Planning the EDT Installation

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HALLIBURTON

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3D Drill View, 3D Drill View KM, 3DFS, 3D Surveillance, 3DView, Active Field Surveillance, Active Reservoir Surveillance, ADC, Advanced Data Transfer, ARIES, ARIES DecisionSuite, AssetConnect, Asset Decision Solutions, Asset Development Center, AssetDirector, Asset Journal, AssetLink, AssetLink Advisor, AssetLink Director, AssetLink Observer, AssetObserver, AssetObserver Advisor, Asset Performance, AssetPlanner, AssetSolver, AssetSolver Online, AssetView, BLITZPAK, CasingLife, CasingSeat, COMPASS, Corporate Data Archiver, Corporate Data Store, Data Analyzer, DataManager, DataStar, DBPlot, Decision Management System, DecisionSpace, DecisionSpace 3D Drill View KM, DecisionSpace AssetLink, DecisionSpace AssetPlanner, DecisionSpace AssetSolver, DecisionSpace AssetView 2D, DecisionSpace AssetView 3D, DecisionSpace Atomic Meshing, DecisionSpace Decision Management Systems(DMS), DecisionSpace for Production, DecisionSpace Infrastructure, DecisionSpace Nexus, DecisionSpace PowerModel, DecisionSpace PrecisionTarget, DecisionSpace Reservoir, DecisionSpace TracPlanner, DecisionSpace Well Seismic Fusion, DecisionSpace WellSolver, DecisionSuite, DepthTeam, Depth Team, DepthTeam Explorer, Depth Team Express, DepthTeam Express, DepthTeam Extreme, DepthTeam E Interpreter, Depth Team Interpreter, Desktop Navigator, DESKTOP-PVT, DESKTOP-VIP, DEX, DIMS, Discovery, Discovery Asset, Discovery FrameBuilder, DMS, Drillability Suite, Drilling Desktop, DrillModel, Drill-to-the-Earth Model, DSS, Dynamic Reservoir Management, Dynamic Surveillance System, EarthCube, EDM, EDT, eLandmark, Engineer's Data Model, Engineer's Desktop, Engineer's Link, ESP, Event Similarity Prediction, ezFault, ezModel, ezSurface, ezTracker, FastTrack, FG+, FieldPlan, Field Scenario Planner, FZAP!, GeoAtlas, GeoDataLoad, GeoGraphix, GeoGraphix Exploration System, GeoLink, GeoProbe GF DataServer, GES, GES97, GESXplorer, GMAplus, GMI Imager, GRIDGENR, Handheld Field Operator, HHFO, 12 Enterprise, iDIMS, IsoMap, iWellFile, i Wellfile, KnowledgeSource, Landmark, Landmark Decision Center, Landmark & Design, Landmark Logo and Design, Landscape, Lattix, LeaseMap, LMK Resources, LogEdit, LogM, LogPrep, Make Great Decisions, MathPack, MIMIC, MIMIC+, Model Builder, MyLandmark, Nexus, Object MP, OpenBooks, OpenJournal, OpenSGM, OpenVision, OpenWells, OpenWire, OpenWorks, OpenWorks Development Kit, OpenWorks Well File, OpenWorks Production, PAL, Parallel-VIP, PetroBank, PetroBank Explorer, PetroBank Master Data Store, PetroWorks, PetroWorks Asset, PetroWorks Pro, PetroWorks ULTRA, PlotView, Point Gridding Plus, Pointing Dispatcher, PostStack, PostStack ESP, PostStack Family, PowerCalculator, PowerExplorer, PowerExplorer Connect, PowerGrid, PowerHub, Power Interpretation, PowerJournal, PowerModel, PowerView, PrecisionTarget, Presgraf, PRIZM, Production Asset Manager, Production, PROFILE, Project Administrator, ProMAGIC, ProMAGIC Connect, ProMAGIC Server, ProMAX, ProMAX 2D, ProMAX 3D, ProMAX 3DPSDM, ProMAX 4D, ProMAX Family, ProMAX MVA, ProMAX VSP, pSTAx, Query Builder, Quick, Quick+, QUICKDIF, QuickWell, QuickWell+, QUIKRAY, QUIKSHOT, QUIKVSP, RAVE, RAYMAP, RAYMAP+, Real Freedom, Real Time Asset Management Center, Real Time Decision Center, Real Time Operations Center, Real Time Production Surveillance, Real Time Surveillance, Real-Time View, Reference Data Manager, Reservoir Framework Builder, RESev, ResMap, RightTime, RTOC, SCAN, SeisCube, SeisMap, SeisModel, SeisSpace, SeisVision, SeisWell, SeisWorks, SeisWorks 2D, SeisWorks 3D, SeisWorks PowerCalculator, SeisWorks PowerJournal, SeisWorks PowerSection, SeisWorks PowerView, SeisXchange, Semblance Computation and Analysis, Sierra Family, SigmaView, SimConnect, SimConvert, SimDataStudio, SimResults, SimResults+3D, SIVA+, SLAM, smartSECTION, Spatializer, SpecDecomp, StrataAmp, StrataModel, StrataSim, StrataWorks, StratWorks, StratWorks 3D, StreamCalc, StressCheck, STRUCT, Structure Cube, Surf & Connect, SynTool, SystemStart, SystemStart for Clients, SystemStart for Servers, SystemStart for S Storage, Tanks & Tubes, TDQ, Team Workspace, TERAS, The Engineer's Desktop, Total Drilling Performance, TOW/cs, TOW/cs Revenue Interface, TracPlanner, TracPlanner Xpress, Trend Form Gridding, Turbo Synthetics, VESPA, VESPA+, VIP, VIP-COMP, VIP-CORE, VIP-DutaStudio, VIP-DutaL, VIP-ENCORE, VIP-EXECUTIVE, VIP-Local Grid Refinement, VIP-THERM, WavX, Web Editor, Wellbase, Wellbore Planner, Wellbore Planner Connect, WELLCAT, Well Cost, WELLPLAN, Well Seismic Fusion, WellSolver, WellXchange, WOW, Xsection, You're in Control. Experience the difference, ZAP!, and Z-MAP Plus are trademarks, registered trademarks or service marks of Landmark Graphics Corporation.

