Pictometry Online Self-hosting Installation Guide

for Version 1.9.1

January 2011

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Contents

About This Guide

This guide contains the instructions you need to install your Pictometry Online web server.

Note: This guide contains procedures for out-of-the-box installation of your web server. To customize your Pictometry Online application once installed, you'll access the Pictometry Online Administration web application. See "5 — Configuring Pictometry Online" for more information.

How to use this guide

The *Pictometry Online Self-hosting Installation Guide* contains installation procedures listed in the order in which you should complete them.

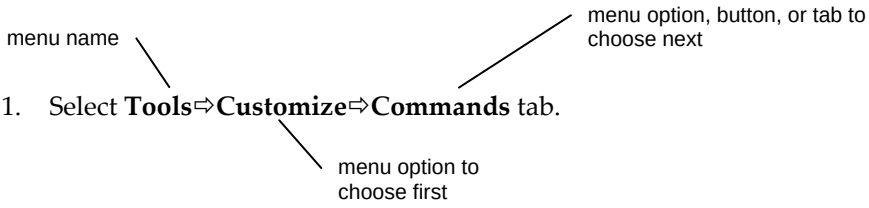
Conventions

This guide uses these conventions:

- Keys, buttons, or file names you click appear in bold type.
- Names of keyboard keys are in uppercase as in this example:

  Press **ENTER**.

- Menu options you select are written in the format shown in this example:



- Values you must supply are shown in angle brackets (< >) as in this example:

  http://<domain name >/ImageNavigator/

- The term "**POL**" refers to the Pictometry Online application and its components.
- The phrase "**POL web server**" refers to the specific component that end users will access through their web browsers.

Your feedback is important to us

If you find errors in this guide, or if you have comments about it, we'd like to know. Please email us at documentation@pictometry.com. Thank you.

1 — Overview

This guide contains instructions to help you install and configure your web servers to run Pictometry Online. You can install POL on an existing shared web server, on a standalone web server, or on up to three distributed web servers: a database server, a tile (image) server, and a POL web server.

Requirements

Before you begin running the Pictometry Self-hosting Installer, make sure your web servers meet the following requirements:

- Intel server class machine, 2.5 GHz or faster, 3GB or better of RAM
- A valid DNS name and/or IP address that all intended users can access (both internally and via the internet, if the server will be made available on the internet). This will be used in the URL for the Self-Hosted POL web application.
- Windows Server 2003 or Windows Server 2008 running in a 32-bit or 64-bit environment
- A database for spatial indices. Self hosting supports MySQL 5.1, Oracle 11g, and Microsoft SQL Server 2008. See Appendix A (MySQL), Appendix B (Oracle), or Appendix C (SQL Server) for the applicable procedure to install and configure your database.

  Note: You'll find the install files ("mysql-5.1.31-win32.msi" and "mysql-5.1.41-winx64.msi") and "MySQL-gui-tools-5.0-r17-win32.msi" in F:\SelfHosting\MySQL\MySQLInstallers on the external drive provided by Pictometry.

- Microsoft IIS 6 (Server 2003) or Microsoft IIS 7 (Server 2008)

PHP 5.2 is needed on all POL servers, but does not need to be installed in advance. If PHP is already installed, the Pictometry Self-hosting Installer configures it; otherwise, it installs and configures it.

Supplied hard drive

To help you set up your web servers, Pictometry provides an external hard drive that contains your Pictometry images, a self-hosting installer, the install file for MySQL 5.1 (both 32-and 64-bit versions), an install file for MySQL GUI tools 5.0, and a DOS batch file that can be used to create a self-signed certificate for your web server. The installer is in this folder: F:\SelfHosting\SelfHostingInstaller.

Assumptions

The instructions in this document assume the following:

- IIS is already installed on all servers you will be using for POL
- SSL is enabled on the POL web server.
- The operating system's root drive is C:
- The external hard drive supplied by Pictometry is assigned drive letter F: when attached to your server. If your system assigns a drive designator other than "F:" then substitute the actual drive designator in this document's instructions wherever they use "F:" to refer to the supplied hard drive.

Self-signed certificate

Because Pictometry Online runs from a secured domain (https), you must have an SSL (Secure Sockets Layer) certificate to run it. The batch file contained on the hard disk you received can install a self-signed certificate—good for 730 days—on your web server. If your server already has a certificate, you can ignore this batch file. Otherwise, install the self-signed certificate by following the procedure described in "2 — Installing the Self-signed Security Certificate" below.

