



Inversion 2017.1

Enhanced interpretation, reservoir prediction and geosteering*

Installation Guide for GVERSE Inversion 2017.1

*Powered by
 **FracGeo**



© 2001 - 2017 LMKR Holdings. All Rights Reserved.

This publication is copyright protected. No part of this publication may be copied or distributed, transmitted, transcribed, stored in a retrieval system, or translated into any human or computer language, in any form or by any means, electronic, magnetic, manual, or otherwise, or disclosed to third parties without the express written permission of:

LMKR Holdings

Corporate Headquarters
Unit No. B1501, Latifa Tower,
Sheikh Zayed Road,
Dubai, UAE, P.O.Box 62163.
Phone: +971 4 372 7900
FAX: +971 4 358 6386
Internet: www.lmkr.com

Trademark Notice

GVERSE™ WebSteering, Predict3D, Attributes, Connect, Planner, Inversion are trademarks of LMKR.

DecisionSpace, Discovery, GeoGraphix (stylized), GeoGraphix Exploration System, GeoLink, GES, GESExplorer, GMAplus, IsoMap, LeaseMap, LogM, OpenWorks, OpenWorks Well File, PRIZM, SeisVision, Xsection are trademarks, registered trademarks or service marks of Landmark Graphics Corporation.

All other trademarks are the property of their respective owners.

Disclaimer

The information contained in this document is subject to change without notice and should not be construed as a commitment by LMKR. LMKR assumes no responsibility for any error that may appear in this manual. Some states or jurisdictions do not allow disclaimer of expressed or implied warranties in certain transactions; therefore, this statement may not apply to you.

Contents

- Introduction 1
- System Requirements 1
 - Software 1
 - Operating System 1
 - Hardware 2
 - Licenses 2
- Installation 2
 - Installing GVERSE Inversion 2
 - Uninstalling GVERSE Inversion 5
- Licensing 7
 - Configuring the License 7
- Contacting LMKR Support 13

Introduction

LMKR is pleased to announce the release of the GVERSE™ Inversion 2017.1 plug-in for enhanced interpretation, reservoir prediction and geosteering*. The plug-in is a colored inversion solution that provides a rapid, yet robust, way to derive geological details in the form of a relative impedance volume (rock hardness). When geosteering through a reservoir, the high resolution impedances calculated by the colored inversion ensure that the well is drilled through the ideal reservoir. This plug-in 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 the plug-in. It also lists the system requirements necessary to install and run the plug-in.

System Requirements

The following sections list the system requirements for the Inversion plug-in.

Software

The software that must be installed on the system running the Inversion plug-in are as follows:

- GeoGraphix Discovery® 2016.1.3 or 2015.1.5
- LMKR License Management Tool 2016.1 for Inversion license
The LMKR License Management Tool (LMT) must be installed to configure the Inversion license.
- Microsoft®.Net Framework 4.6.1
The Microsoft Net Framework 4.6.1 is packaged with the GVERSE Inversion installer. It is installed automatically during the installation process.
- Adobe Reader for selected help files (optional)

Operating System

To run the Inversion plug-in, 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 | ▪ Windows® 10 Ultimate x64 |

Note: It is recommend to use the latest Microsoft® service packs and security patches.

* Powered by FracGeo

Hardware

The hardware requirements are as follows:

Minimum

- 2.4 GHz 64-bit processor
- 8 GB RAM
- NVidia GeForce 400 series
or ATI Radeon HD 5000 Series
or Intel HD Graphics in Intel Haswell processors
- 19-inch monitor

Recommended

- Quad 3.1 GHz 64-bit Intel class or better
- 16 GB RAM or greater
- NVidia GeForce GTX 970
- Dual 21-inch monitors

Licenses

The following licenses are required to run the Inversion plug-in:

- GeoGraphix Discovery 2016.1 or 2015.1 license
- GVERSE Inversion 2017.1 license

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

Installation

This section guides you through the installation and uninstallation processes of the Inversion plug-in.

Installing GVERSE Inversion

Prior to installation, please make sure that supported version of GeoGraphix is installed on the system.

Note: There are two different GVERSE Inversion installers available depending on your version of GeoGraphix. The installation process is the same for both installers. The steps documented in this section are specific to GeoGraphix Discovery 2016.1.3.