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Contents

About this Manual	
Overview	
How To Use This Manual	
Platform Notes	••••••
Understanding the Engineer's Desktop	
What is the Engineer's Desktop?	
Key Components	
Engineer's Data Model (EDM)	
Drilling & Completions Applications	
Drilling Engineering Applications	
Data Management	
Deployment Scenarios	
Overview	
Installation Types	
Database Installations	
Selecting Your Database	
Available Documentation	
Installing Your Database and Applications	
Installing a Fresh Engineer's Desktop Model (EDM) and Applicati Environment	ons in a Local
Local Upgrade Installations	
Merging pre-EDM Databases into EDM Installing in a Citrix Environment Quick Start—The Installation Process In a Nutshell	
Appendix A: Useful and Related Documents	
Release Notes	
Manuals	
Planning the EDT Installation	
EDT Third-Party Components Installation Guide	
EDM Installation Guide	
EDT Drilling Installation Guide	
EDM Drilling Database Guide	

EDM Drilling Data Migration Guide	20
EDT on Citrix	21
Online Help	22
How to use Online Help	22
Using Microsoft HTML Help	22
Using WebHelp	22
Flash Help	22
Anna an disa Da Lan dura anta Carra a art	2.4
Appendix B: Landmark Support	24
Contacting Support	24
Index	30

About this Manual

ATTENTION: For the 5000.1 release, the installation is arranged into three separate installations, which should be run in this order:

- Third-party components
- EDM
- Drilling applications

Run the Third-party Components installation.

Run the EDM install.

Install Drilling applications.

For an outline of various installation scenarios, refer to instructions described later in this guide. For complete installation details, see the following online guides, which can be found in the EDT_Documentation.ZIP file downloaded with the software:

EDT Third-Party Components Installation Guide (EDT_ThirdParty_Install.pdf), EDM Installation Guide (EDM Install.pdf), and EDT Drilling Installation Guide (EDT Drilling Install.pdf).

A simple, quick-start install is described on "Quick Start—The Installation Process In a Nutshell" on page 17.

Overview

Welcome to Landmark's Windows-based Engineer's Desktop (EDT) 5000.1 release. This release of the Engineer's Desktop provides the Drilling & Completions applications—Well Engineering, Tubular Design, and Drilling Data Management—on a shared data model.

Planning the EDT Installation is a navigational document designed for system administrators or others who are responsible for deploying the Engineer's Desktop (EDM) database and suite of applications. This document is available in electronic format (EDT_PlanningInstall.pdf) on the Landmark Software Manager (LSM).

Adobe Acrobat Reader™ must be installed to view .pdf files. Acrobat Reader can be downloaded, at no charge, from Adobe's website: www.adobe.com.

Release 5000.1 Overview: About this Manual 1

How To Use This Manual

This manual describes installation and maintenance scenarios for the Engineer's Desktop Release 5000.1. Each scenario is described briefly, and the reader is directed to the appropriate Release 5000.1 document containing procedures for implementing the scenario. Each scenario is under one of three categories: Database Installation, Application Installation, or Data Migration and Upgrades.

Platform Notes

The Engineer's Desktop can be installed easily on a PC running the Windows operating system. Additionally, Landmark supports the installation of the Engineer's Desktop in a Citrix environment. The following versions of Windows are supported:

- Windows Vista Enterprise
- Windows XP Professional, SP2
- Windows Server 2003, SP2

The following EDM database platforms have been tested and are supported by Landmark:

- Oracle 10g (Oracle 9i is no longer supported)
- SQL Server 2005
- SQL Server 2005 Express (replaces MSDE)

Citrix MetaFrame Feature Release 4.0 has been tested and is supported by Landmark.

For detailed information on certified and supported platforms, see the *EDT Drilling Summary Level Release Notes* (EDT_SummaryReleaseNotes.pdf).

Understanding the Engineer's Desktop

What is the Engineer's Desktop?

The Engineer's Desktop is an engineering environment providing integration across the Drilling & Completions disciplines. The Engineer's Desktop integrates workflows that encompass operations data, drilling engineering analysis, directional design, casing design, production, and surveillance analysis, as well as other information. The environment is supported by the Engineer's Data Model (EDM) database to provide unprecedented operations and engineering integration.

Applications supported in this environment include: OpenWells, Data Analyzer, PROFILE, COMPASS, WELLPLAN, CasingSeat, StressCheck, Well Cost, and Real-Time View.

Installed separately, OpenWire can be used to feed real-time WITSML data into EDM to support real-time drilling engineering workflows, such as torque/drag analysis and ECD monitoring/hole cleaning.

Also installed separately, iWellFile creates a well operations website that provides users with secure, immediate access to ongoing and historical well information, output reports, downhole schematic diagrams, and analytical results available from other EDT applications.

Key Components

Engineer's Data Model (EDM)

EDM (Engineer's Data Model) is Landmark's newest integrated database product. This release of Engineer's Desktop 5000.1 enables the migration of legacy data from COMPASS, WELLPLAN, DIMS, and OpenWells applications into the new common database. Legacy data files can be directly imported for the CasingSeat and StressCheck applications. Common data from each legacy database can be merged into one set of shared business objects, preventing future duplication of information.

