PE Limited
Engineering & Geological Software Development

DOF (IVM and IFM) Developer Training Course

Format
This course is taught over 10 days, covering the full DOF (Digital Oil Field) construction and deployment cycle, workflow development and advanced implementation concepts aiding in oil and gas field management.

Intended Audience
This training course is intended for DOF 'power users', support engineers and in-house development engineers to learn how to configure, implement, modify and maintain DOF systems. While there will be some discussion of the end-user engineering functionality that DOF provides, the focus of this course is on the design and technology within the DOF system, rather than the use of the software tools from an engineering perspective.

Prerequisites
Knowledge of interacting with historians and databases as well as the design of graphical interfaces will aid with understanding many parts of the course. A basic understanding of data flow and IT architecture will benefit attendees. Previous knowledge of the DOF platform through use or prior courses will also be beneficial to attendees, however not compulsory as all aspects shall be covered in detail.

Overall Objectives
- Develop an understanding of the architecture and data structure of a DOF system
- Understand how IVM identifies and processes data and how to bring data from multiple external sources into the DOF environment
- Provide advanced visualization of data for users to promote understanding of their field
- Learn about IVM interface components and their application
- Leverage the IFM equipment data model and its integration with the IVM object library to quickly build out the DOF structure, link to IFM workflow results and integrate with Model Catalogue
- Understand the relationship between DOF components and how to configure each correctly
- Understand and implement visual workflow development techniques within IFM and IVM
- Develop a understanding of administrative tasks to assess the impact of certain decisions when designing a DOF system
- Develop a consideration for the ongoing management, evolution and support of a live system

Topics Covered by Course
- Software architecture, installation and configuration
- Model catalogue operations and security structure
- Configuration and implementation of real time data retrieval from variety of database sources
- Implementation of IFM/IVM data model relationship and development of the IVM object library
- Detailed review of IVM data management tools for pre and post data review
- Development, registration and configuration of IFM visual workflows
- Configuration and use of DOF cluster and best practises associated with
- Setup of automated workflow data retrieval from IFM to IVM
- Design and create IVM graphic screens, including advanced template controls for dynamic field environments as well as extended graphic to graphic navigation concepts
- Full review of plot controls for both embedded graphic and reference linked data review
- Addition of interactive user set points for dynamic graphic and workflow behaviour control
- Creation and development of reporting tools