

Spectra Advanced

Overview

The Spectra Advanced course is designed to build on the Navigators experience. The following document details suggested topics but this course can be tailored to the requirements of the delegates attending.

Duration

A five day course primarily held at our Edinburgh training facilities. (09:30 ~ 17:00)
The suggested content below would cover a 5 day course, but duration may be modified to suit requirements.

Who should attend

This course is designed for experienced Navigators (Chief Navigator/Shift Leader) responsible for supervising Spectra operations, and experienced users who wish to refresh or expand their skills in specific areas of the system.

Objectives

The course will further advance the delegates knowledge and provide a forum for questions, problems and practical exercises.

Prerequisites

Delegates must have previously attended the Spectra Configuration course. It is desirable that they are in a senior or supervisory role. Delegates must also be proficient in the use of the Linux command line.

Teaching Methods

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

On completion of the course delegates will be able to

- Install Spectra software
- Upgrade a Spectra system
- Enable and disable licences on the system
- Verify and modify mn.ini files
- Apply troubleshooting and debug techniques
- Configure and boot Real Time Navigation Units (PowerRTNU/PowerRTNUII/RTNu)
- Perform the required configuration to allow Spectra and Digicourse to interact
- Understand the requirement for and purpose of 4D Operations
- Understand the requirement for and purpose of Multi-Vessel Operations
- Understand what is involved in setting up Multi-Vessel configuration
- Understand the networks required and how the NCNs solve
- Understand the function of NRT (where applicable)
- Use the QCN to analyse NRT output
- Perform advanced QC analysis of data

Course Content

Installation

- Spectra Installation
- Workspace Management Configuration

Upgrades

- Patching individual nodes from ftp site
- Upgrade system using service packs

Licences

- Licence Types
- Requesting a licence
- Applying a licence

mn.ini

- Environment Variables
- Starting nodes
 - Node options
- Alarm Configuration

Troubleshooting and Debug

- Data Server – monitor command
- Bhist
- gather_support_info
- udpmsgsvr
- admin_dsn
- ncn_trace

Real Time Navigation Units

- Hardware Configuration and Architecture
- Software Configuration and Boot Procedures
- Debug - udpmsgsvr

Spectra/Digicourse Integration

NCN

- Networks
- Data Flow
- Time Deskewing
- NCN Output and States
- Gates and Filter Settings
- Observations – QC Output
 - Residuals
 - Normalised Residuals
 - Unit Variance
 - Error Ellipses

Multi-Vessel

- Introduction to Multi-Vessel Operations

4D

- Introduction to 4D Operations

NRT (where applicable)

- Introduction to NRT
- QC analysis of NRT