The EDM database allows for centralization of Drilling application data sets. It also enables naturally integrated engineering workflows.

The Engineer's Data Model installation includes the following database tools: EDM Administration, SQL Server 2005 Express, Database Creation, Database Upgrade, and Drilling Data Migration.

Drilling & Completions Applications

Drilling Engineering Applications

CasingSeat

Landmark's CasingSeat application is used to design viable schemes consisting of casing shoe setting depths and casing sizes. It provides rigorous shoe selection calculation routines to optimize shoe locations based on pore pressure, fracture gradients, and user-defined design constraints. It features inventory-based management of permissible hole and casing size combinations. The application provides layer- and lithology-based characterization of subsurface boundary conditions and operating constraints, including those associated with wellbore stability, minimum overbalance, and differential sticking.

CasingSeat is fully integrated with StressCheck, enabling a precise engineering workflow for more detailed design and stress load analysis of the casing design.

COMPASS

The **COM**puterized **P**lanning and **A**nalysis **S**urvey **S**ystem, is a comprehensive software tool used by oil companies and directional drilling contractors for directional well design and construction. COMPASS offers a fast and accurate means of well planning and identification of potential directional drilling or anti-collision problems at the earliest possible stage. It includes all the features required for complex well trajectory design, survey and anticollision monitoring, and analysis. COMPASS also includes tools for survey data management, multiple planning methods, torque-drag optimization, anti-collision plotting and analysis, and platform optimization.

StressCheck

Landmark's StressCheck application is the first graphics-based casing design product for the Microsoft Windows platforms. It incorporates an array of attributes to enable the user to quickly, systematically, and accurately evaluate casing wear limits, minimum cost design, and working-stress design for burst, collapse, axial installation, and service-life load cases.

StressCheck is based on casing design principles that are broadly accepted and employed in the petroleum industry. CasingSeat and StressCheck are referred to as 'Tubular' applications.

Well Cost

Landmark created Well Cost so that Drilling and Completion Engineers could quickly perform accurate and efficient cost and planning operation analysis throughout the life of a well. Well Cost provides engineers with the ability to generate cost estimates for either low-level budgeting purposes (such as during initial project scope), or the more detailed Authorization for Expenditure (AFE).

Well Cost is Landmark's replacement for DrillModelTM, a tool that provides deterministic Cost AFE analysis but does not offer probabilistic modeling and is not integrated with other applications or databases. Well Cost places a powerful tool in the hands of engineers that is:

- integrated with OpenWells and EDM
- capable of performing deterministic and probabilistic analysis

- flexible and easy to configure
- intuitive and easy to use with an interface that is similar to other Engineer's Desktop applications.

WELLPLAN

WELLPLAN is Landmark's drilling engineering analysis system designed for use at the rigsite and the office to provide both well planning and operations analysis. The different engineering modules of WELLPLAN are seamlessly integrated and address aspects of data collection, analysis, well planning, and modeling.

WELLPLAN can be used to improve well designs, prevent stuck pipe and BHA failures, prevent drilling problems, and essentially drill the right wells the first time at a lower cost. General well information is entered through common editors to enable basic Case data components to be entered (e.g., wellbore editor, string editor, fluid editor, and survey editor). These editors are generally available in most WELLPLAN modules depending on which module or mode of analysis is being used. Additional data required for particular analyses are entered using editors available within each analysis module (e.g., Torque/Drag Actual Loads, Cement Job Editor, etc.).

Data Management

OpenWells

Landmark's latest Drilling and Well Services operations reporting application, OpenWells, is a fully integrated and comprehensive, communications, analysis and corporate engineering information data management system. It is used to capture data for drilling and well services operations.

Wellsite operations reporting offers a new look and feel by taking advantage of the flexibility of a new Java-based architecture and Landmark's Engineers Data Model (EDM) to provide integration between Landmark Drilling, Well Services, and Production products. OpenWells shares a common database with the other drilling engineering applications: CasingSeat, StressCheck, COMPASS, WELLPLAN, and Well Cost. All products also have consistent Data Management, Navigation, Security, Data Synchronization, Unit Management, and Depth Reference Datum Systems. Consistent user interface components and methods have been implemented wherever

possible between all EDM applications to provide the user with a consistent experience across applications.

You can configure this fully customizable application to meet the specific needs of a company through customizable Data Entry Forms, Preview Panes, Output Reports, and the Unit Management System.

PROFILE

PROFILE allows the user to view the wellbore equipment configuration at any stage in the life of the well. It provides rapid access and review of detailed well operations information for more accurate decision making and improved reporting. PROFILE also enables engineers to design any number of planned Completions which can later be used to populate operations Reports in OpenWells. OpenWells and PROFILE can be used concurrently to give immediate visual feedback, thus ensuring data integrity and facilitating improved data quality. This improved workflow efficiency can reduce cycle time and simplify the production of wellbore schematics.

Data Analyzer

Data Analyzer provides an easy-to-use, powerful tool for EDM Drilling and Completions users, which assists them in gaining maximum value from their data. Data Analyzer provides all user levels the ability to quickly and easily build simple and complex adhoc queries against drilling and well services data. Ad-hoc queries can be generated, with the user selecting from the same user-defined labels and data input structure that they are familiar with.

