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Introduction

This document provides instructions to install and activate the IHS Petra FlexLM License Manager, LmAdmin, from Flexera. For all releases of Petra Standard and Petra Workgroup editions, you must have LmAdmin installed. So, if you are upgrading from Petra 3.8.3 to the latest Petra Standard release, you must install this version of LmAdmin. This license manager accepts either the IHS.lic or Geoplus.lic files. The license setup varies slightly with each Petra version, and these differences are described in the license import guidelines.

Note: According to Flexera, you must use LmAdmin for Petra 3.x if you use hardware configurations with a Server 2008 R2 SP1 serving any Vista or Windows 7 clients.

Before you install LmAdmin, we recommend that you change the User Account Control to minimum settings so that it does not interfere with the installation. You can reset the user controls back to their normal settings after the installation.

Workflow Summary

To install and setup the license manager, do the following:

1. Download free Java software
2. Install the LmAdmin software
3. Obtain server information for your Petra license
4. Import the Petra license (IHS.lic or Geoplus.lic) and vendor daemon (IHS.exe or Geoplus.exe) files
5. Configure Petra to the acquire Petra license information

These steps are described in more detail in this manual.

Technical Assistance

If you need additional assistance with this installation process, you can contact the IHS Customer Care team by telephone at 1-800-IHS-CARE (447-2273), or by e-mail message at customercare@ihs.com.
Workflow Summary

**Downloading Java**

Before you install LmAdmin, you must install the latest Java software. Currently, the latest version is Java™ 7 Update 45.

| Tip: | If you are uncertain about what version of Java your server is currently running, click **Do I have Java?**, and then click **Verify Java version**. |

1. In a web browser, go to [http://java.com](http://java.com).
2. Click **Free Java Download** (Figure 1.1).

![Figure 1.1 Checking the Java version and downloading free Java](image-url)
3. Click **Agree and Start Free Download** (Figure 1.2).

![Figure 1.2 Starting the Java download](image1.jpg)

4. In the message at the bottom of the window, click , click **Save As**, and then choose the location that you want to save the Java .exe file (Figure 1.3).

![Figure 1.3 Saving the Java .exe file](image2.jpg)

**Note:** If necessary, you can perform a virus scan at that location.

5. After you download the Java .exe file, click **Run** (Figure 1.4).

![Figure 1.4 Running the Java .exe file](image3.jpg)
6. In the **Welcome to Java** dialog box, click **Install** (Figure 1.5). Install the Java setup file (or installer) as an Administrator.

![Figure 1.5 Beginning the Java installation](image)

7. After installing Java installer, click to clear any selected add-on check boxes (Figure 1.6). We recommend that you do not install any add-ons.

![Figure 1.6 Clear the optional browser installation options](image)

8. Click **Next**. Windows will configure Java for the installation (Figure 1.7), particularly if you are updating your Java environment.

![Figure 1.7 Windows configuring Java](image)
9. After Java is successfully installed, click **Close** (Figure 1.8).

![Figure 1.8 Java is successfully installed](image1)

The **Verify Java Version** page appears, and you can verify that the installed version is the recommended version of Java.

10. In the **Verify Java Version** page, click **Verify Java Version** (Figure 1.9).

![Figure 1.9 Java verification option](image2)
11. In the **Do you want to run this application?** dialog box, click **Run** to start the verification process (Figure 1.10).

![Figure 1.10 Run the Java verification](image1)

12. Your Java installation has been verified (Figure 1.11). Leave the web browser open.

![Figure 1.11 Java is verified successfully](image2)
Installing the LmAdmin Software

Now, you will download and install the license server manager, LmAdmin, from the Flexera Software web site.

Downloading the LmAdmin File

To download the LmAdmin file from the Flexera web site, do the following:

1. In the open web browser, go to http://www.globes.com.
2. In the Flexera Software home page, under Products, click Lmadmin, lmgrd, lmuti, lmtools, etc (Figure 1.12).

