

CASE STUDY

CUSTOMER:
Verizon

MARKET:
Telecommunications

“To develop VEGA (Verizon Enterprise Geospatial Application) we made extensive use of eSpatial’s iSMART for the core development environment. iSMART provided us with a range of sophisticated pure Web Editing capabilities allowing a custom geospatial application to be authored for delivery in a web browser. This includes the ability for multiple users to carry out CAD-like editing and maintenance activities on our Geospatial data from any web browser.”

Rao Tanuku,
Director,
Verizon

Verizon Enterprise Geospatial Application (VEGA): Built using eSpatial’s iSMART™, the Verizon VEGA Application is an Award Winning Web Application for Telecommunications Network Planning

Background:

The Verizon Enterprise Geospatial Application (VEGA) vision was to create a ubiquitous, open, and pure Web-based application in support of Telecommunications OSP (Outside Plant) business needs and additionally leveraging that environment for other, non-engineering related business opportunities. R&D was carried out during 2006. Development, using eSpatial’s iSMART, started in earnest in 2007 to address OSP planning functions in support of Verizon’s FiOS program to provide voice, high-speed internet and video services in a pure fiber network, connected directly to consumers’ residence. This tool was deployed late 2007 and is fully available for all Verizon FiOS markets today.

The challenge:

Verizon’s core business challenge was how to increase efficiency in network rollout processes by integrating core design and other key processes in a single environment.

KEY REQUIREMENTS:

- **Improve efficiencies in network rollout activities**
- **Integrate business & geospatial processes**
- **Single application across key functions**
- **Functionality tied to specific roles**
- **CAD style editing & data capture in web browser**
- **Single database for all GIS, CAD and other data**
- **Scalable enterprise architecture across company**

The Solution: VEGA

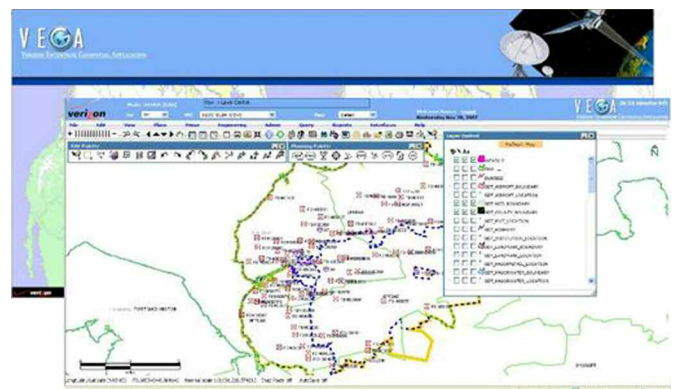
Using eSpatial’s iSMART, Verizon established a single infrastructure upon which to deploy an integrated business application accessible throughout the enterprise. Use of web based technologies reduces installation, maintenance and license costs and delivers what is needed where it is needed – including CAD style editing in a browser.

eSpatial’s iSMART:

iSMART provides a range of sophisticated pure Web Editing capabilities allowing a custom geospatial application to be authored for delivery in a web browser. The web spatial editing capabilities in VEGA are powerful enough to replace traditional desktop-installed specialist GIS Tools for a large variety of business solutions. This includes the ability for multiple users to carry out CAD-like editing and maintenance activities on their Geospatial data through a simple interface, using only a web browser with no plug-in or other client software. By using this advanced web 2.0 based approach, Verizon is migrating core aspects of their planning and engineering activities to the web and away from desktop software, thereby increasing the reach & use of their geospatial applications and data across the organization. Further information on iSMART can be found at <http://www.espatial.com/products>

Award Winning Technology:

Verizon won the GITA Innovator Award 2008, a prestigious International awards competition, with its iSMART based application, VEGA. The award recognizes the user organization that has pushed the envelope of geospatial technology through the innovative development of a unique technology, service, or application to produce a new benefit stream for geospatial technology users.



Business Benefits:

VEGA streamlines processes for planning and construction of Verizon's fiber networks. The application provides a single integrated access point into a number of key processes and departments involved in the network planning and rollout process thereby streamlining workflows. Traditionally, separate systems have been used for each phase of the process with time consuming and potentially error prone handovers of information between the relevant departments.

The VEGA application helps Verizon eliminate some of the traditional "stove pipes" seen in the integration of Geospatial applications with other business systems. They have migrated from a vertical process view to a horizontal one where the application provides the flow between steps in their processes. In essence the geospatial and business applications have been fused into a single entity delivered as an Enterprise grade application with access from any web browser in the organization.

Through the use of iSMART, VEGA delivers on its goals by utilizing a novel approach to the use of Geospatial technology using the latest IT standards and web technologies. These include:

- 1. Migration of traditionally client based CAD functionality to a pure web browser based application which delivers controlled CAD drawing and editing functionality to users.**
- 2. Migration from the use of CAD files to the use of a central Oracle database to store all Geospatial data.**
- 3. Use of roles based access techniques to provide specific data and functionality to end users based on their role in the organization.**
- 4. Replication of the application across a number of Verizon sites providing a common access point across the organization.**

Key Features

- **Single application across key functions**
- **Roles based access relevant to user function**
- **CAD features available via a web browser including: vertex editing, dynamic snapping and auto tracing over existing data**
- **Single database for all GIS, CAD and other data**
- **Scalable enterprise architecture across multiple Verizon sites**
- **Seamless fit with Verizon's existing Enterprise technical architecture**

Key Benefits

- **Significant cost savings in terms of reduced client licenses**
- **Reduced development, deployment, and maintenance costs – no client install or maintenance required**
- **Improved productivity in terms of ease of sharing consolidated, high quality data across the organization in a timely manner**
- **Improved efficiencies in network rollout activities**
- **Increased visibility of Geospatial data as part of core business processes – previously this would have existed in select units only**
- **Use of Web 2.0 capabilities provide an increased acceptance of use of a browser as delivery mechanism for information and data**
- **Increased cultural acceptance of benefits of integrating business processes together in a single environment, thereby removing barriers between departments**
- **Delivery of controlled functionality to end users – "what you need is what you get". Using traditional GIS tools users had the freedom to carry out functions which were not core to the business need (e.g. the ability or users to restyle data was deliberately removed in VEGA for most users). This is not just "graying out" options – options don't appear if user role doesn't require them**
- **Increased visibility of the benefits of integrating Geospatial and non Geospatial data in a single environment – GIS is no longer "special"**

About eSpatial:

eSpatial is a global software and consulting company specializing in GIS (Geographical Information Systems) and Location Services. eSpatial leverages ten years of Oracle Spatial experience to deliver sophisticated and powerful web applications. We have a consistent track record of cost effective solutions that deliver significant return on investment for our customers. iSMART®, our award winning software suite, is the most comprehensive solution to complement Oracle's Spatial technology platform and is fast becoming the first choice for Oracle Spatial.

For Further Information contact:

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