

SEISMIC PROCESSING AND ANALYSIS

Leverage AI and centralized cloud data to identify and accelerate drilling operations



Common in the energy sector, satellite images, geospatial data, and seismic surveys are used to increase the effectiveness of drilling operations. These surveys can consume PBs of data and are constantly growing as companies continue exploration for new oil-rich reserves.

Leveraging AI tools across multiple clouds to analyze this dataset can radically improve the chances of finding these reserves, short-circuiting lengthy timelines. Leverage industry-standard protocols including NFS, SMB, HTTP, FTP and Hadoop HDFS to provide an efficient and flexible shared petro-technical storage infrastructure – a scale-out data lake – that can support a wide set of applications and analytics methods.



ACCELERATE EXPLORATION

Leverage best of breed tools across all cloud providers to accelerate the identification of oil-rich reserves, reducing exploration costs and driving revenue growth.



REDUCED COMPLEXITY WITH CENTRAL DATA LAKES

AI and machine learning require large amounts of “training data” to learn and recognize patterns using the centrally stored geospatial and survey images.



FLEXIBLE TOOLS FOR DIVERSE TECHNOLOGY TEAMS

Existing teams can use their cloud-based Analytics and AI tools of choice across all the cloud providers, speeding up time to value without requiring new skills and knowledge.



SOLUTION ARCHITECTURE

ARTIFICIAL INTELLIGENCE



BUSINESS INTELLIGENCE



MACHINE LEARNING



ANALYTICS AND MODELS



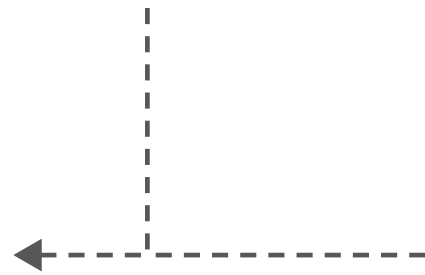
GEOSPATIAL DATA



SEISMIC DATA



DATA LAKE FOR UNSTRUCTURED DATA



SOLUTION SCENARIO

- There is a need to identify new oil reserves or a need to improve extraction efficiencies and existing well production
- With each site requiring 50+ TB of data, storing imaging files from future fields until you're ready to expand or change extraction methods can quickly consume PBs of storage.

SOLUTION BENEFITS

- Use cloud resources for 3-D and 4-D modeling without overprovisioning on-prem servers to crunch numbers
- Select from high-performance storage tiers for current analytics processing
- Utilize cost-effective archival storage tiers for long-term storage
- Recover business-critical workloads quickly when using cloud-based disaster recovery solutions