



**i-Open Technologies is bringing the leading edge SaaM™ solution to the the Planning, Pipeline Operations and Asset Management environment for the Oil and Gas Industry.**



**Simplifying Asset Management**

Historically, searching for crucial records and logistics tied to field based assets has been a time consuming process and therefore, a costly and cumbersome procedure. New and available technology can now improve the efficiency and availability of data in the field and data retrieval from the field into a centralized system in real-time.

Such a system can improve the quality of mapping, decision making, planning and reduce bottom line costs of field based operations.



<http://www.oilandgasoperations.ca>

SaaM™ delivers the ability to achieve on demand access to data that is...Relevant, Accurate, & Consistent.

## Case Study

### Background

As the most active land-drilling contractor in Canada, the company offers customers our proven resource drilling expertise, delivered by their highly skilled and passionate people, utilizing our innovative Super Series Rigs. They delivers maximum efficiency, helping our customers minimize risk, reduce well costs and generate returns on their investments. Their highly skilled and trained crews provide safe, consistent, repeatable and reliable service with the full support of the entire team. With a highly disciplined business management approach, Precision has a reputation of innovating to meet the needs of an always-dynamic energy industry.

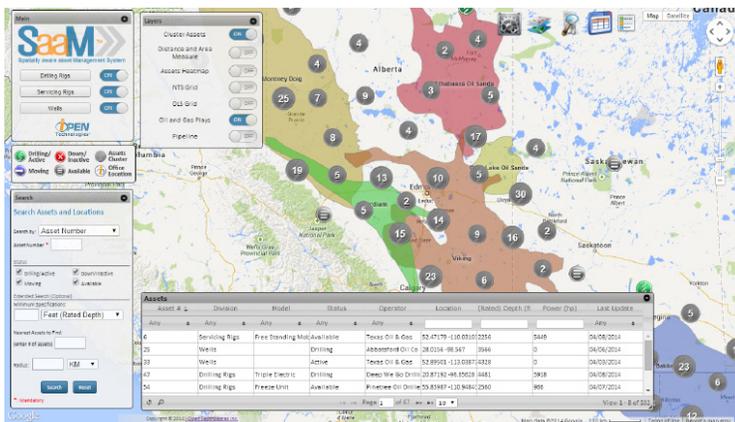
### The Issue

The company is Canadas largest oil rig operator and owning and operating several rigs in Canada and worldwide. Their competitive advantage lies in two primary value propositions; the number of rigs they own and the relative efficiency of their operations. This information is critical to their drilling performance manager as well as the sales and marketing team. These two areas of the company are tasked with ensuring the highest level of performance of their assets and subsequently communicating the performance as a competitive advantage. The company uses data regarding their drilling assets maintained in a corporate enterprise database containing numerous performance metrics, including rate of penetration (ROP), that can be used to illustrate the efficiencies their rigs attain compared to other rigging companies. This data has been traditionally accessed in a fairly manual way which made accessing the information somewhat difficult and hard to maintain.

### Solution

i-Open has worked with them to implement a custom deployment of our Spatially aware asset Management (SaaM) web application. This tool provides a map based interface that gives the user direct access to data in their enterprise database for all company rig assets as well as assets from other companies attained through public sources.

As part of this custom implementation, i-Open added a number of chart and graph widgets that can be used to compare metrics on different rigs; metrics such as ROP, stand time distribution, and drill time. Additionally a number of search tools were added to provide better more intuitive access to the data. Search tools such as point and area of interest searches that allow users to find all rig assets within a distance of a given point. The application utilizes cutting edge frameworks that leverage web development best practices through the HTML5 and JavaScript environments which allows for cross-browser access on all computer platforms.



## Result

The company now has an enterprise grade application that allows rig on rig comparisons which help communicate the company's value proposition to perspective and existing customers. This application gives the sales and marketing team access to tools from anywhere there is an internet connection and provides operations staff with the metrics they need to evaluate and improve performance. The company can also provide filtered information to the public allowing perspective clients to do some of their own research when looking for a rig. All of these attributes make this tool a vital asset to the company and provides them with a key marketing and performance evaluation tool.

## Summary

i-Open was able to provide an application with high quality mapping, decision making, planning, reducing bottom line costs of field based operations and allowing quick access for staff to communicate to their customers to make better management decisions to evaluate and improve performance.

## Business Challenges

- Application that is browser agnostic, and can work on computers and tablets
- Need to locate assets on a user friendly interface
- Need to display client specific overlay file with text labels
- Need to display information from a wide variety of corporate data sources

## Leading Edge Solutions

- Pull real-time data from multiple databases
- Small and very light active server API
- DB to JSON data stream
- Client-side preprocessing for optimized performance

## Key Drivers

- HTML5 / Javascript application to run in any browser
- Map feed from Google Maps; always the latest versions of maps available without any investment in an internal map server
- Easy to use and maintain

## Key Features

- Sophisticated Clustering and Heatmap options developed for application work with two large datasets in an organized fashion
- Queries on any attribute data
- Overlay layers with custom labels
- Asset attribute filtering based on queries
- User maintainable help overlay screen
- Locating assets within a certain radius of any other asset or location
- Links to web pages with inventory listings and asset details
- Measurement tools