

Geomagic Product Activation Details

(December, 2007; Document Version C)

These instructions apply to the following Geomagic software products:

- Geomagic Qualify 10 and all subsequent releases
- Geomagic Studio 10 and all subsequent releases

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- [Installing a Geomagic Product](#) – Run Setup.exe or put the CD in the CD-ROM reader and follow the instructions. Regardless of the licensing scheme (Local with Ethernet, Local with USB Dongle, or Networked), let the *License Wizard* obtain a license from the License Server on your network or from Geomagic, Inc. via the Internet.
 - [Obtaining a Local License File When the License Wizard has Failed](#) – Fill in a form, receive the license by email, and install it by hand.

Licensing Concepts

As depicted in the *Geomagic Product Activation Guide*, all Geomagic products operate by one of three licensing schemes:

- **Local (Node-Locked) License with Ethernet** - The unique hardware ID of the computer's Ethernet card is encoded into a local license file (named **geowatch.dat**), so the Geomagic application will only run on one computer. This license is not portable. The license file will be downloaded into the PC from Geomagic, Inc. when the product is run for the first time (or emailed to you if necessary).
- **Local (Node-Locked) License with USB Dongle** - The license file (**geowatch.dat**) authorizes a specific product to operate on any one of several computers -- the one to which a USB dongle is currently attached. The license file will be downloaded into each PC from Geomagic, Inc. when the product is run for the first time (or emailed to you if necessary), and the USB dongle is shipped with the software by Geomagic or a distributor.
- **Networked License** - The network administrator installs license server software (FlexLM V8.1a or higher) on any computer in the local network. The Geomagic product can be installed on multiple computers, and each instance is configured to look for the license server. The license server contains a license file (**geowatch.dat**) file which authorizes a specific number of simultaneous executions of the product. Basic instructions for installing FlexLM are contained in this document. For advanced information on FlexLM, see the GlobeTrotter Software manual that is distributed on the Geomagic product CD.

For technical support on licensing issues, contact support@geomagic.com or USA (919) 474-3036. Be sure to have your Entitlement Number available for all inquiries.

Installing a Geomagic License Server to Enable Geomagic Applications with a Floating License

Procedures for Windows

Installing the Windows-Based Geomagic License Server

1. Install the Geomagic License Wizard from the product CD.
2. Run the Geomagic License Wizard by clicking START | All Programs | Geomagic | Geomagic License Server | Geomagic License Server.

The Wizard will obtain a floating license from Geomagic via the Internet, but if it does not, use the next procedure.

Obtaining a Network License When the Geomagic License Wizard has Failed

Only if the Geomagic License Wizard could not establish internet access or failed for some other reason, use this procedure to apply for a Network License. You will supply information to Geomagic on a web form, and receive a license file (**geowatch.dat**) file for installation on the Geomagic License Server.

1. Obtain your entitlement number, printed on the paperwork from Geomagic or a distributor.
2. Write down the Windows version number.
3. Ask the Administrator to run the LMTOOLS utility on the license server. Record the following information:
 - Computer Name of the license server,
 - IP port number of the license server.

4. Write down the email address where you wish to receive the license file (**geowatch.dat**) from Geomagic.
5. Write down the mail address where Geomagic can communicate with you.
6. (With Internet access and Microsoft Internet Explorer 6.0 or higher) go to <http://www.geomagic.com/support/license.req/>
7. Enter the recorded information and click **Send Request**.
8. Within one business day, receive a license file (**geowatch.dat**) by email and store it in a safe place. Go to the next procedure.

Installing a Network License When the Geomagic License Wizard has Failed

Only when a license file (**geowatch.dat**) has been received by email, use this procedure to install it on a Windows-based Geomagic License Server.

1. Verify that the Geomagic License Wizard installed the FlexLM service.
2. Copy **geowatch.dat** to the directory where the FlexLM server software is installed, typically C:\Program Files\Geomagic\Geomagic License Server.

Starting the Geomagic License Server

1. Click START | All Programs | Geomagic | Geomagic License Server | Imtools.
2. Click the **Service/License File** tab, and the **Configuration Using Services** radio button.
3. Highlight **Geomagic License Server** in the list.
4. Click the **Config Services** tab.
5. Verify that the **Start Server at Power Up** and **Use Service** checkboxes are checked.
6. Click **Save Service**, then **Yes**.
7. Click the **Start/Stop/Reread** tab and **Start Server**.
8. Click **ReRead License File**.
9. Click the upper right-hand **X** to close the window.
10. The Windows-Based FlexLM License Server is ready to be accessed by clients with Geomagic applications.
11. Start the Geomagic application on the client. Assuming that the user has configured the application for Floating Licensing, the application will find the license server on the local network. Or, the application will prompt the user for the computername and port number of the Geomagic License Server, such as **MyGeomagicLicenseServer.MyCompany.com** and **27000**.