Real-Time View

Real-Time View is a time-based log viewing environment integrated into the Engineer's Desktop. Real-Time View provides operators with the ability to display and output configurable drilling, completions, and workover data logs integrated with operations report information entered at the rigsite. Using WITSML, real-time data can be imported into EDM via OpenWire. LAS or ASCII log data can also be imported into EDM. Real-Time View provides a user-configurable log viewing environment with various display options available to enable engineers to review rig and downhole equipment operations in context with the rigsite supervisor's interpretation of the rig operation. Therefore, Real-Time View enables operations and well-planning teams to review

decisions taken at the wellsite, perform detailed after-action reviews, and identify situations that may lead to NPT.

Deployment Scenarios

Overview

This chapter outlines various deployment scenarios for the Engineer's Desktop (EDT) Release 5000.1. Each scenario is briefly described and the relevant 5000.1 installation document is referenced. The documents describe, in detail, the information necessary to perform that step.

All Engineer's Desktop documents are located on the Landmark Software Manager in .PDF format. From time-to-time, electronic versions of these documents are updated through patches and subsequent releases.

Adobe Acrobat Reader must be installed to view .PDF files. Acrobat Reader can also be downloaded, at no charge, from Adobe's website: www.adobe.com.

Installation Types

Two types of installations are available for the EDT applications:

Local (Standalone)

This install is appropriate for engineers needing to install EDT locally on a PC or laptop to be used by one user. The Local installation will copy the product software, database, and all required support files to the designated directory on the PC's local hard drive.

• Citrix

Citrix can be used to access applications for Drilling and Completions.

Database Installations

Selecting Your Database

Three databases are available for use with the Engineer's Desktop: Microsoft SQL Server 2005 Express (replaces MSDE), SQL Server 2005, and Oracle 10g. SQL Server 2005 Express is included in the installation of EDM. Oracle and SQL Server 2005 must be installed prior to the EDM installation. The selection of which database to use is dependent on several factors. These include:

- The size of the database SQL Server 2005 Express works well for small databases (less than 4 GB). If you have more than 4 GB of data, use SQL Server 2005 or Oracle.
- Number of concurrent database connections SQL Server 2005 Express allows for a maximum of 16 concurrent instances.
- Expertise of in-house database administrators If you have DBAs on staff that are familiar with one of the databases, you will probably prefer to use that database.
- Existing agreements with Microsoft or Oracle EDM is shipped with SQL Server 2005 Express. You may, however already have SQL Server 2005 or Oracle in house and prefer to use one of those databases.
- Full-time connectivity at rigsites If your rigsite will not be connected to an in-house database full time, you will need a database at the rigsite. SQL Server 2005 Express can easily serve as the database for the rig. If you have full-time connectivity, you can use SQL Server 2005 or Oracle. You may want to have a copy of SQL Server 2005 Express on the rigsite computer in case there are problems with connectivity.

Available Documentation

Several installation and data migration guides are used for the installation, upgrades and data migrations for all the EDT applications. A list of the guides and a description of each is listed below.

- The *EDT Third-Party Components Installation Guide* contains information on and procedures for the installation of the Third-Party applications.
- *EDM Installation Guide* Use this installation guide for new EDM installations. This guide also describes how to install multiple versions of EDM on the same computer.
 - —If you are moving from a pre-EDM Drilling database, use the *EDM Drilling Data Migration Guide*.
 - —If you are moving from earlier versions of EDM Drilling databases, use *EDM Drilling Database Guide*.
- EDT Drilling Installation Guide This manual describes how to install all of the Drilling applications.
- *EDM Drilling Database Guide* This manual gives you information on installing SQL Server or Oracle databases as well as upgrading previous versions of EDM.
- *EDM Drilling Data Migration Guide* If your version of the Drilling applications is pre-EDM (i.e., pre-2003.11 DIMS, COMPASS or WELLPLAN), you need to migrate your old database to the EDM model. This manual describes the process.
- *EDT on Citrix* This manual defines how to install and set up Citrix for use with the Engineer's Desktop.

Installing Your Database and Applications

This section describes the major steps necessary to install the EDM database and your applications. Within each step is a reference to the appropriate installation manual for that step.

By default, the EDM installation installs a version of Microsoft SQL Server 2005 Express on your computer. If you are using SQL Server 2005 or Oracle 10g as your database, you need to reject the default on that screen.

This section contains outlines of the following installation scenarios.

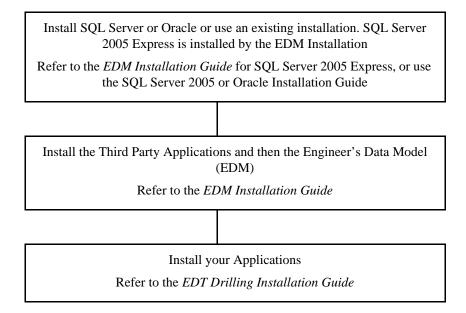
 Local new installations - Neither the EDM database nor any EDT products have been installed on the computer.

- Local upgrade installation previous versions of EDM and at least some applications have been installed on the computer.
 During this process, delete old versions of EDM (not the data) and the applications then install new versions of your applications and upgrade your database.
- Merging pre-EDM databases into EDM If you have a database version that is prior to EDM (pre-2003.11), you need to migrate your database to EDM.
- New Citrix Installation The EDT applications can be run through Citrix.

Note that there is no client/server installation in Release 5000.1.