To install the Inversion plug-in:

1. Download the plug-in from the **LMKR Support Portal - Downloads** page (<http://support.lmkr.com/>).
2. Navigate to the location where you downloaded the installation setup.

Note: Before starting the installation, please make sure that all open applications are closed.

3. Double-click the Inversion plug-in setup executable file (EXE).

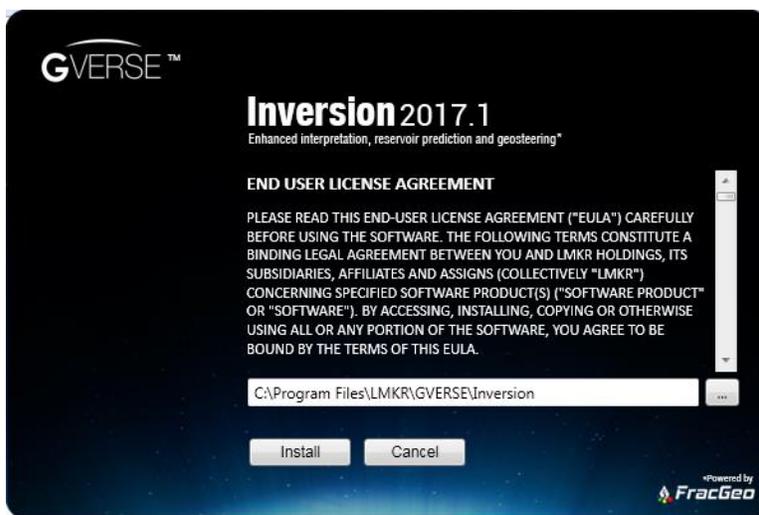
The Installation Wizard dialog displays.



Note: If the Microsoft .NET Framework 4.6.1 is not installed on your computer, a message displays asking if you wish to install it (ensure you have the correct permissions) or decline. Click Install to go ahead with the .Net Framework installation. If you decline, the installation wizard is closed down and the plug-in is not installed.

4. Click **Next**.

The End User License Agreement dialog displays.



5. If you agree to the license agreement, then click **Install**.

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



When the installation finishes, the Exit dialog displays.



6. Click **Exit** to complete the installation.

Uninstalling GVERSE Inversion

GeoGraphix must be closed before removing the Inversion plug-in.

To uninstall the Inversion plug-in:

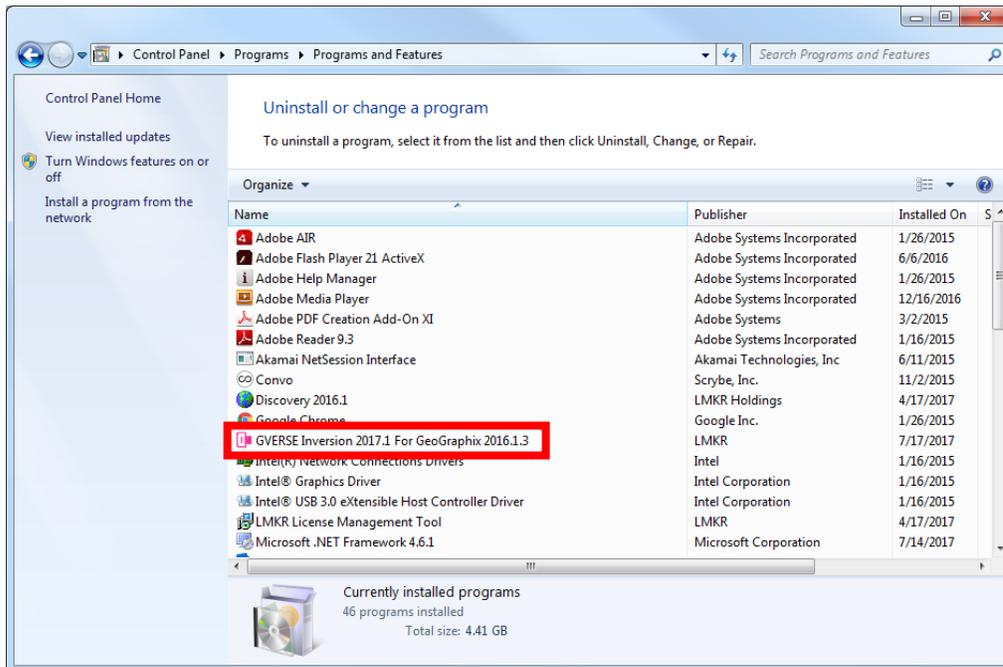
1. From the **Windows Start** menu, select **Control Panel**.

