The PetroVisor™ Platform: The only open and scalable petro-technical platform that serves the entire organization

Introducing the PetroVisor™ Platform

Step to the next level utilizing the newest generation of digital access, analysis, and collaboration with the PetroVisor™ platform. Designed for flexibility, automation of complex workflows, real-time reporting, and cross-organization collaboration, with the decision maker in mind. Optimize operations, capital efficiency, and manpower while mitigating risk. All on a single platform that is easy to set up, maintain, and expand. Built by experienced Petroleum Engineers for the E&P needs of today and tomorrow.

- Optimize Production
- Reduce Below the Wellhead Costs
- Increase Capital Efficiencies
- Reduce Methane Emissions
- Maximize Manpower Value

For the Executive:
- On-demand real-time Executive Asset Summaries.
- Analysis when you need it, the way you want it, that you can generate.

For Operations:
- Production & economics-based prioritization of daily manpower and field activities.
- Real-time artificial lift optimization.

For the Technical Team:
- Integration of disparate datasets, physics-based modeling, machine learning, AI, and advanced economics.
- Customize existing apps or build your own.

For A&D, Budgeting, and Reserves:
- Rapid tee to green analysis through extensive integration and automation.
- Probabilistic economics for stress testing.

For IT:
- Open and transparent API, unified platform.
- Use legacy data and systems without modifying the legacy system.
- Easily scalable due to a single data model.
- On-premise, cloud, or hybrid installations.
- Secure.

For Everyone:
- Collaboration with MS Teams and Power BI.
- Notifications via real-time data analysis.
- Export to package of your choice.

DATAGRATION

What is the PetroVisor™ Platform?

PetroVisor™ consists of a data layer, workflow layer, and a connected operations layer, all in a single unified platform. Designed for seamless automation of complex engineering and operational problems, PetroVisor™ has several notable strengths that place it beyond the capabilities of other existing solutions.

Data Layer – A generalized structure to easily link to and relate any relevant data, such as SCADA, reservoir, geophysical, accounting, etc. Use legacy data as needed without modifying the legacy system. New users are productive in a short time. Initial setup by Datagration and later expansions are very cost efficient. *We call this layer "Semantic Data Integration".*

Workflow Layer – Access data from the data layer and perform complex calculations. Seamlessly link a series of applications into automated workflows. These workflow apps include physics-based models, machine learning, economics engine, and stored procedures. Use the dozens of existing apps, modify them, or build your own apps and workflows. Embed project team and asset-specific knowledge and realities into the workflow. *We call this layer "Knowledge Automation".*

Connected Operations Layer – Gain full visibility, detect problems earlier, and enable teams to act faster. Use Microsoft Teams with Power BI or other visualization tools to discuss workflow design and present results in a collaborative workspace.

DATAGRATION

PetroVisor™ Features

Open access – Connect to 3rd party apps, legacy systems, and any data sources. Export data and results to computational and visualization tools of your choice.

Transparent platform – View and modify the underlying code on existing apps and workflows.

Dozens of existing solutions - Library of workflows that are adaptable to any petro-technical challenge.

Collaboration & notification – Delivers a user first experience, integrated with Microsoft Teams and other BI tools. Simplifies how your team is notified when something important happens.

Security – Secure by default, the platform ensures all your data is protected and supports your Identity Access Management needs.

Engineering mindset – Supports your engineers with standards-based tools and application frameworks for rapid workflow development.

Automation – Everything you need to create and support your automated workflows and business requirements.

Advanced economics engine – A holistic and probabilistic view of investment opportunities from the investor perspective. Completion and drill-out development optimization with embedded physics-based modeling. Corporate-level cash flow modeling with dynamic working capital, debt, equity, and dividends.

Power your workflows with the technology they deserve

A truly unified platform requires integration across your entire technology stack - including analytics platforms, data management solutions, and powerful visualization tools. PetroVisor™ unlocks the value of enterprise legacy systems and technologies by connecting and enhancing data through knowledge automation.

Data Sources We Connect To:

- SQL
- Oracle
- Teradata
- ODBC
- Historian
- Web APIs
- Spreadsheets
- ASCII Files
- SHP Files
- 3rd Party APIs
- Manual Data Entry
- Avocet, Azure Warehouse
- Openwells, EDM, Energy Components
- Access DBs, OFM
- OSIsoft PI
- Odata, RESTful API
- MS Excel
- CVS, LAS, CPS-3, Zmap
- Petrel Maps, Eclipse Maps
- Propser, GAP, Pipesim

Technology We Use:

- MSFT R Open
- MSFT Azure ML
- MSFT ML.Net
- PetroVisor P# DSL
- MSFT Graph
- Azure IoT Hub
- Azure Stream Analytics
- Azure Data Lake Analytics
- Azure SQL
- C#
- .NET / .NET core
- PetroVisor Web API

Scripts & Technology Components:

- Voronoi Grid
- Auto DCA
- Material Balance
- Data Cleansing
- Feature Extraction
- ESP Well & Pump Model
- Gas lift Well Model
- Rod Pump Model
- Bayesian Networks
- Knowledge Graph
- Cross Plot
- Ticketing System
- Feedback Loop
- Workflow Schedule
- Workflow Automation
- Petrel Maps Integration
- Eclipse Maps Integration
- PETEX Model Integration
- ML & AL
- Chart Builder
- Web-based Visualization
- P# IDE

Optimize strategy, operations and spend with PetroVisor™

Well Performance Optimization

Combine real-time SCADA, accounting data, and machine learning to prioritize daily ops activities, optimize artificial lift.

Capital Development Optimization

Rank workover and drilling candidates by combining the latest data with physics-based modeling and investor-oriented economics.

ESG Optimization

Track, manage, and reduce methane emissions, CO_2 emissions, asset retirement obligations, spills, and water use.

EOR Optimization

Improve asset decision making and maximize recovery in heavy oil basins.

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