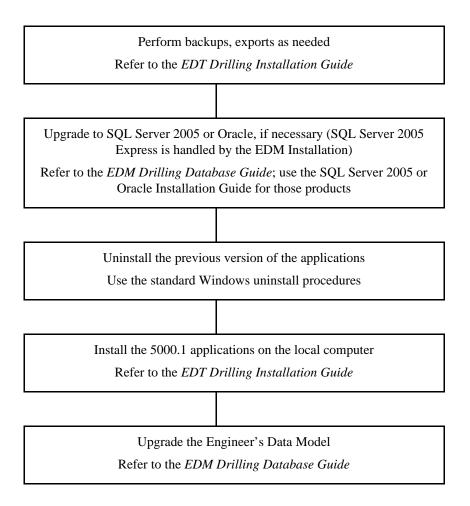
Installing a Fresh Engineer's Desktop Model (EDM) and Applications in a Local Environment

This install can be performed for the Drilling applications.



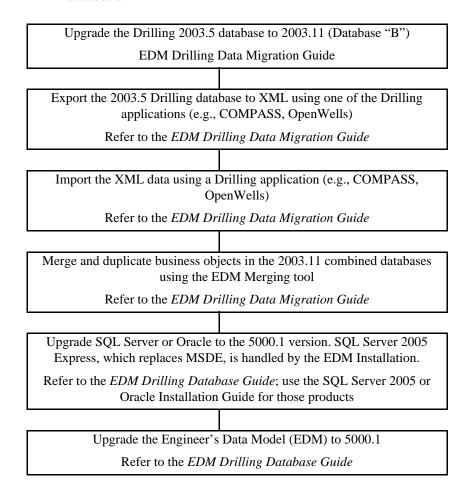
Local Upgrade Installations

The upgrade consists of loading a new version of the application(s) onto your computer and upgrading your database to the new version. The engineering applications allow you to have multiple versions of an application on the same computer. The multiple version installation procedure is described in the "Installing a New Version While Maintaining Older Versions or the Applications" section.



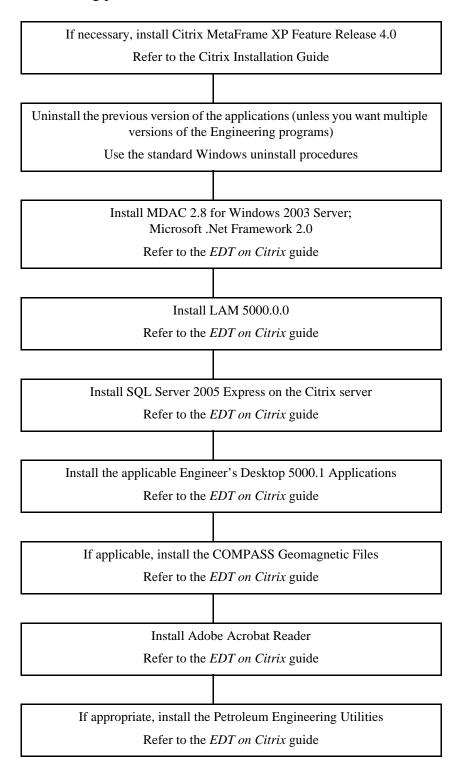
Merging pre-EDM Databases into EDM

Prior to the development of the EDM database, the EDT applications used multiple databases. For the 2003.11 release, all applications moved to the EDM database. If your version of the product is earlier than 2003.11 you will need to merge your database information into an EDM database.



Installing in a Citrix Environment

The Drilling products can be run in a Citrix Environment.



Quick Start—The Installation Process In a Nutshell

Installation sequence of events is VERY IMPORTANT, and MUST be done in the following order:

- 1. *First*, uninstall your existing LAM *before* installing the 5000.1 release—there is new FLEXIm licensing for the 5000.x release. 5000 LAM *will not* install on the same machine with existing 2003 LAM.
- 2. *Next*, you must run the Third-Party Components installation. If you do not install this first, errors will occur. Reboot.
- 3. *Next*, run the EDM installation. Reboot. (EDM *must* be installed before Drilling & Completions applications, or certain services, such as Reporting, will not register correctly.)
- 4. *Finally*, run the Drilling & Completions installation.
- 5. If you have an existing EDM database 2003.14 or higher, it must be upgraded to 5000.1. The new Multi-Version Database Upgrade Utility (EDMPatchDB.exe) will upgrade your 2003.14 or higher database to 5000.1. If your database version is earlier than 2003.14, refer to the EDM Drilling Database Guide for instructions.

Note: Manuals in PDF format that contain details of these procedures are located in the EDT_Documentation.ZIP file that accompanied the software download.

Details of the EDM installation follow in later sections, but this is the mandatory sequence of events.

Appendix A: Useful and Related Documents

Release Notes

Landmark's Release Notes are an integral part of each release. These documents outline important installation information, such as hardware and operating system requirements, installation pre-requisites, product dependencies, and licensing. Release Notes also include a summary of enhancements and new functionality for the products. In addition to lists containing fixed and known problems, information on contacting Landmark Support, is included.

Release 5000.1 contains three separate installations: a Third-Party Components install, an EDM install, and a Drilling Applications install. The latter two have their own Release Notes document. These documents are *EDM Release Notes* and *EDT Drilling Summary Level Release Notes*. These documents can be found on the Landmark Software Manager in the Products\EDT-EDM\Documentation folder:

- EDM Release Notes
- EDT Drilling Summary Level Release Notes
- 5000.0 Release Notes
- In addition, Release Notes are available for the following Drilling and Completions applications: OpenWells, PROFILE, Data Analyzer, WELLPLAN, COMPASS, StressCheck, CasingSeat, Real-Time View, and Well Cost. These documents can be found in the Window's Start menu once the Drilling & Completions installation has been completed (e.g., Start > Programs > Landmark Engineer's Desktop 5000.1 > Documentation > Release Notes).