The Control Panel window displays.

2. From **Programs**, select **Uninstall a Program**.

The Programs and Features window displays.

3. In the list of applications, double-click **GVERSE Inversion 2017.1 for GeoGraphix 2016.1.3**.



The dialog to uninstall the Inversion plug-in displays.



4. Click **Uninstall**.

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



Once the Inversion plug-in is uninstalled from your system, the 'Uninstallation complete' message displays.



5. Click **Exit** to finish the uninstallation.

Licensing

To run the Inversion plug-in, you need a valid LMKR license. Please contact COS@lmkr.com 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 plug-in installation.

If a license file is not configured, then the plug-in does not open and an error message displays. In this case, you must configure the license using the LMT, and then re-launch the Inversion plug-in.

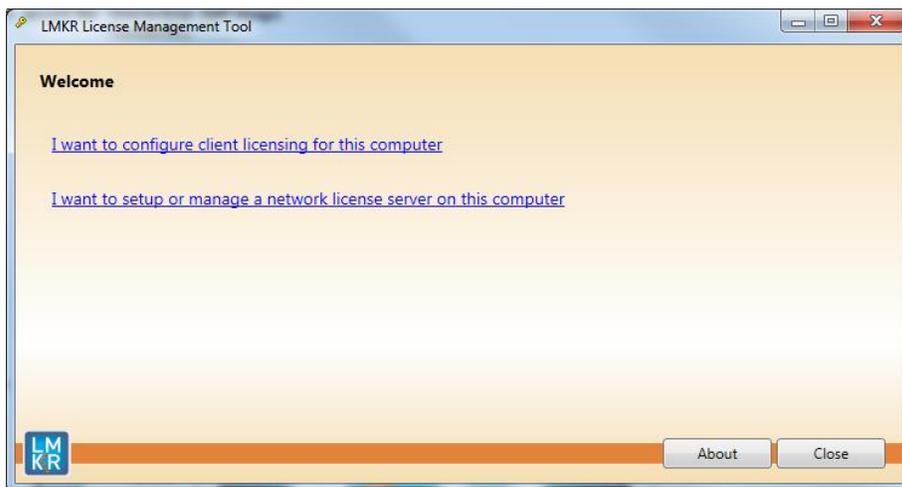
This section provides basic information on how to configure the plug-in license using the LMT. For detailed information on how to install the LMT and configure the plug-in license, refer to the LMT Installation document.

Configuring the License

To configure the Inversion plug-in license:

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

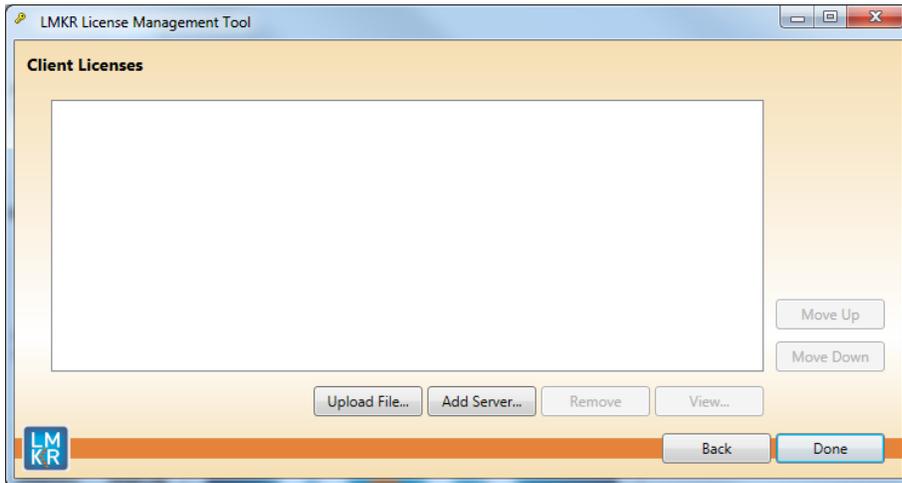
The LMKR License Management Tool Welcome dialog displays.



