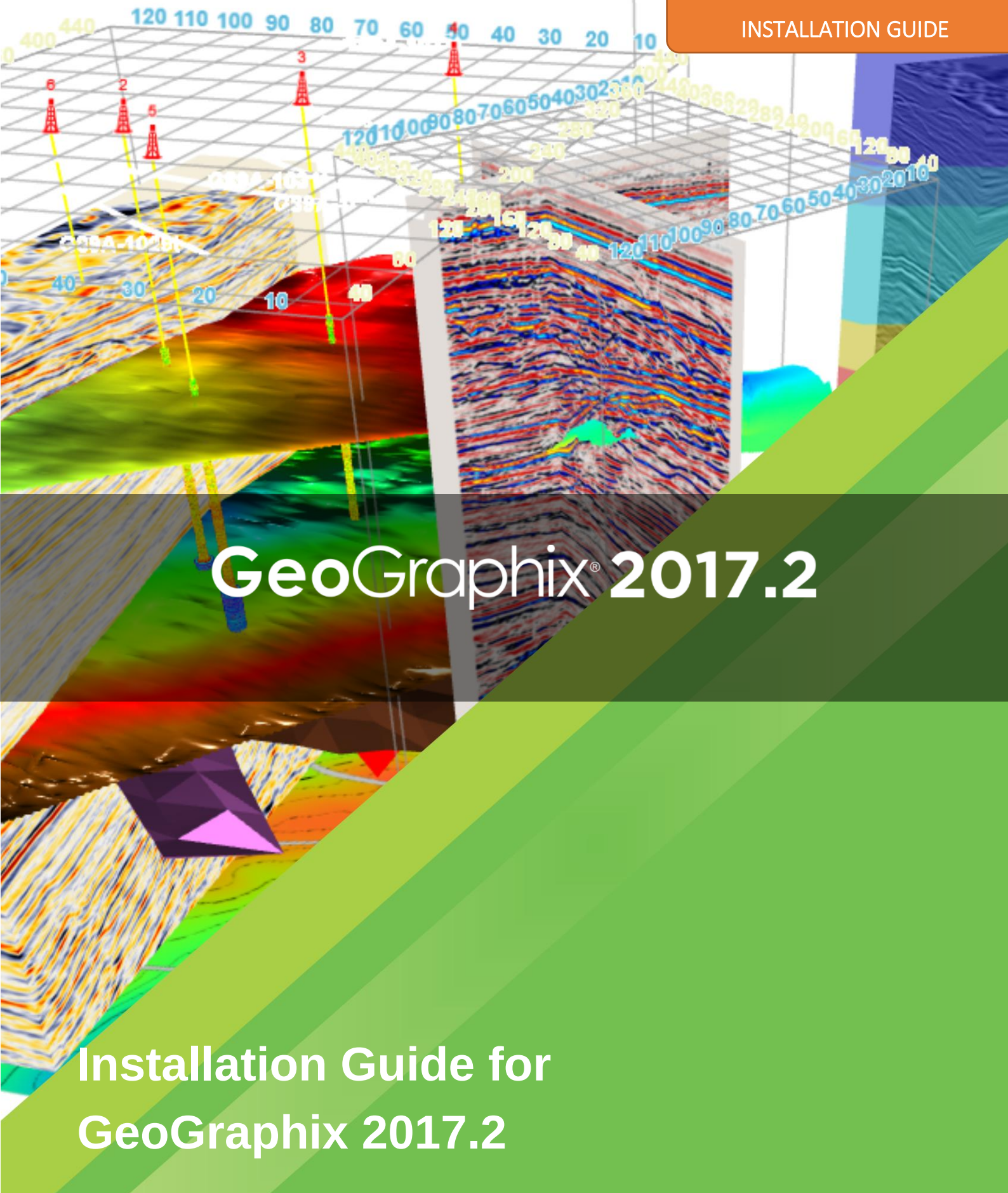

GeoGraphix® 2017.2

Installation Guide for GeoGraphix 2017.2

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Trademark Notice

Note

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Contents

Introduction

Welcome to the 2017.2 release of the ***Discovery™***, **Landmark® Connectivity,** and **Seismic Modeling** software.

- ***Discovery*** includes the Discovery™ 2017.2 version of PRIZM™, smartSECTION®, and GVERSE™ Geophysics (new and updated geophysical interpretation tool for GeoGraphix)
- **Landmark Connectivity** includes the WellXchange™, GridXchange and SeisXchange™ software.
- **Seismic Modeling** includes the 2017 version of the LogM™ and STRUCT™ software.

Discovery software is available through the **LMKR Support Portal - Downloads** page or, by request, on a DVD.

Caution:	
General Installation Requirements **- please refer to the** System Requirements **for a complete list**	The following conditions must be met before you can install the Discovery, Landmark Connectivity, and Seismic Modeling software: ▪ You must have ***Administrative Rights*** to the local computer that will run the installation. ▪ Must have ***Internet Explorer 6.0*** or higher installed. ▪ Microsoft .NET 4.5.1 must be installed. ▪ If you are using smartSECTION on a ***Windows® 10 64-bit*** operating system, then .NET Framework 3.5 must be installed. ▪ Microsoft DirectX End-User Runtime (June 2010) is required to run Discovery 3D, Pro3D, smartSECTION, GVERSE Geomodeling, and GVERSE Geophysics. ▪ Must have networking installed including the ***TCP/IP*** protocol. ▪ To use this software, your computer must be running one of the following operating systems: ○ ***Windows® 7 Enterprise 64 bit*** ○ ***Windows® 7 Ultimate 64 bit*** ○ ***Windows® 10 Professional 64 bit*** ○ ***Windows® 10 Enterprise 64 bit*** ○ ***Windows® Server 2008 R2 Standard 64 bit*** ○ ***Windows® Server 2008 R2 Enterprise 64 bit*** ○ ***Windows® Server 2012 R2 Standard 64 bit*** ▪ If using Discovery on OpenWorks, **OpenWorks for Windows 5000.10.3.02** must be installed. OpenWorks for Windows has two install options; you can use either the Full install option (recommended) or the Basic install option. ▪ If working in a network environment, do not forget that for all computers to continue to work together in shared projects, ALL computers (clients and servers alike) must be updated to the same version of Discovery if any of them are updated. It is intentional that computers with different versions of the Discovery software cannot (under normal circumstances) and should not (in any case) be connected with each other.

The Welcome Guide document included with the download from LMKR or on your DVD contains information on the exciting new enhancements and features in the Discovery 2017.2 release.

This document includes very important information that you should read before installation:

If you have any questions or issues with installation, do not hesitate to contact Technical Support.

Before You Begin Installation

Before you start the installation process, GeoGraphix recommends that you follow these guidelines.

1. Users upgrading from GeoGraphix 2017.1 to GeoGraphix 2017.2 require a new Geophysics license. New users or users upgrading from other versions of GeoGraphix also need valid LMKR licenses.
2. If you are working in a network environment, install the LMKR license server on one computer to be used by all client computers.

Note: The LMKR License Management Tool (LMT) must be installed to configure the GeoGraphix license. Download the latest LMT from the **LMKR Support Portal - Downloads** page (http://support.lmkr.com/). See the LMKR Licensing section for more information.

3. Make sure you have the current install obtained from LMKR or on the DVD and the most recent software update files (if applicable) at the time of installation.
4. Make complete backups or archives of all your projects. This is a very important step, **DO NOT SKIP THIS STEP**. Remember, a backup (such as from a tape) is only as good as the last time it was tested.
5. Backup any customized files from the **Data** directory (such as custom libraries, symbols, and coordinate system files). Do this only if there is ANY chance of going back to the previous version.
6. Test any project updates or functionality if desired in a non-production environment.
7. Uninstall any previous version of GeoGraphix Discovery before installing version 2017.2.
8. Make sure that the prerequisites have been installed.

Note: If working in a network environment, do not forget that for all computers to continue to work together in shared projects, ALL computers (clients and servers alike) must be updated to the same version of Discovery if any of them are updated. It is intentional that computers with different versions of the GeoGraphix software cannot (under normal circumstances) and should not (in any case) be connected with each other.

System Requirements

System requirements for all Discovery applications are provided as general guidelines. Hardware requirements will vary considerably, depending on the types of projects, project sizes, the number of users, and network infrastructure/traffic. Contact your technical sales representative or technical support to discuss your requirements.

- Workstation: Discovery
  - Geologic Suite (DataManager, GESXplorer, and PRIZM)
  - Geophysical Suite (Geophysics, pStaX, and SCAN)

Caution: Landmark Connectivity or using Discovery version 2017.2 with Discovery on OpenWorks projects requires the 5000.10.3.02 version of OpenWorks for Windows.

- Project Server: Discovery
  - Geologic Suite (DataManager, GESXplorer, and PRIZM)
  - Geophysical Suite (Geophysics, pStaX, and SCAN)

Workstation: Discovery

The requirements for Discovery Workstation are as follows:

Software and Hardware Requirements

We recommend using the latest Microsoft® service packs and security patches. The following table lists the operating systems which are supported.

Supported Operating system	RAM	CPU
Windows® 7 Professional x64 Windows® 7 Enterprise x64 Windows® 7 Ultimate x64 Windows® 10 Professional x64 Windows® 10 Enterprise x64	8 GB Minimum 16+ GB Recommended	Pentium i5/i7 or any Quad Core Processor

Note 1: We recommend using the latest Microsoft service packs and security patches. GVERSE Geophysics and GVERSE Geomodeling specifically require Windows platform update package KB2670838 installed on the machine, in case the operating system is Windows 7.

Graphics Hardware Requirements

We recommend the following Graphics Hardware to run the GeoGraphix applications:

Application Support Level	Required Operating System	Required Graphics Hardware
All Discovery Applications including Discovery 3D and advanced 3D visualization (Pro 3D), and GVERSE Geomodeling	Refer to the supported operating systems mentioned on the previous page.	2 GB Minimum 4 GB Recommended DirectX 11 capable hardware. **(see Note 2 below)**
GVERSE Geophysics	Refer to the supported operating systems mentioned on the previous page.	**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 2017.2. You must download and install it separately. • 1,366 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 2017.2. You must download and install it separately. • Solid state hard disk • 1920 x 1080 screen resolution

Note 1: Microsoft DirectX End-User Runtime (June 2010) is required to run Discovery 3D, advanced 3D visualization (Pro 3D), GVERSE Geomodeling and GVERSE Geophysics.

Note 2: To run Discovery 3D, advanced 3D visualization (Pro 3D), and GVERSE 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.

Additional Requirements and Recommendations

- DVD - ROM required for media installation. You do not need this if you have downloaded the installation from http://support.lmkr.com/.
- DCOM/Firewalls configured to allow remote access. Only necessary if sharing projects.
- Microsoft .NET Framework 4.5.1 runtime is required.

Optional Software Requirements

Tools	Software Requirements
For spreadsheet Import Utility in WellBase, SeisBase, and LeaseMap	Excel 2007, 2010 or 2013 (32 or 64 bit) In case the macros are not working in Excel, ensure the **gxdb.xla** file is present in the relevant Microsoft Office *Library* installation folder, and the net pipe adapter service is running.
For Selected Help Files	Adobe Reader
For Discovery on OpenWorks, GridXchange, and SeisXchange	OpenWorks for Windows 5000.10.3.02 – Basic or Full (recommended) Installation available on Landmark's LSM. (See Notes below) and SeisWorks 5000.10 (for seismic workflows).
For ESRI geo-referenced images and ESRI CAD file import in GeoAtlas	ESRI ArcGIS Runtime Engine 10.2.x or 10.3.x or 10.4.x or 10.5 (included in the 3rd Party Installer).
For LOGarc™ Version 4.1.0.3 access in smartSECTION	To use the LOGarc™ feature, the LOGarc™ Version 4.1.0.3 software must be downloaded from IHS LogTech Canada, LTD and a valid account must be in place. You must have administrator rights to the computer on which you want to load the software.

Note for Discovery on OpenWorks: The OpenWorks Full installation requires Hummingbird Exceed. The Oracle client installation in use with the OpenWorks Full installation requires that the "Administrator" option be selected. The "Administrator" option type includes the SQL Plus and the Oracle Database Utilities components, which are needed to run Discovery on OpenWorks, as part of the total OpenWorks package.

Note: Hummingbird Exceed is not required for the OpenWorks Basic installation. If the OpenWorks Basic installation is used, the Oracle client installation can use the "Administrator" option, which will include all of the needed components. Or, the Oracle client installation for the OpenWorks Basic installation can use the "Custom" installation type. However, with the Custom installation type, the following components must be installed:

- Oracle Database Utilities 11.2.0.4
- SQL *Plus 11.2.0.4
- Oracle JDBC/THIN Interfaces 11.2.0.4
- Oracle Net 11.2.0.4

Server: Discovery

The requirements for Discovery Server are as follows:

Software and Hardware Requirements

We recommend using the latest Microsoft service packs and security patches. The following table lists the operating systems which are supported.

Supported Operating system	RAM	CPU
Windows® Server 2008 R2 Standard x64 Windows® Server 2008 R2 Enterprise x64 Windows® Server 2012 R2 Standard x64	32 GB Minimum 64+ GB Recommended SSD Drives Recommended	Intel Xeon Processor or Equivalent Quad 2.4GHz 64-bit or better

Additional Requirements and Recommendations

- DVD-ROM required for media installation. You do not need this if you have downloaded the installation from http://support.lmkr.com/.
- DCOM/Firewall must be configured to allow remote access. For DCOM configuration recommendations, refer to the white papers on the LMKR Support Portal.

Server performance is subject to a large number of variables. It is impossible to give specific recommendations here, but these are some guiding principles to use. In general, multi-user performance of a GeoGraphix Project Server is best when the server is dedicated to GeoGraphix and not shared with other applications, especially database applications. In addition, consideration should be made for the number of GeoGraphix users and the size and number of concurrently accessed projects. At some point, having multiple project servers becomes a better solution than having all users on one server. Generally, somewhere between 10 and 20 users is when a second server might be suggested.

Networking

Networking performance depends on the number of users trying to access a server simultaneously, as well as the bandwidth requirements for those users. Recommendations for server bandwidth typically specify server connectivity at a higher bandwidth than an individual user. For instance, users running at 100 Mbit should be accessing a server running on a 1-Gbit backbone. If users are at 1 Gbit, consider running multiple 1-Gbit connections or a single higher-bandwidth connection on the server.

Database Cache

A large database cache is an important factor to consider when dealing with multiple users accessing large databases. The database engine is capable of addressing a practically unlimited amount of cache memory. The best way to size the memory is to estimate the memory requirements for other running applications and allow the database cache to dynamically allocate any remaining free memory. The engine will only allocate what it needs when using dynamic allocation up to the maximum specified.
It is highly recommended that you let the database engine use as much cache memory as it requires on the host server. Increasing database cache memory is the quickest and most effective way to improve database-related performance on large network projects.
On a workstation, it might be appropriate to reserve 1 to 2 GB for the OS and file system cache and 2 to 4 GB for other running applications. On a dedicated project server, not much memory needs to be reserved for other applications. The ideal maximum varies by the project size, the number of users, and other load considerations. But as a general rule, the higher you can set the maximum, the better.

Storage

A great deal of Discovery's access patterns on a server deal with file I/O. Database access, raster images, and seismic data are examples of files that benefit substantially from a fast disk sub-system. Server environments also place a high importance on data integrity and reliability. At a minimum, consider using a RAID 5 (striped with parity) array. As the size of disks increases, you may also want to consider a hot swap drive and/or RAID 6 (striped with dual parity). Using a controller card with its own cache can also help improve performance.

Network Attached Storage (NAS), Storage Area Networks (SAN), and Other Non-Windows Storage Solutions

There are two typical methods used for accessing external storage devices from a project server: iSCSI and CIFS.

- iSCSI allocates a block of storage on the external device and makes it appear to be a physical disk on the project server. This has the advantage of a 100% compliant file system. However, since the external device sees the allocation as one big file, it makes backup and restoration of individual files using the external device's capabilities more difficult. Standard backup and restore procedures from the server will still work.
- Using CIFS for external storage devices depends greatly on the vendor’s implementation of the CIFS protocol used by the Windows platform. In general, a 100% compliant implementation of CIFS for a performant system is required. In particular, the vendor's implementation of the "File Change/Notify" functionality has been problematic. Devices based on the Windows Storage Server should be 100% compatible, since it shares its components with Windows. Implementations based on UNIX/Linux are where problems occur, due to the fact that the kernel level support is not present. Due to these uncertainties with CIFS implementations, LMKR does not technically support CIFS.

Prerequisites

Discovery 2017.2 has several prerequisites that are required to run the software, as well as prerequisites that are used to enhance the software. Most of these prerequisites can be installed by downloading the appropriate "Discovery Third Party Installer" from the LMKR Support Portal.

Microsoft .NET Framework 3.5

This is specifically required if you are using smartSECTION on a Microsoft Windows® 10 operating system. The Microsoft .NET 3.5 can be downloaded from Microsoft's website and then installed. It is also available in the 3rd Party installers shipped with Discovery 2017.2.

Microsoft .NET Framework 4.5.1

Discovery 2017.2 must have Microsoft's .NET 4.5.1 installed. The Microsoft .NET 4.5.1 can be downloaded from Microsoft's website, and then installed. It is also available in the 3rd Party installer shipped with Discovery 2017.2.

