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need to make sound, safe, and profitable decisions.

In addition to pushing the frontier into remote and deep water operations and unconventional plays such as shale and tar sands, many producers are reevaluating mature fields around the world as the economics of 'easy oil' shift. Faced with such diverse operations and a shrinking global E&P workforce, oil & gas operators increasingly rely on the digital oilfield to track asset performance, optimize production and improve the way people work. And the digital oilfield runs on information.

EDP software gives companies unprecedented visibility into their production operations landscape. With Webbased dashboards. EDPS maximizes operational awareness by connecting the right operations and field staff with the information they need to make sound, safe, and profitable decisions EDPS is data-driven, business-focused, and supports the production optimization workflows that enable operators to meet and exceed targets.

KEY BENEFITS

EDPS delivers real—world results in the field and to the bottom line. With EDPS companies can:

- Improve operational effectiveness, safety,
- and profitability of assets
- Jump-start digital oilfield and integrated
- operations initiatives
- Enable active collaboration for asset teams,
- remote and mobile resources
- Provide centralized document and knowledge
- repositories across disciplines
- Create additional value from existing sources
- of production operations data
- Rapidly configure fit-for-purpose solutions
- on standardized platforms



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Asset Dashboard

EDPS gives asset and operations managers the big picture they need to quickly assess production and financial targets. The Asset Dashboard rolls—up all wells and fields for the asset into one report with easy drill—down to data and details. Interactive charts show current and historical production with KPIs. The data with actual and forecast data overlaid. The dashboard features a wide variety of pre—configured KPI templates.

Field Report

EDPS provides a detailed report for each field (or well group), including wells, completions, reservoirs, platforms or well pads within the field. An interactive chart shows current and historical daily production along with dashboards showing operational targets and actuals. KPIs for each well or completion help operations staff quickly identify well performance issues and take appropriate action to resolve alarms using preconfigured workflows.

Electronic Well File

Each well in the field generates a wealth of information which is often underutilized. EDPS Docusearch helps maximize the value of well information by organizing production, well events, well tests, logs, directional surveys, and documents into an Electronic Well File, creating a high value knowledge repository that can be leveraged for current and future projects.

Completion Summary

The EDP Completion Summary enables operators to keep track of well completion details, including flow status, perforation interval, sand control method, and other key facts. And by tracking completion zones the information can inform ongoing production optimization activities by linking completion characteristics, production history and reservoir information.

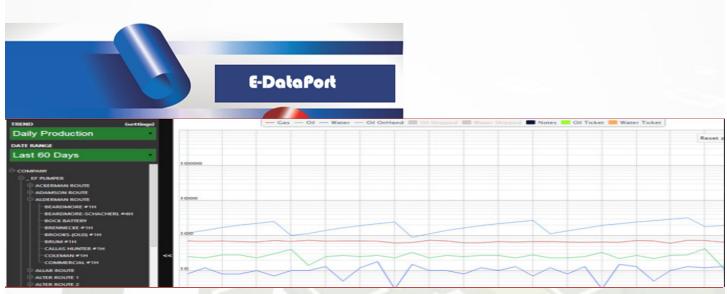
Reservoir Summary

The EDPS Reservoir Summary provides easy access to reservoir characterization, including initial pressure, permeability, porosity, bubble point, and oil and gas viscosity. The summary also provides current reservoir pressure, allocated and cumulative production history, and bottom hole pressure test history. A thumbnail map shows relative position of each completion in the reservoir with tools for building an interactive well log cross—section.

Advanced Well Search

The EDPS Advanced Well Search allows users to quickly find, sort, and filter wells of interest. Users select from a wide range of search criteria, including well name, field name, spud date, well status, and types of data available such as well logs and directional surveys. Well header results are shown in a dynamic, sortable data grid.

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Production surveillance and optimization is process driven and involves many stakeholders. That's why EDPS features customizable workflow templates for managing and tracking common production operations activities. For example, the EDPS Well Review Workflow guides all required personnel through the well review process and

records well optimization recommendations in a ranked opportunity list that helps asset Managers prioritize well workover, re-completion and maintenance. Optionally, customer preferred workflow software can be configured with EDPS.