4. In this dialog, you can either:
 - Click **I want to configure client licensing for this computer** to [configure a client side license](#) 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.



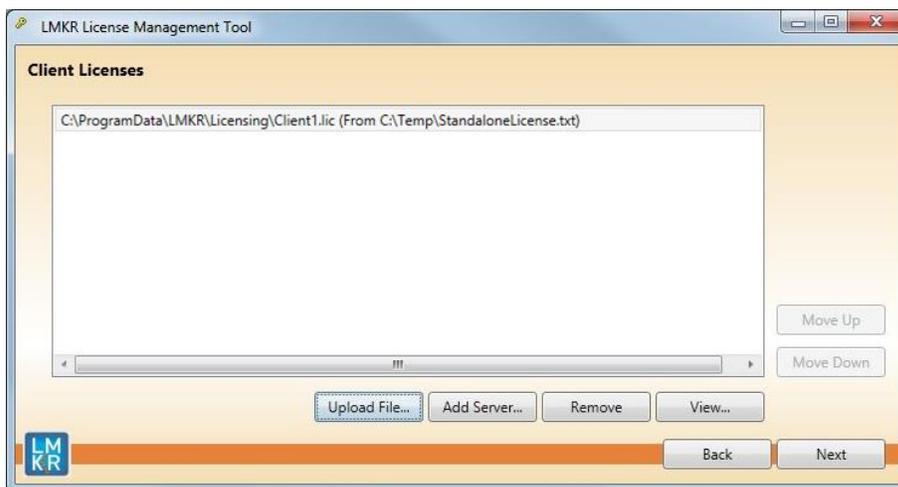
5. In this dialog, you can either:

- Click **Upload file** to [select a standalone client license file](#).
- Or
- Click **Add Server** to [connect to an existing license server](#).

Select a Standalone Client License File

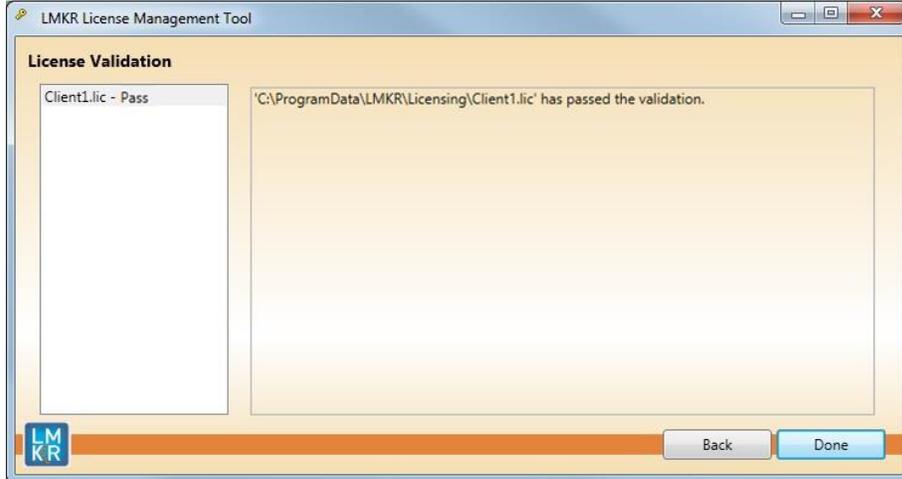
6. Click **Upload File**, browse to select the license you received from LMKR, and then click **Open**.

The selected license displays.



7. Click **Next**.

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



Note: If an error occurs, please contact support@lms.com for assistance.

8. Click **Done** when finished.

Connect to an Existing License Server

6. Click **Add Server**.

The Add Server dialog displays.

