2.3 PerGeos License Manager

2.3.1 Contents

- About PerGeos licensing management
  - Node-locked versus floating licenses
  - Time-limited versus perpetual licenses
- License manager actions
  - Online local activation mode
  - Offline local activation mode
  - FNP license server mode
  - Actions independent of activation mode (local or server)
- Licensing troubleshooting
  - Deactivating PerGeos
  - Firewall problem
  - Licensing events log
  - License lookup log
  - Return or Upgrade impossible with node-locked licenses
- Contacting the license administrator

2.3.2 About PerGeos licensing management

The FEI software license you have acquired defines your rights to use PerGeos and some of its modules (extensions), with a specific level of functionality, for a certain version, on designated equipment, for a specific number of simultaneous users. The license may additionally be restricted to a specific period of time or to specific use cases.

Your FEI software license is protected by a license key. Each time the PerGeos application is launched, it checks for a valid license key. If a valid license key is found, the application runs. Otherwise, you are requested to get a valid license key.

PerGeos has separate license keys for all PerGeos Editions and Extensions.

2.3.2.1 Node-locked versus floating licenses

There are two main types of licenses: node-locked licenses and floating licenses.

Node-locked licensing allows the software to run on a single identified computer only.
If you have purchased PerGeos floating licenses, one or several concurrent users can run PerGeos sessions at the same time from their computers located on your local network. The number of concurrent users is given by the number of PerGeos tokens purchased. In this case, you will have to install FlexNet Publisher license server manager on a local server. Then, on each end user’s computer, you will need to specify the location of this local licensing server (see FNP license server mode).

2.3.2.2 Time-limited versus perpetual licenses

Licenses can be time-limited or perpetual. Time-limited licenses are valid until a given date, which is shown in the product splash screen at start-up or in the About dialog (accessible via the Help > About menu). After this date, PerGeos will stop working. This is usually the case for trial licenses, Beta, or for renewable rented licenses (yearly subscriptions).

2.3.3 License manager actions

When you launch PerGeos for the first time, a dialog appears, indicating that no valid license has been found on your computer. You have the choice of activating or evaluating the product (see figure 2.12). Choose the Activate option, to open the Activation Wizard. Three modes of configuration (see figure 2.13) are available:

- Use online local activation codes: to activate one or several node-locked licenses on a computer with an internet connection,
- Use offline local activation codes: to activate one or several node-locked licenses on a computer with no internet connection,
- Use FNP license server: to specify a license server to activate one or several PerGeos (editions and/or extensions) licenses.

Figure 2.12: License Manager - No valid license found

Other actions may be available depending on the configuration mode.
2.3.3.1 Online local activation mode

When you work in local activation mode, PerGeos allows you to manage your licenses. Different actions are available on depending on the status of your licenses.

**Note:** An internet connection is required for all following actions. If you do not have any internet connection, please refer to the 2.3.3.2 documentation.

**Activate a node-locked license**

When you purchase one or more PerGeos (editions and/or extensions) licenses, you should receive an email from fei@flexnetoperations.com containing a set of activation codes for each purchased product or option.

Launch PerGeos and select **Activate**. On the first page of the Activation Wizard, you must select **Use local activation codes** and click on **Next**. In the **Activate Licenses** page, simply copy and paste your activation codes into the provided text field and press **Activate**.

The **Activate** button is enabled when the activation codes into the provided text field respect this format:

\[<\text{EntitlementId}> [\text{<HostId>}] \text{<ProductName>_<ProductVersion>}.\]

HostId is optional.

A connection to the online activation server will start immediately.

When activation is complete, the product is ready to be used, and the license manager displays infor-
An activation code is a string similar to the following:

```
#License: PerGeos (PerGeos- 1 year time-limited node-locked application license (including maintenance service) - Multiple platforms support) - Expiration date: 12/13/2014:
BL5F-7773-A9F1-F79B PerGeos _1.1
```

**Add new node-locked license after activation**

Once PerGeos is activated, you can add other node-locked license to activate new extensions or editions.

To do so, select **Help > License Manager** and click on the **Activate Additional Extensions or Editions** button (see figure 2.15).

The license manager wizard is opened and displays the page *Activate Licenses* (see figure 2.14). Simply copy and paste your activation codes into the provided text field and press **Activate**.

The **Activate** button is enabled when the activation codes into the provided text field respect this format:

```
<EntitlementId> [ <HostId> ] <ProductName>_ <ProductVersion>
```

HostId is optional.

**Transferring all node-locked licenses to a new computer**
After activating a node-locked license on a computer, you may wish to move it to a new one. To do so, you first need to de-activate the first license by returning the associated activation code and then activate it again on the new computer.

