



# Geophysics

Powerful seismic interpretation for your play

## Release Notes

GVERSE Geophysics 2019.1



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# Contents

- Introduction ..... 1
- What is GVERSE Geophysics? ..... 1
  - Main Features..... 1
  - Benefits ..... 1
- System Requirements..... 2
  - Software ..... 2
  - Operating System ..... 2
  - Hardware..... 2
  - Licenses ..... 3
- Installing GVERSE Geophysics ..... 3
- What’s New in GVERSE Geophysics 2019.1 ..... 4
- Third Party Applications..... 5
- International Trade Compliance..... 6
- Definitions ..... 6
- Contacting LMKR Support..... 7



# Introduction

LMKR is pleased to announce the release of the GVERSE® Geophysics 2019.1 software.

This document provides an introduction to the Geophysics software features and benefits. It also lists the system requirements necessary to install and run the software.

## What is GVERSE Geophysics?

GVERSE Geophysics is a new, intuitive and easy-to-use seismic interpretation system with powerful 3D visualization and interpretation capabilities. GVERSE Geophysics enables geoscientists to execute end-to-end workflows for basic interpretation and more advanced geophysical tasks. The Geophysics software is part of the GVERSE application suite by LMKR (<http://www.lmkr.com/gverse>).

LMKR GVERSE consists of geoscience and engineering solutions focused on workflow optimization and enhancing productivity of teams working on diverse geological and geophysical projects.

## Main Features

- View 2D and 3D seismic data in highly optimized 3D viewer
- Visualize volumes with voxel rendering
- View horizons, faults, wells and associated well data, ISOMap layers and much more in 3D
- Big data support with the new LOD format
- Powerful color palette control with histogram and selective transparency
- Blending to visualize data from multiple versions simultaneously
- Interpret horizons and faults directly in the 3D view
- View surveys, lines, wells, surfaces, layers on highly customizable maps
- Seamless interactivity between map and 3D views
- Import external cubes and use as your velocity model
- Use velocity model for depth conversion of horizons
- View velocity values on seismic sections in real time
- Work on multiple screens with dockable windows
- Save and share work as sessions
- Full backward compatibility for existing interpretations

## Benefits

**Blazing Fast 3D Visualization:** GVERSE Geophysics introduces a brand-new 3D viewer that is built on an engine designed and optimized for seismic and related data. It's never been easier to view your seismic sections, horizons, faults, wells and wellbore data, and much more in the 3D space. The new LOD format does not compromise performance even with very large seismic files. With features such as voxel rendering and co-blending, you can visualize subsurface structures like never before, gain more insight into your data, and make better decisions for your play.

**Interpretation in 3D:** Pick your horizons and faults directly in the 3D viewer. Mark seeds picks and run the auto-trackers directly from the 3D view. With all horizon and fault picking and editing modes available, you can quickly mark your structures and instantly see what they look like in the 3D space.

**Do More with Your Velocity Models:** Import external velocity cubes and use them as your velocity model, visualize velocity values directly on your sections and horizon surfaces, or use the velocity model for T/D conversion of horizons. The velocity modeling improvements will help you get a more accurate picture of the subsurface.

**Easy to use, Intuitive Workflows:** Leverage the latest in technology to minimize your learning curve and focus on what's important. No more digging through tons of menus and dialogs to find what you are looking for. The multi-screen enabled, ribbon-based interface puts everything you need right in front of you.

## System Requirements

The following sections list the system requirements.

### Software

- GeoGraphix Discovery 2019.1
- LMKR License Management Tool 2016.1 for GVERSE Geophysics license  
The LMKR License Management Tool (LMT) must be installed to configure the Geophysics license.
- Microsoft DirectX End-User Runtime (June 2010)
- Microsoft® .NET Framework 4.5.1
- Adobe Reader for selected help files (optional)

### Operating System

- Windows® 7 Professional x64
- Windows® 7 Enterprise x64
- Windows® 7 Ultimate x64
- Windows® 10 Professional x64
- Windows® 10 Enterprise x64

**Note:** It is recommended to use the latest Microsoft® service packs and security patches. Geophysics specifically requires Windows platform update KB2670838 installed on the machine, in case the operating system is Windows 7.

### Hardware

#### Minimum

- 2.4 GHz 64-bit processor
- 8 GB RAM
- Any DirectX 11.1 capable card comparable with NVIDIA® GeForce GTX 430 with 1GB VRAM. DirectX is not shipped with GeoGraphix 2019.1. You must download and install it separately.
- 1366 x 768 screen resolution

#### Recommended

- Quad 3.2 GHz 64-bit processor
- 32 GB RAM
- Any DirectX 11.1 capable card comparable with NVIDIA® GeForce GTX 1060 with 6GB VRAM. DirectX is not shipped with GeoGraphix 2019.1. You must download and install it separately.
- Solid state hard disk
- 1920 x 1080 screen resolution

## Licenses

The following licenses are required to run GVERSE Geophysics:

- GeoGraphix Discovery license version 2019.1
- GVERSE Geophysics license version 2019.1

### **Notes:**

- Refer to the LMKR Customer Support > Knowledge Center > [System Requirements](#) page for up-to-date information on the requirements.