![Figure 1.12 Selecting the Flex download link](image)
Installing the LmAdmin Software

3. Scroll down to **Downloads**, and then click the appropriate file type for your server (32- or 64-bit) (Figure 1.13).

![Figure 1.13 Selecting the correct version and operating system](image)

**Note:** Alternatively, you can directly access the Flexera **Downloads** page at [http://globes.com/support/fnp_utilities_download.htm](http://globes.com/support/fnp_utilities_download.htm).

4. In the message at the bottom of the window, click ↓, and then click **Save As**.

5. In the **Save As** dialog box (Figure 1.14), choose the location where you want to save the LmAdmin file. In this example, the file is being saved in the `_TEMP` folder.

![Figure 1.14 Saving the LmAdmin file](image)
Installing the LmAdmin Software

After downloading and security scanning the appropriate LmAdmin files, you are ready to install the LmAdmin software.

Running the Installer

1. Right-click the saved LmAdmin file (for example, lmadmin-i86_n3-11_11_1_2.exe), and then click Run as Administrator.

Note: If you receive a security warning, click Run, and then proceed with the installation.

After running the installer, the FlexNet Publisher License Server Installer wizard displays (Figure 1.16). This setup wizard provides step-by-step instructions on how to install the LmAdmin software.

2. In the FlexNet Publisher License Server Installer wizard, read the introductory information in the Introduction page, and then click Next.
Selecting the Folder and Files

Now, you will choose where to save the Install folder and then import files from previous installations, if necessary.

1. In the Choose Install Folder page (Figure 1.17), click Choose, and then navigate to the following directory: C:\Program Files\FLEXnet Publisher License Server Manager. Ensure that your install path does not contain any special characters.

![Figure 1.17 Selecting the FlexNet installation folder](image)

**Warning:** If you are installing on a 64-bit machine, do not use C:\Program Files (x86)\FLEXnet Publisher License Server Manager, because the special characters in the path (x86) cause problems with starting the vendor daemon. Flexera is aware of this issue.

2. Click Next.
3. Because there are no files to import, in the **Import Files from Previous Installation** page, click **Next** (Figure 1.18).

![Figure 1.18 Importing any files from previous installations](image)

4. In the **Pre-Installation Summary** page (Figure 1.19), review the installation information. If you need to make any changes, click **Previous**, and then make the necessary changes.

![Figure 1.19 The Pre-installation Summary page](image)
5. Click **Install**. The **Installing FlexNet Publisher License Server Manager** page appears, including a progress indicator that displays the percent completed (Figure 1.20). This process may take a few minutes.

![Figure 1.20 Installing the license server manager](image)

**Installing Visual C++**

If you already have Visual C++ installed on your server, you can skip this step and begin configuring your server settings. Please note that the C++ version is important here. If you are uncertain, in the Control Panel, go to Programs and Features, and then review the list of installed products. If C++ 2008 Redistributable is listed as an installed program, skip this step and proceed to the next step. If Visual C++ is not installed or an earlier version is listed, select the option to install 2008.

**Note:** If you install Visual C++ 2008 Redistributable and a redundant installation occurs, you may be asked to do a harmless repair.
1. In the **Important Information** page (Figure 1.21), do the following:
   
   - If you are certain that you have Visual C++ 008 Redistributable installed on your server, ensure that the **Install Visual C++ 2008 Redistributable Package** check box is not selected, and then click **Next**.
   
   - If there is no Visual C++ installed or an earlier version than 2008 appears, select the **Install Visual C++ 2008 Redistributable Package** check box, and then click **Next**.

2. Read the license terms, and then click **Yes** to install Visual C++.

**Note:** You may have to restart your machine or server after installing Visual C++.
Configuring the Server Setting

Now, you will configure the server settings, including the ports and service.

1. In the **Launch Configuration** page (Figure 1.22), ensure that an available port appears in the **Enter the HTTP Port Number** box. The default port is **8090**; however, you can enter a different port number if another application is using port 8090.

2. In the **Enter the License Server Port Number** box, type **28000**.

**Note:** Flexera recommends that you do not use the default range for License Server Port. Instead, it is recommended that you use a port in the range of 28000 to 28009.

