Avocet Production Operations Software

A field-level decision support system to help hit production targets. Consistently.

Applications

+ Production field data capture
+ Production data management
+ Hydrocarbon accounting
+ Regulatory and field operations reporting

Benefits

+ See a complete picture of your operations
+ Streamline your production accounting processes
+ Understand the reasons for shortfalls
+ Act to close the gap between actual and potential production

Features

+ Robust data collection, validation, computation and business approvals processes to have reliable data up to date
+ Flexible allocation rules able to handle volumes, mass, energy or by components
+ Comprehensive reporting options with automated regulatory report filing
+ Extensible software foundation that can be adapted to your operations

AVOCET

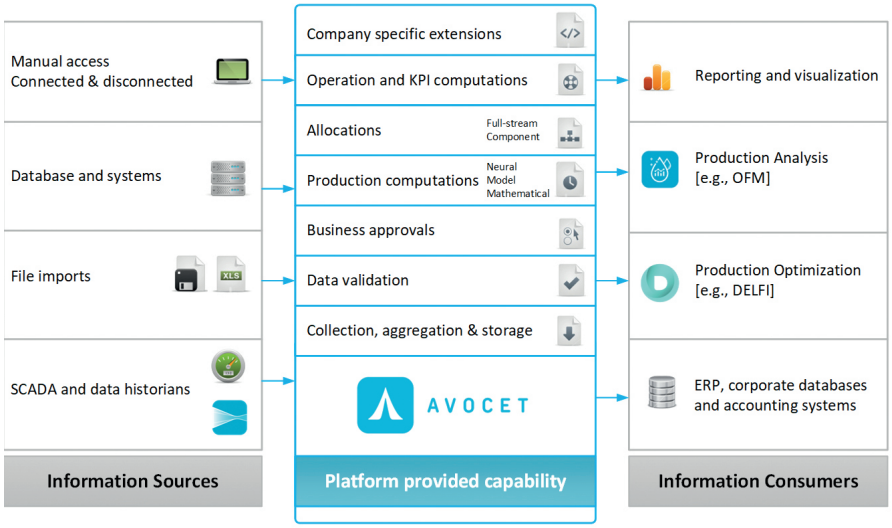
Meeting production targets is a continuous challenge—taking the right course of action at the right time requires information that field engineers can rely on. The Avocet* production operations software lets you achieve this by delivering consistent and reliable information, for all of the assets you operate—onshore, offshore, conventional, or unconventional.

The increasing complexity of today's production operations demands that the information derived from various automated systems (data historians, field systems, and measurement devices) is collected and made available in a meaningful format when you need it. The full value of this information flow can be undermined by the scale of the effort required to analyze the acquired data by engineers who are already tasked with managing a large number of wells. The overload is compounded by the use of outdated systems that are prone to error. Finding dependable, validated information is an everyday battle that limits the effectiveness of people and the decisions they make. The consequences can be costly and cause long term damage to the health and productivity of your assets. The Avocet production operations software is engineered to overcome these difficult challenges, helping you hit production targets time and again. Avocet enables an extensive range of processes that empower you to

+ see a clear, complete, and up-to-date picture of your operations
+ understand the reasons for your production shortfalls and how to fix them
+ act with confidence to close the gap between your actual and potential production.

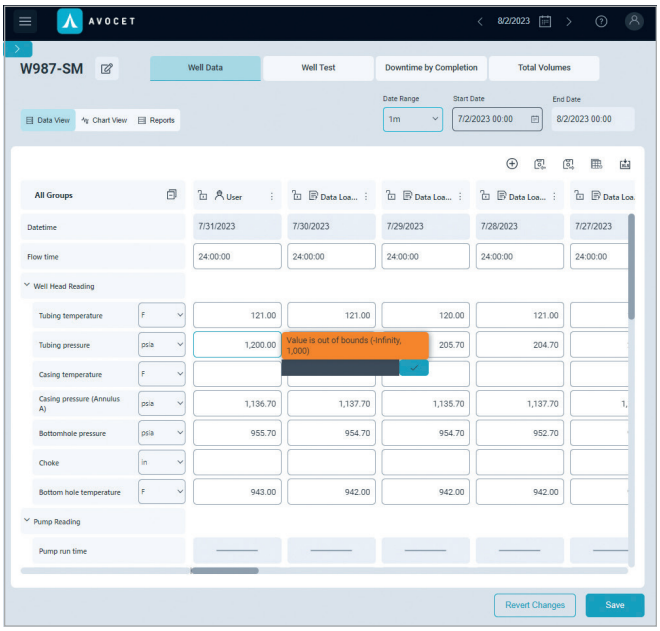
See a clear picture of your operations

Avocet software provides a single, integrated environment that connects global and remote operations from the well to a broad range of disciplines—field staff, production and reservoir engineers, production accountants, and administrators. Asset managers can view asset performance, monitor KPIs, and visualize relevant information that affects production and impacts performance. Production managers can visualize asset performance, including allocated production against plan for a full portfolio of assets—in a single environment, regardless of asset type or where assets are located.