ESRI ArcGIS Runtime Engine

New functionality within GeoAtlas related to geo-referenced images and CAD files requires the ESRI ArcGIS 10 Engine with ESRIArcGIS 10.2.x or 10.3.x or 10.4.x or 10.5. ESRI ArcGIS license must be configured by running **ArcGIS Administrator** with administrative rights, and selecting the **ArcGIS Engine Runtime (Single Use)** option in the wizard. If the ArcGIS Engine is not installed, this message box will appear but the setup will continue:

Microsoft DirectX 11 End-User Runtimes

Discovery 3D, Pro3D, smartSECTION, GVERSE Geophysics and GVERSE Geomodeling require Microsoft's DirectX 11 June 2010 End-User Runtimes to work properly. The Discovery 3D application works only on the Windows 7 (64-bit) or higher operating system. Discovery 3D is not installed unless the computer has Windows 7 (64-bit) or higher. Further Discovery 3D requires a DirectX 11 compatible display card. DirectX 11 June 2010 End-User Runtimes can be installed by downloading the Discovery Third Party Installer.

Platform Update for Windows 7

GVERSE Geomodeling and GVERSE Geophysics specifically require Windows platform update package KB2670838 installed on the machine, in case the operating system is Windows 7.

Installation

Discovery utilizes Microsoft Windows® Installer technology for installing the Discovery applications. Windows® Installer technology provides powerful features for installation and component configuration, network installations (distribution\deployment) and software removal\uninstallation.

Note: Have you read the System Requirements?

This installation guide provides step-by-step instructions for End User or Network Administrator installations:

- End User Installation
  - Install Discovery Applications to a Single Workstation.
- Network Administrator Installation
  - Create LMKR License Service Server for Multiple Workstations.
  - Install the Discovery Applications to Multiple Workstations.
  - Create a Discovery Project Server (optional).

End User Installation

This installation will add the Discovery applications to a Single Workstation.

Caution:	
General Installation Requirements - please refer to the System Requirements for a complete list	The following conditions must be met before you can install the Discovery 2017.2 software: ▪ You must have Administrative Rights to the local computer that will run the install. ▪ Must have Internet Explorer 6.0 or higher installed. ▪ Microsoft .NET 4.5.1 must be installed. ▪ If you are using smartSECTION on a **Windows® 10** operating system, .NET Framework 3.5 must be installed. ▪ Must have networking installed including the ***TCP/IP*** protocol. ▪ This software should only be installed on **Windows® 7** or **10**, or **Windows® Server 2008** or **2012** operating systems. ▪ Microsoft DirectX End-User Runtime (June 2010) is required to run Discovery 3D, Pro3D, smartSECTION, GVERSE Geomodeling, and GVERSE Geophysics.

There are 9 or 11 installation steps, depending upon whether you perform a typical or custom install:

- STEP 1 - Getting Started with the Discovery 2017.2 Release
- STEP 2 - InstallShield Wizard Startup
- STEP 3 - GVERSE Geomodeling Installation
- STEP 4 - License Agreement
- STEP 5 - Customer Information
- STEP 6 - Setup Type (Typical vs. Custom)
- Typical STEP 7 - Select Log Units of Measurement
- Typical STEP 8 - Ready to Install the Program
- Typical STEP 9 - InstallShield Wizard Completed
- Custom STEP 7 - Custom Setup
- Custom STEP 8 - Local Projects Folder
- Custom STEP 9 - Log Units of Measurement
- Custom STEP 10 - Ready to Install the Program
- Custom STEP 11 - InstallShield Wizard Completed

Note: LMKR licensing is installed before or after the above Discovery master installation steps. When Discovery applications are started through the Desktop shortcuts or Start Menu Programs, a licensing check is performed on the workstation. Please refer to the LMKR Licensing section for further details.

End User Installation STEP 1- Getting Started with LMKR Download or Release DVD

Before starting installation, make sure that all open applications are closed.

If you have downloaded Discovery 2017.2 from LMKR, go to the **Download** folder and double-click on the **Discovery2017.2Setup.exe** file to begin. You will proceed directly to STEP 2 - InstallShield Wizard Setup.

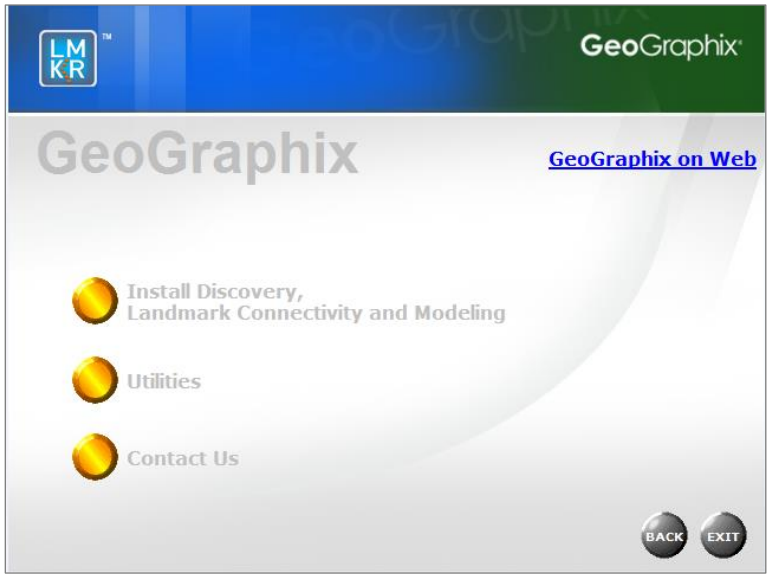
If you have ordered the **Discovery 2017.2 DVD**, continue through this step.

Insert the **Discovery/Landmark Connectivity/Seismic Modeling DVD-ROM** into the DVD-Drive.

The GeoGraphix splash screen appears for a few seconds.

Note: If the GeoGraphix splash screen does not appear automatically, go to the Start menu, and choose Run. In the Run dialog box, browse to the appropriate DVD-drive and select the Install.exe file. Click OK.

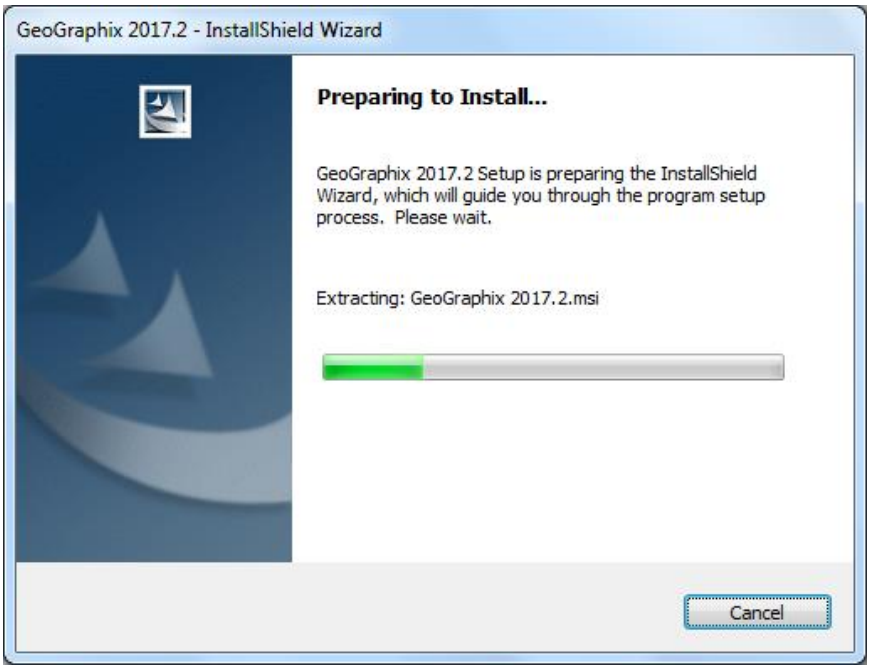
After the splash screen appears for a few seconds, the GeoGraphix install window appears.



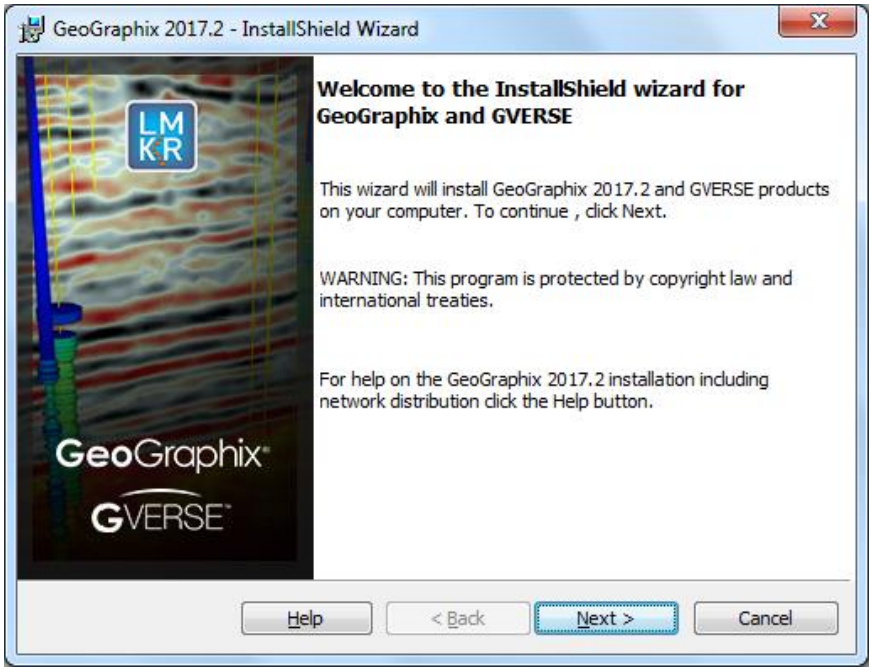
Click the first option,  to proceed to the next step in the End User Installation.

End User Installation STEP 2 - InstallShield Wizard Startup

After clicking **Install Discovery, Landmark Connectivity, and Modeling** in the previous step, the InstallShield wizard is started.



The **Welcome to the InstallShield Wizard for GeoGraphix and GVERSE** step appears on your screen.



Click the **Next** button to proceed to the **GVERSE Geomodeling Installation** step of wizard.

Note: Clicking the **Help** button will open the Discovery Installation Guide help window.

End User Installation STEP 3 - GVERSE Geomodeling Installation

This screen allows you to install GVERSE Geomodeling application in addition to the GeoGraphix software.

Recommended: Select the **GVERSE Geomodeling 2017.2 Fully Integrated 3D Interpretation** check box to install the GVERSE Geomodeling application.

Do not select this check box if you do not want to install the GVERSE Geomodeling application. You can install GVERSE Geomodeling after the GeoGraphix 2017.2 installation by either:

- Downloading the GVERSE Geomodeling setup file from **LMKR Support Portal - Downloads** page (http://support.lmkr.com/)

  or

- Selecting **Start > LMKR > GVERSE > Install Uninstall Geomodeling**. For more information on GVERSE Geomodeling installation, refer to the GVERSE Geomodeling Installation Guide.

Click the **Next** button to proceed to the **License Agreement** step of the installer.

End User Installation STEP 4 - License Agreement

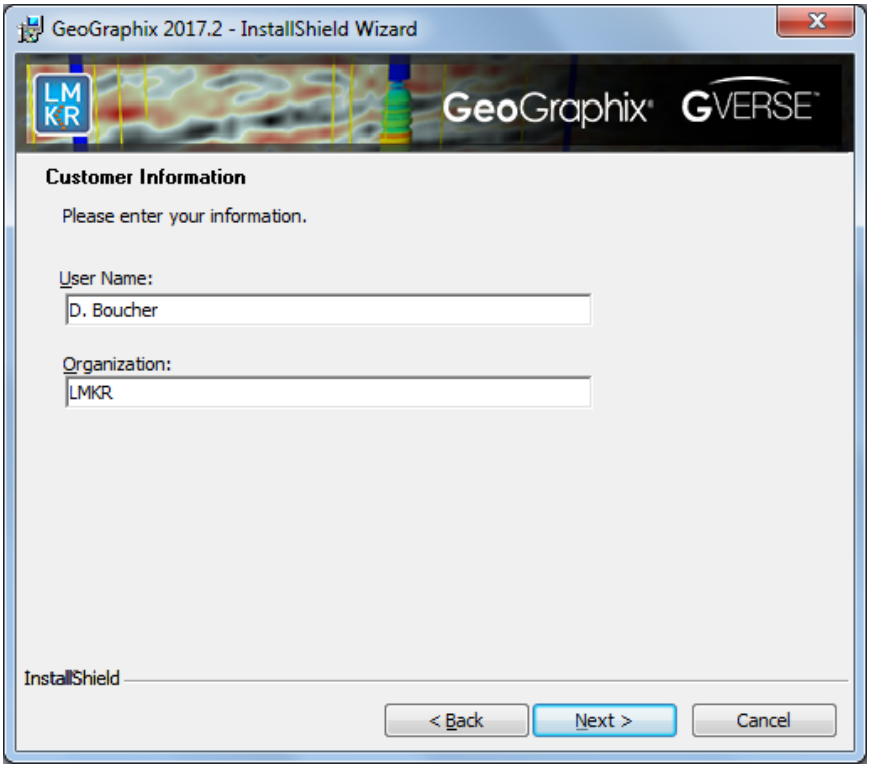
The software license agreement is displayed in this step of wizard.

Select the **I accept the terms in the license agreement** option.

Click **Next** to proceed to the **Customer Information** step of the wizard.

End User Installation STEP 5 - Customer Information

Customer Information appears in this step of the wizard.

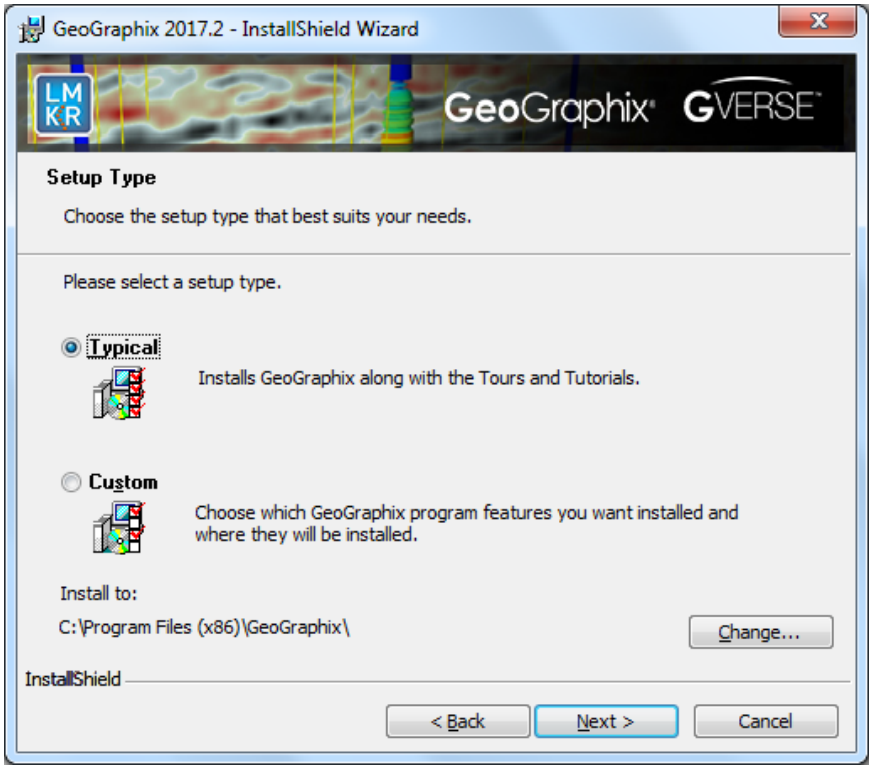


Enter your **User Name** and **Organization**.

Click **Next** to proceed to the **Setup Type** step of the wizard.

End User Installation STEP 6 - Setup Type (Typical vs. Custom)

The type of setup (Typical vs. Custom) and the application destination folder is selected in this step of the wizard.



Options	Description
Typical option:	Choosing this option will install Discovery (Discovery, PRIZM, Geophysics and smartSECTION), and Modeling (LogM, STRUCT) to the application destination folder (Install To:). **Note:** You must use the Custom option if you will run TracPlanner Xpress and you do not have OpenWorks for Windows installed on your computer. If you have OpenWorks for Windows installed, you can use the Typical install option. **Note:** A local projects folder will be installed by default to: C:\ProgramData\Geographix\Projects (for Windows®). If a previous local projects folder is detected by the installation, then the local projects folder will be installed to the previous detected path/folder.
Custom option:	Choosing this option then clicking Next will open a Custom Setup dialog box to choose features to be installed.
Install to:	This is the path/folder where applications will be installed on the computer. **Note:** If the Discovery software has been installed on this computer before, then the "Install to:" will reflect the path/folder of the previous installation; if not, the default path is C:\Program

	Files (x86)\GeoGraphix.
Change command button:	Use this command button to change the path/folder destination of the application. Clicking this button will open a standard Windows® Browse/Open dialog box. **Note:** The path/folder must be a local hard drive.