Manuals

Landmark manuals are available with each release of the Engineer's Desktop. The main function of these manuals is to help clients deploy the Engineer's Desktop with ease and to answer questions that may arise during its deployment. Manuals can be found in PDF format within the EDT_Documentation.zip file, which is included with the Engineer's Desktop release software download. PDFs are also accessible through the Windows Start menu once the installations have been completed. This section describes each of the manuals available with Release 5000.1.

Planning the EDT Installation

The *Planning the EDT Installation* manual explains the different installation procedures for implementing the Engineer's Desktop 5000.1 based on client needs. This manual also details where to find information on upgrading previous versions of EDM, migrating data from pre-EDM applications, and using the applications.

Planning the EDT Installation is available in .PDF format (EDT_PlanningInstall.pdf) when each of the installations is run. Once an installation has been completed, it is accessible through the Windows Start Menu (e.g., Start > Programs > Landmark Engineer's Desktop 5000.1 > Documentation > User Guides).

EDT Third-Party Components Installation Guide

The *EDT Third-Party Components Installation Guide* contains information on and procedures for the installation of the Third-Party applications.

This document is available in .PDF format (EDT_ThirdParty_Install.pdf) when the installation is run. Once an installation has been completed, it is accessible through the Windows Start Menu (e.g., Start > Programs > Landmark Engineer's Desktop 5000.1 > Documentation > User Guides).

EDM Installation Guide

The *EDM Installation Guide* contains information on and procedures for the installation of the Third-Party applications and the Engineer's

Data Model (EDM) on a SQL Server 2005 Express (MSDE replacement) platform. This guide also offers a Troubleshooting section.

This document is available in .PDF format (EDM_Install.pdf) when the installation is run. Once an installation has been completed, it is accessible through the Windows Start Menu (e.g., Start > Programs > Landmark Engineer's Desktop 5000.1 > Documentation > User Guides).

EDT Drilling Installation Guide

The *EDT Drilling Installation Guide* contains information and procedures for installing the Engineer's Desktop 5000.1 Drilling and Completions applications. In addition, this guide includes a Getting Started chapter to familiarize a client with the basics of the Drilling and Completions applications.

This document is available in .PDF format (EDT_Drilling_Install.pdf) when the installation is run. Once an installation has been completed it is accessible through the Windows Start Menu (e.g., Start > Programs > Landmark Engineer's Desktop 5000.1 > Documentation > User Guides).

EDM Drilling Database Guide

The *EDM Drilling Database Guide* contains information on database creation on an Oracle or SQL Server environment, as well as information on how to upgrade previous versions of the EDM database to version 5000.1. This manual is meant for Drilling & Completions users of the EDM database only.

This document is available in .PDF format (EDM_Drilling_Database.pdf), and can be accessed from the Windows Start Menu once the Drilling and Completions installation has been completed, (e.g., Start > Programs > Landmark Engineer's Desktop 5000.1 > Documentation > User Guides).

EDM Drilling Data Migration Guide

The *EDM Drilling Data Migration Guide* explains the process of migrating pre-EDM versions of DIMS, COMPASS, and WELLPLAN data to the EDM platform. This manual takes the user through the

process of preparing the data for migration, and the three steps involved in migrating the data. StressCheck and CasingSeat data are imported rather than migrated, and this is also briefly covered in the manual.

This document is available in .PDF format (EDM_Drilling_DataMigration.pdf), and can be accessed from the Windows Start Menu once the Drilling and Completions installation has been completed (e.g., Start > Programs > Landmark Engineer's Desktop 5000.1 > Documentation > User Guides).

EDT on Citrix

The *EDT on Citrix* guide outlines procedures for installing the Engineer's Desktop in a Citrix environment.

This document is available in .PDF format (EDT_Citrix.pdf) on the Landmark Software Manager.

Online Help

How to use Online Help

The Engineer's Desktop uses two types of online help for each application. Most online help formats are shipped using Microsoft HTML Help. Online help can be accessed from the applications menubar or by using the F1 key to access context-sensitive help. Flash help is provided as an alternative solution to Windows XP, SP2 security settings blocking WebHelp pages.

Using Microsoft HTML Help

Microsoft HTML Help is an online Help system that is based on the HTML (Hypertext Markup Language) format. HTML Help is comprised of a single .CHM file. This file is launches the tri-pane HTML Help Viewer. The three panes are as follows:

- The toolbar pane is used to navigate back and forward through topics, print topics, and Show/Hide the HTML topics.
- The navigational pane is used to navigate a Table of Contents (Contents tab), a list of key words (Index tab), and an online glossary items (Glossary tab).
- The topics pane is used to display the various topics in HTML format.

Using WebHelp

WebHelp is also an online Help system that is based on the HTML (Hypertext Markup Language) format. WebHelp also contains a similar tri-pane layout to HTML Help, but it is an uncompiled help system. This uncompiled Help system supports a variety of browsers and platforms. WebHelp features include: a table of contents, an index, a glossary, and full-text search. WebHelp is compatible with most browsers.

Flash Help

Flash help versions of the WebHelp files are provided for those who don't want to have to permanently change security settings in their

browser to view help. See "Windows XPSP2 Default Security Settings Block Some Online Help" in the *EDT Drilling Summary Level Release Notes* for details.

Appendix B: Landmark Support

Contacting Support

Landmark operates Technical Assistance Centers (TACs) in Australia, the United Kingdom, and the United States. Additional support is also provided through local support offices around the world. Local support office information is listed below. If problems cannot be resolved at the district level, our escalation team is called to resolve your incidents quickly.

Support information is always available on the Landmark Graphics Support internet page located at: http://css.lgc.com/CustomerSupport/CustomerSupportHome.jsp.