To do so, open the Help > License Manager (see figure 2.15) and click on the Deactivate Extensions or Editions button. A dialog will open (see figure 2.27), allowing you to select the licenses you want to deactivate. When you click on the Deactivate button (see figure 2.16, the selected licenses are returned to the server and can be activated on any other system.

**Upgrading to a new PerGeos version**

When a new version of PerGeos is released, and if the activation process has been used for a previous version, after installing and launching the new PerGeos version, a dialog is displayed. It offers several choices, including an Upgrade option.

If the licensed modules are under maintenance, they will be immediately available for use after the upgrade process.

**Note:** The previous version can still be used on the same computer even after upgrading to the new version.

**Re-activating a license**
When you use a renewable license (through a subscription agreement), PerGeos will stop working when the license expiration date is reached. When you launch a new session of PerGeos, an error dialog is displayed with several choices, including a Reactivate option.
As soon as you have renewed your subscription, you can re-activate your node-locked license to allow PerGeos to run again for a new period of time.

**Activate Demo PerGeos licenses**

The Demo licenses are node-locked and time-limited.

Launch PerGeos and select the **Evaluate** option. On the first page of the Activation Wizard, you must select **Use local activation codes** and click on **Next**. On the **Activate Demo Licenses** page, simply copy and paste your activation codes into the provided text field and press **Activate**. The **Activate** button is enabled when the format of activation code into the provided text field respect this format:

```
<EntitlementId> [HostId] <ProductName>_<ProductVersion>.
```

HostId is optional.

A connection to the online activation server will start immediately. When activation is complete, the product is ready to be used.

**Activate Beta PerGeos licenses**

The Beta licenses are only node-locked and time-limited.

When you launch a Beta version for the first time, or if your Beta licenses are expired, the Activation Wizard is opened at the **Configure Beta Version Licensing** page. You must select **Use local activation codes** and click on **Next**. On the **Activate Beta Licenses** page, simply copy and paste your activation
codes into the provided text field and press **Activate**.
The **Activate** button is enabled when the format of activation code into the provided text field respect this format:

```
<EntitlementId> [HostId] <ProductName>_<ProductVersion>.
```

HostId is optional.
A connection to the online activation server will start immediately. When done, the product is ready to be used.

**Figure 2.21**: License Manager - Beta Activation Wizard - Configure Beta Version Licensing

**Figure 2.22**: License Manager - Beta Activation Wizard - Activate Beta Licenses
2.3.3.2 Offline local activation mode

In offline activation mode, you will be able to perform the same actions than in 2.3.3.1 but without any internet connection.

Activate a node-locked license

When you purchase one or more PerGeos (editions and/or extensions) licenses, you should receive an email from fei@flexnetoperations.com containing a set of activation codes for each purchased product or option.

Launch PerGeos and select Activate. On the first page of the Activation Wizard, you must select Use offline activation codes and click on Next. In the Activate Licenses page, simply copy and paste your activation codes into the provided text field and specify a path to an XML file (a file with extension .xml) that will contain your offline activation request. Then, press Next (see figure 2.23). The Next button is enabled when the path of XML request file is specified and the format of activation code respect this format:

\[
\text{<EntitlementId> [<HostId>] <ProductName>_<ProductVersion>}.\]

HostId is optional.

The next page (see figure 2.24) explains the remaining steps to perform before completing the offline activation request:

1. Transfer your XML request file to a computer with an internet connection.
2. Open vsg3d.flexnetoperations.com/control/vsgs/offlineActivation in a web browser.
3. Specify the path to your XML request file in the provided file field.
4. Click on the Process button. An "activation.xml" XML response file will be downloaded.
5. Transfer this "activation.xml" file to the computer without internet access.
6. Click on Next to import the "activation.xml" file and resume your activation request (see figure 2.25).

When activation is complete, the product is ready to be used, and the license manager displays information related to the activation.

Add new node-locked license after activation

Once PerGeos is activated, you can add other node-locked license to activate new extensions or editions.
To do so, select Help > License Manager and click on the Activate Additional Extensions or
Editions button (see figure 2.26).
The license manager wizard is opened and displays the page Activate Licenses (see figure 2.23). Simply copy and paste your activation codes into the provided text field and specify a path to an XML file that will contain your offline activation request. Then press Next and follow the displayed instructions (listed also in the 2.3.3.2 section).
The **Next** button is enabled when the path of XML request file is specified and the format of activation code respect this format:

```
<EntitlementId> [HostId] <ProductName>_<ProductVersion>
```

**HostId** is optional.

**Transferring all node-locked licenses to a new computer**

After activating a node-locked license on a computer, you may wish to move it to a new one. To do so, you first need to de-activate the first license by returning the associated activation code and then activate it again on the new computer.