3. Click **Next**.
4. In the **Service Configuration** page (Figure 1.23), do the following:
   a. In the **Enter the service name** box, type **lmadmin**.
   b. In the **Enter number of seconds to delay when starting the service** box, keep the default value of **0**.
   c. Select the **Run as a service** check box.
   d. Click **Next**.

![Figure 1.23 Setting up the service](image-url)
5. In the **Start the Server** page (Figure 1.24), select the **Start server now** check box, and then click **Next**.

![Figure 1.24 Starting the service](image)

6. In the **Install Complete** page, click **Done** (Figure 1.25).

![Figure 1.25 Finishing the installation](image)
Obtaining Server Information

After installing the License Manager, the service will start and you can log in. You need to obtain the pertinent server information to generate the Petra license.

If the FlexNet Publisher page displays properly, go to Logging On to FlexNet Publisher on page 1-24.

Starting the Service Manually

If the FlexNet Publisher page does not immediately appear after the installation is completed, you can start the service manually in the Control Panel.

1. On the Task Bar, click Start, and then click Control Panel.

2. In the Control Panel (Figure 1.26), click Administrative Tools, and then click Services.

Figure 1.26 Opening the Administrative Tools to start the FlexNet service
3. In the **Services** window (Figure 1.27), right-click **lmadmin**, and then click **Start**.

![Figure 1.27 Starting the LmAdmin service](image)

4. Ensure that lmadmin service has started (Figure 1.28), and then close the **Services** window.

![Figure 1.28 Verifying that the service started](image)
5. Open a web browser, go to \textit{http://localhost:8090}. The \textbf{FlexNet Publisher} page opens.

\textbf{Note:} Your port number may be different than the one used in this example (port 8090). Use the port number that you used in Configuring the Server Setting on page 1-18.

![Figure 1.29 The FlexNet Publisher page](image-url)
Obtaining Server Information

Logging On to FlexNet Publisher

You will need to set up a user name and password before logging on to FlexNet Publisher. After logging on, you will need to obtain the system information for generating the Petra license.

1. In the **FlexNet Publisher** page, click **Administration**.
2. In the **Sign In** dialog box (Figure 1.30), do the following:
   a. In the **User Name** box, type **admin**.
   b. In the **Password** box, type **admin**.
   c. Click **Submit**.

![Figure 1.30 Changing the LmAdmin default password](image)

Now, you will be prompted to change your password.

**Note:** It is recommended that you use an easy-to-remember administrator user name and password, because if you forget them, you will have to reinstall the service.

3. In the **Change Password** dialog box (Figure 1.31), do the following:
   a. In the **Old password** box, type **admin**.
   b. In the **New password** and **Confirm password** boxes, type your new password.
   c. Click **Save**, and then click **OK**.
4. In the **System Information** window (Figure 1.32), copy the **Host Name** and **Ethernet Address**, and then paste the information in an e-mail message.

**Note:** The Host Name and Ethernet Address have been removed from Figure 1.32 for security reasons. Your fields will be populated.
5. Send the e-mail message to the following e-mail address: petralicensing@ihs.com.

Note: In your e-mail message, ensure that you indicate the license that you need. In this case, you will need an IHS.lic for either Petra Standard or Workgroup.

An IHS representative will send you your license file.

**Optional: Setting up Favorite and Desktop Shortcut**

While you are waiting for your Petra license file, you can add LmAdmin to your favorites list and create a desktop shortcut for quicker access.

1. In a web browser, add FlexNet as a favorite.

![Figure 1.33 Adding a Favorite for the FlexNet License Manager](image_url)

2. Right-click the favorite that you just added, and then create a shortcut on your desktop.
Configuring the Petra License

After you receive the Petra license, you will need to import the license, and then set the vendor daemon location.

Importing the Petra License File

1. After you receive the Petra IHS.lic file from IHS, save it on your machine.
2. In a web browser, go to http://localhost:8090 to display the FlexNet Publisher page, or double-click the Flexera shortcut on your desktop.

