

Spectra to Orca Migration

Overview

The Spectra to Orca Migration course focuses on both operation and daily maintenance of the Orca system. The course will provide a technical overview of Orca and take the delegates through the procedures involved in the daily operation of the system.

Duration

A four day course held at our Edinburgh training facilities. (09:30 ~ 17:00)
Due to the amount of equipment required, it is not possible to run this course away from the dedicated training area at our Edinburgh facilities.

Who should attend

The course is designed for navigators and operators who have worked with Spectra on 3D surveys for at least 6 months and need to transfer their skills to Orca.

Objectives

The course will provide the skills and knowledge to perform the daily navigation production tasks required, onboard modern deep marine seismic vessels involved in acquiring 2D, 3D, 4D and WATS surveys. The course will also provide an insight into how Orca functions at a more theoretical level than the Orca Operator course.

Prerequisites

At least 6 months knowledge and experience working with Spectra 3D is required as well as a good understanding and knowledge of geodesy and navigation techniques.

Teaching Methods

The course will be a mixture of demonstrations and practical sessions. Hands-on exercises and practice time will be given at every available opportunity.

On completion of the course delegates will be able to

- Understand the basic operation of Orca and the principle modules within the system
- Understand the capabilities of the system
- Understand file, directory and database structures
- Start and stop Orca, verifying that all modules are operating correctly
- Use the Planning module to full effect for single and multi vessel operations
- Shoot a sequence of lines and monitor progress with the Control UI
- Diagnose common navigation faults with the Diagnostics UI
- Configure and position Display servers
- Interface a new navigation system to the PowerRTNU
- Start and stop lines
- Use the Diagnostics Node, Orca Web and Display servers to monitor a line
- Knockout observations, nodes, streamers and vessels
- Run and re-run End of Line tasks
- Understand Edits and their effects on the final data files
- Import P1/90 from Sprint
- Configure and use Reflex with Orca
- Create new single and multi vessel surveys
- Change surveys

Course Content

Orca Overview

- Overview of Orca demonstrating functionality and capabilities of the system
- File and directory structure
- Databases

Orca Planner

- Planning sequences of survey lines
- Using the Planner in multi vessel surveys

Orca Displays

- Configuring and positioning Display servers
- Contexts

Operations

- Starting and stopping the system
- Importing preplots
- Controlling steering for single and multi vessel operations
- Starting, shooting and stopping lines
- Monitoring lines and diagnostics
- End of Line tasks
- Knockouts – Observation, Node, Streamer, Vessel
- Edits and their effects on the final data
- Creating a new survey
 - Survey and GRS definition
 - Import preplots
 - Checking test points
- Changing surveys

Monitoring and Diagnostics

- Diagnostics Node
- Orca Web
 - Online and offline operations
 - Report Configuration
 - End of Line tasks including Edits

Multi vessel

- Introduction to multi vessel operations demonstrating an awareness of the system capabilities on a slave vessel
- Creating a multi vessel survey

Sprint

- Importing from Sprint

Reflex

- Using Reflex with Orca

PowerRTNU

- Interfacing a navigation system to the PowerRTNU