Stopping the Geomagic License Server

Perform this step only if necessary.

1. Click START | Settings | Control Panel | Administrative Tools | Services, then right-click the Raindrop Geomagic service and select Stop.

Uninstalling the Geomagic License Server

CAUTION: Before continuing, create a backup copy of the license file (geowatch.dat). It typically resides at C:\Program Files\Geomagic\Geomagic License Server. Also, verify that other applications do not rely on the version of FlexLM that you are uninstalling.

1. Use Add/Remove Programs (at Start | Settings | Control Panel | Add/Remove Programs) to remove the Geomagic License Server.

Miscellaneous Procedures for Windows

Upgrading the Windows-Based Geomagic License Server

The Geomagic License Server uses the FlexLM license server version 8.1a. Use this procedure if your site has an older FlexLM license server.

CAUTION: Before continuing, create a backup copy of the license file (**geowatch.dat**). It typically resides at C:\Program Files\Geomagic\Geomagic License Server.

1. Stop the Geomagic License Server
 - a. Click **START | Settings | Control Panel | Administrative Tools | Services**, then right-click the Geomagic service and select **Stop**.
2. Uninstall the Old Geomagic License Server

CAUTION: Before continuing, verify that other applications do not rely on the version of FlexLM that you are uninstalling.

 - a. Go to the directory in which your geowatch.dat file is installed (such as C:\Program Files\Geomagic\FlexlmServer).
 - b. **CAUTION:** Do not skip this step. Copy **geowatch.dat** to a safe place on the hard drive. You will re-use it.
 - c. Click **START | Settings | Control Panel | Add/Remove Programs**.
 - d. Scroll through the list to FlexLM Server.
 - e. Click **Add/Remove**.
 - f. Click **Yes** to confirm your intention to remove the FlexLM Server.
 - g. When completed, click **OK**.
 - h. Go to the C:\Program Files\Geomagic\flexlmserver and delete all the files that may have remained after the uninstall, except **geowatch.dat**.
3. Obtain the HostID and Name of the Geomagic License Server
 - a. Go to **Start/Programs/Geomagic/FlexLM/FLEXinfo**.
 - b. Give the Host ID, computer name and entitlement number to our licensing department. (Apply by web: <http://www.geomagic.com/support>). They in turn will send you a license file (**geowatch.dat**) as an attachment. Store it in a safe place.
4. Merge the New and Original License Files
 - a. Back up the original license file (geowatch.dat or a .lic file) and the new license (**geowatch.dat**) file.
 - b. Begin adding the contents from the *new geowatch.dat* file to the *original* license file by opening Notepad with word-wrap turned off.
 - c. Open the **NEW geowatch.dat** file.
 - d. Copy all the INCREMENT lines beginning with, and including, the word **INCREMENT**. Be careful to only copy the text from the first word INCREMENT to the end of the file.)
 - e. Now open the *original geowatch.dat* or other license file in Notepad.
 - f. Paste all the INCREMENT lines from the *new geowatch.dat* to the very end of the *original* file. The new INCREMENT lines should each appear on separate lines. The modified license file should now look just like the original, except that there should now be new INCREMENT lines at the end of the file.
 - g. Save the new file as **geowatch.dat**.
 - h. Copy the newly merged **geowatch.dat** file that you created to a safe place.
5. Start the Geomagic License Server
 - a. Copy the newly merged **geowatch.dat** file to C:\Program Files\Geomagic\FlexLMServer (or customized location). Click **OK** to overwrite the old version.
 - b. Click **Start | Programs | Geomagic | FlexLM | Imtools**.
 - c. Select the **Service/License File** tab and choose **Configuration Using Services**.

- d. Highlight **Geomagic** as a service.
- e. Select the **Configure Services** tab.
- f. Verify that **Starts Server at Power Up** and **Use Service** are checked.
- g. Choose **Save Service**.
- h. Select the **Start/Stop/Reread** tab and choose **Start Server**.
- i. Select **Reread License File**.
- j. Click the upper right-hand "X" to close the window.
- k. Verify that the product is installed and licensed on the client computer.

Stopping the Windows-Based Geomagic License Server

Perform this step only if necessary.