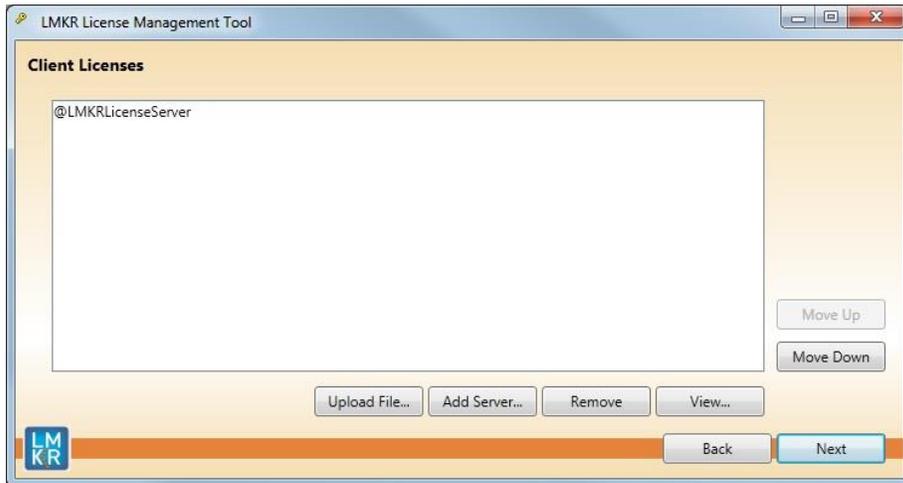


7. In this dialog, specify the following:
 - **Port Number:** If a specific port is required, clear the **Auto** checkbox, and then enter the port number that matches the port number being used by the LMKR license server (contact your network administrator for more information).
 - **Server Name:** Enter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

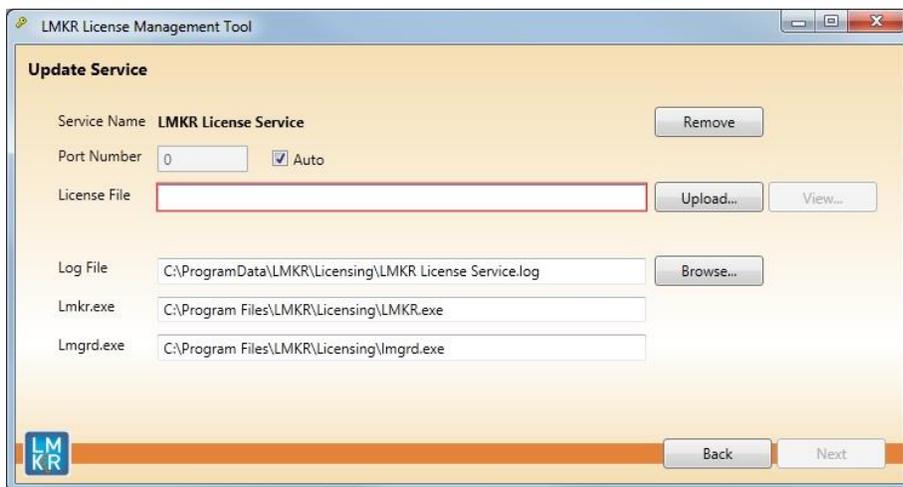


9. Click **Next**.
10. Click **Done** once finished.

Setup a License Server

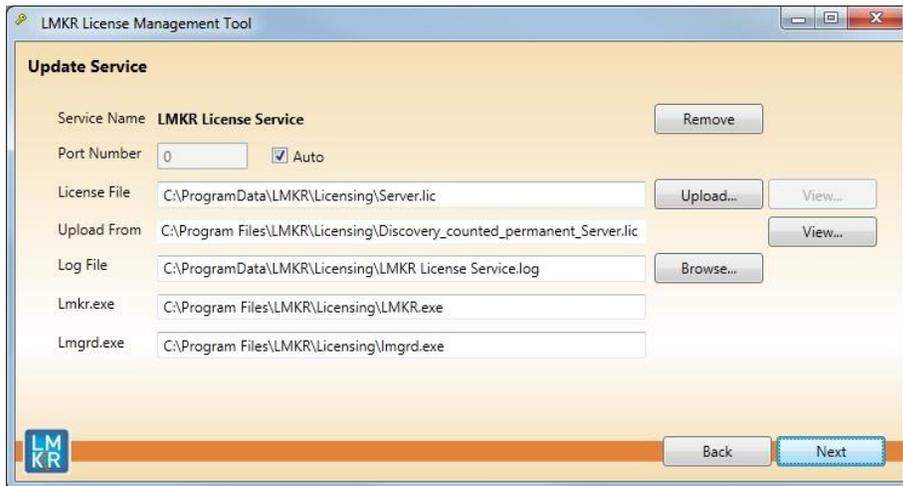
This is only performed on the system running the LMKR license server.

