

# **Schlumberger**

## Digitally enabling production operations for faster, better decisions

## **Applications**

- Production surveillance, analysis, and diagnostics
- Well and field-scale production and artificial lift optimization
- Flow assurance risk identification
- Pipeline integrity management
- Capacity planning
- Production forecasting
- Candidate selection for workovers and interventions

#### **Key benefits**

- Provides a single-source view of operations for clarity in analysis and decision making
- Delivers automated insights that give continuous guidance and recommendations based on the latest operating conditions
- Enables integrated machine learning and AI for continuous learning and value extraction
- Offers integrated self-service analytics to support personalization and adding your own IP
- Enables quick and easy data connections to rapidly prototype new solutions, including cross-domain work processes beyond operations
- Supports new applications and solutions with an open framework and scalability

- Delivers consistency across assets and the standardization of best practices
- Leverages your existing data sources and software technology and increases the return on investment while lowering the cost of ownership

## **Enhancing operations and production performance**

The ProdOps\* tuned production operations solution enables you to optimize production performance and continuously create value at scale. Powered by the open, cloud-based DELFI\* cognitive E&P environment, ProdOps solution seamlessly connects people, data, and models across the entire production space—streamlining your operations and delivering greater insight for faster and better decision making.

## Unifying data in a shared production advisory system

ProdOps solution delivers unity by bringing together data and work processes from across your organization to set new standards. Underpinned by a robust, industry-proven data infrastructure and ingestion framework, the solution brings together live, contextualized data from structured and unstructured sources, calibrated first-principle physics models of wells and networks, and data

analytics into a shared, collaborative environment.

The net result is the instant identification of underperforming assets, issues, and opportunities for improvement, as well as confidence in recommendations and decision making at the right time.

Your teams can proactively manage assets by reviewing advisory insights. Insights run continuously and automatically in the background using data-driven or physics-driven models or in combination as hybrid models. Insights provide recommendations that can be ranked based on metrics, such as potential gains and chances of success.

The ProdOps solution enables engineers to share data, store models, and track and manage models as they mature over time. Engineers can easily evaluate alternatives using consistent models for design, engineering analysis, and operations.

## **Empowering asset teams**

ProdOps solution enables asset teams to track production metrics, analyze performance, and manage tasks more easily and with greater clarity compared with using conventional methods. Teams have access to an up-to-date and comprehensive view of the entire



#### Integrated

Streamlined ingestion, integration, and orchestration of data and models across your organization and from third-party sources



#### **Collaborative**

A single environment to review and analyze performance, assign tasks, and track activities



#### Automated

Data-driven and first-principle models for continuous, automated insights and value creation



## Open

Liberation of data and workflows; capability to connect systems and differentiate with your own IP





asset to quickly understand reasons for underperformance. By automating data gathering, ProdOps solution delivers significant quality improvements and time savings, freeing up time for deeper analysis and the identification of opportunities.

After solutions or opportunities are identified, tasks can be assigned and moved to resolution through collaboration on task assignments, verification, tracking, and up to final closure.

#### **Automating data and analytics**

The solution transforms well production management and surveillance by automating the execution of workflows through machine learning and advanced Al. This provides

engineers and asset managers with actionable insights and customized analytics for proactive decision making without having to be data science experts.

Data, workflows, and business logic are integrated to autodetect trends and well events, remove data outliers, and automate processes, such as decline curve fitting.

## Maximizing ROI and enabling innovation

The scalable ProdOps solution enables you to readily connect to data and build your own workflows and applications. It is a cost-effective solution that lowers the total cost of ownership compared with conventional production surveillance and analysis

solutions—providing you instant access to data, models, and analytics for continuous value creation while maximizing ROI.

ProdOps solution combines deep petroleum engineering domain science, innovative digital technologies, and more than 20 years' experience in digital oilfield projects worldwide. From pilot projects to enterprisewide implementation and postimplementation support, Schlumberger is committed to helping you achieve your full potential with the ProdOps solution by guiding you every step of the way. We work in partnership with you and third parties to deliver solutions that help you remain competitive.

## **Well operations**

Optimization through continuous monitoring and automated identification of operational issues

## **Network operations**

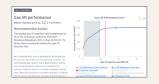
Immediate guidance for better field-scale production management decisions

### **Production forecasting**

Intelligent production forecasting

## Well portfolio optimization

Automated, rapid screening and ranking of workover candidates









- Quickly view and understand underperformance
- Reliably diagnose problems and confidently recommend solutions at the right time
- Support a range of artificial lift types
- Optimize production and artificial lift
- Identify flow assurance risk
- Manage pipeline integrity
- Enable capacity planning
- Automatically identify wells that need updates
- Rapidly update large well counts with batch runs
- Automate engineering best practices and business logic
- Proactively manage assets with automated recommendations, potential gains, and likelihood of success

ProdOps solution applications can be augmented with your own IP.

#### What is the DELFI cognitive E&P environment?

The secure, scalable, and open cloud-based DELFI environment provides seamless access to software across exploration, development, drilling, production, and midstream applications—all delivered via a flexible and personalized SaaS subscription model. Combined with domain expertise, digital technologies in the DELFI environment help solve challenges across the E&P life cycle.



