

LM KR

Geomodeling Fully Integrated 3D Interpretation

Installation Guide

GVERSE Geomodeling 2017.1



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Introduction

LMKR is pleased to announce the release of the GVERSE[™] Geomodeling 2017.1. The GVERSE Geomodeling application is an integrated environment for modeling that incorporates existing mapping and cross section features of smartSECTION[®] with the 3D view. It takes your smartSECTION interpretations to a whole new level with 3D modeling, while also enabling you to fully utilize the existing smartSECTION features. The application 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 the productivity of the teams working on diverse geological and geophysical projects. These applications help cut the processing time required for interpretations resulting in fast, easy to use scalable tools that are inter-operable with other known geoscience software suites; enabling a connected multi skilled workforce.

This document guides you through the installation and license configuration processes of Geomodeling.

System Requirements

The following sections list the system requirements for the Geomodeling.

Software

The software that must be installed on the system running the application are as follows:

- GeoGraphix Discovery 2017.1
- LMKR License Management Tool 2016.1 for GVERSE Geomodeling license

The LMKR License Management Tool (LMT) must be installed to configure the license.

- Microsoft DirectX End-User Runtime (June 2010)
- Adobe Reader for selected help files (optional)

Operating System

To run the application, you need one of the following operating systems installed on your system:

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

<u>Note</u>: It is recommend to use the latest Microsoft[®] service packs and security patches. Geomodeling specifically requires Windows platform update KB2670838 installed on the machine, in case the operating system is Windows 7.

Hardware

The hardware requirements for this application are the same as the GeoGraphix hardware requirements.

<u>Note</u>: To run Geomodeling, it is recommended that an NVIDIA DirectX 11 compatible card be used. We recommend using the latest video drivers and Microsoft updates for your system.

Licenses

The following licenses are required to run the application:

- GeoGraphix Discovery 2017.1 license
- GVERSE Geomodeling 2017.1 license
 The GVERSE Geomodeling license is required to enable Model 3D view and Contours on Map view.
 Also note that FrameBuilder™ is part of the GVERSE Geomodeling license.

<u>Note</u>: Refer to the LMKR Customer Support Portal (<u>http://support.lmkr.com/</u>) for up-to-date information on the requirements.

Installation

This section guides you through the installation and uninstallation processes of the Geomodeling application.

Installing GVERSE Geomodeling

Geomodeling can be installed while installing GeoGraphix 2017.1. This is the recommended installation method. For details on installing Geomodeling along with GeoGraphix, refer to the <u>GeoGraphix</u> <u>Installation Guide</u> on the LMKR Support Portal.

If you opted not to install Geomodeling along with GeoGraphix, then refer to the following steps.

- 1. Prior to installation, please make sure that GeoGraphix 2017.1 is installed and shut down on the system.
- 2. You can either:
 - Select Start > LMKR > GVERSE > Install/Uninstall Geomodeling if GeoGraphix 2017.1 is already installed.

Or

 Download the Geomodeling setup file from LMKR Support Portal - Downloads page (<u>http://support.lmkr.com/</u>). Navigate to the location where you downloaded the installation setup, and then double-click on the Geomodeling 2017.1 setup file. The Welcome to the GVERSE Geomodeling Setup Wizard dialog displays.

| 😸 GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 Setup | | |
|---|--|--|
| L M KR | Welcome to the GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 Setup Wizard | |
| | The Setup Wizard will install GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 on your computer. Click Next to continue or Cancel to exit the Setup Wizard. | |
| | Back Next Cancel | |

3. Click Next.

The End User License Agreement dialog displays.

| 😸 GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 Setup |
|--|
| End-User License Agreement Please read the following license agreement carefully |
| END USER LICENSE AGREEMENT PLEASE READ THIS END-USER LICENSE AGREEMENT ("EULA") CAREFULLY BEFORE USING THE SOFTWARE. THE FOLLOWING TERMS CONSTITUTE A BINDING LEGAL AGREEMENT BETWEEN YOU AND LMKR HOLDINGS, ITS SUBSIDIARIES, AFFILIATES AND ASSIGNS (COLLECTIVELY "LMKR") CONCERNING SPECIFIED SOFTWARE PRODUCT(S) ("SOFTWARE PRODUCT" OR "SOFTWARE"). BY ACCESSING, INSTALLING, COPVING OR OTHERWISE USING ALL OR ANY PORTION OF THE SOFTWARE, YOU AGREE TO BE BOUND BY THE TERMS OF THIS EULA. IF YOU ARE NOT WILLING TO BE BOUND BY THE TERMS OF THIS EULA, YOU SHOULD CLICK THE "CANCEL" OR SIMILAR BUTTON, TERMINATE THE DOWNLOAD AND/OR INSTALLATION PROCESS, IMMEDIATELY CEASE AND REFRAIN FROM |
| I accept the terms in the License Agreement Print Back Next Cancel |