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



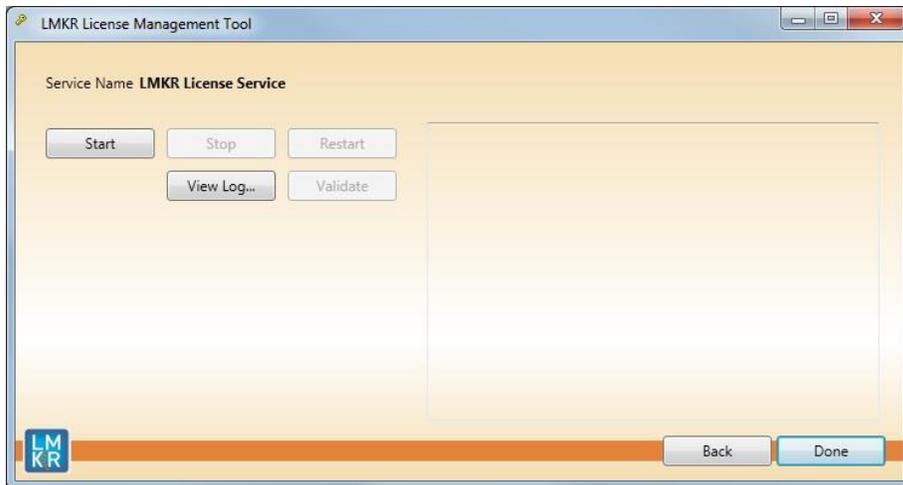
5. In this dialog, specify the following:

- **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.



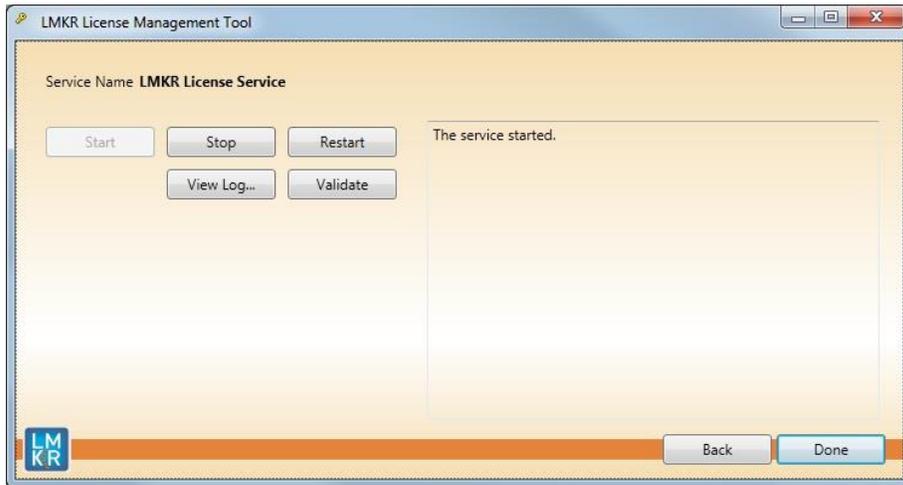
6. Click **Next**.

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



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

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



Note: If an error appears, contact support@lml.com 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
<p>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</p>	<p>UK Monday - Friday 8am - 5pm +44 20 3608 8042 *Excluding bank holidays</p> <p>UAE Sunday - Thursday (Dubai GMT+4) 8am - 5pm +971 4 3727 999</p> <p>Egypt Sunday - Thursday +0800-000-0635 *Excluding bank holidays</p>
Asia Pacific & Australian Continent	Southwest Asian countries
<p>Malaysia Monday - Friday (Kuala Lumpur GMT+8) 9am - 6pm +60 32 300 8777 *Excluding bank holidays</p>	<p>Pakistan Monday - Friday (Islamabad GMT+5) 9am - 6pm +92 51 209 7400 *Excluding bank holidays</p>

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