Note: Your port number may be different than the one used in this example (port 8090). Use the port number that you used in Configuring the Server Setting on page 1-18.

3. Click Administration.
4. Click the Vendor Daemon Configuration tab, and then in the Vendor Daemons page, click Import License (Figure 1.34).

Figure 1.34 The Vendor Daemon Configuration Tab
5. In the **Import License File** page, Click **Browse**, navigate to the location where you saved the license file, and then click the IHS.lic file. The file path appears in the **License File from Your Local Machine** box.

6. Select the **Overwrite License File on License Server** check box.

7. Click **Import License**.

![Figure 1.35 Importing the license file](image1)

A copy of the IHS.lic license file is moved to the FlexNet Publisher License Manager folder as shown in Figure 1.36.

![Figure 1.36 License file properly copied into \HIS location](image2)
Activating the Vendor Daemon

The FlexNet Publisher page confirms that you have successfully uploaded the license file and configured the new vendor daemon. Notice the red error messages. This is expected.

1. Click OK. You will fix the missing executable later.
2. Copy the IHS.exe vendor daemon file to the install path shown in Figure 1.38, where the license file located.

Figure 1.38 Both the license file and vendor daemon file in place
Configuring the Petra License

Note: If you need a geoplus.exe vendor daemon file, download it at: https://petraftp.ihsenergy.com/IHS.zip.

Warning: IHS Perform and OPE$T also use a license daemon named IHS.exe which can conflict with the Petra IHS.exe daemon if both daemons are running on the same subnet and/or license server. If this is the case, both license services will stop running. If this happens, contact an IHS Perform Licensing representative by sending an e-mail message to PSGLicensing@ihs.com for an alternative license daemon. To resolve a conflict with OPE$T, an alternative subnet and/or license server will need to be used for either OPE$T or Petra.

3. In the Vendor Daemons page, click Administer (Figure 1.39).

![Figure 1.39 Preparing to administer the vendor daemon](image)
Vendor Daemon Actions

After you have set up the license and daemon files per Petra version, you can finish setting up your Petra license.

1. In the **Vendor Daemon** page (Figure 1.40), under **General Configuration**, copy the path in the **License File or Directory** box.

2. In the **Vendor Daemon Location** box, paste the path, and then change the file extension from **.lic** to **.exe**.

3. Click **Vendor Daemon Log**.

![Figure 1.40 Entering the name of the vendor daemon](image-url)
4. Select the **Overwrite Vendor Daemon Log** check box (Figure 1.41).

![Figure 1.41 Overwriting the vendor daemon log to finalize the installation](image1.png)

5. Click **Save**. The vendor daemon configuration successfully updates (Figure 1.42).

![Figure 1.42 Saving and completing the installation](image2.png)
6. Click **Start**. In the Vendor Daemons page, the status of the vendor daemon will change to “**Starting Up**” as shown in Figure 1.43.

![Figure 1.43 Successful startup](image)

7. To refresh the status of the vendor daemons, click the **Server Configuration** tab, and then click the **Vendor Daemon Configuration** tab. The status for the IHS vendor daemon has been updated to “**Up**” for either IHS (Petra 4) or geoplus (Petra 3) as shown in Figure 1.44.

![Figure 1.44 Service is now up](image)
8. In the **FlexNet Publisher** page, click **Dashboard** (Figure 1.45).
   a. If you have critical errors, under **Alerts**, click the red X’s to remove them.
   b. Depending on the number of vendor daemons you have installed, do the following:
      - If you have more than one daemon installed, under **Licenses**, click the **Select** arrow, and then either select **geoplus** or **IHS** as needed.

![Figure 1.45 Selecting daemon if more than one](image)

- If you have one daemon installed, click **Concurrent**.

![Figure 1.46 Viewing any concurrent daemons](image)

Now, you can see the licenses available for your install. You may only have Petra, or there may be additional licenses showing.
LmAdmin – IHS License Reread

If you need to reread the license for any reason, especially if you receive a new one at any time, do the following.