Installation tasks

To set up your Pictometry Online web server, you must complete each of the following tasks:

- (*IIS 7 only*) Select CGI as a web server Role Service. (Next topic)

  Important: You can do this when you set up IIIS 7 or after; but you must do it before running the Pictometry Self-hosting Installer. (You don't need to do it before installing MySQL.)

- Install a security certificate, if you don't already have one. (See Chapter 2, page 5.)
- Install and configure your database.

  Note: Pictometry self-hosting can use a MySQL, Oracle, or MS SQL Server database. See Appendix A (page 45) to set up MySQL, Appendix B (page 55) for Oracle, or Appendix C (page 59) for SQL Server.

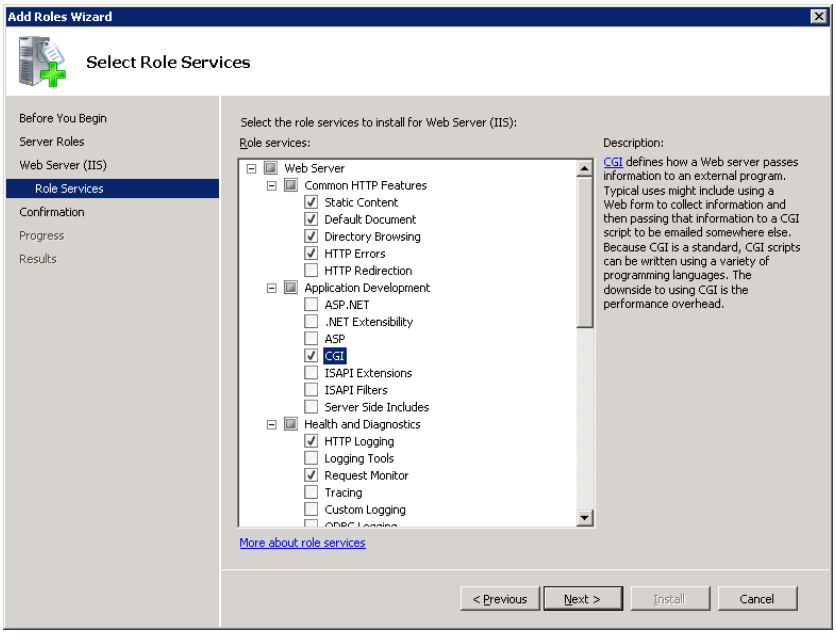
- Run the Pictometry Self Hosting Installer; which installs the POL application and various support files, configures IIS, and installs PHP (if necessary) (See Chapter 3, page 9.)
- Confirm the PHP parameters. (See Chapter 4, page 21.)
- Use the Pictometry Online Administration web application to configure Pictometry Online. (See Chapter 5, page 25.)
- (If your images are accessed via a remote share), configure IIS for network share access. (See Chapter 6, page 29.)

Selecting CGI as a Web Server Role Service (IIS 7 only)

CGI and FastCGI are installed as integral parts of IIS 7. If you don't select CGI during Web Server setup, use the following procedure to select it after setup.

♦ To select CGI as a Role Service:

1. Start Server Manager.
2. In the left pane, click **Roles**.
3. In the right pane, scroll down to Role services under the Web Server role and select **Add Role Services**. The Add Roles Wizard opens.
4. Check **CGI** (under "Application Development").



5. Click **Next**, then click **Install**.
6. When the installation finishes, close Server Manager.

2 — Installing the Self-signed Security Certificate

WARNING: The following procedure may overwrite any certificates you already have. Run the following procedure **only if you don't already have an SSL certificate**.

Checking for an existing certificate

Follow these steps to see if you already have a certificate.