4. If you agree to the license agreement, then select I accept the terms in the License Agreement.

The Destination Folder dialog displays. This dialog shows the path where the Geomodeling application is going to be installed on the computer. It is recommended to use the default path for installation.

| 🖞 GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 Setup | | |
|--|--|--|
| Destination Folder Click Next to install to the default folder or click Change to choose an | | |
| Install GVERSE Geomodeling 2017. 1 For GeoGraphix 2017. 1 to: | | |
| C:\Program Files\LMKR\GVERSE\Geomodeling\ Change | | |
| | | |
| | | |
| <u>B</u> ack <u>N</u> ext Cancel | | |

5. Click Next.

The Ready to Install GVERSE Geomodeling dialog displays.



6. Click **Install** to continue with the installation.

The installation process initiates and the dialog displays the installation progress.

| 😸 GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 Setup | | |
|--|--|--|
| LM KR Installing GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 | | |
| Please wait while the Setup Wizard installs GVERSE Geomodeling 2017.1 For GeoGraphix | | |
| 2017.1. Status: | | |
| | | |
| | | |
| | | |
| Back Next Cancel | | |
| | | |

When the installation finishes, the Completed GVERSE Geomodeling Setup Wizard dialog displays.

| B GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 Setup | | |
|---|--|--|
| KR | Completed the GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 Setup Wizard | |
| | Click the Finish button to exit the Setup Wizard. | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Back Einish Cancel | | |

- 7. Click **Finish** to exit the wizard.
- 8. After successful installation of Geomodeling:
 - The Geomodeling icon replaces the smartSECTION[®] icon in the GeoGraphix toolbar.
 - The smartSECTION functionality (Map and Cross Section views) remains the same, and is available as part of Geomodeling without requiring any new license.
 - All new features of smartSECTION also become available in Geomodeling.



Uninstalling GVERSE Geomodeling

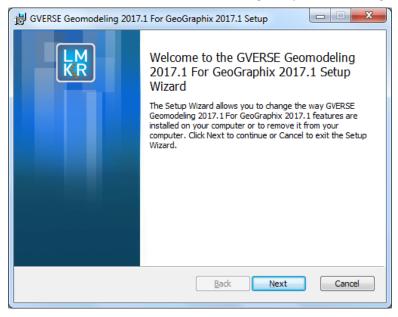
Geomodeling is automatically uninstalled on uninstalling GeoGraphix 2017.1. This uninstallation method is recommended. For details on uninstalling GeoGraphix, refer to the <u>GeoGraphix Installation Guide</u> on the LMKR Support Portal.

Please note that to use smartSECTION features, you do not need to uninstall Geomodeling as smartSECTION functionality (Map and Cross Section views) remains the same and is available as part of Geomodeling without requiring any new license.

To uninstall Geomodeling only, refer to the following steps.

- 1. GeoGraphix must be shut down before removing Geomodeling.
- 2. You can either:
 - Select Start > LMKR > GVERSE > Install/Uninstall Geomodeling.
 - Or
 - Navigate to the location where you downloaded the installation setup, and then double-click on the Geomodeling 2017.1 setup file.

The Welcome to the GVERSE Geomodeling Setup Wizard dialog displays.



3. Click Next.

The Change, Repair, or Remove installation dialog displays.

| B GVER | SE Geomodeling 2017.1 For GeoGraphix 2017.1 Setup |
|--------|---|
| | Change, repair, or remove installation Select the operation you wish to perform. |
| | Change GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 has no independently selectable features. Repair Repairs errors in the most recent installation by fixing missing and corrupt files, shortcuts, and registry entries. Remove Removes GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 from your computer. |
| | Back Next Cancel |

4. Click **Remove**.

The Ready to Remove GVERSE Geomodeling dialog displays.

| 😸 GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 Setup |
|---|
| Ready to remove GVERSE Geomodeling 2017.1 For GeoG |
| Click Remove to remove GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 from your computer. Click Back to review or change any of your installation settings. Click Cancel to exit the wizard. |
| |
| Back @Remove Cancel |