## Installing GVERSE Geophysics

GVERSE Geophysics along with its 3D module, is installed seamlessly as part of the GeoGraphix installation. For details, refer to the GeoGraphix Installation Guide.

# What's New in GVERSE Geophysics 2019.1



LMKR is pleased to announce the release of GVERSE NOW, a web-based launch platform for all GeoGraphix and GVERSE applications. GVERSE NOW provides instant access to GeoGraphix and GVERSE support, documentation, white papers, training schedules, webinars, software downloads, and release and user group announcements. The main purpose of GVERSE NOW is to put the entire range of LMKR resources at your fingertips - so you get the support and information you need - when you need it. We've also integrated iEnergy® Core into the launcher. iEnergy® Core gives you access to in-depth discussions of industry standards and trends.

To launch GVERSE NOW:

- From the **Start** menu, select **All Programs > GVERSE NOW > GVERSE NOW**.


Or

- Double-click **GVERSE NOW**  on your desktop.

In the GVERSE NOW window, the GeoGraphix applications display under the GeoGraphix menu and GVERSE applications display under the GVERSE menu.

To launch GVERSE Geophysics:

Click **Geophysics**  from the **GVERSE** menu.

**Note:** To run Geophysics from GVERSE NOW window, ensure the application is installed on your machine. The applications that are not installed are marked with a red plus sign .

The screenshot shows the GVERSE NOW web interface. On the left, there are three callout boxes:
 

- Quick Links:** Instant access to GeoGraphix and GVERSE support, documentation, white papers, training schedules, webinars, software downloads, and release and user group announcements.
- GeoGraphix & GVERSE Menus:** Single interface to launch GeoGraphix and GVERSE applications.
- Useful Links:** Access License Request, Purchase and Register.


 The main interface features a navigation bar with 'iEnergy', 'GVERSE NOW', and 'SUPPORT TRAININGS WEBINARS ABOUT'. Below this is a banner for 'LMKR Events'. The central area is divided into two columns: 'GeoGraphix' and 'GVERSE'. The 'GeoGraphix' column contains icons for Project Explorer, WellBase, GeoAtlas, XSection, Plizm, ZoneManager, SmartSECTION, Query Builder, Discovery 3D, Depth Registration, Deltcon, LandNet, LeaseMap, Coord, and pStax. The 'GVERSE' column contains icons for Geophysics, Geomodelling, Field Planner, Predict 3D, Attributes, and WebSteering. The 'Geophysics' icon has a red plus sign. On the right side of the interface, there is an 'iEnergy What's New?' section with a list of recent updates and a pagination bar at the bottom.



# Third Party Applications

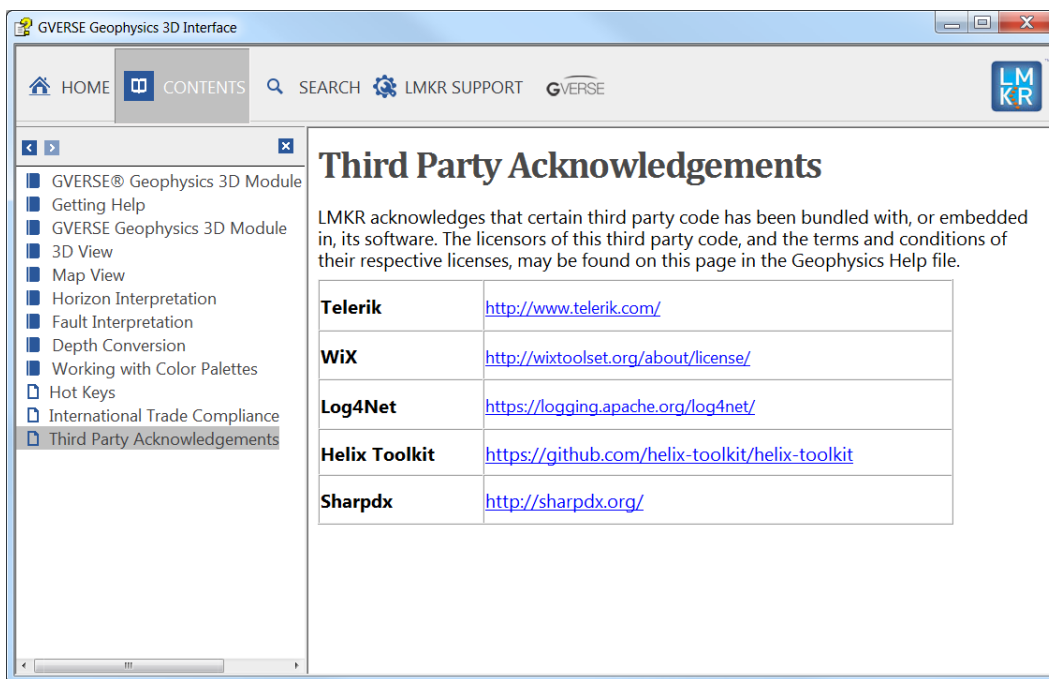
LMKR acknowledges that certain third party code has been bundled with, or embedded in, its software. The licensors of this third party code, and the terms and conditions of their respective licenses, may be found in the Geophysics help file.

