



CASE STUDY

MAJOR OILFIELD SERVICES COMPANY REDUCES DATA LATENCY TO ONE SECOND FROM FIELD TO OFFICE WITH FIORANOMQ

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Arturo Altamirano
CTO
Leading Technology Supplier
Oil & Gas Industry

CUSTOMER PROFILE

A Fiorano client in oilfield service is the world’s leading supplier of technology, integrated project management and information solutions to customers working in the oil and gas industry worldwide. Employing more than 87,000 people representing over 140 nationalities and working in approximately 80 countries, the oilfield services company provides the industry’s widest range of products and services from exploration through production. The company maintains principal offices in Paris, Houston and the Hague.

BUSINESS PROBLEM

Because of the fragility of certain formation processes during oil collection, the company’s field staff has to transmit data back to office staff in a timely manner. Pressurizing and fracturing oil and gas formations requires real-time or near real-time transfer of data; if decisions made by office staff take a few seconds or minutes, the company risks damaging the formation.

The oilfield services company’s previous application for data transmission was based on HTML coding and transmitted by satellite feed. Unfortunately, data in this protocol took too much time; transmitting via satellite was a latent process, sometimes taking as long as ten seconds. In addition to latency, transmissions would break often. By the time office staff members saw trends and made decisions, the formations could be damaged.

In 2008, Arturo Altamirano, a principle engineer, was designated the task of finding a software solution that would eliminate as much latency as possible, bringing data transmission from the field to the office closer to real-time.

SOLUTION

Altamirano started his search by analyzing and testing the best components on the market, from Microsoft to Sun products. In the end, FioranoMQ performed the best in terms of latency and support documentation.

“After we tested it, it was clear that FioranoMQ was the strongest product on the market,” said Altamirano. “FioranoMQ’s Java Messaging Server doesn’t require all of the same HTML protocol to be built, enabling office staff to analyze data almost instantaneously as it was produced in the field.”

With FioranoMQ’s Java Messaging Server (JMS), Altamirano was able to divide each stream in the field into an independent data stream, rather than receiving the information in bulk. The capability allows staff members in the offices to consume specific data streams independently.

Altamirano mentioned, “FioranoMQ’s dynamic functionality allowed us to perform high availability configuration out-of-the-box. The servers almost never go down. If they do, the backup servers kick in instantaneously, providing us with nearly seamless data streaming.”

BENEFITS

With FioranoMQ, Altamirano and the company have been able to reduce data latency from 5-10 seconds to a maximum wait of one second. Office employees no longer have to worry about breaks in streams and non-continuous data transfer. All data and decision-making is presented in real-time.

“Since we started using FioranoMQ in October 2008, 50-60 percent more office employees have been able to implement real-time data transmission from field locations. That number is increasing by 5-10 percent every month,” added Altamirano.

With FioranoMQ, office staff members have greatly reduced errors based on timeliness. The integration capability and out-of-box functionality have made FioranoMQ an important addition to the oilfield service company’s business platform.

ABOUT FIORANO SOFTWARE

Fiorano Software (www.fiorano.com) is a leading provider of enterprise class business process integration and messaging infrastructure technology. Fiorano’s network-centric solutions set a new paradigm in ROI, performance, interoperability and scalability. Global leaders including Fortune 500 companies such as Boeing, British Telecom, Credit Agricole Titres, Lockheed Martin, NASA, POSCO, Qwest Communications, Schlumberger and Vodafone among others have used Fiorano technology to deploy their enterprise nervous systems.

To find out more about how Fiorano can help you meet your enterprise integration objectives, visit www.fiorano.com or e-mail sales@fiorano.com