To do so, open the **Help > License Manager** (see figure 2.26) and click on the **Deactivate Extensions or Editions** button. A dialog will open (see figure 2.27), allowing you to select the licenses you want to deactivate and the path to the XML file that will contain your offline deactivation request. After clicking on the **Next** button, the dialog displaying the offline instructions (listed also in the 2.3.3.2 section) will be displayed. Once the import of the deactivation request has been performed, the selected licenses are returned to the server and can be activated on any other system.

**Upgrading to a new PerGeos version**

When a new version of PerGeos is released, and if the activation process has been used for a previous version, after installing and launching the new PerGeos version, a dialog is displayed. It offers several...
choices, including an **Upgrade** option.

After clicking on the **Upgrade** button, a dialog will open (see figure 2.29), allowing you to select the licenses you want to upgrade and the path to the XML file that will contain your offline upgrade.
request. Then, click on the **Next** button: the dialog displaying the offline instructions (listed also in the 2.3.3.2 section) will be displayed. Once the import of the upgrade request has been performed (and if the licensed modules are under maintenance), the selected licenses will be upgraded and the new version of PerGeos can be used immediately.

![License Manager - Upgrade Proposal Dialog Offline](image)

**Figure 2.28:** License Manager - Upgrade Proposal Dialog Offline

![License Manager - Upgrade Licenses Dialog Offline](image)

**Figure 2.29:** License Manager - Upgrade Licenses Dialog Offline

**Note:** The previous version can still be used on the same computer even after upgrading to the new version.
Re-activating a license

When you use a renewable license (through a subscription agreement), PerGeos will stop working when the license expiration date is reached. When you launch a new session of PerGeos, an error dialog is displayed with several choices, including a Reactivate option.

After clicking on the Reactivate button, a dialog will open (see figure 2.31), allowing you to select the licenses you want to reactivate and the path to the XML file that will contain your offline reactivation request. Then, click on the Next button: the dialog displaying the offline instructions (listed also in the 2.3.3.2 section) will be displayed. Once the import of the reactivation request has been performed (and if you have renewed your subscription), the selected licenses will be reactivated and the new version of PerGeos can be used immediately for a new period of time.

Activate Demo PerGeos licenses

The Demo licenses are node-locked and time-limited.

Launch PerGeos and select the Evaluate option. On the first page of the Activation Wizard, you must select Use offline activation codes and click on Next. On the Activate Demo Licenses page, simply copy and paste your activation codes into the provided text field and specify a path to an XML file that will contain your offline activation request (see figure 2.3.3.2). The Next button is enabled when the path of XML request file is specified and the format of activation
code respect this format:

```xml
<EntitlementId> [/<HostId>] <ProductName>_<ProductVersion>.

HostId is optional.
```

Then, click on the Next button: the dialog displaying the offline instructions (listed also in the 2.3.3.2 section) will be displayed. Once the import of the activation request has been performed, the product is ready to be used.

**Activate Beta PerGeos licenses**

The Beta licenses are only node-locked and time-limited.

When you launch for the first time a Beta version or if your Beta licenses are expired, the Activation Wizard is opened at the Configure Beta Version Licensing page. You must select **Use offline activation codes** and click on Next. On the Activate Beta Licenses page, simply copy and paste your activation codes into the provided text field and specify a path to an XML file that will contain your offline activation request (see figure 2.3.3.2). The Next button is enabled when the path of XML request file is specified and the format of activation code respect this format:

```xml
<EntitlementId> [/<HostId>] <ProductName>_<ProductVersion>.

HostId is optional.
```
Then, click on the **Activate** button: the dialog displaying the offline instructions (listed also in the 2.3.3.2 section) will be displayed. Once the import of the activation request has been performed, the product is ready to be used.
2.3.3.3 FNP license server mode

PerGeos floating (or concurrent) licenses are handled by FlexNet Publisher tool. In order to manage PerGeos floating licenses, you need to:

1. **Install** FlexNet Publisher license server manager on a local server of your LAN,
2. **Activate** your PerGeos licenses on this license server,
3. **Configure** each PerGeos instance on local computers to use this license server.

**FNP license server manager installation and management**

For explanations about how installing a FlexNet license server and managing floating licenses (activation, upgrade, re-activation, return), please refer to:


**Configure PerGeos to use licenses from FNP license server**

At PerGeos startup, select the **Activate** option and then **Use FNP license server** on the first page of the Activation Wizard.