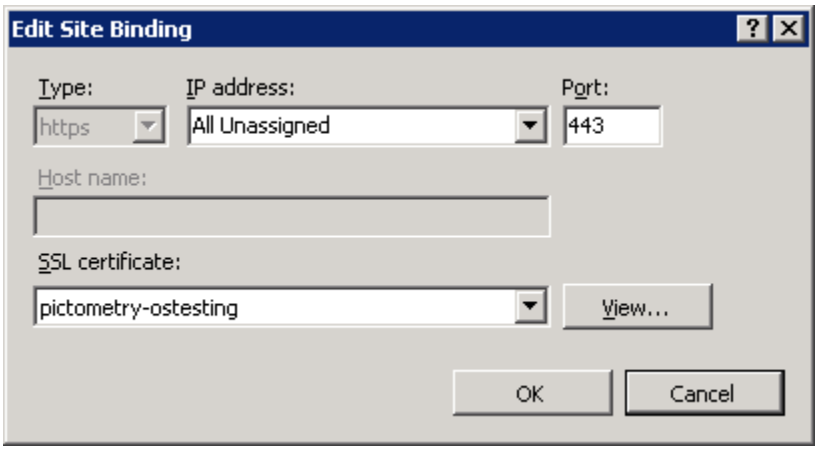
♦ To check for an existing certificate (Server 2003):

1. Start IIS Manager.
2. In the left pane, double click the Web Site folder.
3. In the left pane, right-click **Default Web Site** and select **Properties** from the context menu. The Default Web Site Properties dialog opens.
4. Click the **Web Site** tab.

   If the SSL port field contains the value "443" then you already have a certificate.

♦ To check for an existing certificate (Server 2008):

1. Start IIS Manager.
2. In the left pane, select **Default Web Site**.
3. In the far right pane, click **Bindings** (under "Edit Site").
4. *If the dialog shows that HTTPS is assigned to port 443*, select the line on which HTTPS appears and click **Edit**. The Edit Site Binding dialog opens.



If you see a certificate listed under "SSL certificate" and the Port field contains the value "443," then you already have a certificate.

5. Click **Cancel**, then **Close**.

If your web server does *not* have a certificate, use the following procedure to install a self-signed certificate.

Installing the self-signed certificate

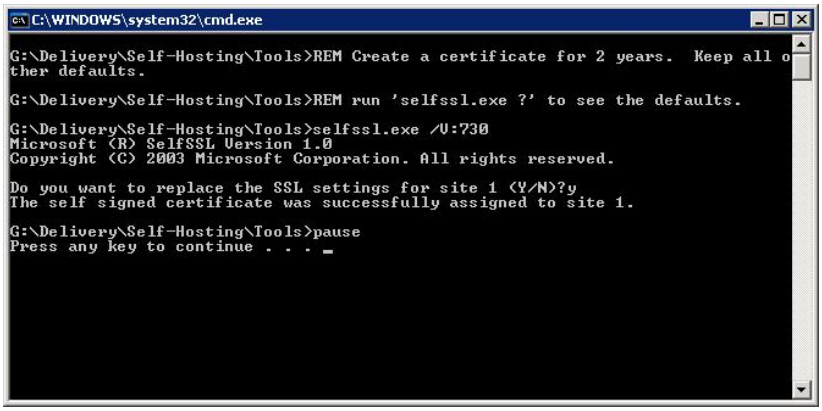
To install a self-signed certificate for Server 2003 (IIS 6), you'll use a file supplied by Pictometry. To install a self-signed certificate for Server 2008 (IIS 7), you'll generate the certificate right from the IIS 7 Manager. Use one of the following procedures, depending on your version of IIS.

♦ To install the self-signed certificate (Server 2003):

1. Double-click the file called "selfsigned.bat" (F:\SelfHosting\Tools\) on the hard drive provided by Pictometry. A command prompt opens and the batch file runs.
2. When asked if you want to replace the SSL settings for site 1, type **y** (for yes) and press **ENTER**.