Technical Assistance Centers

North America

7:30 am - 5:30 pm Central Standard Time Monday - Friday, excluding holidays 713-839-2200 (Houston, TX, USA)

Toll Free 1-877-435-7542 (1-877-HELP-LGC)

Fax: 713-839-2168 (Houston, TX) Fax: 907-275-2655 (Anchorage, AK) Fax: 303-796-0807 (Denver, CO) Fax: 403-262-1929 (Calgary, Canada)

Email: support@lgc.com

Latin America

(Spanish, Portuguese, English) 7:00 am - 5:00 pm Central Standard Time Local normal business hours

1-713-839-3405 (Houston, TX, USA)

Fax: 713-839-3646 Email: soporte@lgc.com

Toll Free from:

Argentina: 0800-800-5263
Brazil: 0800-891-0837
Chile: 800-201-898
Colombia: 01800-915-4743
Mexico: 001-888-438-1296
Peru: 0800-51634
Trinidad: 1-888-438-1296
Venezuela: 0-800-526-3627

Toll Free from local area: Ecuador (Quito) (02)226-1908 Europe, Africa, Middle East

8:00 am - 5:30 pm Local Time

Monday - Friday, excluding holidays

Asia, Pacific

8:00 am - 5:00 pm Local Time Monday-Friday, excluding holidays 44-1372-868686 (Leatherhead, UK)

Fax: 44-1372-868601 (Leatherhead, UK) Fax: 44-1224-723260 (Aberdeen, UK)

Email:

eame helpdesk@lgc.com

ssasupport@lgc.com (Southern Africa)

61-8-9481-4488 (Perth, Australia)

Toll-free 1-800-448-488

Fax: 61-8-9481-1580

Email:

apsupport@lgc.com FSU support@lgc.com

Toll-Free from:

China: 10-800-6100-253 Indonesia: 001-803-61284 Japan: 00531-61-0021 Malaysia 1800-803-687 New Zealand 0800-400-555 Philippines 1800-1611-0207 South Korea 00308-61-0046 Taiwan 0080-161-1350 Thailand 001-800-611-2784

Toll Free from local area: Vietnam: 84-8-9191901

Email: eame helpdesk@lgc.com

Email: eame helpdesk@lgc.com

District Support Offices

Algeria (Algiers)

8:30 am - 4:30 pm Local Time

Saturday - Wednesday excluding holidays

Angola (Luanda)

8:00 am - 5:00 pm Local Time

Monday - Friday, excluding holidays

Argentina (Buenos Aires)

9:00 am - 6:00 pm

Local time

54-11-4312-8411

213 21 37 72 39

1-817-493-5900

Fax: 1-817-493-560

Toll Free 0800-800-5263

Fax: 54-11-4311-9566

Email: soporte@lgc.com

Australia (Perth)

8:00 am - 5:00 pm Local Time

Monday - Friday, excluding holidays

61-8-9481-4488

Toll Free 1800-448-488

Fax: 61-8-9481-1580

Brazil (Rio de Janeiro)

8:00 am - 5:30 pm

Local Time

Brunei (Bandar Seri Bagawan)

8:30 am - 5:30 pm Local Time Monday - Friday, excluding holidays

Canada (Calgary)

7:30 am - 5:30 pm Central Standard Time

Monday-Friday, excluding holidays

Chile (TAO TAC, Houston, Texas)

Local normal business hours

Colombia (Bogota)

8:00 am - 5:00 pm

Local Time

Ecuador (Quito)

8:00 am - 5:00 pm

Local Time

Egypt (Cairo)

8:00 am - 4:00 pm Local Time

Saturday - Wednesday, excluding holidays

India (New Delhi)

9:00 am - 5:30 pm Local Time

Local Business Days, excluding holidays

Indonesia (Jakarta)

7:30 am - 4:30 pm Local Time

Monday - Friday, excluding holidays

Japan

8:00 am - 5:00 pm Local Time

Monday - Friday, excluding holidays

55-21-3974-4000 or Toll Free 0800-891-0837

Fax: 55-21-3974-4002

Email: soporte@lgc.com

67-3-233-5319

Email: apsupport@lgc.com

Toll Free 1-877-435-7542

(1-877-HELP-LGC)

Fax: 403-262-1929 (Calgary, Canada) Fax: 713-830-2168 (Houston, TX)

Email: support@lgc.com

Toll Free 800-201-898

Fax: 1-713-839-3646

Email: soporte@lgc.com

57-1-326-4000

57-1-326-6710

Toll Free 01800-915-4743

Fax: 57-1-326-6717 Email: soporte@lgc.com

59-32-226-1844

Toll Free from Quito (02)226-1908

Fax: 59-32-226-2590

Email: soporte@lgc.com

20-2-759-1717

(ask for Landmark Technical Support)

Email: eame helpdesk@lgc.com

91-11-622-1885

(c/o Samit Enterprises)

Fax: 91-11-647-9246

Email: apsupport@lgc.com

62-21-3003-9039 or Toll Free 001-803-61284

Fax: 62-21-3003-9088

Email: apsupport@lgc.com

Toll Free 00531-61-0021

Malaysia (Kuala Lumpur)

8:30 am - 5:30 pm Local Time

Monday - Friday, excluding holidays

Mexico (Reynosa)

8:00 am - 6:00 pm

Local Time

New Zealand (New Plymouth)

8:00 am - 5:00 pm Local Time

Monday - Friday, excluding holidays

Nigeria (Lagos)

8:00 am - 5:00 pm Local Time

Monday - Friday, excluding holidays

People's Republic of China (Beijing)