You will need to specify the name of the FNP license server. Optionally, you can specify a port number with a separator ":" (`<ServerName>:<PortNumber>`). Using a specific port number depends on the way the server is configured. In such a case, please contact your server license administrator for more information about the FNP license server configuration and the potential need to indicate a specific port number.

A connection to the FNP license server will start immediately. When done, the product is ready to be used.

![License Manager - FNP License Server Configuration](image)

**Figure 2.36**: License Manager - FNP License Server Configuration
Note: It is possible to test the connection to the specified server using the Test button.

2.3.3.4 Actions independent of activation mode (local, server or offline)

Reconfigure

You can change your configuration mode at any time, but this action requires that you restart the application. To do so (in local activation mode), select Help > License Manager and click on the Reconfigure Licensing button.

![Image of License Manager - Reconfiguration Wizard]

Figure 2.37: License Manager - Reconfiguration Wizard

Show available extensions

When PerGeos is running, you can see the activated licenses on your computer. Select Help > Show Available Extensions.

Note: One activation code can activate several licenses.
2.3.4 Licensing troubleshooting

2.3.4.1 Deactivating PerGeos

When using PerGeos node-locked activation codes, please deactivate them before any of the following operations:

- uninstalling PerGeos
- reinstalling or replacing the operating system
- replacing the hard drive
- disposing of the system

Otherwise, you will not be able to re-activate them on another system as they will still be activated on the original system, and it will be difficult or impossible for you to deactivate them for a transfer. To deactivate PerGeos, please read the following instructions according to your licensing mode: online or offline.

2.3.4.2 Firewall problem

If you have an internet connection but encounter the error ”Unable to connect to server https” when trying to activate a license, it probably comes from your firewall configuration. You need to configure your firewall to allow the connection to the online activation server:

- Server: vsg3d.flexnetoperations.com
- IP: 64.14.29.85
2.3.4.3 Licensing events log

If an error occurs during PerGeos activation, you can find more details in the licensing events log. The log file is saved in the user application data directory:

- Windows path: `C:\Users\<your_login_name>\AppData\Roaming\FEI\licensingPerGeos.log`

This log file details all activation actions and licensing information only when an error occurs.

2.3.4.4 License lookup log

If the `VSG_LICENSE_DEBUG` environment variable is set to a file name, licensing debug output is written to the specified file when PerGeos is launched. You can open and read this debug file yourself. Below are instructions for setting this environment variable on Windows.

**Note:** For using a license debug filename as indicated below, you need sufficient privileges to write into the PerGeos installation directory. Otherwise, set `VSG_LICENSE_DEBUG` to a path where you can write files. For example, `/home/\<your_login_name>/debug.txt`, or `C:\Temp\debug.txt`.

You can set the environment variable via the Control Panel for Windows or you can set it in a command prompt on all platforms.

**Windows - Control Panel**

1. You can get to the Control Panel via the Windows Start menu.
2. In the Control Panel, select the System application.
3. Click on the Advanced tab.
4. Press the Environment variables button.
5. In either the User or System variables, press the New button.
6. For the Variable name enter `VSG_LICENSE_DEBUG`.
7. For the Variable value enter `debug.txt` (without the quotes).
8. Close the dialogs by clicking on OK.
9. Run PerGeos from the Start menu. When the License Manager dialog is displayed, dismiss it.
10. Then look for a file named `debug.txt` in the top level of the PerGeos installation directory.

**Windows - Command Prompt**

1. On Windows you can get to a command prompt via the Windows Start menu as follows:
   
   Start > Programs > Accessories > Command Prompt

2. In the command prompt window, type:
   
   ```
   set VSG_LICENSE_DEBUG=debug.txt
   ```

3. Change the current directory to where your PerGeos executable is. For example:
   
   ```
   cd C:\Program Files\PerGeos1\bin\arch-Win64VC12-Optimize
   ```

4. Run PerGeos as follows:
   
   ```
   PerGeos.exe
   ```

5. When the License Manager dialog comes up, dismiss it.

6. Look for the file `debug.txt` in the current directory.

### 2.3.4.5 Return or Upgrade impossible with node-locked licenses

The License Manager uses the Unique Machine Number (UMN) to validate the identity of the machine that initiated the request. The Unique Machine Number value is retrieved from your system hardware information (or, for virtual machines, from hypervisor-controlled information).

If your system hardware is modified since the original activation, the UMN of your machine can be changed and your machine is considered as different by the License Manager.

As well, such error messages may appear:

> Trying to return a fulfillment issued to a different machine.

This case requires the intervention of the technical support.

### 2.3.5 Contacting the license administrator

You can contact the license administrator using this address: fei-sw-license@fei.com