Geotrace - one integrated database

Geotrace is promoting an idea of a single integrated database for all oil company information. We interviewed CEO Bill Schrom

Houston reservoir data management company Geotrace has a vision that oil and gas companies can have a single unified database covering the whole of their exploration and production activity, from seismic, geology, petrophysics, production engineering to reservoir simulation.

Geotrace is not the only company on the market with such an offering, but Bill Schrom, CEO, believes that the company's edge rests on how well all of the components are integrated.

"We feel that we have better integration than the competitors," he says.

"It gets very hard to do an integrated subsurface image. Lots of companies do this in silos."

"We wanted to integrate all kinds of data, starting with seismic," says Andrei Bezhentsev, managing director of Geotrace's subsidiary company Tigress Solutions in Tyumen, Russia, where much of the development work is done.

"The idea is to have one integrated database for the company, including seismic data, log data, well data, mapping, project data, production engineering, simulation data, external data, and asset data."

Tigress has a sophisticated production reporting system. It also has a reservoir simulator and petrophysics software.

Tigress has an office in Tyumen, Russia, to do software localization and maintenance.

Tigress developed a system to move data in and out of the database efficiently, which it calls Tigress Import Export System (TIES).

"The idea is to have one integrated database for the company" - Andrei Bezhentsev, managing director of Geotrace's subsidiary company Tigress Solutions.

It has a special technology called 'dropbox', where all of the files are put in a folder for import that will be done all in a batch.

The software can also cojoin with and pull data from Landmark's OpenWorks, Petris' Recall and Schlumberger's GeoFrame.

In a separate development, Geotrace has just launched a service called 'bandwidth extension', to help oil and gas companies make use of the higher and lower frequencies of their seismic data, supported by their well log / wireline data.

This service enables oil and gas companies to get a much higher resolution image of their reservoirs.

"Historically you could see a 100ft sand, with this, you can see 10ft sand," says Mr Schrom.

Building on Tigress

Geotrace's offering combines its seismic and wireline data processing ability with the software of Tigress Geosciences, a UK company it acquired in September 2006.

Tigress Geosciences is recognized as a market leader in the creation of databases with the capability to hold a wide range of exploration and production data.

By combining Tigress' data management systems and software, with Geotrace's seismic and wireline data processing, "We do the whole thing and tie it all together," says Mr Schrom says.

Tigress originally developed its database system in the 1980s, as a project to build a database of North Sea Oil data, which was led by Shell, Enterprise Oil, and the UK Government Department of Trade and Industry.

Tigress has since been engaged in a major project to gather together all of the available data about the vast Kirkuk oilfield in Iraq into one database.

Tigress has built databases of the North Sea, including 1255 wells and 3500 logs. Another was built for a Houston company incorporating 65,000 wells.

In another project, it built a database of the Samotlor Field in Russia, operated by TNK-BP, which has 17,000 wells and 35 years of production history.

"It's a distributed database. There are no practical limits to how big it can be," says Mr Bezhentsev. "You can use it for day to day production management."

"We feel that we have better integration than the competitors" - Bill Schrom, CEO, Geotrace.

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Tigress has an office in Tyumen, Russia, with software development and maintenance functions.

Geotrace background

Geotrace has come a long way since its founding as a 2D seismic data processing company for US customers in 1979.

Mr. Schrom joined the company as CEO in 2003, and has pushed the company to operate internationally.

"When I started, we had offices in Denver, Dallas and Houston. Now we have offices in Norway, London, Cairo and Trinidad with marketing representation in Venezuela, Brazil and Colombia," he says.

"We just opened an office in Dubai - we're expanding in the Middle East."

Mr Schrom was previously head of the Western Hemisphere with Western Atlas, a seismic company acquired by Baker Hughes in 1998.

Geotrace's CFO and COO were also previous Western Geophysical executives.

Geotrace has another UK operation, Geotrace UK Ltd, which "ties up" seismic data using wireline data and doing more with the high frequency component of seismic data, Mr Schrom says.