Case Study: Regione del Veneto, Italy

The Challenge:
Regione del Veneto in northeast Italy is home to more than 4.5 million people. Its capital, Venice, is one of the most visited cities in the world. To meet the growing challenges that come with managing infrastructure for a major urban area, the Veneto region’s Geographic Information System (GIS) and Cartography Department needed a new, cost-efficient technology environment. It wanted a system that could support internal activities of many regional departments and make it easy to share vast amounts of data. This environment would also allow users to make updates via a Web-based interface, ensuring the most current, secure, and accurate information would be available across the enterprise.

The Project Objectives:
- Develop a successful spatial data infrastructure (SDI) program
- Provide cost-efficient services inside the organization
- Establish new server-side rules and administration for data sharing
- Improve network security
- Enable remote updates to the central database
- Develop a simple, customizable user interface

The Solution:
Veneto’s GIS and Cartography Department was successfully using Intergraph® technology for the distribution of regional and local cartographic data and maps. It expanded its use of Intergraph’s GeoMedia® WebMap Professional and TerraShare® software platform to implement an SDI solution that would enable data sharing via the region’s intranet and conform to standards such as Infrastructure for Spatial Information in Europe (INSPIRE). The open architecture, flexibility, and scalability of Intergraph technology were critical factors in the selection process. Customized for the Veneto region, the GeoMedia solution allows the rapid exchange of data, as users can update the database remotely via a simple HTTP protocol. In addition, the Web interface enables regional customers to access all data and GeoMedia desktop...

New SDI Makes it Easy for Region to Share Vast Amounts of Data Internally and Externally

Profile:
Name – Regione del Veneto
Web site – www.regione.veneto.it

The Italian Republic is divided into 20 autonomous regional authorities, each with its own legislative, administrative, and executive functions. Veneto, located along the Adriatic Sea, is Italy’s eighth-largest region. Venice is Veneto’s capital city, and is one of the world’s most popular tourist cities. The region also offers many other attractions and is home to world-class vineyards. Veneto is Italy’s most-visited region, attracting about 60 million tourists each year.

Key Benefits:
- Provides centralized SDIs for multiple regional departments
- Allows remote editing and other desktop functions via Web connections
- Integrates data from various sources
- Supports system flexibility and reliability

Products Used:
- GeoMedia®
- GeoMedia WebMap Professional
- GeoMedia SDI Pro
- GeoMedia SDI Portal
- GeoMedia Respublica Intranet (RPI)
- TerraShare®
functions. The interface also allows the region to distribute Java technology throughout the network, reducing investment costs. The project has consolidated and standardized multiple databases into one SDI geographic database, harmonizing and securing geospatial data exchange between Venetian government entities, businesses, and the public for improved collaboration and productivity, and ease of maintenance and administration.

Veneto stores all raster data using TerraShare technology, and uses Oracle’s regional database management system (RDBMS) to streamline data distribution and management. Bundled with GeoMedia WebMap Professional, Intergraph’s GeoMedia solution is compatible and scalable with existing projects in the region. With the centralized geospatial database, the region can distribute data to multiple regional departments. The powerful Web interface and caching technology allows remote editing, advanced queries, pre-configured queries, and pre-configured thematic maps. Administrators manage all connections configured on the Web during implementation to enhance the flexibility and reliability of the system. The new system manages raster data, such as orthophotos and maps, and also stores the regional geodatabase in Oracle. The SDI solution is capable of storing and managing mass quantities of data and metadata while enabling users across the region to search for, access, share, and publish data through an easy-to-use Web portal. Intergraph Italy implemented the system, which has about 50 regional intranet users.

THE FUTURE:
The region plans to expand the project to make all services available to the public and other external users via the Internet with controlled access. Maurizio De Gennaro, Director of GIS and Cartography Production, Regione del Veneto, says the integration and centralization of regional geographic data is valuable for the government and public alike. “The benefits of this regional system are primarily for our citizens, who can now easily find and download all the geographic data they need,” De Gennaro says. “For us, one of the main benefits is to have all data online with the ability to manage it in a distributed environment. This ensures geographic data is up-to-date and synchronized among several regional departments.”

ABOUT INTERGRAPH

Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data. Businesses and governments in more than 60 countries rely on Intergraph’s industry-specific software to organize vast amounts of data into understandable visual representations and actionable intelligence. Intergraph’s software and services empower customers to build and operate more efficient plants and ships, create intelligent maps, and protect critical infrastructure and millions of people around the world.

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.

For more information, visit www.intergraph.com.

Figure 1: This image shows a full view of Regione del Veneto using GeoMedia.

Figure 2: This image is an orthophoto of Venice using GeoMedia.

Figure 3: This image shows a cartographic base map used to view and manage sports facilities, such as the swimming pool points marked...