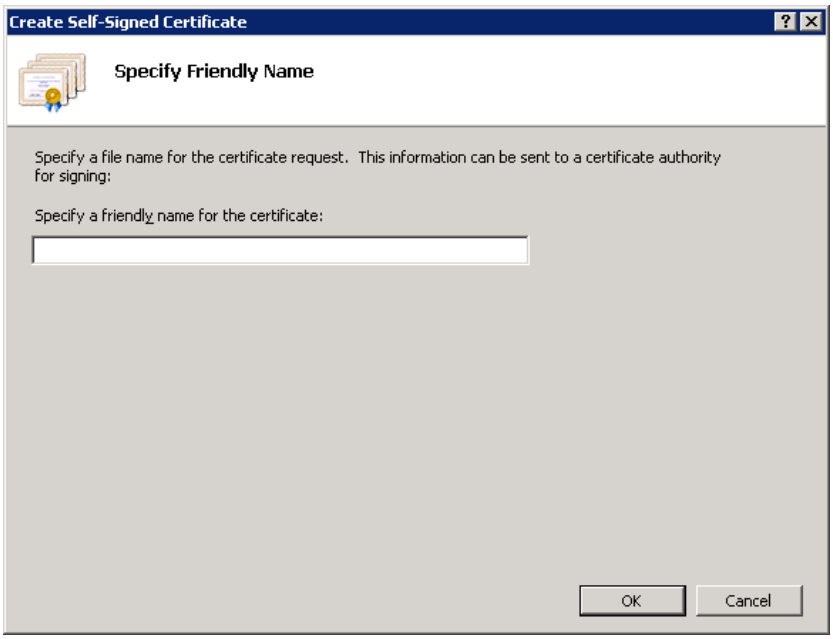
   A confirmation message in the command window states that the certificate was successfully assigned to site 1.

   This certificate is good for 2 years.

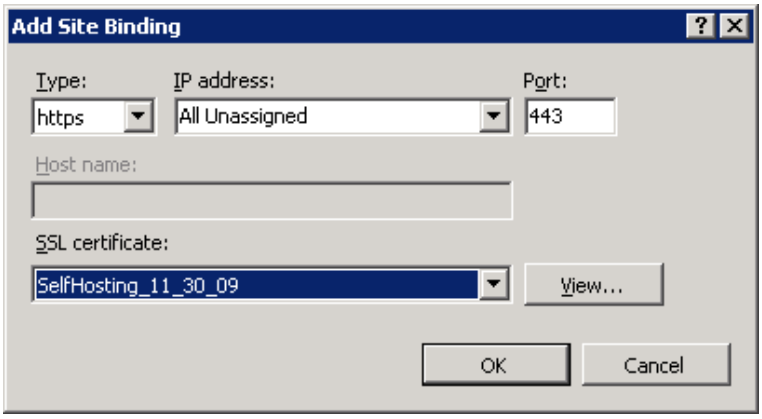


♦ To install the self-signed certificate (Server 2008):

1. Start IIS Manager and select the server name in the left pane.
2. In the center pane, double click **Server Certificates**.
3. In the right pane, click **Create Self Signed Certificate**. The Specify Friendly Name dialog (next page) opens.

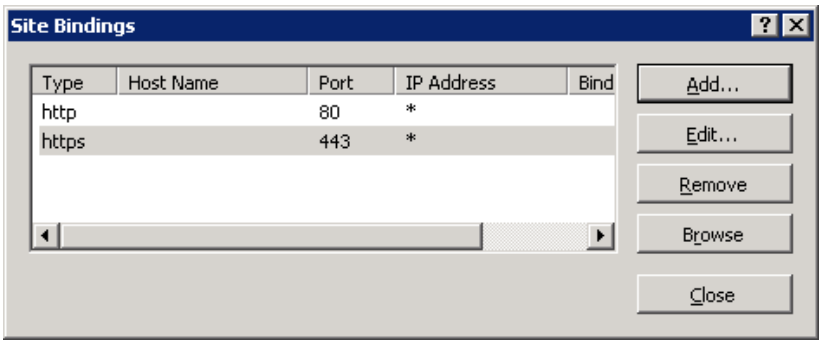


4. In the Specify Friendly Name dialog, type a name that will be easy to remember and click **OK**.
5. In the left pane of IIS Manager, select **Default Web Site**.
6. In the right pane, click **Bindings** (under "Edit Site").
7. In the Site Bindings dialog, click **Add**. The Add Site Binding dialog opens.



8. From the Type list select **HTTPS**. Leave the port set to **443** (the default) and leave the IP address set to **All Unassigned**.
9. From the SSL certificate list, select the "Friendly Name" of the certificate you created, then click **OK**.

The Site Bindings dialog shows that https is on port 443.



10. Click **Close**.

3 — Running the Pictometry Self-hosting Installer

Before running the Self-hosting Installer, be sure you have installed and configured your database. See Appendix A (page 45) to set up MySQL, Appendix B (page 55) for Oracle, or Appendix C (page 59) for SQL Server.

WARNING: Before beginning the installation, back up the IIS configuration as described in Chapter 7. If you are using a MySQL database, back up or make a copy of your MySQL data files.

