

Optimum document management

With hydrocarbon extraction becoming more technically complex, document management is imperative in ensuring efficient, safe operations. Tim Fleet, **Sword CTSpace**, and Yuri Klochko, **Gubkin Russian State University of Oil and Gas**, reveal how new platforms can optimise workflow, boost productivity and facilitate smooth, effective collaboration. Rod James reports.

A series of events has dramatically altered the global oil and gas landscape. Squeezed margins, brought on by economic recession throughout the developed world, have put a premium on efficient, cost-effective maintenance and operations throughout the sector. The Deepwater Horizon oil spill has further complicated matters. As governments review their offshore drilling regulations, which will inevitably lead to greater restrictions, companies must adapt their systems and training programmes to deal with a host of new compliances.

These events are, however, catalysts for greater change. Hydrocarbons are becoming more difficult to extract, requiring new techniques and technologies that are expensive to implement and need vast quantities of instructional documentation and technical drawings. According to Tim Fleet, vice-president of product management at information handling and collaborative workflow specialist **Sword CTSpace**, making sure all this documentation is easily accessible and properly organised is a challenge that will only grow in scale.

“At home you’ve got a number of appliances with all the manuals in your top drawer,” he says. “On a rig there are 20, 30 or even 40,000 equivalents. If you have people working on a hazardous asset, you have to keep focused on ensuring that they are using procedures, instruction manuals and drawings that are up-to-date and match the physical equipment they are working with.”

Fusion Enterprise

With 25 years’ experience in document management, **Sword CTSpace** is well positioned to facilitate this. The firm has a range of enterprise content management solutions, software and web-based platforms that can either build on or replace existing workplace systems. Its **Fusion Enterprise** solution gives facility operators and engineers instant access to the documentation they need from a single location, enabling them to make quick, informed decisions.

“Equipment is in a constant state of change and maintaining equilibrium of all the related documentation is a huge challenge,” Fleet says. “With our technology, customers can easily access and manage documentation that tracks how people do things to an asset and the results of that action.”

It is because of this specialism that **Sword CTSpace** was first approached by the **Gubkin Russian State University of**

Oil and Gas, Russia’s principle higher educational institution for petroleum engineers. Under a government scheme launched in 2007, the university has adopted a highly vocational teaching approach that aims to prepare students for work in the energy sector. The university was looking to build a fully functional IT infrastructure that replicated that of an oil and gas company, with a modern data centre and all the necessary software applications.



Hydrocarbons are difficult to extract, requiring technologies, drawings and instructions. It’s important that all this documentation is easy accessible.

“Gubkin was honoured to be granted the right to implement the Innovative Education Programme, which is based on an ‘education through activities’ approach,” Yuri Klochko, deputy director of the Center of Information Technologies at **Gubkin Russian State University of Oil and Gas**, explains. “The main idea of this is the simulation of an exercise or process that is almost identical to the real collaborative work of professionals in a genuine oil and gas-producing company.”

Russian companies have traditionally used a system of network-shared folders and, although there are document management solutions on the domestic market, **Gubkin** was in search of something more comprehensive. **Sword CTSpace**, in conjunction with **IBM**, took the **Fusion Enterprise** application and used it to extend the existing **IBM FileNetP8** content management system. With assistance from the university faculty it then localised the platform

from a linguistic and compliance perspective, and prepared and tested the development environment.

“We’d been working all around the world, but hadn’t really done anything in Russia,” Fleet says. “We understood that some of the Russian government standards and regulations needed to be built into the software. We didn’t change the software, but configured it differently. The knowledge and expertise of how to do that came from the university personnel, who had in-depth knowledge of these Russian standards. It was a very interesting mix.”

The university decided to take this project a step further. In conjunction with IBM, SAP and other parties, the institution endeavoured to create the ‘reference architecture’ for an oil and gas company, with its own system as the demonstration model. After a long period of consultation with a number of oil and gas industry players, Sword CTSpace’s offering was chosen as the best document management component for this set-up.

“Our consultation revealed that engineering information management systems for capital projects were in high demand,” Klochko explains. “During our search for a solution we studied lots of different systems, collected customer feedback and examined a number of international examples. Today, we consider Fusion Enterprise to be part of that reference architecture for oil and gas based on its great number of successful deployments around the world.”

Enterprise content management

With the new enterprise content management (ECM)-based system in place Gubkin is able to take advantage of all the platform’s systems, including the powerful business process management engine. In addition, the concentration of all project data in a common information environment allows for easy accessibility. Fusion can be accessed from multiple locations by internal and external clients, allowing

“ We consider Fusion Enterprise to be part of the reference architecture for oil and gas based on its successful deployments worldwide. ”

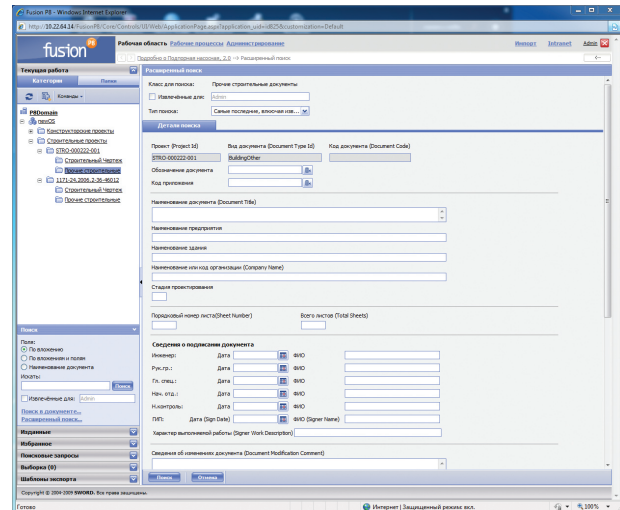
information to be seamlessly and transparently passed from owner to operator and to manufacturer. According to Fleet, the successful outcome has had huge benefits for both sides.

“The university is now able to show how it is leveraging technology that is in use in Europe and the US and is successfully applying it to the Russian market,” he says. “You aren’t just taking the software 100% as is from the outside and hoping it will translate successfully. Actually understanding how people work and presenting it back is always the best way to go about it.”

Fleet’s hope is that this is just the first of many successful partnerships between his company and Russia’s oil and gas players. The formal launch of the partnership was attended

by more than 40 senior oil and gas executives, and there has been great interest from companies. Klochko sees no reason why this increase in business shouldn’t come to fruition.

“Some Russian oil and gas companies are not yet ready to deploy ECM-based solutions and so we are sure there will be heavy growth in this area,” he says. “From that point of view, Sword CTSpace’s market entry was extremely well timed. It was important for them to break the ‘first customer’ barrier, after which they can make claim to a big part of the market.”



The Fusion Enterprise engineering content management system, localised to Russian standards and regulations.

Growing internet role

Looking ahead, Fleet sees globalisation playing an increasingly important role in his company’s development and marketing strategy. With technological advancements requiring the expertise of many different parties from around the world, the need to expand web-based information exchange, as well as review and approval processes, will grow.

“In the old days if there was, for example, an offshore asset in Scotland, they would talk about the people that work ‘on the beach’,” he says. “This means that there would be an office in Aberdeen with technical support and a services team, and those people would all be focused on that offshore asset. Today those people might be dotted around the world, in places as far flung as Angola. That is a major trend – greater use of the internet and some of the social media applications that facilitate long-distance collaboration.”

As the demands of the industry grow and, with it, the importance of document management, solutions such as these will surely become an integral part of the oil and gas set-up. ■

Further information
Sword CTSpace
www.sword-ctspace.com

