

# Saudi Aramco Develops and Implements Customized Tutorial Package

Ocean software development framework enables training solution

## CHALLENGE

Provide an advanced, integrated tutorial package focused on collaboration and customized workflows for Saudi Aramco's new Upstream Professional Development Center, which will educate Aramco employees in multiple oilfield disciplines covering many job families in a new state-of-the-art training center.

## SOLUTION

Develop a specialized tutorial plug-in for Petrel\* seismic-to-simulation software using the Ocean\* software development framework.

## RESULTS

Deployed a responsive tutorial program that will help familiarize the user with oilfield disciplines, in addition to specialized domain tools incorporating local field data, company culture, and specific processes used in the development of Saudi Aramco fields.

**"It is fantastic to educate different specialists through the integration of the Ocean framework and Petrel software."**

**Dr Abdalla Ahmed**  
Group Leader Technology Team  
Upstream Professional  
Development Center



Saudi Aramco, the national oil company of Saudi Arabia, develops, transports, and refines hydrocarbons in Saudi Arabia and other countries. It is ranked among the world's top oil companies because of its huge crude oil reserves and production. Over its more than 75 years of existence, the company has developed its own culture and methods.

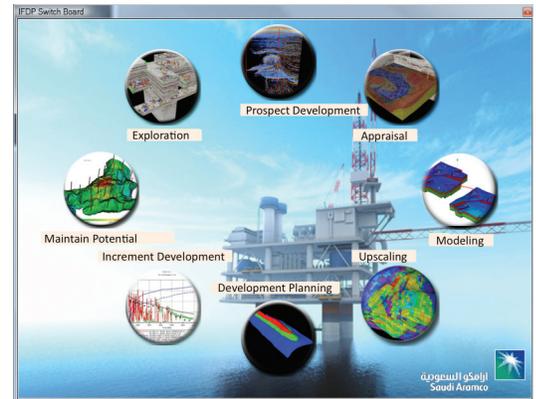
With major increases in the pace of operations and a tight job market for experienced staff, the industry must hire a significant number of people and train them and its existing professionals quickly and effectively.

Saudi Aramco has already explicitly recognized developing the workforce as one of its major strategic imperatives. Factors include

- increasing retention
- capturing company workflows and expertise
- transferring knowledge
- offering courses covering many job families
- offering courses customized for specific fields, workflows, and data
- focusing on collaboration
- training using interactive simulation.

Saudi Aramco has launched a new Upstream Professional Development Center that incorporates extensive new facilities for employee training. The company sought an integrated solution that would provide training for newcomers and existing employees—providing education in

- multiple oilfield disciplines, from geophysics to reservoir engineering
- local field data
- corporate culture
- specific processes used for developing Saudi Aramco fields.



*The seven oilfield discipline steps addressed by the Petrel plug-in tutorial.*

### Saudi Aramco tutorial capabilities

Schlumberger Information Solutions helped Saudi Aramco to build a specialized tutorial plug-in for Petrel seismic-to-simulation software using the open capabilities of the Ocean software development framework. The integrated educational tool combines customized procedures to capture the Saudi Aramco decision-making process, from prospect identification to field optimization.

The advanced, integrated tutorial package focuses on collaboration, customized workflows, and data for the new Upstream Professional Center. It will educate Aramco employees in multiple oilfield disciplines in many job families in a new state-of-the-art training center by

- creating training relating to specialized domain tools
- reducing data gathering and processing by using integrated applications
- leveraging E&P applications and existing expertise.

The oilfield discipline portion of the tutorial package is broken into steps. Each step in the tutorial uses preselected workflows adapted to chosen field data, with workflows and custom applications tailored to each stage of field development—using real Aramco field data. The workflows were chosen to emphasize particular aspects of field evaluation. The application runs quickly and exhibits results automatically, so that users have hands-on experience that simulates the work scenario.

### Increased knowledge

After completing the customized Petrel tutorial, Saudi Aramco users will be more familiar with the company's local field data, the corporate culture, and a wide array of specific processes related to the region's field development. The tutorial package

- addresses every part of the workflow
- integrates third-party applications
- offers an intuitive and user-friendly interface
- makes it easy to build new training applications quickly.

Users can interact with the tutorial displays to witness how changes in input affect the reservoir evaluation results, and they can make parameter changes when running each task, immediately viewing results as part of the learning process. Ultimately, users will have been exposed to a wide scope of field development techniques, from exploration seismic to history-matched simulation. The tutorial also offers the additional advantage of familiarizing participants with production tools. Training using the Ocean based tutorial began in November 2010.

### Schlumberger Information Solutions

Schlumberger Information Solutions (SIS) is an operating unit of Schlumberger that provides software, information management, IT, and related services. SIS collaborates closely with oil and gas companies to solve today's tough reservoir challenges with an open business approach and comprehensive solution deployment. Through our technologies and services, oil and gas companies empower their people to improve business performance by reducing exploration and development risk and optimizing operational efficiencies.

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