Overview

The Pictometry Self-hosting Installer (provided on the supplied hard drive) does the following:

- Configures IIS
- Installs the Pictometry Online application
- Installs (if not already installed) and configures PHP
- Install and configures various support files

Depending on your requirements, you might install Pictometry Online on a single web server or on up to three web servers: a POL web server, a Database server, and a Tile server (which stores your imagery). The installer can be used to configure from one to three servers, as needed.

WARNING: If you're installing on a web server running Windows Server 2008, your computer must be re-booted after the following tasks are complete:

– The Pictometry Installer is done.

– You have verified that PHP was installed correctly (page 21).

This guide will instruct you to re-boot your computer at the appropriate time. If there are other web applications being run from the web server on which you are installing POL, you might want to schedule this procedure for a time that is most convenient.

Self-hosting Installer procedure

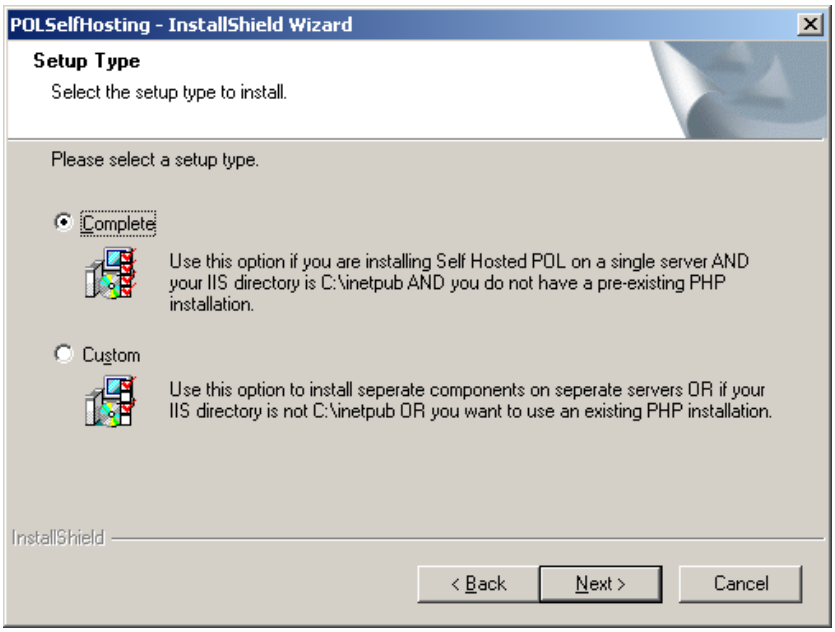
You'll run the Installer from the hard drive supplied by Pictometry. Follow the on-screen instructions. When you're done with each window, click **Next** to move to the next one. There are many parts to this installer.

♦ To run the Pictometry Self-hosting Installer:

1. Run **setup.exe** (found in the F:\SelfHosting\SelfHostingInstaller folder of the supplied hard drive).

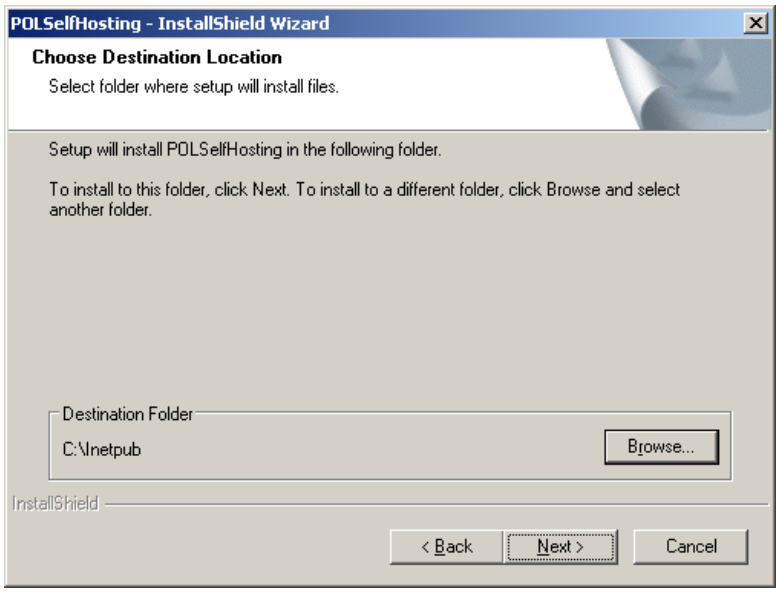
   The POL Self Hosting InstallShield Wizard opens.

