



Transforming geospatial information

This utility company had built up a huge enterprise document repository, but it was difficult to access the right information. There was often duplication of effort and reports would frequently get lost. Fujitsu built a custom application that integrates the repository with a map to offer real-time visibility of the location of assets, environmental study areas, and documents. Now, 2.79 million map objects are linked to 2.5 terabytes of files.

About the customer

This North American company handles electricity generation, transmission and distribution, serving just under two million customers. Around 97% of its electricity generation comes from clean or renewable sources. It operates over 30 hydroelectric facilities and also has natural gas-fueled thermal power plants. Its various facilities generate around 50,000 gigawatt hours of electricity annually, depending on prevailing water levels.



Industry: **Utilities**



Location: **North America**



People: **6,000+**

Challenge

Integrating a legacy enterprise document repository with Geographic Information Systems (GIS) for real-time visibility.

Solution

- Customized application development to integrate with existing systems

“The project team built new and important capabilities for us. There is an opportunity to leverage what was built.”

Director of Technology Delivery, North American hydroelectric company



2.79 million

GIS objects integrated into the new Envirohub platform

Simplifying knowledge management

This company has an Environmental Risk Management (ERM) group, which manages a large amount of environmental and archaeological documentation used to support ongoing operations and planning of new and existing hydroelectric facilities, transmission, and distribution networks.

However, this complex and extensive environmental information was stored in a non-standardized fashion in various formats, systems, and locations. Without a robust repository that is supported and linked to a geographical information system, ERM staff were often not aware of previous work and studies completed in a geographic area, resulting in duplicating similar studies and collecting information already previously gathered.

The company wanted to integrate the existing document repository with the GIS spatial database, to give 100 regular users the ability to gather up-to-date information that is geospatially displayed. This would help the company avoid incurring increased costs for mismanaged projects as a result of poor information.

A versatile, integrated platform for search

The company turned to long-standing strategic IT partner, Fujitsu, for advice. Fujitsu built a customized application, known as the Envirohub, which leverages the latest Esri ArcGIS API for JavaScript and provides new digital capabilities through powerful location services, data management, analysis, and mapping. It integrates with the enterprise document repository to capitalize on existing training and staff knowledge of the search and retrieval applications.

Now, 2.79 million GIS objects can be linked to 2.5 terabytes of files, such as Word, Excel, PDF, PPT and JPG. It allows users to associate existing objects with files and vice versa, as well as to create their own objects (lines, polygons and points) on the map. Fujitsu constructed an intelligent engine that creates and continuously updates associations based on file and object metadata. The system allows users to open a map and search for files based on a variety of criteria and keywords, such as ‘environmental study’ or ‘wildlife conservation area’.

Real-time visibility of millions of assets

This hydroelectric company can now pull information in real-time to track millions of assets, such as power lines, streams, wildlife corridors, and other features. Rather than duplicating work, users can quickly retrieve all the relevant data relating to any notable asset.

Many environmental records are currently not managed correctly in accordance with record management policies, specifically with respect to retention, disposition, and security. Envirohub ensures that the company can easily and painlessly adhere to such policies.

“The Envirohub solution is very slick and the project team built a new and very important capability for us. Most importantly, there is an opportunity to leverage what was built and gain additional value. I was impressed by the outstanding work,” says the Director of Technology Delivery, North American hydroelectric company.

Feedback from users has been equally positive, with favorable comparisons to Google Earth in terms of ease of use and the quality of data. Users are delighted that reports will no longer be lost.

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