Enriching OSDU Energy Standards with Edge Analytics, FogLAMP, and AVEVA Data Hub

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Open Subsurface Data Universe

- Data Standards for Upstream Energy Datasets
- Expanding to Other Energy Sources
- OSDU is Cloud Agnostic
OSDU Platform is currently supporting Exploration Drilling and Production Domain. Operators want to analyse OSDU data with real time Operational data.

ADH provides a centralized repository for all operational data and continuously updated in real time.

Extensive APIs for IO into ADH. Seamless integration into OSDU

OSDU Integration with ADH enables

- Complete Operational insights
- Predictive Maintenance of Drilling and Production Assets
Enhanced Business Value - Edge Integration

- Fledge brings in real time data with variety of protocols
- Enables Edge Intelligence
- Support Drilling & Production, Process Control Domain

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Enhanced Value with ADH Integration

- ADH brings in Operational Data
- ADH enables Operations Insights
- Cloud Architecture and ADH APIs enables easy Integration
Real-Time Data Drilling Data Aggregation in ADH

AVEVA™ Data Hub  Trend

Add Traces

Assets

Streams

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PetraHub Energy EDM Platform - Query data from ADH

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Data Federation - Contextual Analysis OSDU Data with ADH
Edge & ADH Integration with Real Time Data Ingestion Platform
Use Cases - Upstream & Midstream
Mitigation Drilling Risks with Failure Predictions

ADH Provide Real Time Drilling Measurements – WOB, Torque, MWD Logs to enable real time wellbore stability calculations
Real-Time Bottom Hole Sensor Data with Fiber Optic Sensing Data  
(Distributed Temperature Sensing)
Prediction of Optimal Completion Design
Integration of Real-Time Data from ADH (OSI PI Data BHP, BHT etc.)

Static Model

Updated Reservoir Flow with Real Time BHP, BHT from ADH
Distributed Acoustic Sensing - Machine Learning on the Edge

Production Surveillance, Frac monitoring, Asset Monitoring

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Distributed Acoustic Sensing - Processing on Fledge and aggregation in ADH

Production Surveillance, Frac monitoring, Asset Monitoring
Pipeline Monitoring with DAS (Acoustic Sensing)

FogLamp ingests Real Time DAS profile into ADH to detect events on pipelines with continuous monitoring

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