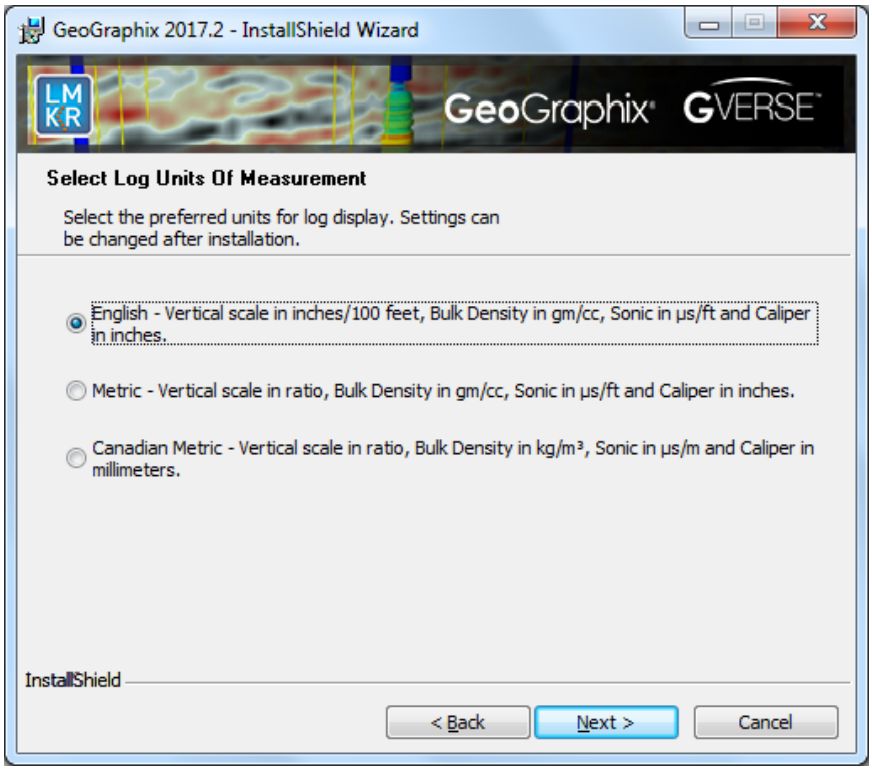
If the **Typical** option is selected, click **Next** to proceed to the **Select Log Units of Measurement** step of wizard.

If the **Custom** option is selected, click **Next** to proceed to the **Custom Setup** step of wizard.

Typical

End User Installation Typical STEP 7 - Select Log Units of Measurement

This step of the wizard determines which default log units will be setup for PRIZM and XSection.

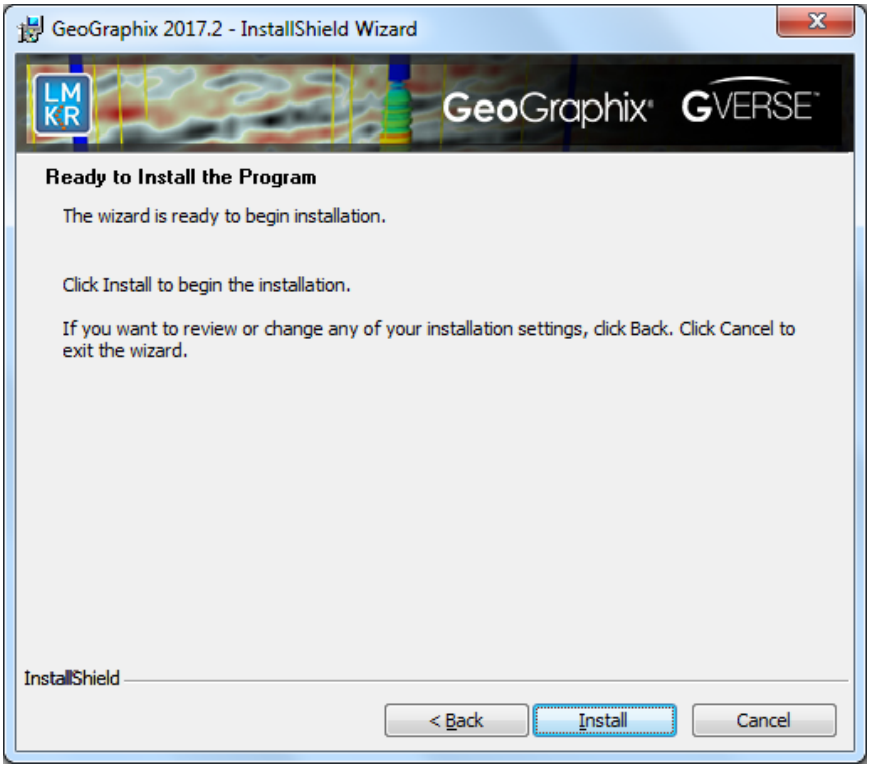


Note: The units can be changed in PRIZM and XSection after installation.

Click **Next** to proceed to the **Ready to Install the Program** step of the wizard.

End User Installation Typical STEP 8 - Ready to Install the Program

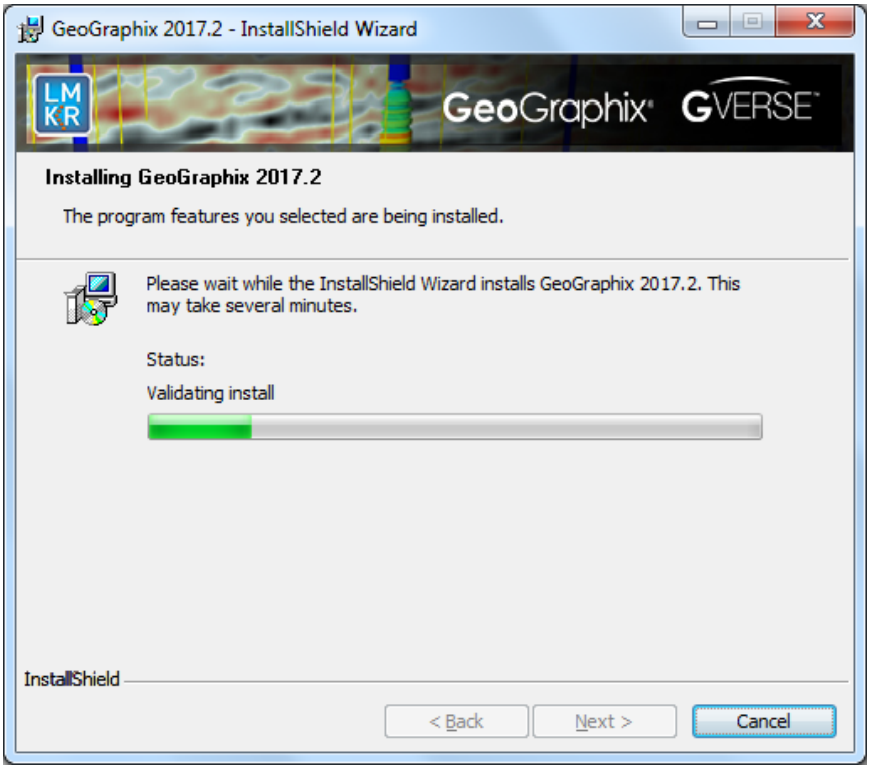
This is the second to last step of the wizard.



Click **Install** to copy files and begin installing the software, or click **Back** to review and make any changes as necessary.

End User Installation Typical STEP 9 - InstallShield Wizard Completed (FINAL STEP)

After the **Install** button is clicked in the Ready to Install the Program step, files are installed to the workstation.



When the installation is finished, the **InstallShield Wizard Completed** dialog box appears:

Click **Finish** to complete the installation.

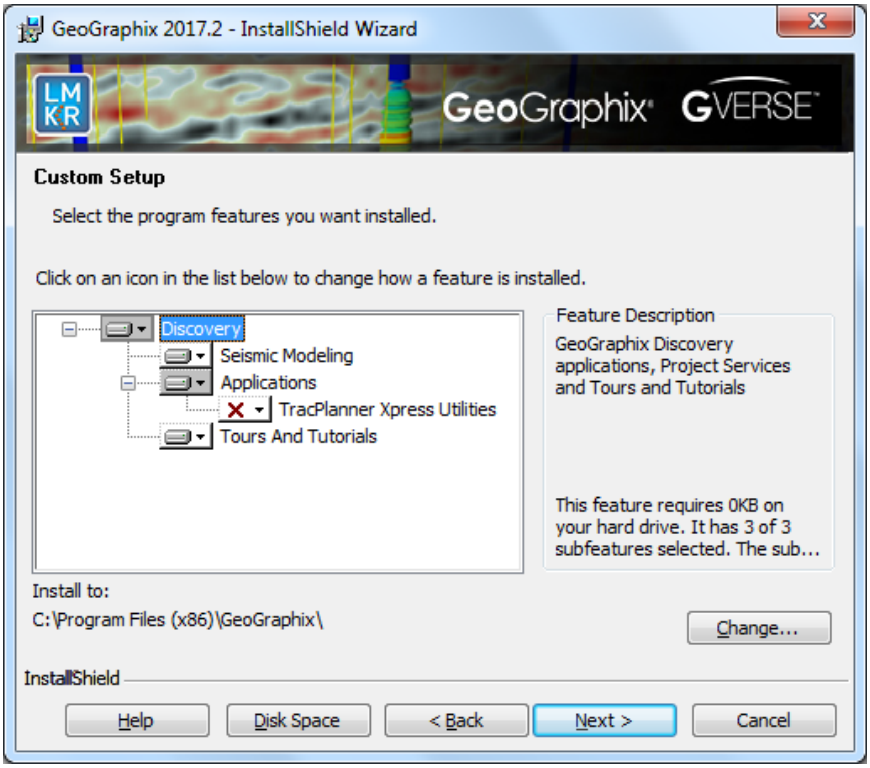
The Discovery software can now be started through Desktop shortcuts, or **Start** >> **Programs**.

Note: LMKR licenses are installed after the Discovery master installation steps. When the Discovery applications are started through Desktop shortcuts or Start Menu Programs, a licensing check is performed on the workstation. Please refer to the LMKR License Management Tool for further details.

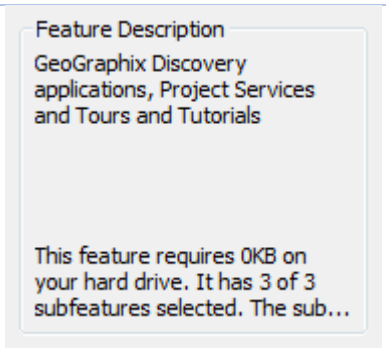
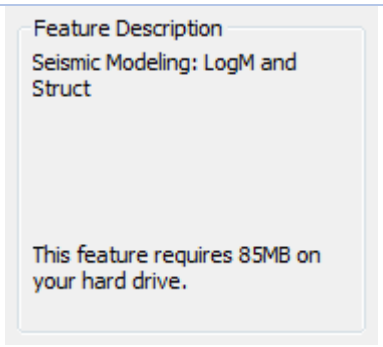
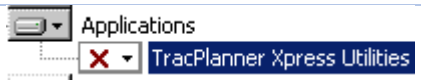
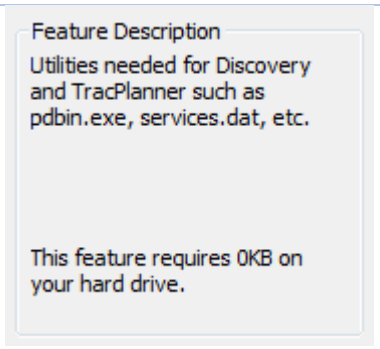
Custom

End User Installation Custom STEP 7 - Custom Setup

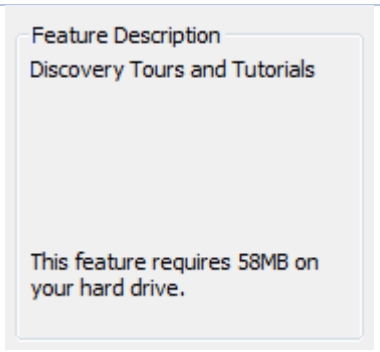
This step of the wizard can be used to select certain features to be installed and change the application destination directory.

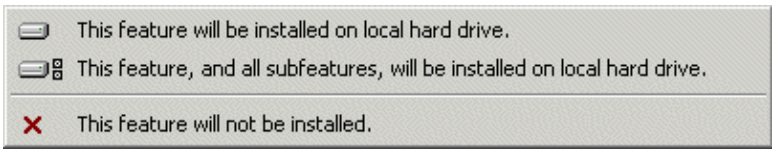


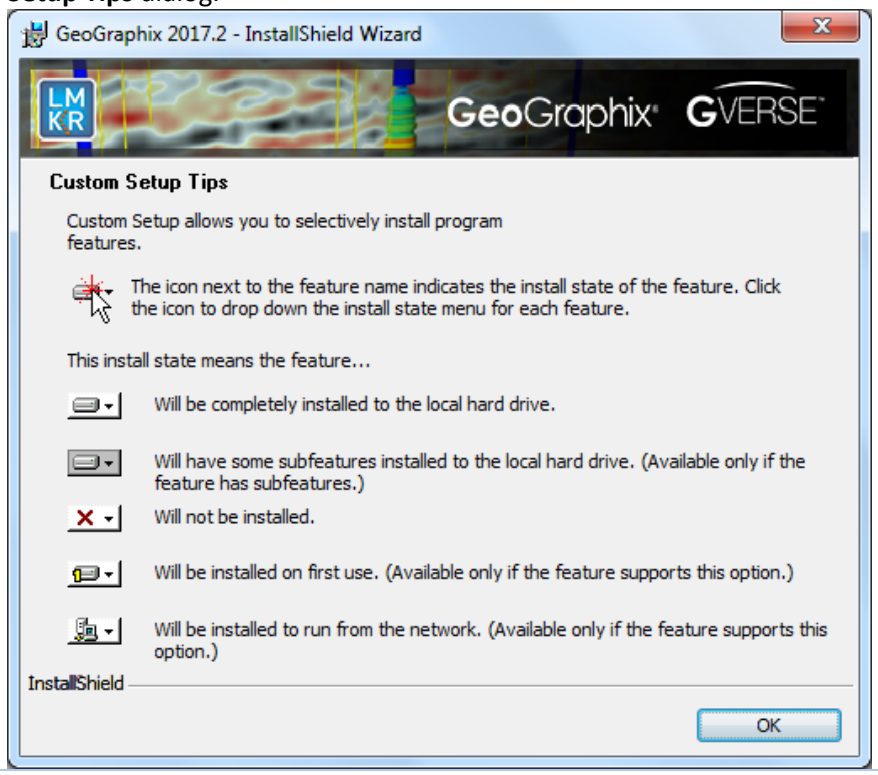
For details on the various options available in this dialog, refer to the table on the next page.

Options	Description	
List Box and Feature Description:	When a feature is selected in the list box, a description of the feature will appear at right in the Feature Description box.	
		
		
		
	 **Note**: The TracPlanner Xpress Utility is not selected by default. To install the TracPlanner Xpress Utility, click the down arrow and select an install option from the drop-down list. Installation of this utility is not necessary if OpenWorks for Windows is already installed.	

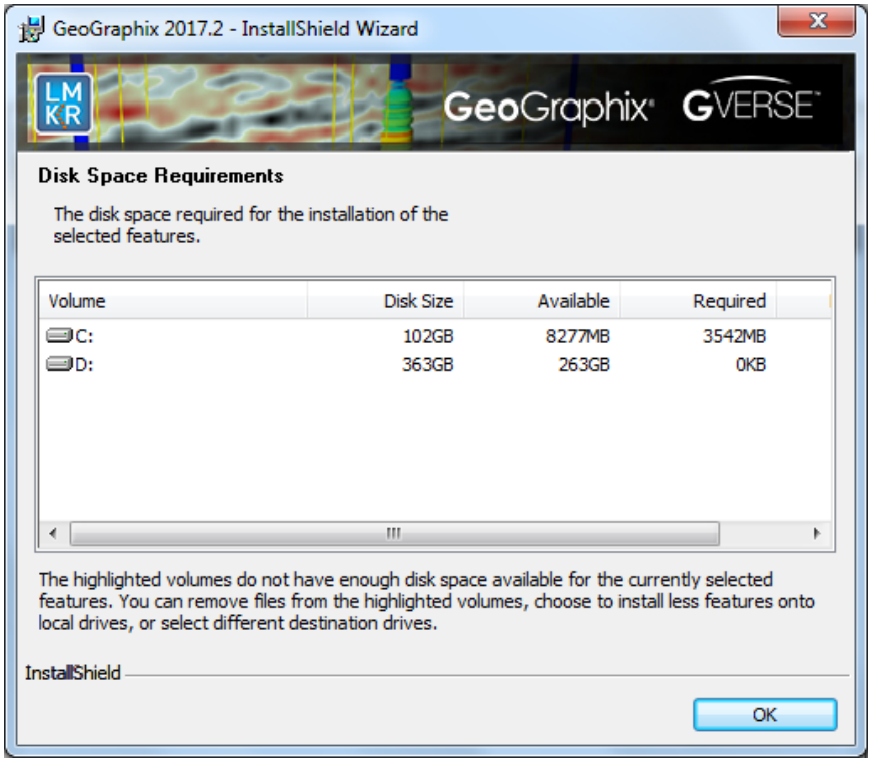
<table>
<tr><td></td><td> 



Discovery Tours and Tutorials include creating a "SampleFiles" directory and installing zip projects for 3 possible project areas (Moosehead, Powder and Stratton).</td></tr>
<tr><td></td><td>Clicking the down arrow  icon will list options to install or not install the feature:


Clicking the Help button on this Custom Setup dialog will bring up the Custom Setup Tips dialog.

</td></tr>
<tr><td>Install to:</td><td>This is the path/folder that will be used to install the applications on the computer.

<u>Note</u>: If GeoGraphix software has been installed on this computer before, then the "Install to:" description will reflect the path/folder of the previous</td></tr>
</table>

	installation.
Change command button:	Use this command button to change the path/folder destination of the application. Clicking this button will open a standard Windows® **Browse/Open** dialog box to change the application destination folder.
Disk Space command button	Clicking this button displays the Disk Space Requirements dialog box. This dialog box shows the capacity (**Disk Size**) of the drive where you plan to install the application, along with the **Available** disk space on the drive and the **Required** disk space for the application. **Note:** The **Available** disk space is highlighted if the **Required** disk space for the application exceeds the **Available** disk space. Use any of the remedies suggested on the dialog box so you can complete the installation. 

Select features to be installed and click **Next** to proceed to the **Local Projects Folder** step of the wizard.

