it for specific situations. Now, the new Web-based GIS system gives employees from other departments easy, read-only access to various reports that may be of interest or provide useful information.

THE FUTURE:

The implementation of Croatian Roads' new GIS Intranet went quickly, largely due to the company's current use of Intergraph GeoMedia technology. Croatian Roads' next goal is to develop a similar Web-based GIS system for public use and integrate it into the official Croatian Roads' Web site. The interface would be the same, but with limited data and access permission. Croatian Roads recommends a Web GIS solution as an ideal tool to make existing data available for use by any interested party.



The main screen of the Web-based intranet solution.



Integration with meteo system (meteo stations) and traffic system (counting places) shows up-to-date live data coming from the field.



AADT visualization

ABOUT INTERGRAPH

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Intergraph operates through two divisions: Process, Power & Marine (PP&M) and Security, Government & Infrastructure (SG&I).

Intergraph PP&M provides enterprise engineering software for the design, construction, and operation of plants, ships, and offshore facilities. Intergraph SG&I provides geospatially powered solutions to the defense and intelligence, public safety and security, government, transportation, photogrammetry, utilities, and communications industries.

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