1. Click **START | Settings | Control Panel | Administrative Tools | Services**, then right-click the Raindrop Geomagic service and select **Stop**.

Uninstalling the Windows-Based Geomagic License Server

CAUTION: Before continuing, create a backup copy of the license file (geowatch.dat). It typically resides at C:\Program Files\Geomagic\FlexLMServer. Also, verify that other applications do not rely on the version of FlexLM that you are uninstalling.

1. Go to the directory in which your **geowatch.dat** file is installed (such as C:\Program Files\Geomagic\Flexlmserver).
2. **CAUTION:** Do not skip this step. Copy **geowatch.dat** to a safe place on the hard drive. You will re-use it.
3. Click **Start | Settings | Control Panel | Add/Remove Programs**.
4. Scroll down to **Geowatch Server 8.1a**.
5. Click **Remove**.
6. To confirm your intention, click **Yes**.
7. Click the upper right-hand **X** to close the window.
8. Go to the C:\Program Files\Geomagic\Flexlmserver and delete all the files.

Procedures for UNIX

Installing the UNIX-Based Geomagic License Server

Geomagic products with floating licenses require FlexLM 8.1a to be installed. If your site uses FlexLM for other applications, check with the application vendor to verify compatibility with FlexLM 8.1a.

Installing FlexLM 8.1a from Geomagic Product CD

1. Log in as the root user and open a window.
2. Pick an install location for FlexLM software and utilities, such as **/opt/flexlm**.
3. Create all the following directories by typing:

```
mkdir /opt/flexlm
mkdir /opt/flexlm/bin
mkdir /opt/flexlm/etc
mkdir /opt/flexlm/log
```
4. Copy all files from the appropriate location on the CD-ROM of the Geomagic product (such as IRIX from cdrom directory /flexlm/Irix) into /opt/flexlm/bin.
5. Change to the /opt/flexlm/bin directory.

6. Edit **ONLY** the following lines in the `lmgrd.server` shell script to reflect your specific site installation. The file may be read-only.

```
RUNAS=nobody
LMGRD=/opt/flexlm/bin/lmgrd
LMDOWN=/opt/flexlm/bin/lmdown
DEBUGFILE=/opt/flexlm/log/flexlm.log
LM_LICENSE_FILE=/opt/flexlm/etc/geowatch.dat
```

7. Save `lmgrd.server` file.

Obtaining Host ID and Name of FlexLM Server

1. To obtain a Host ID, type:

```
cd /opt/flexlm/bin
lmutil lmhostid
```
2. Make a note of the MAC address of the Ethernet card.
3. Use the `hostname` command and note the hosts name.
4. Obtain your entitlement number.
5. Write down the mail and email address where Geomagic can communicate with you.
6. (With Internet access and Microsoft Internet Explorer 6.0 or higher,) go to <http://www.geomagic.com/support/license.req/>
7. Enter the recorded information and click Send Request.
8. Within 24 hours, receive the license file (**geowatch.dat**) by email and store it in a safe place.

Obtaining a Floating License for the UNIX-Based License Server

The UNIX-based Geomagic License Server is not designed to obtain a Floating License from Geomagic, Inc. via the Internet, so use this procedure to apply for a Floating License manually. You will supply information to Geomagic on a web form, and receive a license file (**geowatch.dat**) file for installation on the Geomagic License Server.

1. Obtain your entitlement number, printed on the paperwork from Geomagic or a distributor.
2. Write down the Windows version number.
3. Ask the Administrator to run the `LMTOOLS` utility on the license server. Record the following information:
4. Computer Name of the license server,
5. IP port number of the license server.
6. Write down the email address where you wish to receive the license file (**geowatch.dat**) from Geomagic.
7. Write down the mail address where Geomagic can communicate with you.
8. (With Internet access and Microsoft Internet Explorer 6.0 or higher) go to <http://www.geomagic.com/support/license.req/>
9. Enter the recorded information and click **Send Request**.
10. Within one business day, receive a license file (**geowatch.dat**) by email and store it in a safe place. Go to the next procedure.

Installing a Floating License and Starting the FlexLM 8.1a server

1. Copy the license file (geowatch.dat, received by email) to /opt/flexlm/etc.
2. To make the FlexLM server run every time the system reboots, copy the modified lmgrd.server file from the install directory to /etc/init.d, then type:

```
chmod 744 /etc/init.d/lmgrd.server
chown root /etc/init.d/lmgrd.server
chgrp sys /etc/init.d/lmgrd.server
ln -s /etc/init.d/lmgrd.server /etc/rc2.d/ S95lmgrd
```

3. To start the license server without rebooting, type:

```
/etc/init.d/lmgrd.server start
```
4. To check the server's status, type `lmutil lmstat`.
5. Verify that the Geomagic product is installed and licensed on the client computer.