1. Open the FlexNet Publisher page, and log on.
2. Click the Vendor Daemon tab, and then click Administer. (Figure 1.47).

![Figure 1.47 Entering the administer mode](image-url)
3. Click **Reread License Files** (Figure 1.48).

![Figure 1.48 Rereading the license file](image1)

You should see the "The license file was successfully reread message" in green as shown in Figure 1.49.

![Figure 1.49 Successfully rereading the license file](image2)
4. Click **Dashboard**.

5. Click **Concurrent** to display the license information. For this installation, all features available for licensing (Figure 1.50).

![Dashboard after a reread](image)

**Figure 1.50 The dashboard after a reread**

6. Close the **FlexNet Publisher** page.
Configuring Petra to Acquire License

Whether the Petra installation is server or standalone, Petra acquires its license in the same way. When you start Petra, settings in the PetraConfig.ini file serve as flags that communicate to the start sequence program to determine the license Petra needed to start the Petra Main Module. When the license is configured to find a network license, the Petra.ini file points to the port of the host server running the License Server. If a license is returned successfully, the Petra Main Module opens.

To configure Petra, do the following:

1. Run the config.exe file.
2. Configure the Petra.ini file.

Running the Config.exe File

This file sets the system path, the client path, and the licensing method, and it also writes to the PetraConfig.ini file. The system path is set to the directory where Petra programs are stored, whether it is Petra 3 or Petra 4 (Standard or Workgroup). This is also the directory where either PetraStandalone.exe or PetraServer.exe is installed. Files in this directory include the geoplus1.exe and other module executables. The client path is the system path for standalone installations, but for client/server installations, the client path is the directory path where client.exe was installed on the user’s machine.

![Figure 1.51 Running config.exe to set up the environment](image)

Note: The location of the PetraConfig.ini file varies depending on the operating system. For Windows 7, the file is in C:\ProgramData\IHS\Petra. For Windows XP, the file is in C:\Documents and Settings\All Users\Application Data\IHS\Petra.
Configuring the Petra.ini File

The Petra.ini file is an important configuration file that contains information Petra needs to run properly. One of these items is the identification of the license service. If you do not receive a sample Petra.ini file from Petra Licensing, look in the \Parms subfolder of the Petra Server installation folder for the Petra.ini file and make the necessary modifications to it as instructed below.

Two command lines in the Petra.ini file contain the information that Petra needs to connect to the license server. The first command line confirms that the Flex License is enabled. The second command line provides the port number and Host Name/address of the license server. These command lines must be entered in the Netlogin section of the Petra.ini file. (For more information on this file, see Petra in the Multi-User Environment manual).

The following is an example of the Netlogin section:

```
[NETLOGIN]
FLEXLM=ENABLED
FLEXLMLICPATH=(Port Number)@(HostName)
```

Note: The Petra.ini file must be stored in the System Path to work. Normally it is located in either the C:\geoplus1 folder for a standalone installation or the petrasrv folder of a server installation.

Figure 1.52 shows the NETLOGIN section for a Petra.ini file. In this example, the port is 28000, and the host name is PetraLicServer.

Note: The FLEXLMMDATALIC command enables Petra “data access” licenses for data transfer. It can be excluded entirely or commented out with a semi-colon (;).
Petra License Checkout from the Server

When you start Petra, the license information must be successfully found to open Petra. This process includes Petra, Flexera, the operating system and TCP/IP network protocol.

<table>
<thead>
<tr>
<th>Process</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Petra</td>
<td>Uses executable files from system path in config.EXE</td>
</tr>
<tr>
<td>Read Petra.INI</td>
<td>Encounters Petra.INI in system path; searches for license at the port and host specified</td>
</tr>
<tr>
<td>Compare/Check License Information</td>
<td>Compares Petra.INI path FLEXLMLICPATH=28000@hostname with License File and License Manager/Service Are the port and host name the same? Are the ports open? (See Note below)</td>
</tr>
<tr>
<td>Complete Comparison Match</td>
<td>User obtains license from License File Manager/Service</td>
</tr>
<tr>
<td>Petra Opens</td>
<td>User sees the Welcome to Petra window</td>
</tr>
</tbody>
</table>