End User Installation Custom STEP 8 - Local Projects Folder

This step of the wizard determines where the local projects folder (path/folder) will be created during the installation.

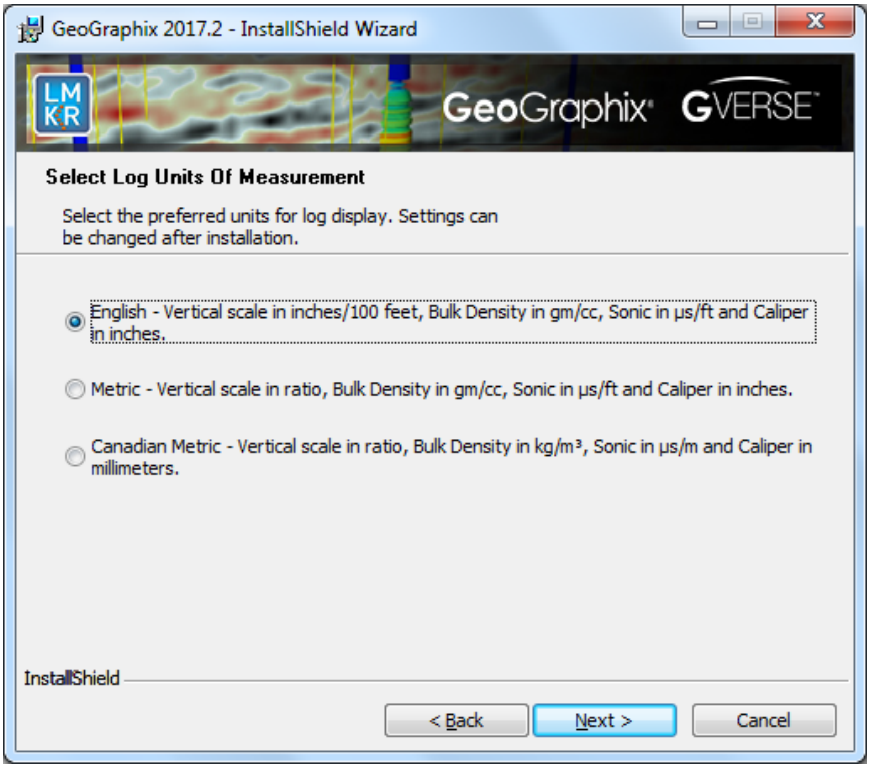
Clicking the **Change** command button will open a standard Windows® **Browse/Open** dialog box to change the application destination folder.

Note: The Local Projects Path/Folder must be a local hard drive.

Click **Next** to proceed to the **Log Units of Measurement** step of the wizard.

End User Installation Custom STEP 9 - Log Units of Measurement

This step of the wizard determines which default log units will be setup for PRIZM and XSection.

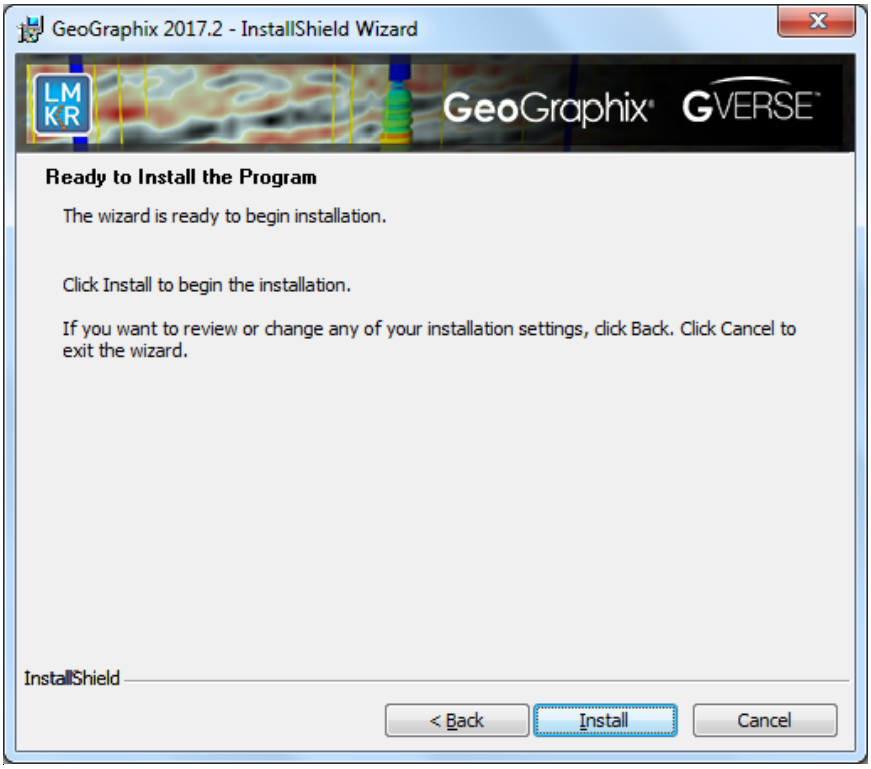


Note: The units can be changed in PRIZM and XSection after installation.

Select the appropriate **Units** option and click **Next** to proceed to the **Ready to Install the Program** step of the wizard.

End User Installation Custom STEP 10 - Ready to Install the Program

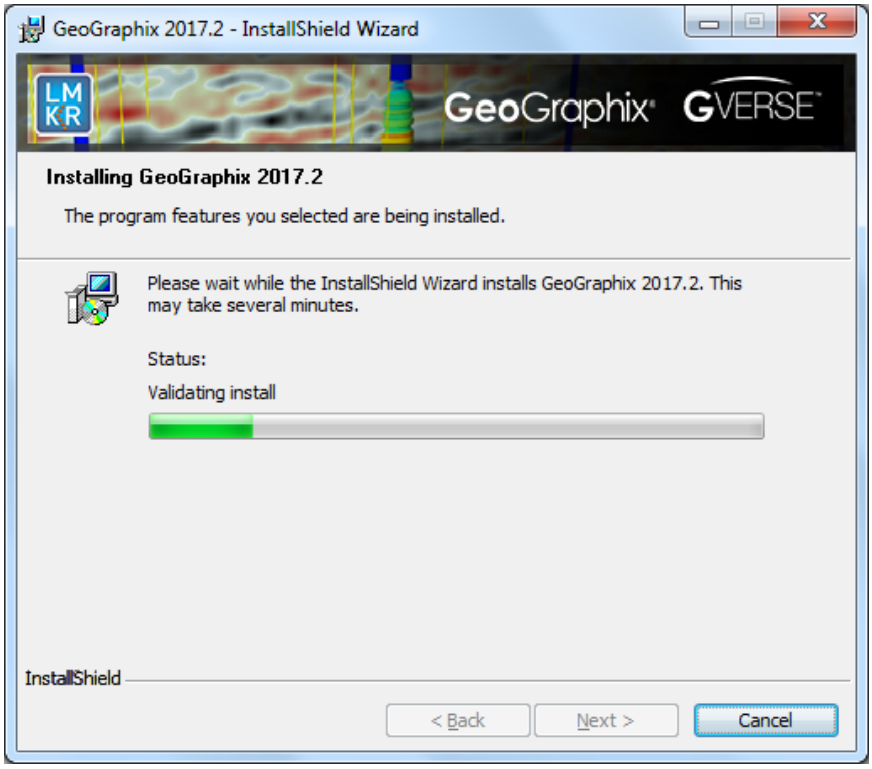
This is the second to last step of the wizard.



Click **Install** to copy files and begin installing the software, or click **Back** to review and make any changes as necessary.

End User Installation Custom STEP 11 - InstallShield Wizard Completed (FINAL STEP)

After the Install button is clicked in the **Ready to Install the Program** step, files are installed to the workstation.



When installation is finished, the InstallShield Wizard Completed dialog box appears.

Click **Finish** to exit the installation.

The Discovery software can now be started through Desktop shortcuts, or **Start** >> **All Programs**.

Note: LMKR licensing is installed before or after the Discovery master installation steps. When the Discovery applications are started through Desktop shortcuts or Start >> All Programs, a licensing check is performed on the workstation. Please refer to the LMKR License Management Tool section for further details.

Network Administrator Installation

There are several possible installation configurations and methods that could be used for deploying Discovery in a network environment. The best method for your particular situation depends upon the number of users and your network environment.

There are at least 3 important components to consider in any network environment:

- LMKR License Management Tool
- Workstation Installation
- Discovery Project Server (Optional)

If you have any questions or issues with your particular network environment, please do not hesitate contacting GeoGraphix Technical Support.

Network License Server

The LMKR License Management Tool must be installed to use Discovery in a network environment. Download the tool from the **LMKR Support Portal - Downloads** page and follow the installation instructions.

After the server is set up, when the **License Management Tool** runs on the client computer, choose the **I want to setup or manage a network license server on this computer** option and enter the required information.

For more information on the license wizard see the LMKR Licensing section.

Workstation Installation

Network Administrator Installation

Caution:	
General Installation Requirements - please refer to the System Requirements for a complete list	▪ The following conditions must be met before you can install the Discovery 2017.2 software: ▪ You must have ***Administrative Rights*** to the local computer that will run the install. ▪ Must have ***Internet Explorer 6.0*** or higher installed. ▪ Microsoft .NET 4.5.1 must be installed. ▪ Must have networking installed including the ***TCP/IP*** protocol. ▪ Microsoft DirectX End-User Runtime (June 2010) is required to run Discovery 3D, Pro3D, smartSECTION, and GVERSE Geomodeling. ▪ This software should only be installed on ***Windows® 7*** or ***10,*** or ***Windows® Server 2008*** or ***2012*** operating systems.

The workstation installation in a network environment can be initiated from the Discovery 2017.2 download or directly from the Release DVD or by creating an Application Distribution site:

- Using LMKR download or Release DVD
- Using Application Distribution Site

Using LMKR Download or Release DVD

Workstation installations directly from the Discovery 2017.2 download or the Release DVD are quite acceptable if you do not mind configuring the installation at each workstation. The installation could be shared on a network drive or carried from workstation to workstation.

The installation procedure for workstation installations directly from LMKR or the release DVD is identical to the End User Installation.

Note: Licensing will need to be configured on each workstation. The configuration can be set with the LMKR License Management Tool.

Using the Application Distribution Site

Workstation Installations with an Application Distribution Site can save considerable configuration time at the workstation and can even be automated to create unattended, silent installations for the workstation.

There are 6 steps involved with performing Workstation Installations using an Application Distribution Site:

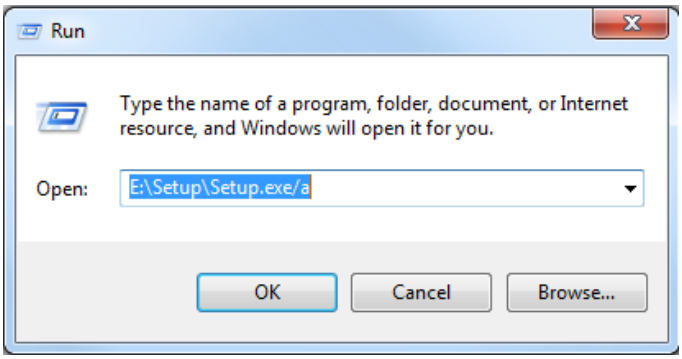
- STEP 1: Administrative Install - Start >> Run
- STEP 2: Administrative Install - InstallShield Wizard Startup
- STEP 3: Administrative Install - Network Location
- STEP 4: Administrative Install - InstallShield Wizard Completed
- STEP 5: Configure Application Distribution Site
- STEP 6: Install to Workstations

Create Application Distribution Site STEP 1 - Administrative Install - Start >> Run

An administrative installation is generally started with a Run "setup.exe" command containing the "/a" parameter.

A Run command can be configured in the standard Windows® Run dialog box. This dialog box can be accessed from the Windows Taskbar **Start** menu and **Start** >> **Run**.

If the Discovery 2017.2 DVD is in a DVD-Drive with assigned drive letter of "E", then the command line would be the same as the one in the Run dialog box below:



Create Application Distribution Site STEP 2 - Administrative Install - InstallShield Wizard Startup

After configuring the Run command in STEP 1 - Administrative Install **- Start >> Run**, the InstallShield wizard is started…

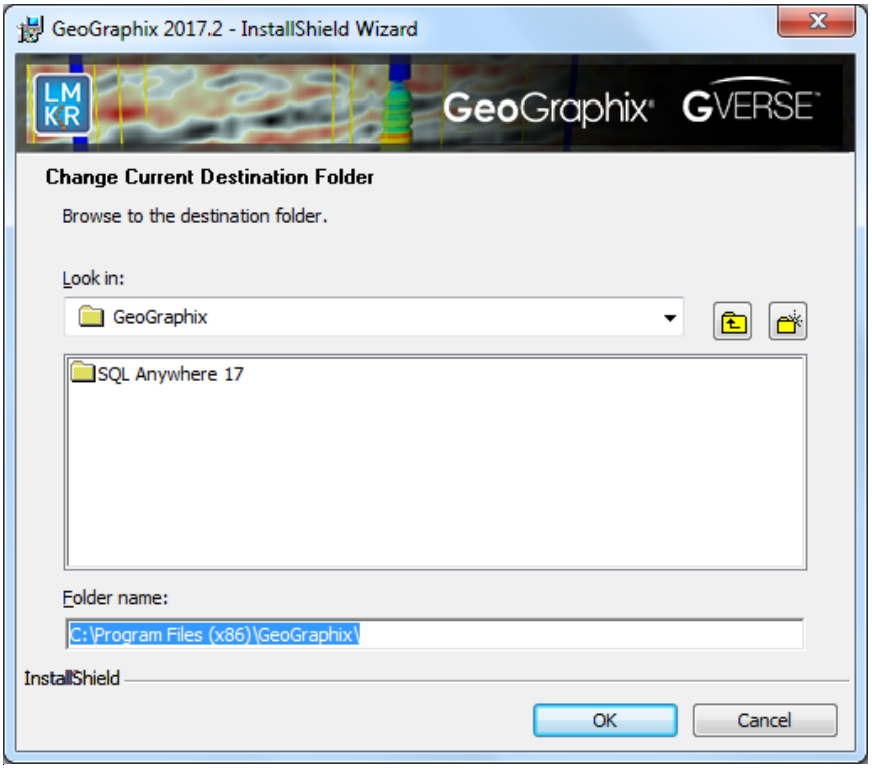
The Welcome to the InstallShield Wizard for Discovery 2017.2 appears on your screen.

Click **Next** to proceed to the **Network Location** step of the wizard.

Note: Clicking the **Help** button will open the Discovery Installation Guide help window.

Create Application Distribution Site STEP 3 - Administrative Install - Network Location

This step of the wizard determines the location where the distribution site will be created on the network.



Option	Description
Network location:	Specify the network mapped drive/path or UNC path where the distribution site will be created. **Note:** A User running an administrative installation must have permissions to write to the designated Network location. Discovery Release Setup contents will be copied and decompressed to this network location.
Change command button:	Clicking this command button will open the **Change Current Destination Folder** dialog box where you can change the network location destination folder. Click the Down Arrow in the **Look in** list box to navigate to a new destination folder. **Note**: The New Folder command button can be used to create new folders. When a new destination is set, click **OK** to return to the **Network Location** dialog box.

Click **Install** to copy files and create network distribution site.

Create Application Distribution Site STEP 4 - Administrative Install - InstallShield Wizard Completed

After **Install** is clicked in the Network Location step, installation files are decompressed and copied to the network location that was designated in STEP 3 - Administrative Install - Network Location.

And when the installation is finished, the InstallShield Wizard Completed dialog box appears:

The Network Application Distribution Site should contain the following folders and files at this point:

Name	Date modified	Type	Size
Setup	3/27/2018 6:20 PM	File folder	
Utilities	3/27/2018 6:21 PM	File folder	
AUTORUN	10/23/2008 2:24 AM	Setup Information	1 KB
closing	9/23/1997 2:06 AM	Bitmap image	31 KB
Demo.dbd	11/17/2017 9:55 PM	DBD File	968 KB
Demo.dsj	11/17/2017 9:55 PM	DSJ File	1 KB
DS32.DLL	11/14/2000 3:39 AM	Application extens...	28 KB
Install	11/14/2000 3:39 AM	Application	384 KB
Setup_Instructions	3/21/2018 9:48 AM	Compiled HTML ...	2,347 KB

In the next step, the setup.ini of the application distribution site will be configured for distribution to the workstations.

Note: Running the setup.exe in the application distribution site could be used at a workstation to install Discovery software, but configuring the setup.ini can save time and even be automated to create an unattended, silent installation for the workstations.