5. Click **Remove**.

The uninstall process initiates and the dialog displays the uninstallation progress.

| 🖞 GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 Setup | | |
|---|--|--|
| LM KR Removing GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 | | |
| Please wait while the Setup Wizard removes GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1. | | |
| Status: Removing shortcuts | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Back Next Cancel | | |

Once the application is uninstalled from your system, the Completed the GVERSE Geomodeling Setup Wizard dialog displays.

| 🖞 GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 Setup | | |
|---|--|--|
| L M KR | Completed the GVERSE Geomodeling 2017.1 For GeoGraphix 2017.1 Setup Wizard | |
| | Click the Finish button to exit the Setup Wizard. | |
| | | |
| | | |
| | | |
| | | |
| | | |
| <u>B</u> ack <u>Finish</u> Cancel | | |

6. Click **Finish** to exit the wizard.

Post-Uninstallation Step

You need to add the following registry in the Registry Editor to ensure that the smartSECTION icon appears in ProjectExplorer:

[HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\GeoGraphix\Installed Modules\smartSECTION]

| "AppName"="smartSECTION" |
|--------------------------|
|--------------------------|

| ab AppName | REG_SZ | smartSECTION |
|------------|-----------|---------------|
| 腿 Туре | REG_DWORD | 0x0000007 (7) |

"Type"=dword:0000007

Licensing

To access all of the Geomodeling features, you need a valid LMKR license. This license is required to enable Model 3D view and Contours on Map view. The smartSECTION functionality (Map and Cross Section views) remains the same, and is available as part of Geomodeling without requiring any new license. Also note that FrameBuilder is part of the GVERSE Geomodeling license.

Please contact <u>COS@lmkr.com</u> to request a license. Once you receive the license, use the LMT to configure it for a single system or to set up a network license on a server. This can be done either before or after the Geomodeling application installation.

This section provides basic information on how to configure the license using the LMT. For detailed information on how to install the LMT and configure the application license, refer to the LMT Installation document.

Configuring the License

To configure the Geomodeling application license:

- 1. Obtain your license file from <u>COS@lmkr.com</u>.
- 2. Download the LMT from the LMKR Support Portal Downloads page (<u>http://support.lmkr.com/</u>).
- 3. Install the LMT. Once installed, launch the LMT from **Start>>All Programs>>LMKR>>Licensing>>** License Management Tool.

LMKR License Management Tool

Welcome

Lwant to configure client licensing for this computer

Lwant to setup or manage a network license server on this computer

About
Close

The LMKR License Management Tool Welcome dialog displays.

- 4. In this dialog, you can either:
 - Click I want to configure client licensing for this computer to <u>configure a client side license</u> on the current system.

Or

 Click I want to setup or manage a network license server on this computer to setup a license server.

Configure a Client Side License

After clicking I want to configure client licensing for this computer, the Client Licenses dialog displays.

| LMKR License Management Tool | |
|------------------------------------|-----------|
| Client Licenses | |
| | |
| | |
| | |
| | |
| | |
| | |
| | Move Up |
| | Move Down |
| Upload File Add Server Remove View | |
| Back | Done |
| | |

- 5. In this dialog, you can either:
 - Click Upload file to <u>select a standalone client license file</u>.

Or

Click Add Server to <u>connect to an existing license server</u>.

Select a Standalone Client License File

6. Click Upload File, browse to select the license you received from LMKR, and then click Open.

The selected license displays.

| C\ProgramData\LMKR\Licensing\Client1.lic (From C:\Temp\StandaloneLicense.txt) | | |
|---|-------|----------------------|
| | | |
| | | |
| | | |
| | 100 | |
| | | Move Up |
| « [| • | |
| Upload File Add Server Remove View | • • • | Move Up Move Down |

7. Click Next.

On successful license configuration, the 'Pass' message displays as shown in the image below.

| LMKR License Manageme | nt Tool | |
|-----------------------|--|---------|
| License Validation | | |
| Client1.lic - Pass | 'C:\ProgramData\LMKR\Licensing\Client1.lic' has passed the validation. | |
| M | Bad | :k Done |

Note: If an error occurs, please contact <u>support@lmkr.com</u> for assistance.

