GAIA
Digital Subsurface Platform
Schlumberger
Stop Exploring for Data. Start Exploring for Oil and Gas.

A major challenge when prospecting for oil and gas is sorting through endless data—seismic data, well and production logs, subsurface measurements, documents, and reports—often stored in multiple systems. Data is everywhere. But it doesn’t have to be.

The GAIA* digital subsurface platform puts all data at your fingertips—anytime, anywhere, and from any device. It instantly connects you with multiple content providers across the E&P life cycle, giving you access to structured data—seismic, wells, and production—and unstructured content such as news and market reports. This digital gateway to subsurface insights enables you to accelerate the data-to-discovery journey in basins around the world.

Seamlessly bringing together content from diverse sources to accelerate screening and ranking of opportunities.
Accelerate Decision Making

Powered by the DELFI* cognitive E&P environment, the GAIA platform delivers unique user experiences, from prospecting and screening an area of interest to integrating your data with the massive amount already available. The platform is yours to discover, visualize, screen, and interact with all available data in a region or basin without compromising resolution and scale. This digital enablement leads to faster decision making while enhancing collaboration across the team.

The world’s data at your fingertips
- Quickly find, load, and curate data
- Gain instant, secure access to unified data across domains using a single, integrated platform accessible from any device
- Derisk basins of interest based on new exploration priorities and bid and license rounds
- Enhance collaboration between stakeholders for expedited decision making
- Seamlessly integrate data into workflows in the DELFI environment

Scalable and intuitive cloud-based platform
- Subscriptions attuned to all E&P phases
- High-resolution streaming of a global seismic library that incorporates real-time analytics and data enhancements
- Aggregated market intelligence based on industry news such as IHS Markit global E&P datasets
- High performance computing and machine learning capabilities
Identify Areas of Interest

The GAIA platform enables you to easily identify areas of interest by seamlessly integrating various content types onto an ultraperformant global map—from terabytes of seismic data to basin history and the latest industry and licensing round news. Intuitive search-and-filter capabilities illuminate relevant data so you can prospect mature or underexplored basins and quickly determine if opportunities meet your near- and long-term portfolio objectives.

Content types
- Global E&P datasets
- Industry news
- Well logs
- Production data
- 2D seismic lines and 3D seismic volumes
- 2D and 3D entitlement data
- Basin geomodels
- Subsurface measurements: gravity, magnetics, and bathymetry data
- Technical papers and reports: fluid inclusion studies, active field data, play studies, and geologic province reports
- License round blocks
- Active lease blocks
- Farm in and farmout opportunities
Visualize the Subsurface

After identifying an area of interest, instantly dive into real-time 2D and 3D seismic data and velocity models to analyze key attributes and gain a greater understanding of geological complexities to reduce risk and uncertainty. With a regional understanding of structural and stratigraphic complexity, you can identify potential challenges and share discoveries across the team.

Enhanced views

- Well log viewer
- 2D seismic visualization
- 3D seismic and models visualization
- Base map view
- Trace information extraction
- Seismic model and attribute corendering
- Amplitude scaling and selection of seismic data color scale

*High-resolution corendering of velocity model on 3D seismic volume in GAIA platform.*
After delving into a specific area of interest, you can then evaluate the data for quality by using enhanced screening capabilities. The GAIA platform provides automatic tools for quality assessment and enhanced, prepackaged interpretations of the data you choose to explore—enabling you to explore key geologic conditions and compare datasets for even greater discoveries.

**Tools for quality assessment**
- Fast-track regional subsurface models
- Automated calibration of seismic and well data
- Automatic horizon picking and seismic attribute analysis
- Petrophysical analysis
- Well log interpretation
- Machine learning interpretation: salt, stratigraphy, and fault
- Analogs and insights from structured data
- Insights from documents and unstructured data
Evaluate Exploration Opportunities

All the work your team performs in the early exploration phase can seamlessly integrate with earth models and existing workflows in the DELFI environment. With high performance computing and machine learning capabilities, your workflows are accelerated and automated, helping you determine economic viability, focus new ventures, and form a better basin-entry strategy in weeks instead of months.

Integration capabilities for even greater insight

- Autopackage data from the GAIA platform into the Petrel* E&P software platform, Omega* geophysical data processing platform, and Techlog* wellbore software platform.
- Develop evergreen geological models combining your data with the content available in the GAIA platform.

*Enables integration of datasets to increase confidence across the E&P life cycle.*
Unlock Subsurface Insights

The GAIA platform is a fit-for-purpose, end-to-end solution that enables you to quickly unlock subsurface insights by instantly connecting you with content providers from around the world and across the E&P life cycle. With access to the world’s available data at your fingertips, you can significantly reduce risk and cost and seamlessly move from data to discovery to achieve first oil fast.
Accelerate Energy Discovery