9:00 am - 5:30 pm Local Time

Monday - Friday, excluding holidays

Peru (Lima)

Local normal business hours

Russia (Moscow)

7:00 am - 5:00 pm Local Time

Local Business Days, excluding holidays

South Korea

8:00 am - 5:00 pm Local Time

Monday - Friday, excluding holidays

Taiwan

8:30 am - 5:30 pm Local Time

Monday-Friday, excluding holidays

603-2164-1121 or

Toll Free 1-800-803-687

Fax: 603-2164-1135

Email: apsupport@lgc.com

52-555-208-3533

52-555-208-3868

Toll Free 001-888-438-1296

Local Office Fax: 52-555-514-7646 Support Fax: 1-713-839-3646

Email: soporte@lgc.com

61-6-755-2318

Toll Free 0800-400-555

Fax: 64-6-755-2407

Email: apsupport@lgc.com

234-1-461-0780

(ask for Landmark Technical Support)

Fax: 234-1-262-0769

Email: eame helpdesk@lgc.com

86-10-8486-4501

Toll Free 10-800-6100-253 or

10-800-810-0209

Fax: 86-10-8486-4819

Email <u>bjsupport@lgc.com</u>

or apsupport@lgc.com

Toll Free 0800-51634

Fax: 001-713-839-9646

Email: soporte@lgc.com

7-095-960-2926 7-095-960-2927

(ask for Landmark Technical Support)

Fax: 7-095-755-8301

Email: eame helpdesk@lgc.com

Toll Free 00308-61-0046

Email: apsupport@lgc.com

Toll Free 00801-61-1350

Thailand (Bangkok)

8:00 am - 5:00pm Local Time

Monday - Friday, excluding holidays

Trinidad & Tobago (TAO TAC, Houston, TX)

7:00 am - 5:00 pm Central Standard Time

(Houston, TX)

Local normal business hours

United Arab Emirates (Dubai)

7:00 am - 5:00 pm Local Time

Local Business Days, excluding holidays

United Kingdom

8:00 am - 5:30 pm Local Time

Monday - Friday, excluding holidays

United States (Anchorage)

7:30 am - 5:30 pm Central Standard Time

Monday - Friday, excluding holidays

United States (Denver)

7:30 am - 5:30 pm Central Standard Time

Monday - Friday, excluding holidays

United States (Houston)

7:30 am - 5:30 pm Central Standard Time

Monday - Friday, excluding holidays

Venezuela (Caracas)

8:00 am - 5:00 pm

Local Time

Vietnam (Ho Chi Minh City)

8:00 am - 5:00 pm Local Time

Monday - Friday, excluding holidays

66-2-278-8100

Toll Free 001-800-611-2784

Fax: 66-2-278-8199

Email: apsupport@lgc.com

Toll Free: 1-888-438-1296

Fax: 1-713-839-3646

Email: soporte@lgc.com

+971-4-3036446

(ask for Landmark Technical Support)

Fax: +971-4-3315837

Email:

gulf support@lgc.com

eame helpdesk@lgc.com

44-1372-868686 (Leatherhead)

Fax: 44-1372-868601 (Leatherhead)

Fax 44-1224-723260 (Aberdeen)

Email: eame helpdesk@lgc.com

Toll Free 1-877-435-7542

(1-877-HELP-LGC)

Fax: 907-275-2655

Email: support@lgc.com

Toll Free 1-877-435-7542

(1-877-HELP-LGC)

Fax: 303-796-0807

Email: support@lgc.com

713-839-2200

Toll Free 1-877-435-7542

(1-877-HELP-LGC)

Fax: 713-839-2168

Email: support@lgc.com

58-212-953-0774

Toll Free 0-800-526-3627

Fax: 58-212-952-3845

Email: soporte@lgc.com

84-8-910-1901

Toll Free 84-8-9191901

Fax: 84-8-910-1902

Helpful internet links are shown below.

Name	Website Address
Landmark Graphics home page	http://www.lgc.com
Landmark Graphics FTP Site	ftp://ftp.lgc.com
Oracle home page	http://www.oracle.com
FLEXIm license management software home page	http://www.macrovision.com/support/ by category/Software Licensing.shtml
Microsoft SQL Server 2005 home page	http://www.microsoft.com/sql/default.asp
Adobe Acrobat Reader	http://www.adobe.com
Microsoft SQL Server 2005 Express	http://www.microsoft.com/sql/editions/ express/default.mspx

Landmark Support 24

Index

A	M
Acrobat Reader 1	Manuals 19
С	0
CasingSeat 4 COMPASS 5	Online Help 22 OpenWells 6 Oracle Platform 10
D	Overview 1
Data Analyzer 7 Data Management 6 Database Installations 10 Deployment Scenarios 9 Database Installations 10 Oracle Platform 10 Overview 9 SQL Server 2005 Express Platform 10 Documents EDM Drilling Data Migration Guide 20 EDM Drilling Database Guide 20 EDM Installation Guide 19 EDT Drilling Installation Guide 20 EDT on Citrix 21 Planning the Installation 19 Drilling & Completions Applications 4 Drilling Engineering Applications 4	P Platform Notes 2 PROFILE 7 R Release Notes 18 S SQL Server 2005 Express 10 SQL Server Platform 10 StressCheck 5 Summary Release Notes 2 Support 24
	U
EDM 4 Engineer's Data Model 4 Engineer's Desktop 3	Upgrade database 11, 14
H how to use this manual 2	Website Addresses 29 Well Cost 5 WELLPLAN 6
I	
Installation Types Citrix 9 Local (Standalone) 9	

Release 5000.1 Index 30