Engineer’s Desktop™ (EDT™) Software

COMPREHENSIVE AND INTEGRATED WELL CONSTRUCTION SOFTWARE SUITE

OVERVIEW

Engineer’s Desktop™ (EDT™) exploration and production software from Landmark is the most comprehensive – and the only integrated – well construction data management and engineering suite of E&P solutions, and is the preferred standard for many E&P operator companies. This solution facilitates business process management, supports the well construction life cycle, and enhances drilling operation efficiency.

With today’s challenges in the oil and gas market, operators are being forced to increase production with decreasing resources. To accomplish this, operators must reduce process redundancies, increase transferrable knowledge creation, and decrease iterations in order to achieve expected performances and financial goals.

For faster and smarter results, the EDT software suite allows well construction applications to run on a shared data model. As the only complete and integrated well construction software suite on the market, new science is continually added to the EDT platform to help companies thrive in the age of digital drilling intelligence.

BENEFITS

Capture information once and use it everywhere

The Engineer’s Data Model™ (EDM™) platform from Landmark provides a single platform for detailed operations and engineering workflows that can manage the broadest range of well data in one database, complete with robust data management tools and enterprise-grade security. It enables E&P companies to take control of their well data, and, through deep integration with the industry’s broadest portfolio of well engineering solutions, drive better well construction decisions.

Design the most sound and cost-effective path and wellbore schemes

The EDM platform enables the design of wellbore geometries for maximum contact with the most productive reservoir zones. It provides a simple approach to input data, along with powerful graphical visualization capabilities to help interpret the path and wellbore faster and more accurately. The EDM platform reduces uncertainties caused by inconsistent applications of the path and wellbore model, and enables the design of wellbore geometries for maximum contact with the most productive reservoir zones.

KEY VALUES

» Maximizes reservoir recovery over the life of the well
» Assists in designing wells for the right lifespan
» Reduces operational costs
Drill more efficiently without compromising safety
With the EDM platform, operators can design complex well string operations with rigorous analyses to define the key aspects of each pipe-related operation in the wellbore. Results and analyses performed in the user-friendly interface are stored in the EDM database, and are shared across the Landmark suite of well construction applications for specific drilling, casing, or costing analysis.

Manage and track drilling and completion activities
By integrating the EDM platform and other Landmark engineering technologies with the industry’s standard reporting tools using interactive user interfaces, operators can successfully manage operations for the full life of a well – from site sourcing through to abandonment.

FEATURES

**COMPASS™ software for directional path planning**
COMPASS™ software is used as a comprehensive tool for directional well design and construction. It offers fast and accurate well planning and identification of potential directional drilling or anti-collision problems at the earliest possible stage.

**CasingSeat™ software for preliminary casing design**
CasingSeat™ software enables operators to create viable design schemes consisting of casing shoe setting depths and casing sizes. This technology provides rigorous shoe selection calculation to optimize shoe locations based on pore pressures, fracture gradients, and user-defined design constraints. CasingSeat software is fully integrated with StressCheck software (for tubular casing design), enabling a precise engineering workflow for more detailed design and stress load analysis of the casing design.

**StressCheck™ software for tubular casing design**
StressCheck™ software enables users to quickly, systematically, and accurately evaluate casing wear limits – and to determine minimum-cost designs, along with working-stress designs, for burst, collapse, axial installation, and service-life load cases.
FEATURES (CONTINUED)

CasingWear™ software for casing wear prediction
CasingWear™ software is the next generation of well integrity applications to predict locations and magnitudes of cased pipe damage due to the friction and galling of drilling operations. Apply proven WELLPLAN™ well engineering software for analysis of soft- and stiff-string torque and drag in order to determine drillpipe tool joint casing inner-wall contact points and side forces applied to casing wear analysis.

Well Cost software for accurate cost estimations
Well Cost software performs accurate and efficient cost and planning operation analysis throughout the life of a well. Well Cost analysis enables operators to generate cost estimates for either low-level budgeting purposes (such as during an initial project scope) or for a more detailed authorization for expenditure (AFE).

WELLCAT™ well integrity analysis
WELLCAT™ software is the tool of choice for many companies operating in high-pressure/high-temperature (HPHT) deepwater or heavy oil drilling and production environments. A comprehensive analysis of loads and stresses on casing and tubing is provided, including service life analysis. Detailed analysis of the entire casing system is provided to understand the effects of annular pressure buildup, along with the interaction in the casing and tubing systems within a well. Loads and their resulting wellhead movements are evaluated to determine the integrity of the well tubular.

WELLPLAN™ well engineering software
WELLPLAN™ software is a drilling engineering analysis system designed for use at the rigsite and the office to provide both well planning and operational analysis. It is used to improve well designs; prevent stuck-pipe issues, bottomhole assembly (BHA) failures, and drilling problems; and enable operators to drill the right wells the first time at lower costs.

Accurate well cost estimations from Well Cost software result in detailed AFE reports.

WELLCAT™ software provides well integrity analysis for HPHT environments in deepwater and ultra-deepwater areas.

WELLPLAN™ software’s simplified well engineering design process leads to better well decision-making results.
DATA MANAGEMENT APPLICATIONS

**EDM™ AutoSync™ software**
EDM™ AutoSync™ software provides the ability to synchronize field operation reports and configurations between a regional/head office and disconnected computers typically located at rigsites with intermittent connectivity.

**Data Analyzer™ software**
Data Analyzer™ software provides an easy-to-use, powerful tool for users of the EDT software suite, which enables them to realize maximum value from their captured well operations and engineering information. It provides all user levels the ability to quickly and easily build simple and complex ad-hoc queries against drilling and well services data.

**PROFILE™ software**
PROFILE™ software enables any user, from a rig supervisor to a completions engineer to a business analyst, to quickly visualize currently installed and historical wellbore information and downhole equipment in the form of wellbore schematics and reports.

**OpenWells® software for field operations reporting**
OpenWells® technology is the industry-leading software used by more than 130 operators worldwide for field operations reporting on the entire well delivery life cycle. This software provides visual solutions to speed up data entry, and leverages the industry-standard EDM platform to store and access information everywhere on multiple devices.

For more information, contact your local Halliburton representative or visit us on the web at www.landmark.solutions

SYSTEMS AND SOFTWARE

**Software Requirements**
Engineer’s Data Model™ (EDM™)
Microsoft Data Engine (MSDE)

**Operating Systems**
Windows® 10 Enterprise, 64-bit
Windows® 7 SP1, 64-bit
Windows® Server 2012 R2, 64-bit
Windows® Server 2008 R2 SP1, 64-bit
CITRIX® XenApp 7.12
CITRIX® XenApp 7.9
ORACLE® 12.1.0.2 Client, 64-bit (WELLPLAN™ and CasingWear™ software)
ORACLE® 12.1.0.2 Client, 32-bit (Classic applications)
Microsoft® SQL Server Enterprise 2014 (12.0.4100.1), 64-bit
Microsoft® SQL Server Express 2014, 64-bit