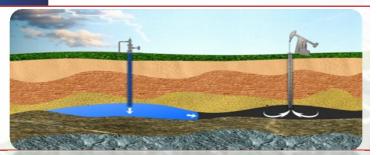
Entitlement Manager

EDPS makes data security a priority with simple to administer yet powerful user entitlement controls. The Entitlement Manager defines business roles, such as production operator, and enables fine grained control down to individual wells and documents to ensure only approved users can view certain types of data.

Data Access Hub

Asset teams require a wide range of multidisciplinary data. But these systems are often isolated. EDPS leverages Data track record of integrating over 30 commercial data sources. The Data Access Hub virtually integrates all required data and makes it available through

an integrated data environment which is accessible on— demand by EDPS. Optionally, EDPS may be configured to use the customer's existing integrated data environment.



Open Data Store

where essential production operations data is not already being stored and managed EDPS offers a set of streamlined information management tools for storing documents, well events, and other types of data. The optional Open Data Store leverages the PPDM data model to ensure your data remains in a portable and reusable format. And for more extensive data management requirements, EDPSDB Data Management System can be deployed alongside EDPS.

Remote Access Portal

EDPS is deployed inside the corporate firewall where company security policies and network logins enable safe and convenient access. The optional Remote Access Portal enables field staff, remote operations centers, or even joint venture partners to securely access approved information

from anywhere using a laptop, touchpad, or any Webenabled mobile device.

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KEY FEATURES

- Modular and Adaptive Architecture
- Interactive KPIs, Charts, and Maps
- Technical Dashboards
- Enhanced Web–Based Tools
- Integrated Data Environment
- Commercial Data Integration
- Pre–Configured KPI Templates
- Configurable Workflow Solutions
- Real-Time Data Accessibility
- PPDM Data Storage Standards
- Excel Export From Charts and Grids
- Robust Security and Entitlements
- Unlimited End–User Licensing
- Pre-Configured KPI Templates
- Configurable Workflow Solutions
- Real-Time Data Accessibility
- PPDM Data Storage Standards
- Excel Export From Charts and Grids
- Configurable Excel Plug–In

SUPPORTED PRODUCTION OPERATIONS WORKFLOWS

- · Asset and Field Surveillance
- · Well Review and Optimization
- · Opportunity List Management
- · Work Over and Intervention
- · Production Forecasting
- · Well Integrity Management
- Equipment Performance Monitoring
- · Well Information Management
- Mobile Asset Tracking
- · Operations Risk Management

COMPONENTS

- Asset Dashboard
- · Field Dashboard
- Electronic Well File
- · Reservoir Summary
- · Workflow Manager
- Advanced Well Search
- Entitlement Manager
- Data Access Hub
- Open Data Store

RICH DATA VISUALIZATION

Viewers

- Time Trend Chart
- · Wellbore and Log Viewer
- Decline Curve Analysis
- 3-D Subsurface Viewer
- · Cross-Section Viewer
- KPI Dials and Gauges
- · Pareto Chart Viewer
- Directional Survey
- · Dynamic Data Grids
- Production Charts

- Wells and Wellbore Tracks
- · Satellite Imagery and Weather
- · Roads and Boundaries
- Production Bubble Plots



By improving data access E-Dataport Suite creates new opportunities to address underlying data management practices. That's why EDPS offers a holistic solution that provides business value quickly while solving data quality with Ener-Dat data management products.

HOLISTIC PLATFORM

Ener-Dat Data Management creates immediate value by dramatically improving data transparency and availability. Enhancing production surveillance and optimization workflows may also require improving the underlying information and data management practices. That's why EDPS offers a holistic solution that provides business value quickly while solving data quality and accuracy with the Ener-Dat Data Management System (EDMS).

EDMS leverages your company's existing investments in data and information management systems and gives data managers powerful tools to load, edit, and QC exploration and production data.

