The Catalyst for Change

Subsurface Seismic Data Management *By Jane Hodson*



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Centrica Energy E&P



- Headquartered in Aberdeen
- Since 2010 Increased Oil & Gas Production by 50% >220,000 boe/d
- Ranked one of the fastest growing new entrants in Norway
- One of the top Gas producers in the UKCS
- Over the last 4 years acquired Venture, Suncor assets and Statfjord





The Catalyst for Change..... 2010

- Growing sense of urgency as Centrica Energy E&P saw a substantial increase in seismic data due to new acquisitions and mergers.
- Needed a Long Term Asset Management strategy
- Would have to handle change and operational expansion quickly and easily
- We knew that access to critical data could make or break project approval!



What happened next in

- Series of Workshops to define the Asset Management Data strategy
- Corporate Data Stores implemented
- Agreed to provide access to good quality consistent data
- Ownership of data identified and approved
- Rationalisation of data by cleanup and standards agreed
- Data management framework outlined



The story continued..... In-House

- A project to create a detailed seismic catalogue across our Assets was started in 2011.
- This catalogue included navigation, metadata, original digital media and supporting documentation (in digital format), linked together by the application of common standards and naming conventions.
- It is maintained on a specific Isilon server capable of holding at this time >150 Terabytes but can scaled to 15 Petabytes of data.
- Each workstation has a 10Gb direct connection to the server for fast and accurate access to the data.
- Created Petrel Master Projects for all Regions that have a complete set of seismic data in native format that is locked down and can be referenced for Working project use.

How much Seismic do we have in Centrica UK?



Petrel Master Corporate Seismic Projects

S:\CNNS\Master Project\ CNNS_Master_Corporate_Seismic3D.petR CNNS_Master_Corporate_Seismic2D.petR

S:\CNNS\Working Projects\Mallard\2013

- 3D seismic is realized at 32bit and externally zgy files exist in the related folder in the seismic server.
- All Projects READ only except Data Administrators
- Users can Reference seismic from MRPS ensuring only ONE copy of each seismic volume NO DUPLICATION
- Project tracker used to identify ROGUE seismic volumes

The story continued..... External

- Agreement that DPTS (Ovation Data) would become the single source solution for Seismic Archive/Retrieval/DR Solution
- We wanted a company more familiar with seismic tape transcription and storage
- GIS Front end now being implemented
- Data always on the latest technology.
- Two copies of the data holding helps meet DR requirements.
- Flexibility of access to data (online, nearline, offline, etc.)
- Online shopping is the way forward



Exploration Archives Work Flow