Miscellaneous Procedures for UNIX*Upgrading a UNIX-Based Geomagic License Server*

Geomagic products with floating licenses require FlexLM 8.1a to be installed. If your site uses FlexLM for other applications, check with the application vendor to verify compatibility with FlexLM 8.1a.

CAUTION: Before continuing, create a backup copy of geowatch.dat. It typically resides at C:\Program Files\Geomagic\FlexLMServer\geowatch.dat

Merge the New geowatch.dat with the Original License File

1. Back up the original license file (**geowatch.dat** or a non-Geomagic .lic file) and the new license (**geowatch.dat**) files.
 - a. Begin adding the contents from the new geowatch.dat file to the original geowatch.dat by copying the new geowatch.dat file to the /tmp directory.

```
cat /tmp/geowatch.dat >> /opt/flexlm/etc/geowatch.dat
```
 - b. Open the new modified geowatch.dat file.
 - c. Delete the comment (#) lines from the bottom half of the file. Keep the ones on the top.
 - d. Delete the Server and Vender lines that are repeated at the bottom of the file.
 - e. The modified geowatch.dat should now look just like the original, except there should now be new INCREMENT lines added to the end of the file.
 - f. Save the new file as geowatch.dat.
 - g. Copy the newly merged geowatch.dat file that you created to a place for safekeeping.

Restart the FlexLM 8.1a Server

2. Start the server.
 - h. At the prompt, type:

```
/etc/init.d/lmgrd.server start
```
 - i. Version 8.1a FlexLM server will start. The Windows-Based FlexLM License Server is ready to be accessed by clients with Geomagic applications.

Installing a Geomagic Product

Regardless of the licensing scheme that will be used, follow these steps to install or re-install a Geomagic product to a personal computer.

1. Terminate all other applications including anti-virus and firewall software.
2. Run **Setup.exe**, or insert the Geomagic CD into the CD-ROM drive. If the installation does not start automatically, open Windows Explorer, navigate to the CD-ROM directory, and double-click the **D:\Autorun\Auto-G.exe** file.
3. Click **Install Program Name**.
4. On the InstallShield Wizard window, click **Next**.
5. If you agree to the license terms, click **Accept**, then click **Next**.
6. Choose **Custom Setup** and click **Next**.
7. On the Custom Setup window, choose the installation directory for the new software, or accept the default. Click **Next**.
8. Click **Install**.
9. Click **Finish**.
10. If the Geomagic installation window is still open, click **Exit**.
11. Verify that you have an Entitlement Number for the Geomagic product. (When upgrading a node-locked license, the previous Entitlement Number is sufficient.)
12. If you plan to use a floating license, a network license server must be operational before you continue. If necessary, go to *Applying for a Floating License*.
13. Re-start other applications such as anti-virus and firewall software.
14. Start the Geomagic product. Assuming this is the first time this Geomagic application has been launched on this computer, the License Wizard starts automatically.
 - **For a Node-Locked License**, the Wizard prompts you for information and attempts to download a license file from Geomagic, Inc. via the internet. If the Wizard succeeds, the Geomagic product starts. If the Wizard cannot establish internet access, it presents a summary of information that must be used in the next step. Go to [Obtaining a Local License When the License Wizard has Failed](#).
 - **For a Floating License**, the installer prompts you for information and configures this application to seek authorization from the Geomagic License Server. (The administrator must have completed the steps at [Installing a Geomagic License Server to Enable Geomagic Applications with a Floating License](#).)

Obtaining a Local License File When the License Wizard has Failed

Only if the License Wizard could not establish internet access or failed for some other reason, use this procedure to apply for a Local License File (for use with or without a USB dongle). You will supply information to Geomagic on a web form, and receive a license file (**geowatch.dat**) file and additional instructions by email.

1. Obtain the summary of information that was generated by the License Wizard.
2. Write down the email address where you wish to receive the license file (geowatch.dat) from Geomagic.
3. Write down the mail address where Geomagic can communicate with you.
4. (With Internet access and Microsoft Internet Explorer 6.0 or higher) go to <http://www.geomagic.com/support/license.req/>
5. Enter the recorded information and click Send Request.
6. Within one business day, receive the license file by email, store it in a safe place, and install it according to instructions that are included in the email.