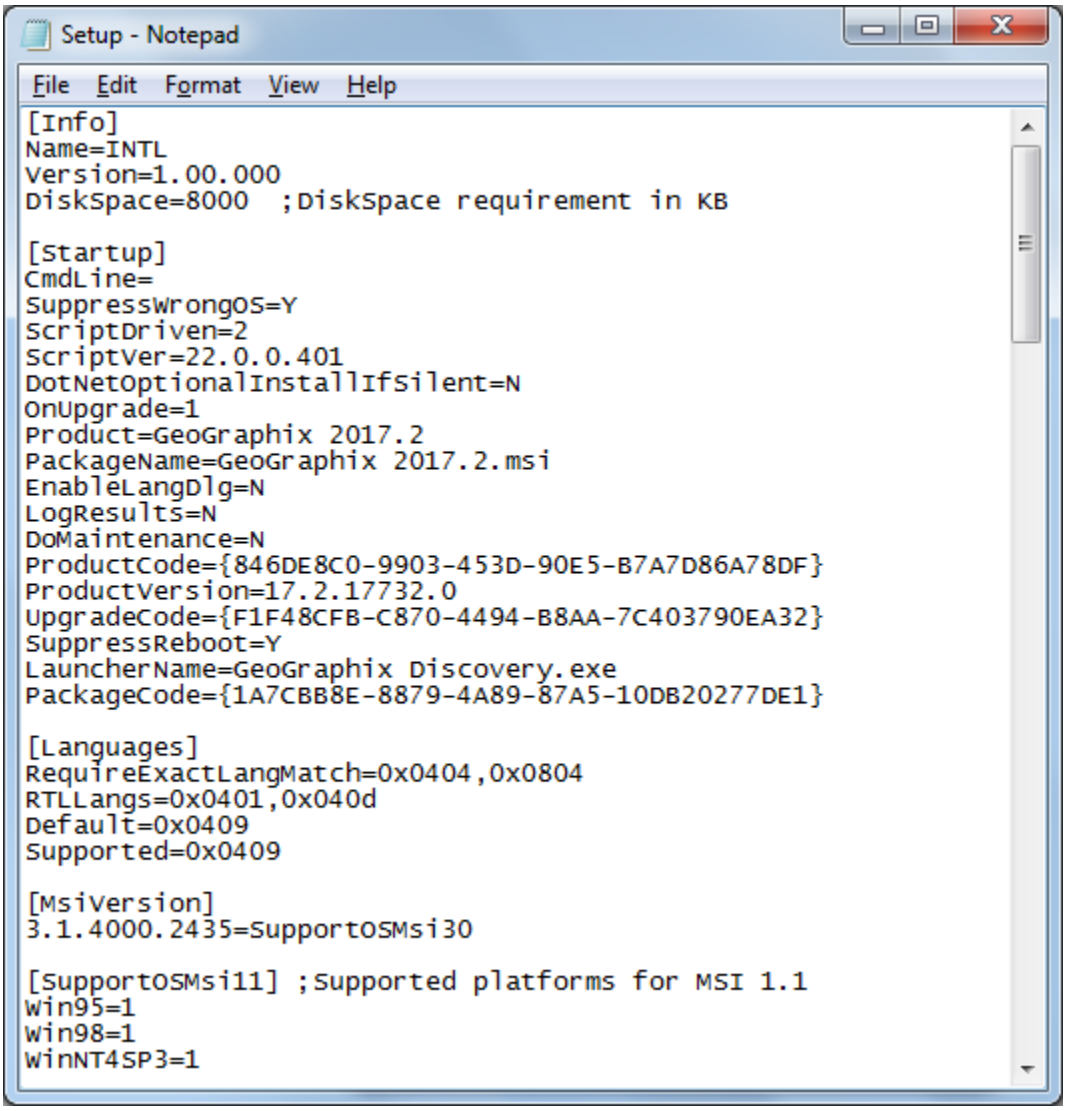
Create Application Distribution Site STEP 5 - Configure Application Distribution Site

After all the necessary files have been copied and decompressed to the Application Distribution Site with the Administrative Install in the previous steps, the Application Distribution site needs to be configured for your particular network environment.

Note: If you only have the download of the setup and not the DVD media, you will need to use the Workstation Setup files located on the Discovery Utilities under Extras\Workstation files.

This involves editing some of the existing command variables (such as, User Name, Company Name, etc.) or adding commands along with variables to the "**Setup.ini**" file on the Application Distribution Site.

Look for the [Startup] section in the "**Setup.ini**":



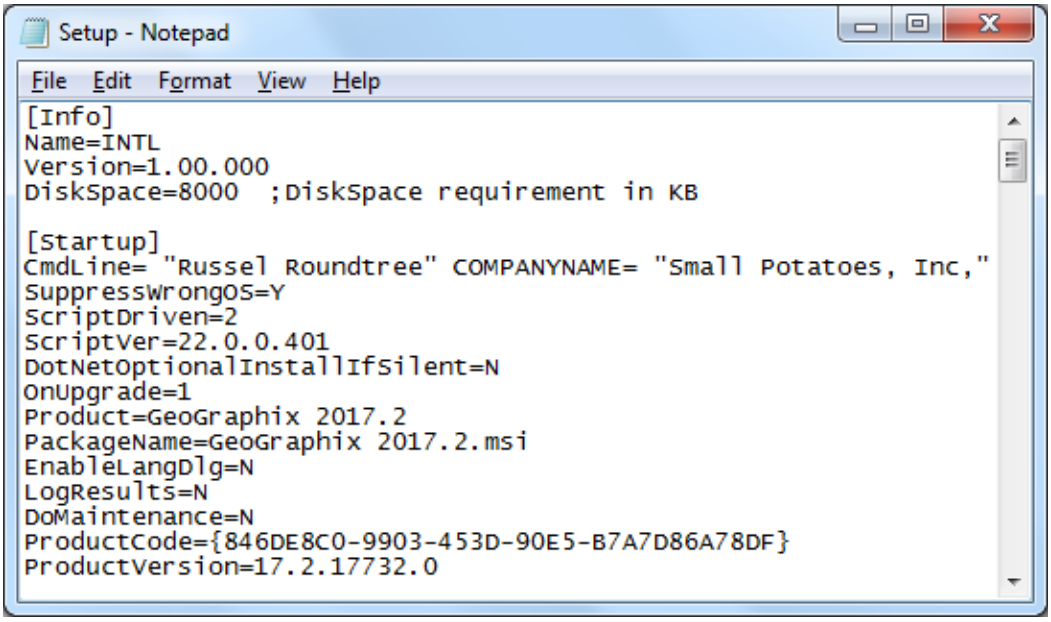
The following table lists some commands and variables that may be used on the CmdLine in the "**Setup.ini**":

Command	Variable (quotes required where shown)	Description
USERNAME	"Text string"	The variable value within quotes will be used for the User Name field in the Customer Information dialog.
COMPANYNAME	"Text string"	The variable value within quotes will be used for the Organization field in Customer Information dialog.
ADDLOCAL (This command can be used to install specific Discovery applications. It is very similar to choosing specific features in a custom install. If this command is not used, then a typical install is run.)	"Apps,ClientDrivers60,DataDirect60,Discovery,GeoGraphixDiscovery,LeadTools,Modules, ProjectServer,Providers,Services,SystemCore,WindowsSystemFiles,AOLibCopier,DataCore, DepthRegistration2,Discovery3D,EventLogging,GES,HelpCore,LandmarkConnectivity, MapObjects.Common,MapObjects.Release,Modeling, Prizm,ProjectDatabaseRebuilder, Projects,SeisVision,smartSECTION,SQLAnywhere17,ThirdParty.Common,ThirdParty.Release, Tools,ToursAndTutorials,TracPlannerUtilities,WellXchange,WindowsSystemCore, WPFToolkit" **Note:** This command is on one line with no spaces.	This variable value would install all the necessary features for Discovery only. **Note:** If the ADDLOCAL command is used, then the ALLUSERS command must also be used. Moreover, instead of specifically mentioning the application names, the ALL keyword can also be used.
ALLUSERS	1	If the ADDLOCAL command is used, then the ALLUSERS command must also be used. The ALLUSERS command enables the installation of GeoGraphix services.
PROJECTS	"Local Drive:\Folder"	This must be a local hard drive. This command can be used to designate a local projects folder which is essentially step 7 of the custom end user installation. **Note:** If this command is not used, a Projects

		folder will be installed by default to C:\Documents and Settings\All Users\Application Data\GeoGraphix\Projects. If a previous local projects folder is detected by the install, then the local projects folder will be installed to the previous detected path\folder.
UNITS	"English" OR "Metric" OR "CnMetric"	This command can be used to make selections normally made in step 8 of custom end user installation.
/q, /qn	Not applicable	No UI seen during installation.
/qb	Not applicable	Basic UI seen during installation. qb! can be used to hide the Cancel button.
/qr	Not applicable	Reduced UI seen during installation. No modal dialog box displayed at the end of the installation.
/qf	Not applicable	Full UI seen during installation.
/qn+	Not applicable	No UI seen during installation except for a modal dialog box displayed at the end of the installation.
/qb+	Not applicable	Basic UI with a modal dialog box seen at the end of the installation. qb+! or qb!+ can be used to hide the Cancel button.
/qb--	Not applicable	Basic UI with no modal dialog boxes seen during installation.

Note: If GVERSE Geomodeling or GVERSE Geophysics is not installed, then use the.msi file(s) provided with the install.

After removing the comment sign (";") and editing or adding variables in CmdLine, your "**Setup.ini**" CmdLine may look similar to the following example (other commands can exist):



Note: Only a small portion of the "Setup.ini" is displayed above.

Using Application Distribution Site - STEP 6 - Install to Workstations (FINAL STEP)

After the application distribution site is configured for your network environment, Discovery applications can now be deployed to the workstations.

You can deploy Discovery applications to the workstations by sharing the application distribution site with the workstations and running "setup.exe" in the application distribution site (similar to the End User Installation).

OR

You may want to utilize scripts or 3rd party tools such as Microsoft® SMS or InstallShield® AdminStudio that take advantage of Microsoft® Windows Installer technology for workstation deployment.

This is the last step in a Workstation Installation using an Application Distribution Site.

Discovery Project Server (Optional)

Creating a *Discovery* Project Server is an optional third component in a network administrator installation. It is a very important consideration if you want to store Discovery projects on a central server, then share those projects across the network for multiple users.

Note: A Workstation Installation will create a local projects folder on every workstation with GeoGraphix *Discovery* installed, so all workstations can create and store projects on their local hard drive. Local projects can also be shared between users on the network if the project properties in ProjectExplorer are set to network access. Please refer to the ProjectExplorer Help files for more information on local projects versus network projects.

A *Discovery* Project Server can be created with a custom installation using the Discovery 2017.2 download or Release DVD.

Note: This installation must be performed on the server that will become the *Discovery* Project Server. This server must have access to the LMKR License Management Tool (this server may also be the License Server).

There are 11 steps involved with creating a *Discovery* Project Server:

- STEP 1 - Getting Started with The Discovery download or Release DVD
- STEP 2 - InstallShield Wizard Startup
- STEP 3 - GVERSE Geomodeling Installation
- STEP 4 - License Agreement
- STEP 5 - Customer Information
- STEP 6 - Setup Type (Typical vs. Custom)
- STEP 7 - Custom Setup
- STEP 8 - Local Projects Folder
- STEP 9 - Log Units of Measurement
- STEP 10 - Ready to Install the Program
- STEP 11 - InstallShield Wizard Completed

Discovery Project Server - STEP 1 - Getting Started with the Discovery Download or Release DVD

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

If you have downloaded Discovery 2017.2, go to the **download** folder and double-click on the **Discovery2017.2Setup.exe** file to begin. You will proceed directly to STEP 2 - InstallShield Wizard Setup.

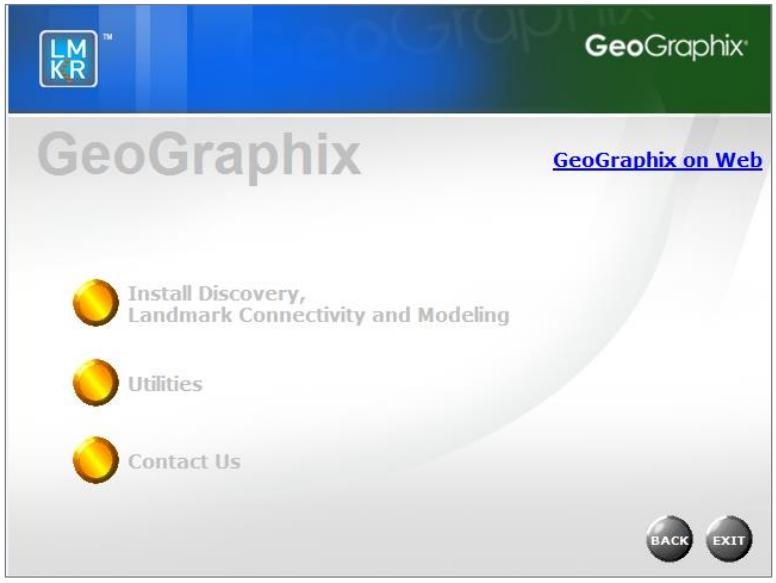
If you have ordered the **Discovery 2017.2 DVD**, continue through this step.

Insert the **Discovery/Landmark Connectivity/Seismic Modeling DVD-ROM** into the DVD-Drive.

The GeoGraphix splash screen appears for a few seconds.

Note: If the GeoGraphix splash screen does not appear automatically, go to the Start menu, and choose **Run**. In the Run dialog box, browse to the appropriate DVD-ROM drive and select the **Install.exe** file. Click **OK**.

After the Splash Screen appears for a few seconds, the GeoGraphix install window appears.



Click the first option, 

to proceed to the next step in the Discovery Project Server Installation.

Discovery Project Server - STEP 2 - InstallShield Wizard Startup

After clicking **Install Discovery, Landmark Connectivity, and Modeling** in the previous step, the InstallShield wizard starts.

The **Welcome to the InstallShield Wizard for Discovery 2017.2** step appears on your screen.

Click the **Next** button to proceed to the **GVERSE Geomodeling Installation** step of the wizard.

Note: Clicking the **Help** button will open the Discovery Installation Guide help window.

Discovery Project Server – STEP 3 – GVERSE Geomodeling Installation

This screen allows you to install GVERSE Geomodeling application in addition to the GeoGraphix software.

Recommended: Select the **GVERSE Geomodeling 2017.2 Fully Integrated 3D Interpretation** check box to install the GVERSE Geomodeling application.

Do not select this check box if you do not want to install the GVERSE Geomodeling application. You can install GVERSE Geomodeling after the GeoGraphix 2017.2 installation by either:

- Downloading the GVERSE Geomodeling setup file from **LMKR Support Portal - Downloads** page (http://support.lmkr.com/)

  or

- Selecting **Start > LMKR > GVERSE > Install/Uninstall Geomodeling**. For more information on GVERSE Geomodeling installation, refer to the GVERSE Geomodeling Installation Guide.

Click the **Next** button to proceed to the **License Agreement** step of the installer

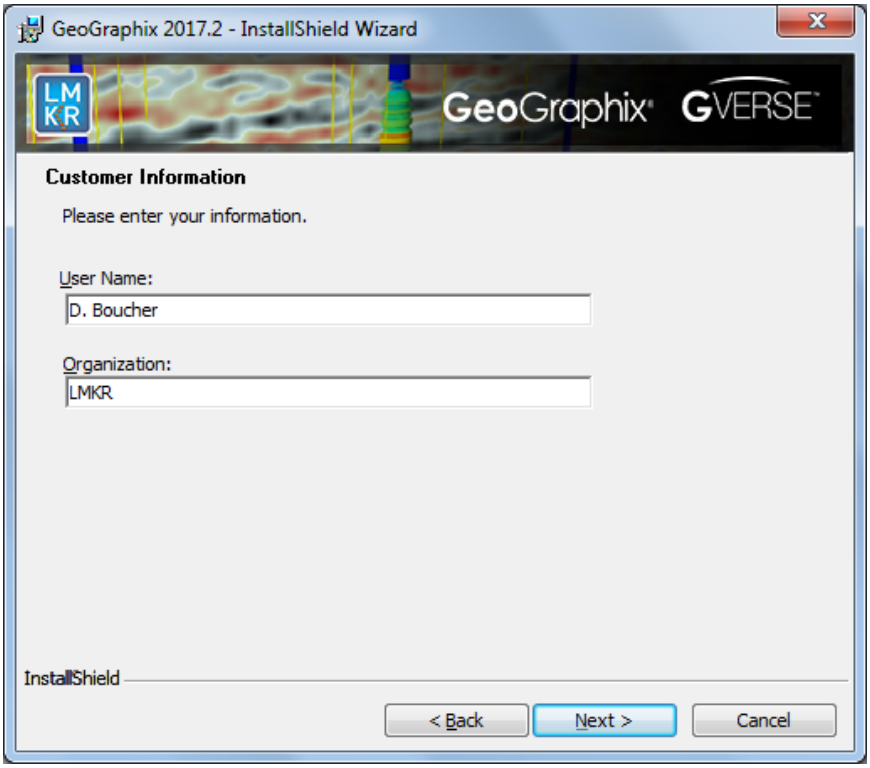
Discovery Project Server - STEP 4 - License Agreement

The software license agreement is displayed in this step of wizard.

Select the **I accept the terms in the license agreement** option. Click **Next** to proceed to the **Customer Information** step of the wizard.

Discovery Project Server - STEP 5 - Customer Information

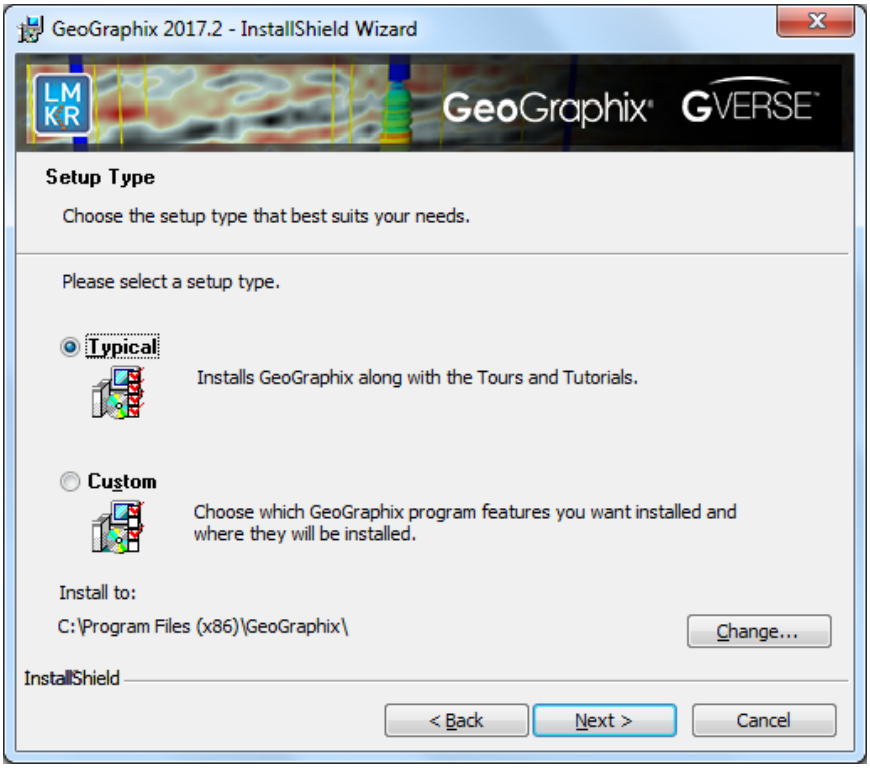
Customer Information appears in this step of the wizard.