8. Click **Done** when finished.

Connect to an Existing License Server

6. Click Add Server.

The Add Server dialog displays.

| erver Informa | tion | |
|---------------|------|------|
| Port Number | 0 | Auto |
| Server Name | | |
| | 0 | |

- 7. In this dialog, specify the following:
 - Port Number: If a specific port is required, clear the Auto checkbox, and then enter the port number that matches the port number being used by the LMKR license server (contact your network administrator for more information).
 - Server Name: Enter the name or the IP address of the license server

Note: By default, the Auto option is selected where the port is automatically detected. This option is used only when the license server uses a port from within the block of ports specific for Flexera FLEXnet Licensing ranging from 27000 to 27009.

8. Click **OK**.

The selected LMKR license server displays in this dialog.

| LMKR License Management Tool | |
|------------------------------------|----------------------|
| Client Licenses | |
| @LMKRLicenseServer | Move Up Move Down |
| Upload File Add Server Remove View | |
| Back | Next |

- 9. Click Next.
- 10. Click **Done** once finished.

Setup a License Server

This is only performed on the system running the LMKR license server.

After clicking I want to setup or manage a network license server on this computer, the Update Service dialog displays.

| Service Nam | e LMKR License Service | Remove | |
|--------------|---|--------|------|
| Port Numbe | r 0 🗸 Auto | | |
| License File | | Upload | View |
| Log File | C:\ProgramData\LMKR\Licensing\LMKR License Service.log C:\Program Files\LMKR\Licensing\LMKR.exe | Browse | |
| Lmgrd.exe | C:\Program Files\LMKR\Licensing\Imgrd.exe | | |

- 5. In this dialog, specify the following:
 - Port Number: If a specific port is required by your network administrator, clear the Auto checkbox, and then enter the port number.
 - License File: Click Upload to upload a new license file. The license file that is uploaded is renamed as Server.lic. This file is saved in the C:\ProgramData\LMKR\Licensing folder.
 - Log File: Click Browse to select a location to save the log file.

| Service Name | LMKR License Service | Remove | |
|--------------|--|--------|------|
| Port Number | 0 V Auto | | |
| License File | C:\ProgramData\LMKR\Licensing\Server.lic | Upload | View |
| Upload From | C:\Program Files\LMKR\Licensing\Discovery_counted_permanent_Server.lic | | View |
| Log File | C:\ProgramData\LMKR\Licensing\LMKR License Service.log | Browse | |
| Lmkr.exe | C:\Program Files\LMKR\Licensing\LMKR.exe | | |
| Lmgrd.exe | C:\Program Files\LMKR\Licensing\Imgrd.exe | | |

6. Click Next.

The LMKR License Server is then installed as a Windows Service.

| service Name L | MKR License Servic | | |
|----------------|--------------------|----------|--|
| Start | Stop | Restart | |
| | View Log | Validate | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

7. Click **Start** to initiate the **LMKR License Service**.

The 'The service started' message displays on the dialog.

| LMKR License Ma | anagement Tool | | | | |
|-----------------|---------------------|----------|----------------------|------|------|
| Service Name LI | MKR License Service | | | | |
| Start | Stop | Restart | The service started. | | |
| | View Log | Validate | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| R | | | | Back | Done |

Note: If an error appears, contact <u>support@lmkr.com</u> for assistance.

8. Click **Done** once finished.

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 and South America | Europe, Middle East & Africa |
|---|---|
| Monday – Friday 8am-6pm CST Toll Free (US/Canada) : +1 855 GGX LMKR (449 5657) Colombia : +57 1381 4908 United States : +1 303 295 0020 Canada : +1 587 233 4004 *Excluding bank holidays | UK Monday - Friday 8am - 5pm +44 20 3608 8042 *Excluding bank holidays UAE Sunday - Thursday (Dubai GMT+4) 8am - 5pm +971 4 3727 999 Egypt Sunday - Thursday +0800-000-0635 *Excluding bank holidays |
| Asia Pacific & Australian Continent | Southwest Asian countries |
| Malaysia Monday - Friday (Kuala Lumpur GMT+8) 9am - 6pm +60 32 300 8777 *Excluding bank holidays | Pakistan Monday - Friday (Islamabad GMT+5) 9am - 6pm +92 51 209 7400 *Excluding bank holidays |

Helpful Links

| Name | Website Address |
|---------------------|-----------------------------|
| LMKR Homepage | http://www.lmkr.com |
| LMKR GVERSE | http://www.lmkr.com/gverse/ |
| LMKR Support Portal | http://support.lmkr.com |