In Table 1.1, filled cells indicate that the process is performed by Petra software, and unfilled cells indicate that the process is performed by the Flexera software, operating system, and network protocol (TCP/IP)

**Note:** The License Service uses two TCP ports: one for the License Server Manager port (usually 28000) and one for the vendor daemon port, either the default or user-defined value. If the service does not work at this point, you may need to contact your IT/Network Administrator to confirm that these ports are actually open.
Appendix A: FAQ

The following topics describe common licensing issues and solutions. These issues generally relate to one of four main components in the licensing setup:

- **Config.EXE**
- **Petra.INI**
- License File (IHS.lic/geoplus.lic)
- License Manager/Service.

**Why am I getting a HASP 15 error when opening Petra?**

In this case, Petra does not see your Petra.ini file. The Petra.ini is the roadmap file containing commands that tell Petra where to pull a license. It must be located in your Petra software system folder. For a standalone installation, it will located in C:/Geoplus1 folder. For a network installation, it will located in the C:/Petrasrv folder.

If you are unsure of your system folder, right-click the icon you use to start Petra, and then click **Choose Properties**. Navigate to the path displayed in the properties, and then run config.exe to find your system path. Your Petra.ini file needs to be in the system path.

**I installed the LmAdmin software; however, I cannot get the browser-based Flex Publisher page to display.**

In the Control Panel, click **Administrative Tools**, and then click **Services**. In the **Services** window, either start or restart the lmadmin service. Also, you can open the C:\Program Files\FLEXnet Publisher License Server Manager folder, and run the lmadmin.exe file.

**I have LmAdmin installed on the server, but I cannot get the license daemon to display or run.**

Ensure that you have the network card with the correct ethernet address in the license file and that it is enabled. Open the license file and verify that the ethernet address is correct. Also, the host name must be identical (spelling and it is case sensitive), and the License Server and Vendor Daemon ports must be open and unblocked.

**I got the license service running on my server, but the clients cannot pull a license. When I open Petra, I get a message that says it failed when looking for a license.**

In your Petra.ini, ensure that you have the correct host name and port:

```
FLEXLM=ENABLED
FLEXLMLICPATH=28000@PETRALICSERVER01
```

Where 28000 represents an example port and PETRALICSERVER01 represents an example server.

Verify the server port in the Flex Publisher to ensure it matches the port in the FLEXLEMLICPATH (28001). Also, verify the server name. If they are correct and it still fails, try the IP address of the server name.
I have verified that the Petra.ini is where it should be and looks correct, and LmAdmin software is running on the server and appears correct; however, Petra still fails to checkout a license.

Check to see if your Windows firewall is running on either the client or server side. If yes, disable the firewall on both sides and try again. Also, check to see if hardware firewall may be blocking ports.

**What do I do if Petra is not looking for a network license?**

Navigate to the C:/Geoplus1 folder and run the config.exe file. Set the Obtain License From option to Network License. (If you are running Petra 4 on Windows 7, you do not need to run as Administrator.)

**Why does my license service go down after Windows updates?**

Windows updates commonly include updates to security settings/patches, as TCP/IP is a primary communication protocol within your intranet and across the Internet. It is important to monitor the updates to anticipate which ones can affect the ports used by a license service.

**Why am I seeing the Specify License Server window? Why am I getting an error in saving configuration settings?**

There are several possible reasons why these messages (see Figure 1.53 through Figure 1.55) appear:

- The Port number specified in the Petra.ini file is incorrect or not open.
- The Host Name specified in the Petra.ini file is incorrect.
- The DNS service on your network is not allowing the proper forward or reverse look up of the server IP address from its name. In this case, you can replace the server name in the .ini file with the actual IP address of the server machine.
- Some kind of firewall or other network security software, switch, or router is blocking the communication.

![Figure 1.53 Flex License Finder error](image)
Figure 1.54 Flex License Finder Server Search Message

Figure 1.55 Configuration error message