Enter your **User Name** and **Company Name**. Click **Next** to proceed to the **Setup Type** step of the wizard.

Discovery Project Server - STEP 6 - Setup Type (Typical vs. Custom)

The type of setup (Typical vs. Custom) and the application destination folder is selected in this step of the wizard.



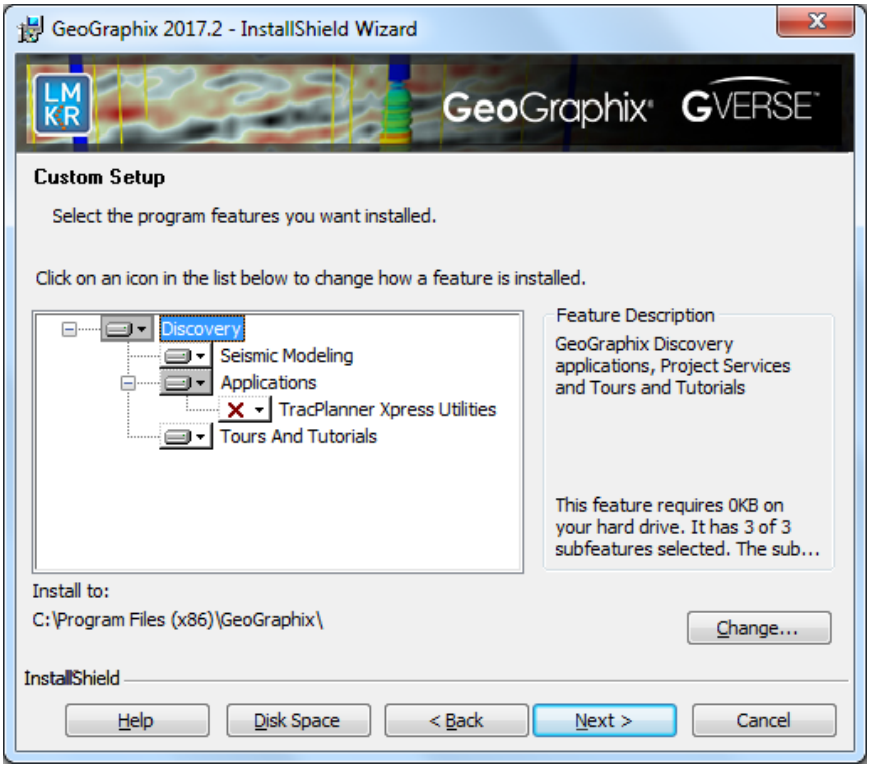
Option	Description
Typical option:	Choosing this option will install Discovery (GESXplorer, PRIZM, Geophysics) to the application destination folder (Install To:). **Note:** A local projects folder will be installed by default to: C:\ProgramData\GeoGraphix\Projects (for Windows®). If a previous local projects folder is detected by the install, then the local projects folder will be installed to the previous detected path\folder.
Custom option:	Choosing this option then clicking Next will open a Custom Setup dialog box to choose features to be installed.
Install to:	This is the path/folder where applications will be installed on the computer.
Change command button:	Use this command button to change path/folder destination of the application. Clicking this button will open a standard Windows® **Browse/Open** dialog box to change the application destination folder. **Note:** The path/folder must be a local hard drive.

To create a Discovery Project Server, select **Custom** option and click **Next** to proceed to the **Custom Setup** step of the wizard.

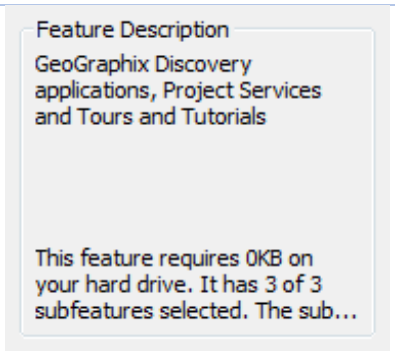
Note: A Discovery Project Server can be created by using the Typical setup type and installing all the Discovery applications, but a Custom setup type may be preferred because the installation options can be customized.

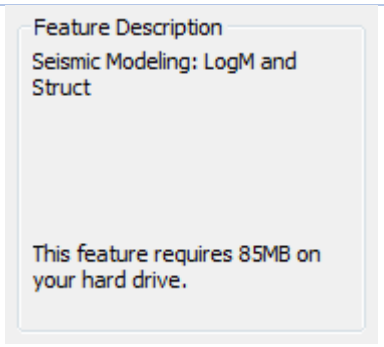
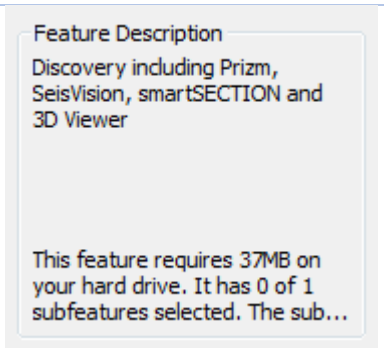
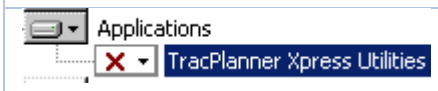
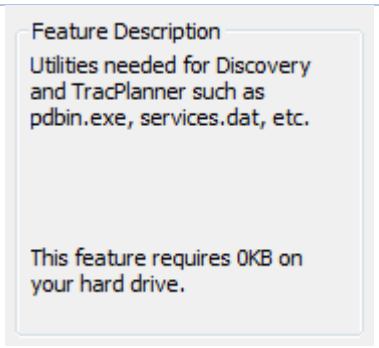
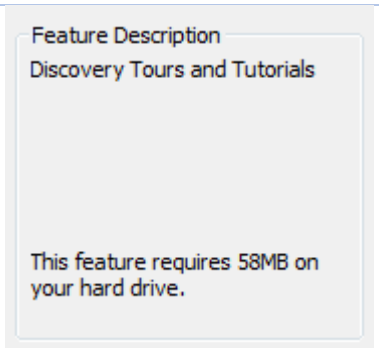
Discovery Project Server - STEP 7 - Custom Setup

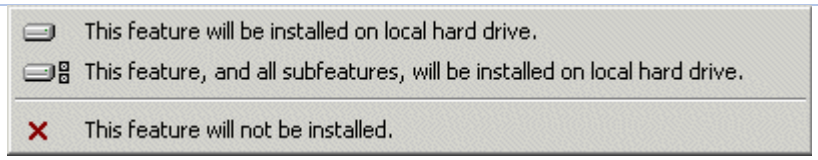
This step of the wizard can be used to select certain features to be installed and change the application destination directory.

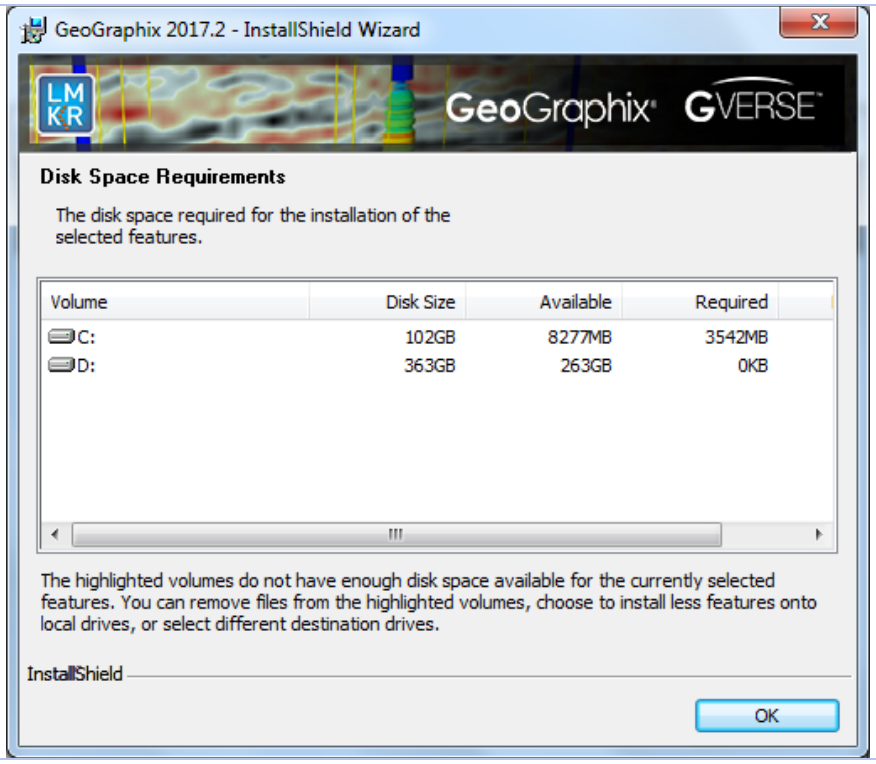


For details on the various options available in this dialog, refer to the table below.

Option	Description
List Box and Feature Description:	When a feature is selected in list box, a description of the feature will appear at right in the Feature Description box.
	

		
		
	 **Note**: The TracPlanner Xpress Utility is not selected by default. To install the TracPlanner Xpress Utility, click the down arrow and select an installation option from the drop-down list. Installation of this utility is not necessary if OpenWorks for Windows is installed.	
		 Discovery Tours and Tutorials include creating a "SampleFiles" directory and installing zip projects for 3 possible project areas (Moosehead, Powder and Stratton).
	Clicking the down arrow  icon will list options to install or not install the feature:	

	 Clicking the **Help** button on this Custom Setup dialog will bring up the Custom Setup Tips dialog. 
Install to:	This is the path/folder where applications will be installed on the computer.
Change command button:	Use this command button to change the path/folder destination of the application. Clicking this button will open a standard Windows® **Browse/Open** dialog box to change the application destination folder.
Disk Space command button	Clicking this button displays the Disk Space Requirements dialog box. This dialog box shows the capacity (**Disk Size**) of the drive where you plan to install the application, along with the **Available** disk space on the drive and the **Required** disk space for the application. **Note:** The **Available** disk space is highlighted if the **Required** disk space for the application exceeds the **Available** disk space. Use any of the remedies suggested on the dialog box so you can complete the installation.



Select features to be installed and click **Next** to proceed to the **Local Projects Folder** step of the wizard.

Discovery Project Server - STEP 8 - Local Projects Folder

This step of the wizard determines the location where the local projects folder (path/folder) will be created during the installation.

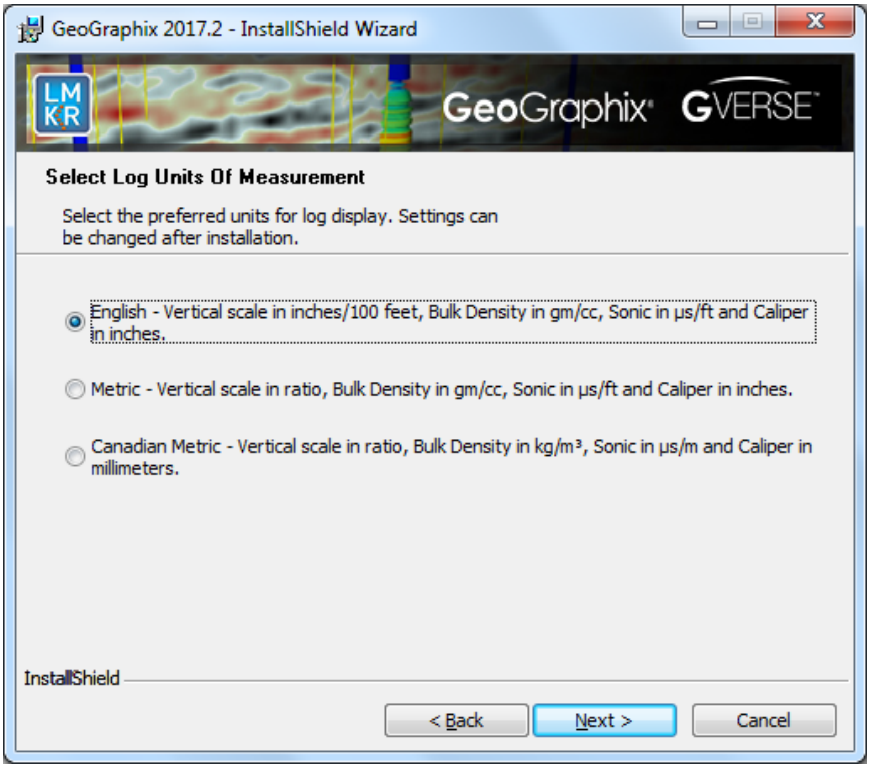
Clicking the **Change** command button will open a **Change Current Destination Folder** dialog box where you can change the application destination folder.

Note: The Local Projects Path\Folder must be a local hard drive.

After installation is complete (as the text in the dialog box indicates), projects on the Discovery Project Server can be organized in Homes using ProjectExplorer >> File >> New >> Home. More information regarding network projects can be found in the ProjectExplorer Help files.
Click **Next** to proceed to the **Log Units of Measurement** step of the wizard.

Discovery Project Server - STEP 9 - Log Units of Measurement

This step of the wizard determines which default log units will be setup for PRIZM and XSection.

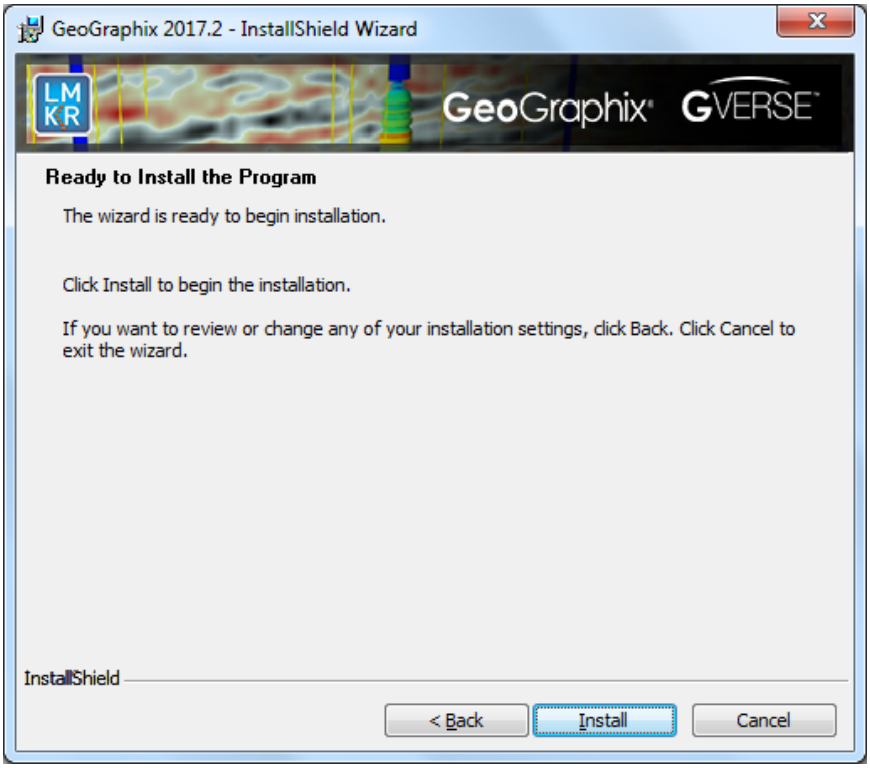


Note: The units can be changed in PRIZM and XSection after installation.

Select the appropriate **Units** option and click **Next** to proceed to the **Ready to Install the Program** step of the wizard.

Discovery Project Server - STEP 10 - Ready to Install the Program

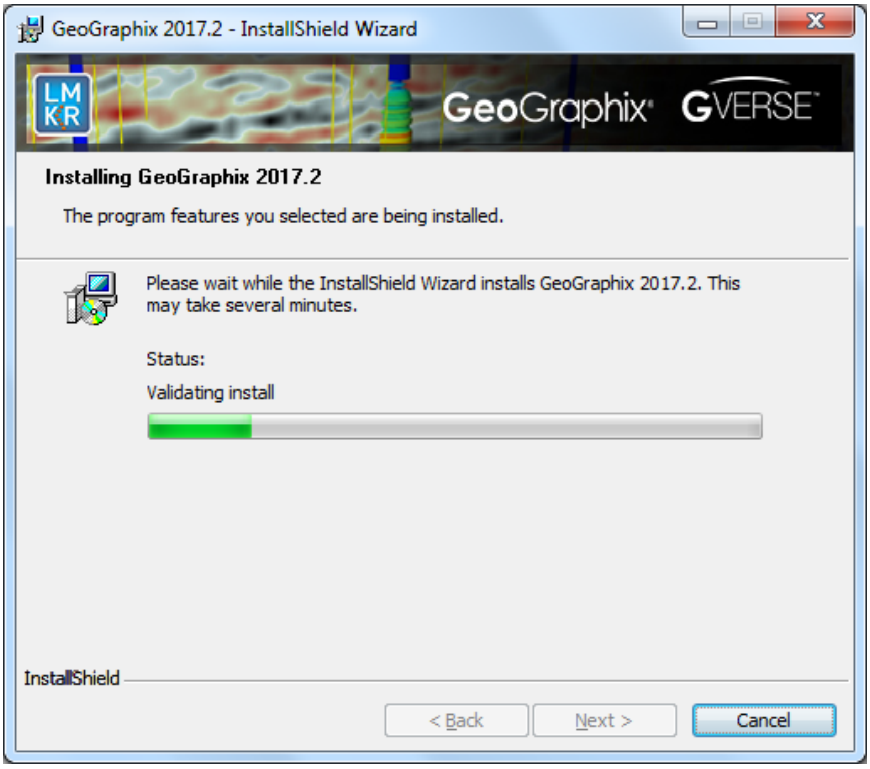
This is the second to last step of the wizard.



