Schlumberger

DELFI Production Data Foundation

Digitally enabling production operations and innovation through comprehensive data integration and access

APPLICATIONS

- Enterprise production operations data ingestion and consumption to readily build and automate your own workflows and applications using consistent and enriched data
- Advanced capabilities to understand and discover data through simple to use visual interfaces
- Access to integrated data analytics, machine learning, and other Al capabilities

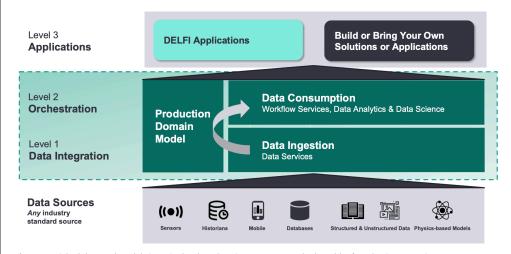
KEY BENEFITS

- Unifies and liberates operational data and knowledge across domains for global operations using a single, integrated framework
- Provides the ability to ingest data from a diverse set of live and operational systems for variable frequencies, including AI and IoT sources, data historians, databases, simulation models and REST API based sources
- Delivers consistency and standardization, from the contextualization of data from disparate data sources into a rich, unified, open and extensible production domain model
- Empowers users and developers to quickly build applications and incorporate own IP by leveraging the DELFI cognitive E&P environment's openness, reducing time to market and minimizing costs
- Provides access to integrated data science platforms for the easy construction, sharing and application of data analytics, ML and Al across the enterprise
- Enables the write-back of calculations and results into the solution for reuse and easy visualization
- Enables a maintained history of changes to the data allowing consumers to request the state of the data at a specific point in time

DELFI Production Data Foundation (PDF) provides enterprise data integration from on-premise and cloud sources. The solution delivers the underlying infrastructure, services and interfaces required to support and unify production data ingestion, domain modeling, workflow orchestration, and data consumption.



The PDF solution brings together production and equipment data from across your organization. The solution defines a standard to ingest and maintain connections to operational data sources, applies consistent production domain data structures and manages time series data. The PDF solution is the product of more than two decades of production data management experience and serves as the foundational data infrastructure for DELFI-native solutions such as the ProdOps tuned production operations solution.



Access enriched data and models in a single, shared environment across the breadth of production operations

The solution delivers value to a wide range of disciplines working in field operations, asset management, engineering, business analysis, data science, and software development.

DELFI Production Data Foundation

Connect, store, manage, share and build with ease, at speed

The PDF solution delivers a robust cloud architecture to connect, store, manage and validate data. In addition, the solution provides quick and easy access to build your own applications and workflows. PDF capabilities in summary:

Ingestion: continuous ingestion from structured and unstructured data sources such as IoT sensors/devices, SCADA historians, databases, applications, Excel, document repositories/management systems and physics-based simulation models.

Domain model contextualization: a rich and extensible domain model to allow time-series data to be put in the context of wells, production equipment, assets and processes.

Storage: time series and data structures are stored in a scalable architecture designed to be performant for both read and write access, while retaining important qualities of the data consistency, such as out-of-order data handling.

Consumption: APIs allow the discovery and consumption of structured and time-series data for use within DELFI data science solutions and OSDU™ Data Platform compliant data ecosystems, such as the DELFI data ecosystem, to enable cross-domain data analysis and workflows.

Open Integration & AI: data publishing services provide configurable streams of data into analytics visualization and custom destinations. The solution offers inbuilt integration with TIBCO SpotfireTM and DataikuTM for BI, analytics and data science as well as integration with your own tools and platforms.

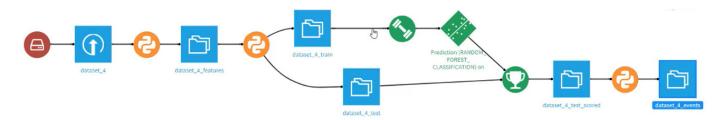


Create powerful data analytics and Al-fueled visualizations

Innovate by readily building your own applications and workflows

Quick and easy data access is enabled through consumption APIs and integrated data science platforms for the development of bespoke applications, workflows and analytics for better and faster decision-making. PDF customers are given complete autonomy to design, build, operationalize and maintain their own Intellectual Property (IP), thereby maximizing the return on investment to acquire and access data.

Contact/Email your local Schlumberger representative to learn more.



Automate workflows with integrated cognitive capabilities such as machine learning or other AI techniques



