

Talisman Energy

Alberta, Canada

1

Case Study

Key Facts:

ndustry:	Oil and Gas
Droblem:	Romodoling data

Problem: Remodeling data to work with GIS applications plus maintenance of a rigorous database update schedule is complex and time-consuming for the GIS team.

Solutions: FME®

Results: Efficient, scheduled, and automated data transformation enables sharing of accurate and current spatial data for informed decision-making throughout the organization.

Summary

Talisman Energy recognizes the power of maps when analyzing information and therefore wishes to provide access to accurate spatial data through maintenance of a central GIS data repository. The company consumes various disparate datasets, which are often not joined to GIS geometry and require conversion and remodeling prior to being loaded into the database. Much of this data changes frequently and a solution is required to ensure the database reflects the most current information. Talisman uses FME® to efficiently manage the transformation, updating, and distribution of vital data for analysis using GIS mapping applications resulting in more informed decision-making and a more productive GIS team.

The Organization

Talisman Energy Inc. is an independent, upstream oil and gas company based in Calgary, Alberta, Canada. Talisman has operations in North America, the North Sea, South East Asia and Latin America.

The Situation

As a company operating internationally in the fastpaced and highly competitive upstream oil and gas industry, Talisman's stakeholders require access to current information relating to its assets and operations (mineral right leaseholds, proprietary well information, construction schedules) that is suitable for use in mapping applications to make critical decisions on a daily basis. To facilitate data sharing throughout the organization the company maintains a corporate GIS database.

The Challenge

Complex data formatting and remodeling, maintenance of a rigorous GIS data update schedule, and dissemination of useful data to a large GIS user base in a timely manner for a large, international company places time and resource constraints on Talisman's GIS team.

The company wishes to store as much relevant information as possible in the corporate GIS data repository. The data originates from within the company and also from external sources such as vendors and government agencies and is in a variety of different formats and models. In certain cases the data contains no spatial information, which is necessary for storage in the GIS data repository and when using it for analysis in Esri® ArcGIS® and other mapping applications. The GIS team has the task of reformatting and integrating the disparate datasets for loading into the database. Critical to informed decision-making is whether the data being analyzed is current. Some datasets used by Talisman such as leasehold and well header information can change daily and it is a challenge for the GIS team to ensure changes are accurately reflected in the database as soon as possible.

The Solution

Talisman's GIS team makes use of FME technology to create a number of transformation workspaces that remodel the different datasets into a format that is suitable for loading into the GIS database. Using FME, disparate datasets are quickly and easily transformed into a uniform format and model. Pertinent attributes are retrieved and joined to the GIS geometry, and in some cases FME is used to create the geometry itself - such as wellbores generated from directional survey LAS files containing inclination and azimuth offsets and joined again to proprietary data like construction schedules. This prepares the data for download and use in various GIS mapping applications by Talisman end users.

The flexibility of FME Workbench saves time as once a transformation workspace has been configured it can be applied to similar tasks for other Talisman projects around the world by making slight alterations to accommodate data from different jurisdictions as opposed to starting from scratch.

"Safe Software's FME has streamlined Talisman Energy's spatial data management processes allowing for the sharing of the most current and accurate information to users companywide, improving decisionmaking."

 Roland Schwietz, Lead GIS Specialist, Geospatial Services of Talisman Energy. For their data maintenance challenges, Talisman employs FME Server and its scheduling capabilities. To ensure changes in the different source datasets are reflected in the GIS database, the transformation workflows created in workbench are published to FME Server and scheduled to run automatically at specified frequencies. This ensures that users are always accessing current information from the GIS database.

The Benefits

For Talisman Energy, the use of Safe Software's FME technology streamlined their data remodeling, maintenance and distribution processes resulting in more informed decision-making companywide, and improved productivity of the GIS team.

With FME's data transformation capabilities and intuitive graphical user interface any information can be quickly and easily joined to GIS geometry. By spatially-enabling the data it can be visualized in a variety of mapping applications for more effective analysis and better decisions. These capabilities also enable different datasets to be integrated and loaded into a central GIS data repository, simplifying data access for users by having it located in one place.



Talisman leasehold diagram showing directional wellbore geometry that was derived from LAS survey files using FME.

Decision-making is also improved with FME Server's scheduled tasks. By automating the transformation and loading of constantly changing internal and external datasets into the GIS database, users always have access to data that is accurate and up-to-date. As well, with much of the data being updated on a regular basis, users can see changes over time for trending analysis.

FME's automation saves time for Talisman's GIS teams who would have had to manually execute much of the data transformation and loading tasks. Their valuable skills can be directed at more complex responsibilities improving their productivity.

What They're Saying

"The ability to have information from various databases ioined to GIS geometry not only allows users to visualize and use their data more effectively, but also enables more efficient data access through a single GIS data repository," says Roland Schwietz, Lead GIS Specialist, Geospatial Services of Talisman Energy. "Users don't have to spend time accessing multiple databases.

"FME Server's scheduling capabilities are also a key element of Talisman's spatial data management system. With so much rapidly changing data to maintain, having a tool that automatically refreshes the database at regular frequencies ensures that it is always up-to-date."

Learn More

To find out how FME can help address your data interoperability and maintenance challenges, or to download a free evaluation copy of FME, visit www.safe.com



Copyright © Safe Software Inc. 2012. All rights are reserved. Printed in Canada. FME is a registered trademark of Safe Software Inc. All other product names may be trademarks or registered trademarks of their respective owners.