Click **Install** to copy files and begin installing the Discovery software, or click **Back** to review and make any changes as necessary.

Discovery Project Server - STEP 11 - InstallShield Wizard Completed (FINAL STEP)

After the **Install** button is clicked in the Ready to Install the Program step, files are installed to the workstation.



When the installation is finished, the InstallShield Wizard Completed dialog box appears:

Click **Finish** to exit the installation.

Discovery can now be started through the desktop shortcuts or the Start menu.

Note: The Discovery Project Server must now be configured to connect to the LMKR Licensing Management Tool. When the Discovery application is started through desktop shortcuts or the Start menu, a licensing check is performed on computer. Please refer to LMKR Licensing Management Tool for further details.

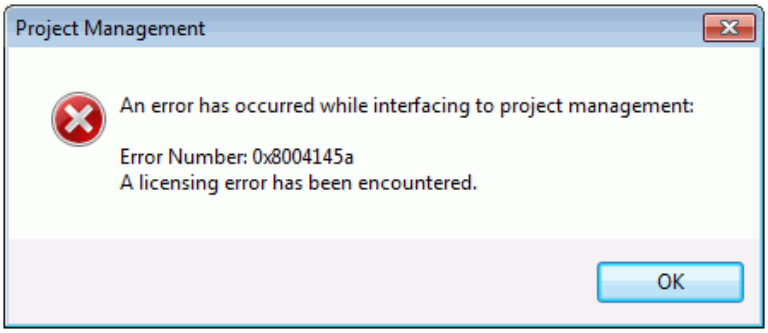
This is the final step in creating a Discovery Project Server. If necessary, other components in a Network Administrator Installation (such as Workstation Installations) may now be installed.

LMKR Licensing

Users upgrading from GeoGraphix 2017.1 to GeoGraphix 2017.2 do not require a new license. New users or users upgrading from other versions of GeoGraphix need a valid LMKR license.

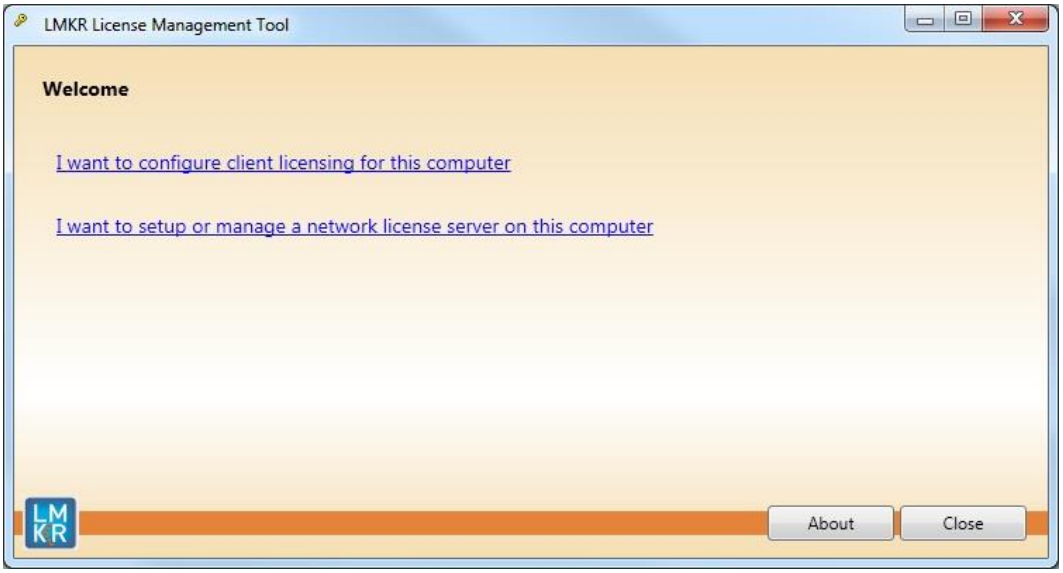
LMKR License Management Tool

If no license file is configured for Discovery the following message appears:



All of the licensing of Discovery products is configured using this tool. Use this tool to set a license for a single computer or to set up a network license on a server.

Once the LMKR License Management Tool is accessed, launch it by selecting **Start** >> **All Programs** >> **LMKR** >> **Licensing** >> **License Management Tool**.

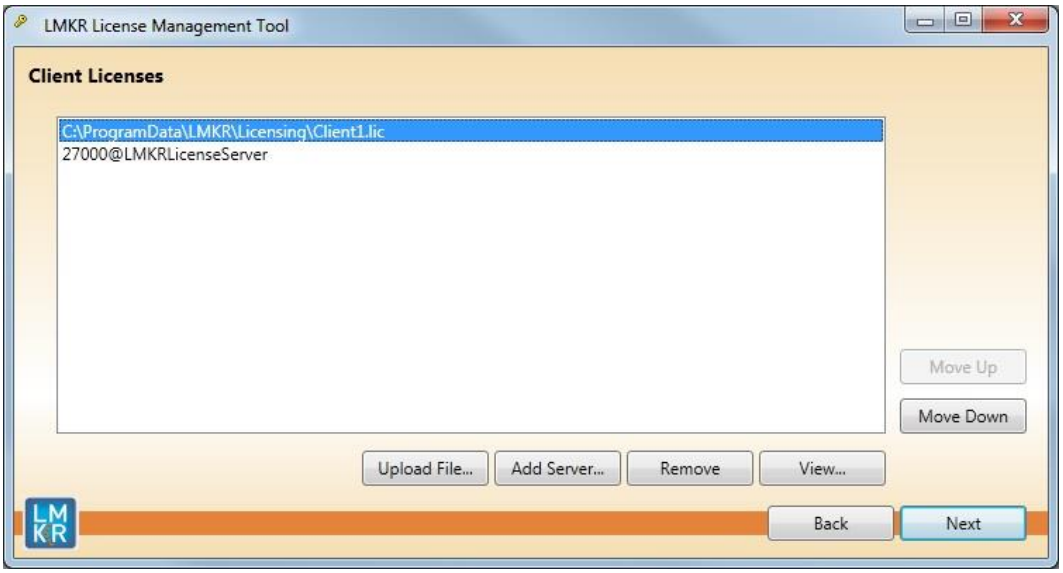


You can access a client license for a computer by clicking the **I want to configure client licensing for this computer** command on the Welcome Page.

You can set up a network license by clicking the **I want to setup or manage a network license server on this computer** command on the Welcome Page.

Client License

Setup a client License by clicking the **I want to configure client licensing for this computer** option on the Welcome page of the LMKR License Management Tool.



Use this page to select a client license for installation from your local computer or from a server. Use the buttons at the bottom and the right-hand side of the window to add servers to the list, remove servers from the list, or move the servers up or down the list. The LMKR License Management Tool will look for license files on each server in order, from top to bottom.

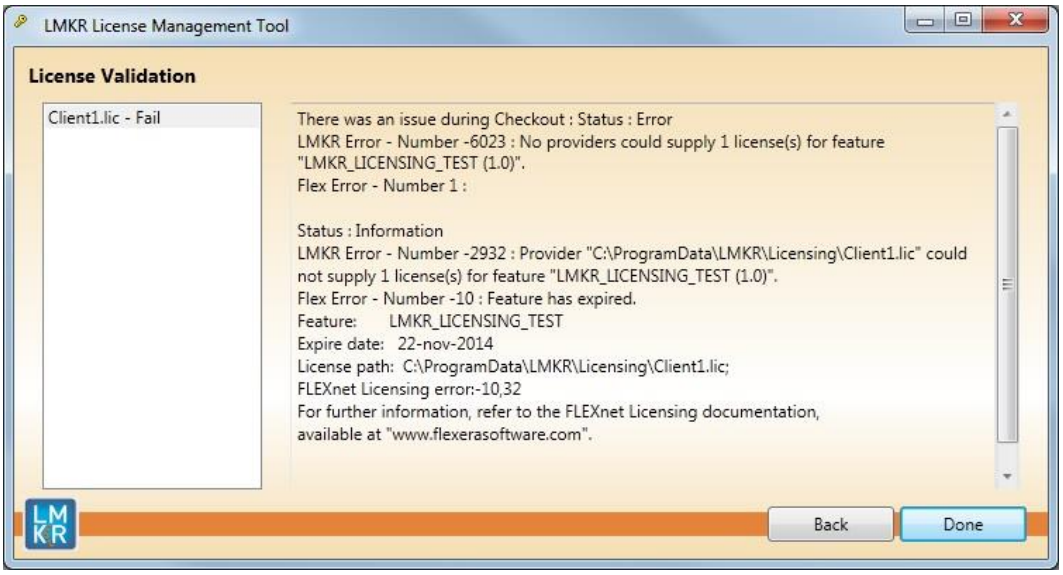
Click the **Upload File** button to begin the search for a license file locally.

Click the **Add Server** button to point to a client license on a server.

If you want to select a license file from a specific server, highlight that server in the list and click the **Upload File** button.

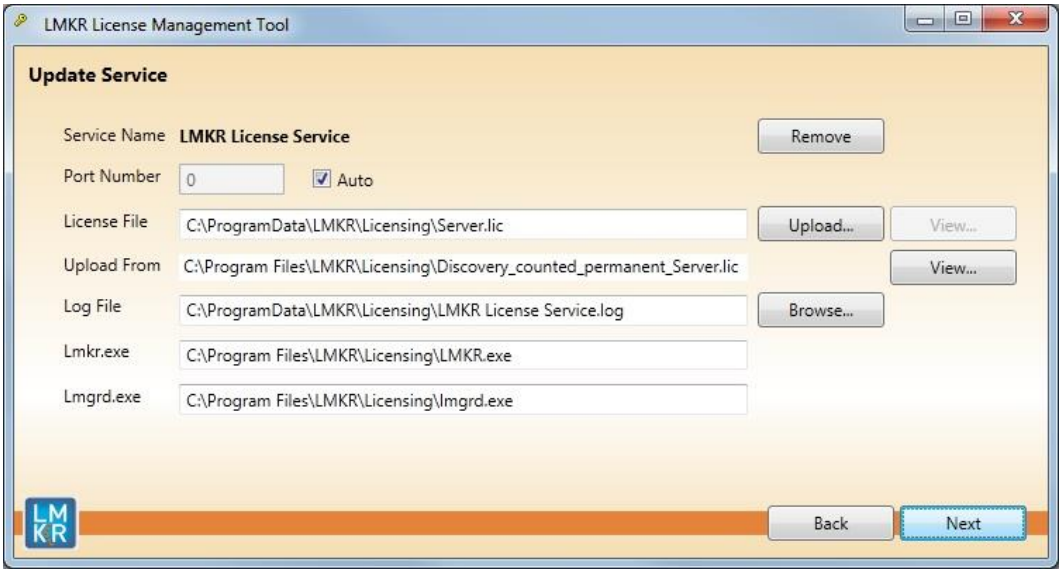
Click the **Next** button to view the validation of the license.

When license has been configured properly, the **License Validation** page will confirm that the license **Passed**. If the license is not valid or if the network connection is not functioning properly, the validation page will list the license as **Failed** (as shown below).



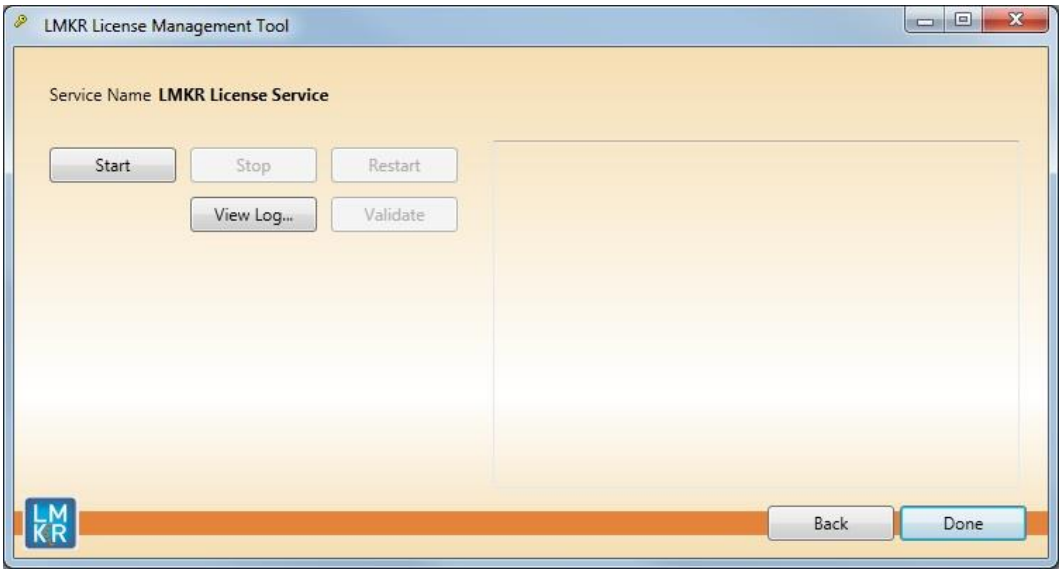
Network License

You can configure a Network license by clicking the **I want to setup or manage a network license server on this computer** command on the Welcome page of the LMKR License Management Tool.



The **Update Service** page will appear showing the location of the license server. This page lists the location of where a license server is installed on the local computer.

Click the **Next** button to access the **Service Name** page where you can Start, Stop, Validate, or View the debug log.



Landmark Connectivity Installation

Installing Landmark Connectivity will install the following Discovery applications/features:

- WellXchange
- GridXchange
- SeisXchange

Landmark Connectivity will be installed by default with the Discovery Typical setup type installation or can be custom installed by selecting the Landmark Connectivity feature in the Discovery Custom setup type of the installation.

Caution:
To run SeisXchange, and GridXchange, Landmark OpenWorks for Windows **5000.10.3.02 and** its associated software components must also be installed. In addition, if you are utilizing SeisXchange, an NFS application such as Hummingbird® NFS Maestro must also be installed and the configuration of several components to access SeisWorks will be necessary. (This does not apply to WellXchange-OpenWorks Connect or GridXchange.) Please refer to Preparing the SeisXchange Environment for further information if you will be utilizing SeisXchange and Geophysics on OpenWorks.

Go to: OpenWorks for Windows

Go to: Preparing the SeisXchange Environment

Return to: Installation

OpenWorks for Windows

Note: Discovery on OpenWorks projects, GridXchange, and SeisXchange require OpenWorks for Windows.

Please refer to the OpenWorks Installation Procedures for detailed, step-by-step instructions for installing OpenWorks for Windows. This document discusses installing all the software components associated with OpenWorks for Windows:

Note: The OpenWorks full install requires Hummingbird Exceed. The Oracle client installation in use with OpenWorks Full requires that the "Administrator" option be selected. The "Administrator" option type includes the SQL Plus, the Oracle Database Utilities, and other components necessary to run Discovery on OpenWorks

Note: Hummingbird exceed is not required for the OpenWorks Basic install. If OpenWorks Basic installation is used, the Oracle client installation can use the "Administrator" option, which will include all of the needed components. Or, the Oracle client installation for the OpenWorks Basic installation can use the "Custom" installation type. However, with the Custom install type the following components must be installed:

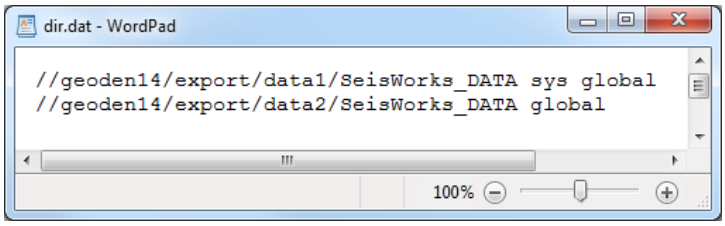
- Oracle Database Utilities 10.2.0.1.0, or Oracle client 11.2.0.4
- SQL *Plus 10.2.0.1.0, or Oracle client 11.2.0.4
- Oracle JDBC/THIN Interfaces 10.2.0.1.0, or Oracle client 11.2.0.4
- Oracle Net 10.2.0.1.0, or Oracle client 11.2.0.4

After these Oracle components are installed, run the upgrade patch to Oracle 10g 10.2.0.4 (32- bit).

Preparing the SeisXchange Environment

Once OpenWorks for Windows along with Discovery are in place, the installation and configuration of an NFS application, along with configuration of the dir.dat file to access SeisWorks, will be necessary if SeisXchange or Geophysics on OpenWorks will be utilized:

1. Install and configure the NFS application as necessary.
2. Export the required UNIX® /LINUX® SeisWorks file systems for NFS.
3. Verify that all the required NFS daemons are running on the UNIX® /LINUX® computer.
4. Configure the Windows® environment variable OW_CONF_DIR (which defaults to $OWHOME/conf where the district.dat file is located), which will point to the location of the dir.dat file associated with the district.
5. Configure the dir.dat (example shown below) to find exported SeisWorks file systems.



