# Schlumberger

# **Avocet Production Operations Software Platform**

Field level decision support system

# **APPLICATIONS**

- Production data management
- Volumes and allocations management
- Production data reporting

#### **BENEFITS**

- Unify operational data and knowledge across domains and global operations using a single, integrated platform
- Gain maximum value from all your assets
- Minimize downtime and optimize production
- Identify reasons for production interruptions or shortfalls

#### **FEATURES**

- Supports concurrent users with common data feeds, visualization, automated reporting, and user-defined alarms and notifications
- Model-based surveillance and diagnostics
- Standardized enterprise data access
- High-quality visualization with web and desktop access
- High-frequency data storage and loading
- Data capture from field, SCADA, spreadsheets or external databases
- Global industry standards to support audits, security, and regulatory compliance
- Consistent management of data for error validation, security, unit conversions and engine calculation

The Avocet\* production operations software platform provides an asset decision support system that enables users to more effectively manage rates, recovery, and efficiency to deliver maximum value for all types of assets, including onshore, offshore, conventional, or unconventional.

#### See a picture of operations in a single, shared environment

The integration capabilities of the Avocet platform connect global and remote operations for a broad range of disciplines from field staff and production and reservoir engineers, through to production accountants and administrators.

The Avocet platform collects, stores, and displays all types of production operations information (surface, wellbore, wellhead, and facilities data) with measurements (well test data, fluid analyses, transfer tickets, and tank inventories). This enables users to view and track forecasts, production targets, budgets, and other KPIs at a corporate, business-unit, or geographical level. All users can see asset performance in a single environment, regardless of asset type or location.

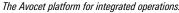
#### Understand the impact of changing production conditions

By combining data and measurements acquired in production operations with simulation models, the Avocet platform offers users technical insight into the reasons for production interruptions and shortfalls. This software platform connects with other Schlumberger software platforms and products, as well as third-party software. For example, integration with OFM\* well and reservoir analysis software delivers an easy flow of data into the Petrel\* E&P software platform for tasks like reservoir simulation history matching in the ECLIPSE\* industry-reference reservoir simulator. Up-to-date models help users to understand how changing production conditions will impact production. With data and models united in a single environment, the root cause of problems can be identified more quickly, resulting in minimized downtime and optimized production.

#### Tackle key industry challenges with operations solutions

Additional operations solutions for enhanced monitoring and surveillance are available to help tackle the key challenges facing today's production industry—from multiphase metering to ESP surveillance and management of pipeline transient behaviors like pigging and hydrates.







# **Avocet Production Operations Software Platform**

These solutions are standardized, off-the-shelf packages ready to be deployed, but can be customized to any particular operational environment. A flexible and extensible infrastructure supports custom solutions development, either by Schlumberger or third-party organizations.

#### Aggregate and store all forms of data

The production data core of the Avocet platform aggregates and stores all forms of data collected in production operations, from continuous and sporadic flow measurements to equipment specifications and the results of subsequent engineering analysis. For all Avocet platform implementations, the core powers solutions for workflow automation, visualization, tracking, data-driven analysis, and model-based workflows. The production data core is the powerful, extensible base of the Avocet platform.

#### Connect, store, and manage data efficiently

The Avocet platform production data management system (PDMS) delivers a robust data architecture to connect, store, manage, validate, and report enabling you to see a comprehensive picture of your asset for the complete well, equipment, and event life cycle. Its flexible architecture also allows it to connect to other data stores removing the need for data duplication. The PDMS is made of several components that can be customized to your needs.

#### Achieve accurate volumes management

The volumes management function provides data entry, production visualization, computation, fluids allocation, and operational and regulatory reporting — all through an easy-to-use application that runs on desktops, field laptops, and the web. This function performs full-stream allocations for a wide range of fluid and chemicals at various complexity levels, from simple single battery allocations to field-wide networks comprising multiple plants, gathering facilities and wells.

# Create predefined or tailored reports

The Avocet platform delivers rich visualization and reporting tools. Predefined reports, which can be tailored as required, are delivered to meet your operational and partner reporting needs. In addition, data is visualized using an interactive grid data analyzer.

# Capture and review data, even when offline

The Avocet platform offers portable field data collection while disconnected from corporate networks. Operators and pumpers can collect information onsite and review historical data records while visiting locations with limited to no available connection. Data can be synchronized with the main Avocet platform server using dial-up or standard networks.

# **High-frequency infrastructure**

The infrastructure of the Avocet platform facilitates high-frequency data collection, computation, and alarming. With transparent access to model results, aggregated sensor data and high-frequency sources enable a powerful range of capabilities.



The Avocet platform enables decision support of the asset in a single integrated environment.

#### Track and monitor stream trends over time

Component allocation is essential to facilities where commingled streams are processed, typically in offshore environments or at end-of-line terminal plants. The component allocation function splits oil and gas streams into alkane composition fractions such as methane, ethane, and butane, and allocation is done on individual components. This solution enables component tracking and monitoring of stream trends over time.

# Software developer's toolkit

The software developer's kit (SDK) is an intuitive set of tools and capabilities for extending and customizing the Avocet platform — from making minor changes to an existing screen, all the way to implementing a whole new workflow. The SDK allows the Avocet platform to be customized to suit your business needs.



Maximize uptime and run life with real-time monitoring and equipment management.