Data capture and validation

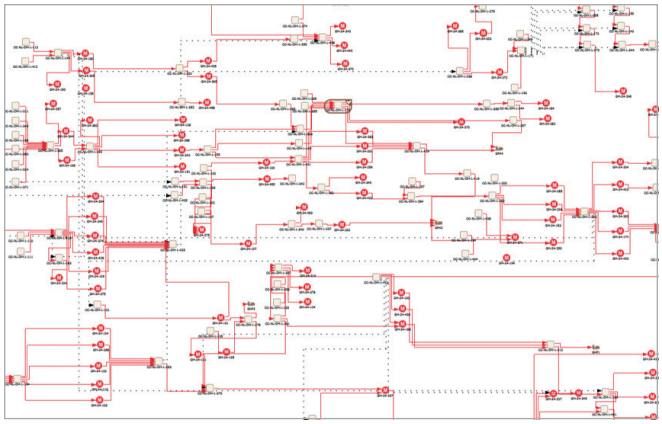
Avocet is time-based, maintains a full historical record, and can be used to collect all types of production operations information from subsurface, wellbore, wellhead, and facilities. Measurements, well test data, fluid analyses, transfer tickets, and tank inventories can also be collected, and parameters from subsurface and oilfield equipment are easily loaded. Users can track forecasts, production targets, budgets, and other KPIs at corporate, business-unit, or geographical levels. Maintenance and operational history, as well as other events that contribute to operational shortfalls, are easily tracked. Multiphase measurements are leveraged with predesigned screens for an integrated acquisition-to-reporting workflow. Avocet enables users to extend the data collection system to gather any type of production and operational information. Using industry-standard protocols, data is loaded and validated directly from SCADA systems, data historians, and business systems. The Avocet interface provides easy-to-navigate, task-based workflows that can be customized for various users. The interface can be localized and also supports unit conversions. Validation of numerical limits and deviations occurs on-screen, helping users identify invalid data through the display of nonintrusive prompts. The graphical display of historical data in context allows users to understand the relative quality of information being entered and processed.



Production computations and allocations

Avocet enables you to perform mass, energy, volume or full stream and component-based allocations for a wide range of fluid and disposition types, including fluid injections and chemicals. Production is calculated using measurements, tank inventories, shipments, and tickets supported by a host of industry calculations, including API, ISO, and AGA standards for volume computation, temperature, and pressure corrections. Theoretical estimates for wellhead production are computed using various methods such as well tests, measurements, and mathematical models, and allocation is set up using network schematics.

Allocations are computed at various complexity levels, from simple single battery allocations to field-wide multiflow networks comprising multiple wells, plants, and gathering facilities.



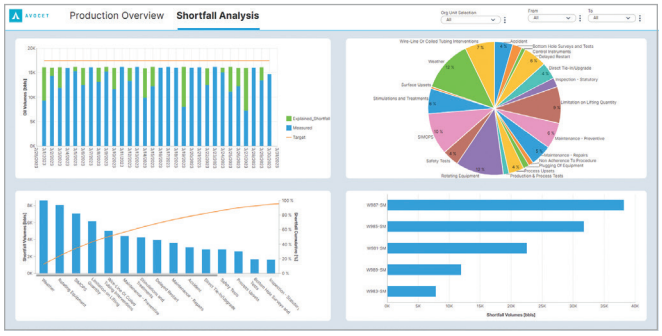
Understand the reasons for shortfalls

Delivering the insight you need, Avocet enables you to understand the reasons for production shortfalls and empowers you to act confidently to close the gap between actual and potential production, and implement the best course of action quickly. This includes the ability to;

+ connect operational data to your engineering analysis
+ evaluate reservoir, wells, and facilities in concert
+ achieve consensus on the root causes faster
+ build calculations and analyses tailored to your needs.

Effortless reporting

Avocet delivers rich visualization and reporting using Microsoft Reporting Services. 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.



These reports can be supplemented using additional third-party business intelligence or reporting tools such as Microsoft Power BI, Tableau, Dundas BI, SAP Crystal Reports, etc. All information within Avocet can be exported to Microsoft Excel for further analysis. Avocet supports regulatory reporting and filing to state and federal authorities.

Seamless integration
With seamless OFM* well and reservoir analysis software integration, you can connect operational data to your engineering analysis. Avocet supports rapid OFM project building to create basemaps, grid maps, forecasts, candidate recognition, and reservoir and production engineering workflows.

Avocet is a modular system that allows API-based extensions for your unique requirements. For optimized field management, Avocet supports integration with other systems and applications. Data is automatically loaded from SCADA systems, data historians, and other business systems using REST APIs, OLEDB, ODBC, CSV, and XML formats.

Collected information can be integrated with surveillance, planning, and optimization applications. Data is exported to both fiscal modeling systems (such as Merak† Peep economic evaluation and decline analysis software) and backoffice systems (such as SAP). Avocet also supports the Energistics PRODML and WITSML standards for data transfers.

Enhanced security
Avocet provides role-based security for data and information. Access rights and privileges are assigned to users for various information types, including specific pieces of equipment or additional data fields that concern them. User authentication can be performed using Microsoft Active Directory, while rowlevel auditing and tracking of data changes can be performed to support a company's compliance policies.

Complete customization
Avocet is a modern Microsoft .NET framework-based application that stores data using Microsoft SQL Server or Oracle RDBMS. Predefined templates allow rapid deployment and configuration for all types of operational settings, including conventional land; offshore; deep offshore; floating production, storage, and offloading vessels; coalbed methane; SAGD; and other heavy oil operations.

The system is entirely configurable with a layered architecture. Custom data types and computations can be added to support existing and new operational workflows. The look and feel can also be tailored, and navigation and toolbars are completely configurable.

Avocet is designed with sustained upgradability in mind, keeping up with the needs of rapidly changing production environments from first oil to abandonment. This provides an extensible foundation for today's digital integrated oilfields.

Local expertise, global support
Avocet builds on the success of technology solutions for over 300 customers from all organizations and asset types around the world. This experience is supported by award-winning support and robust deployment methodologies-we work with you to develop the best possible solutions.