Utilities

You can install the Discovery 2017.2 Utilities from the download section of the Discovery 2017.2 Software from the **LMKR Support Portal - Downloads** page or from the Discovery 2017.2 Release DVD.

If you have downloaded Discovery 2017.2 from LMKR, see the **GeoGraphix Discovery 2017.2 Utilities Read Me** to install the Utilities. Click on the **Install Guide** button  to open the **GeoGraphix Discovery 2017.2 Utilities Read Me** file.

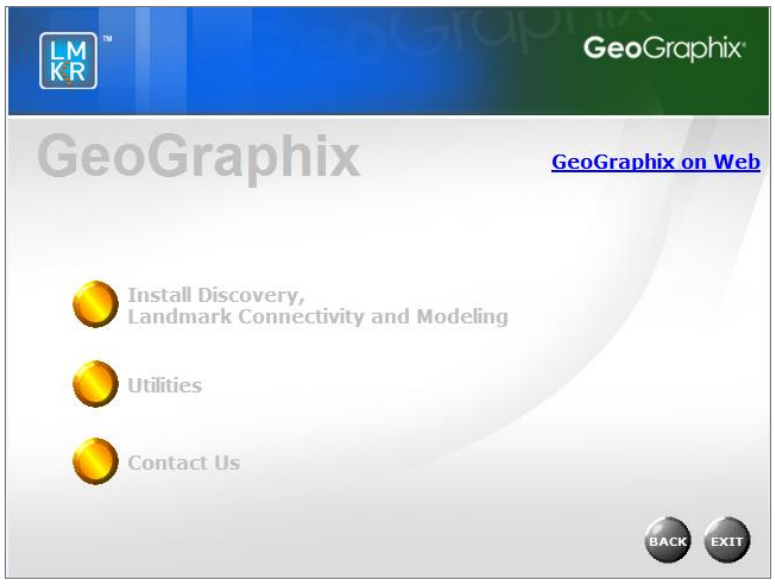
If you have downloaded Discovery 2017.2 from the LMKR website, go to the **download folder** (for XP 64-bit Operating Systems), or the folder you specified to save the Utilities folder during the download, and double-click on the specific Utility executable file to begin.

If you have ordered the **Discovery 2017.2 DVD**, continue through this step.

Insert the **Discovery/Landmark Connectivity/Seismic Modeling DVD-ROM** into the DVD-Drive.
If you have ordered the Discovery 2017.2 DVD insert the Discovery/Landmark Connectivity/Seismic Modeling DVD-ROM into the DVD-Drive.
The GeoGraphix splash screen appears for a few seconds.

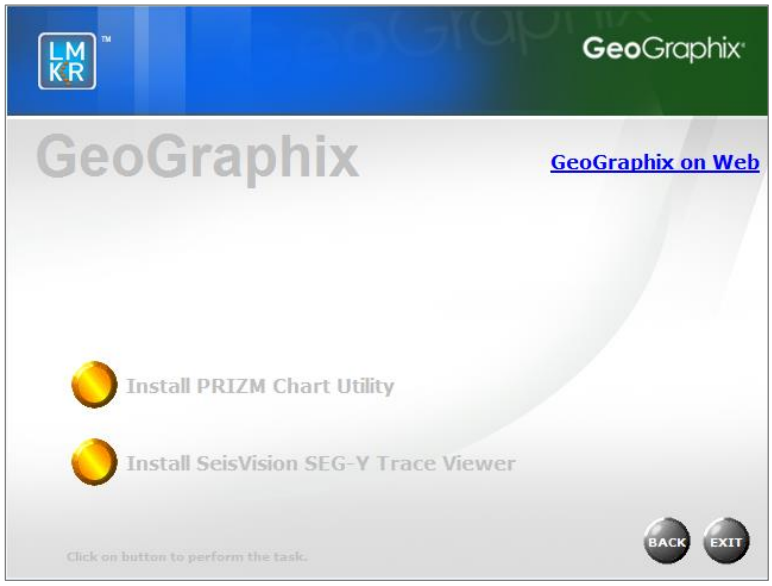
Note: If the GeoGraphix splash screen does not appear automatically, go to the Start menu, and choose **Run**. In the Run dialog box, browse to the appropriate DVD-ROM drive and select the **Install.exe** file. Click **OK**.

After the Splash Screen appears for a few seconds, the Install Options window appears.



Click the second option 

.The Utilities screen appears.



There are two utilities available on the Utilities screen:

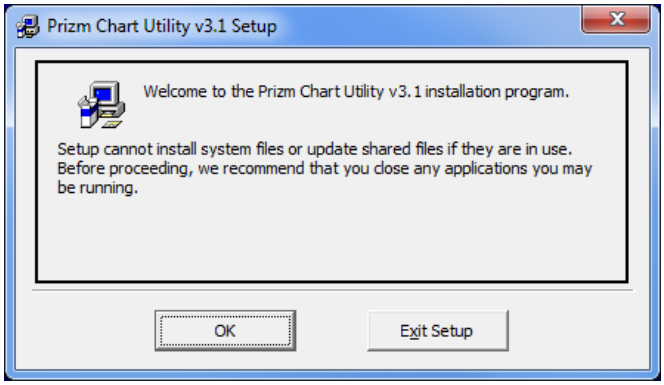
- Install PRIZM Chart Utility
- Install SeisVision SEG-Y Trace Viewer

Utilities - Install PRIZM Chart Utility

If you have downloaded the Discovery 2017.2 Utilities and used the default settings, the PRIZM Chart Utility folder will be in the **C:\Program Files (x86)\GeoGraphix\Utilities** folder (for a typical download on a **Windows®** (64-bit) operating systems). If you have not used the default settings during the download, navigate to the folder specified for saving the Utilities. Clicking **Setup.exe** in the **Prizm Chart Utility** folder will open the Prizm Chart Utility dialog box.

If you have the Discovery 2017.2 DVD, insert the DVD into the DVD drive and select the **Install PRIZM Chart Utility** option 

on the Utilities screen of the Discovery install screen or the release DVD to launch the PRIZM Chart Utility Setup program.

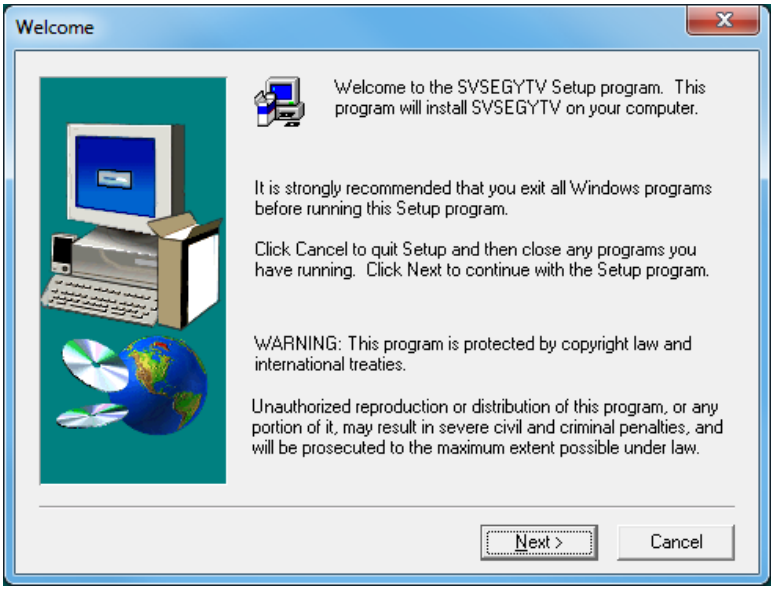


Utilities - Install SeisVision SEG-Y Trace Viewer

If you have downloaded the Discovery 2017.2 Utilities and used the default settings, the SeisVision SEG-Y Tracer View Utility folder will be in the **C:\Program Files (x86)\GeoGraphix\Utilities** folder (for a typical download on a **Windows®** (64-bit) operating systems). If you have not used the default settings during the download, navigate to the folder specified for saving the Utilities. Clicking **Setup.exe** in the utility folder will open the Welcome dialog box.

If you have the Discovery 2017.2 DVD, insert the DVD into the DVD drive and select the **Install SeisVision SEG-Y Trace Viewe**r option 

on the Utilities screen of the Discovery install screen or the release DVD to launch the SeisVision SEG-Y Trace Viewer Setup program.



Uninstalling Discovery 2017.2

Similar to uninstalling other Windows® applications, Discovery 2017.2 can be removed from a computer using **Add/Remove Programs** in the Control Panel.

There are 3 simple steps to removing Discovery 2017.2:

Note: All Discovery applications should be closed or exited before completing the following steps.

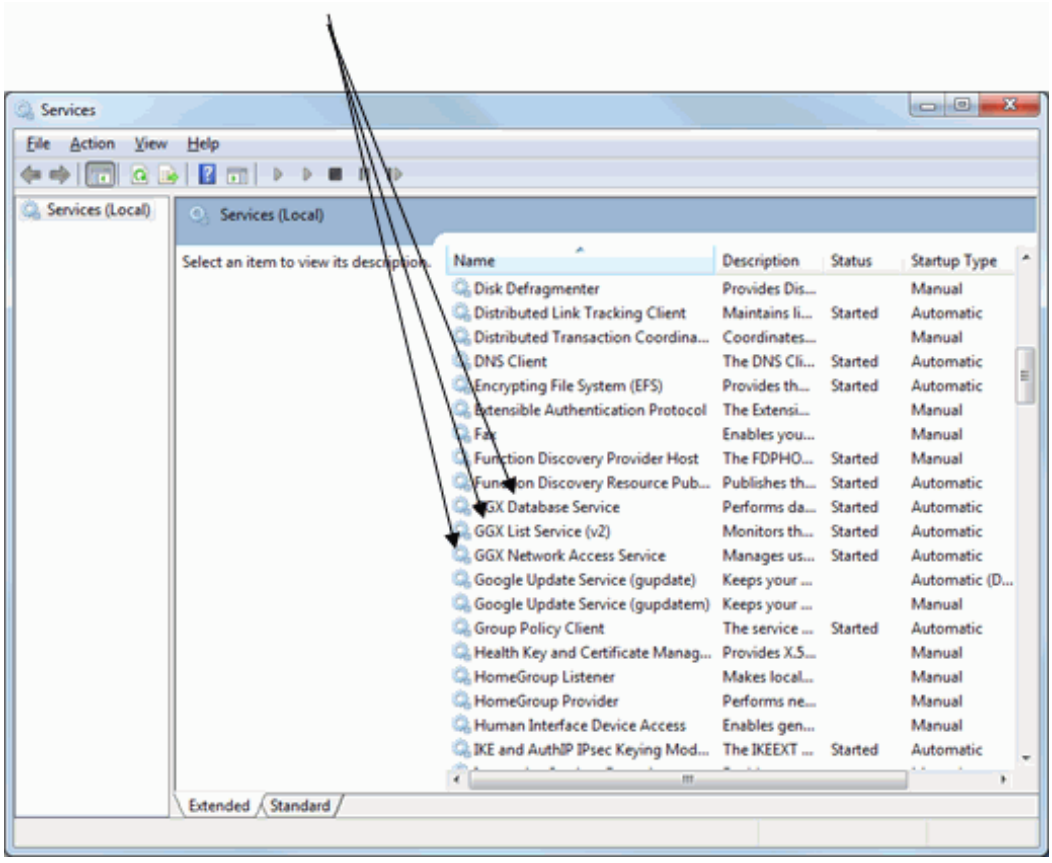
- STEP 1 - Stopping GeoGraphix Services in Control Panel Services
- STEP 2 - Getting Started with Add/Remove Programs in Control Panel
- STEP 3 - Removing Discovery Software

STEP 1 - Stopping GeoGraphix Services in Control Panel Services

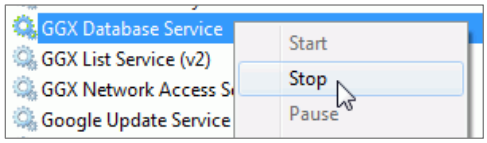
From the Windows® Taskbar, use **Start** >> **Control Panel** >> **Administrative Tools** >> **Services** to open the Services applet window.

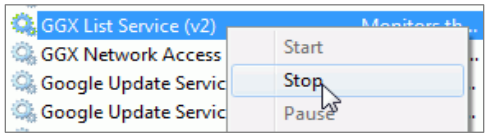
There are three GeoGraphix Services that should be stopped before removing GeoGraphix software:

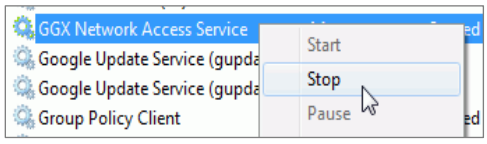
- GGX Database Service
- GGX List Service (v2)
- GGX Network Access Service



If a Service is not stopped, highlight the Service, then right-click and choose **Stop** to stop the Service. All 3 Services should be stopped:







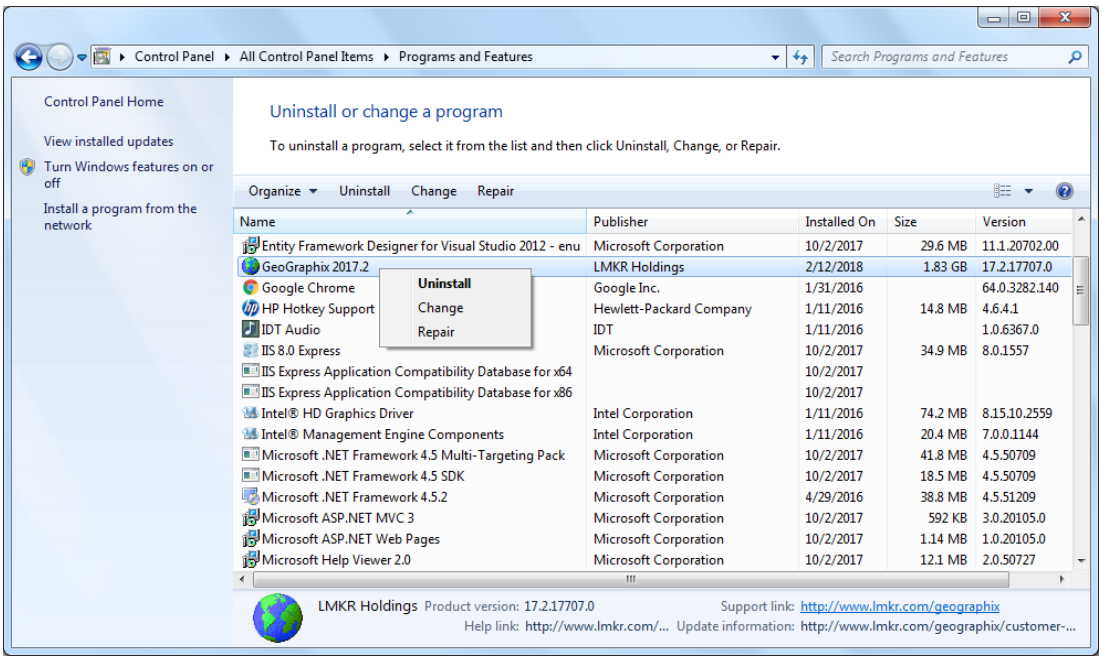
Note: It is recommended that the above GeoGraphix Services are stopped before removing Discovery software, but if the Services are not stopped, the Discovery Uninstall program will stop the Services during the uninstall/removal process.

STEP 2 - Getting Started with Programs and Features in Control Panel

To start the uninstall/removal of the Discovery software, open the Programs and Features applet using **Start** >> **Control Panel** >> **Programs and Features**.

Note: If the Control Panel is set to View by: Category (rather than View by: Large icons or View by: Small icons), select Programs >> Uninstall a program.

In the Programs and Features window, **highlight** Discovery 2017.2. Right-click and select **Uninstall** to remove Discovery or select the Change or Repair buttons to modify or repair a Discovery install.



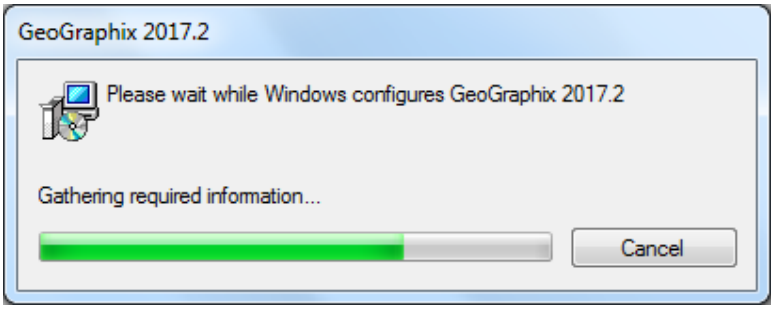
Note: The **Change** button (or right-click option) can be used to modify or repair Discovery installations. **Repair** will re-install the Discovery software repairing any files or registry entries that may be missing or damaged.

To uninstall GVERSE Geomodeling, refer to the GVERSE Geomodeling Installation Guide.

Click the **Remove** button to proceed to the next step of removing/uninstalling the Discovery software.

STEP 3 - Removing Discovery Software (FINAL STEP)

After highlighting Discovery 2017.2 and clicking the **Uninstall** command in the Programs and Features window, a progress bar will appear and Discovery will be removed from the computer.



Note: Some data and project file directories may be left on the hard drive. These directories are typically the following (may be different if software was installed without default directory locations):

- C:\Documents and Settings\All Users\Application Data\GeoGraphix
- C:\Program Files\GeoGraphix

This is the last step in uninstalling/removing the Discovery software from your computer.

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 Support Portal	http://support.lmkr.com