To access the 3rd party license agreements:

1. Either press **<F1>** or click the **Help** button  located at the top right corner.

The Help window displays.

2. In the **Contents** pane, locate the **Third Party Acknowledgements** help topic as shown in the image below.



## International Trade Compliance

This application is manufactured or designed using U.S. origin technology and is therefore subject to the export control laws of the United States. Any use or further disposition of such items is subject to U.S. law. Exports from the United States and any re-export thereafter may require a formal export license authorization from the government. If there are doubts about the requirements of the applicable law, it is recommended that the buyer obtain qualified legal advice. These items cannot be used in the design, production, use, or storage of chemical, biological, or nuclear weapons, or missiles of any kind.

The ECCNs provided here (if available) represent LMKR's opinion of the correct classification for the product today (based on the original software and/or original hardware). Classifications are subject to change. If you have any questions or need assistance please contact us at [support@lmkr.com](mailto:support@lmkr.com).

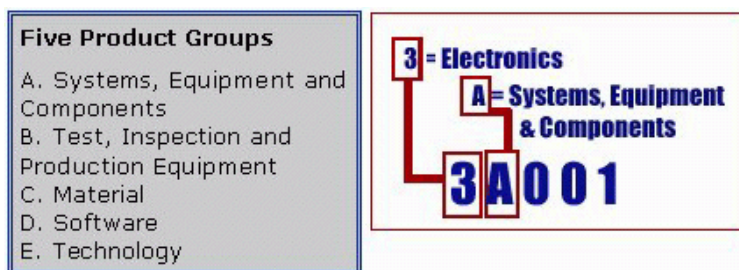
Under the U.S. Export Administration Regulations (EAR), the U.S. Government assigns your organization or client, as exporter/importer of record, responsibility for determining the correct authorization for the item at the time of export/import. Restrictions may apply to shipments based on the products, the customer, or the country of destination, and an export license may be required by the Department of Commerce prior to shipment. The U.S. Bureau of Industry and Security provides a website to assist you with determining the need for a license and with information regarding where to obtain help.

The URL is: <http://www.bis.doc.gov>.

## Definitions

ECCN - Export Control Classification Number - The ECCN is an alpha-numeric code, e.g., 3A001, that describes a particular item or type of item, and shows the controls placed on that item. The CCL (Commerce Control List) is divided into ten broad categories, and each category is further subdivided into five product groups. The CCL is available on the EAR Website.

The following illustration is a sample:



The ECCN number (if available) and License Type for this product are included in the table below. Also included is the date the table was last updated.

Product/Component/R5000	EAR Number	License	Last Updated On
GVERSE Geophysics	EAR99	EAR	03/28/2018

## Contacting LMKR Support

LMKR is committed to providing the highest level of technical customer support in the industry. With an average tenure of more than thirteen years, our highly trained and experienced staff of technical analysts is comprised of geoscientists, engineers, land professionals, petrophysicists, and system specialists.

Please refer to our Customer Support timings mentioned below to ensure that you have access to our support analysts assigned to your region. When getting in touch with LMKR support, please remember that real-time support will not be available during bank holidays or after office hours. If you do get in touch with LMKR Support outside of work hours, please leave a voice message with a brief description of the issue that you are facing. Your voice message will be used to automatically create a support case for you. This will enable our analysts to attend to your issue and provide you with a resolution as soon as possible

North & South America	Europe, Middle East & Africa
<p>Monday – Friday 8 am – 6 pm CST* Toll Free (US/Canada) : +1 855 GGX LMKR (449 5657)</p> <p><b>Colombia:</b> +57 1381 4908</p> <p><b>United States:</b> +1 303 295 0020</p> <p><b>Canada:</b> +1 587 233 4004</p> <p><i>*Excluding bank holidays</i></p>	<p><b>UK:</b> Monday – Friday 8 am – 5 pm* +44 20 3608 8042</p> <p><b>UAE:</b> Sunday – Thursday (Dubai GMT+4) 8 am – 5 pm* +971 4 3727 999</p> <p><i>*Excluding bank holidays</i></p>
Asia Pacific & Australian Continent	Southwest Asian Countries
<p><b>Malaysia:</b> Monday – Friday (Kuala Lumpur GMT+8) 9 am – 6 pm* +60 32 300 8777</p> <p><i>*Excluding bank holidays</i></p>	<p><b>Pakistan:</b> Monday – Friday (Islamabad GMT+5) 9 am – 6 pm* +92 51 209 7400</p> <p><i>*Excluding bank holidays</i></p>

## Helpful Links

Name	Website Address
LMKR Homepage	<a href="http://www.lmkr.com">http://www.lmkr.com</a>
LMKR GVERSE	<a href="http://www.lmkr.com/gverse">http://www.lmkr.com/gverse</a>
LMKR Support Portal	<a href="http://support.lmkr.com">http://support.lmkr.com</a>