2. When the Pictometry License Agreement window opens, accept the license agreement terms.
3. On the Customer Information window, type the appropriate customer information.
4. Follow the directions provided by the Installation Wizard until the Setup Type window opens.

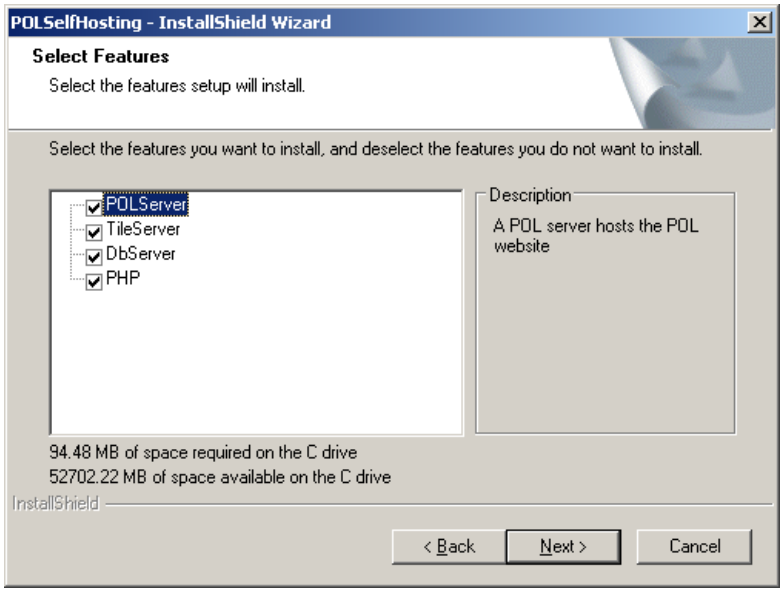


5 On the Setup Type window, select the type of installation. Refer to the on-screen descriptions for more information about when to select each option.

6. *If you selected the Custom installation in Step 5*, do the following (otherwise proceed to Step 7):
   a. On the Destination Location window, accept the default install location or browse to the Inetpub folder (if the location of Inetpub is other than C:).



b. Click **Next** until the Select Features window opens.



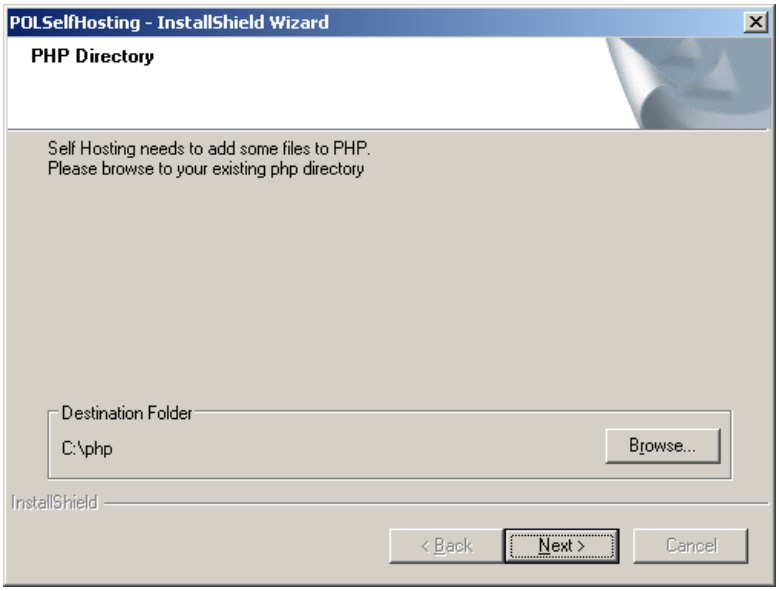
c. On the Select Features window, check all applicable servers (POL, Tile, and Database). PHP is a mandatory component on each server running POL. Check **PHP** if *not* already installed on your web server. (If PHP is already installed, *uncheck* this option.)

d. Click **Next**.

7. Click **Install**. The Installer copies files to the web server(s). This will take a minute or two. While this happens, you might see windows appear, disappear, and flicker. There might also be short periods of inactivity.

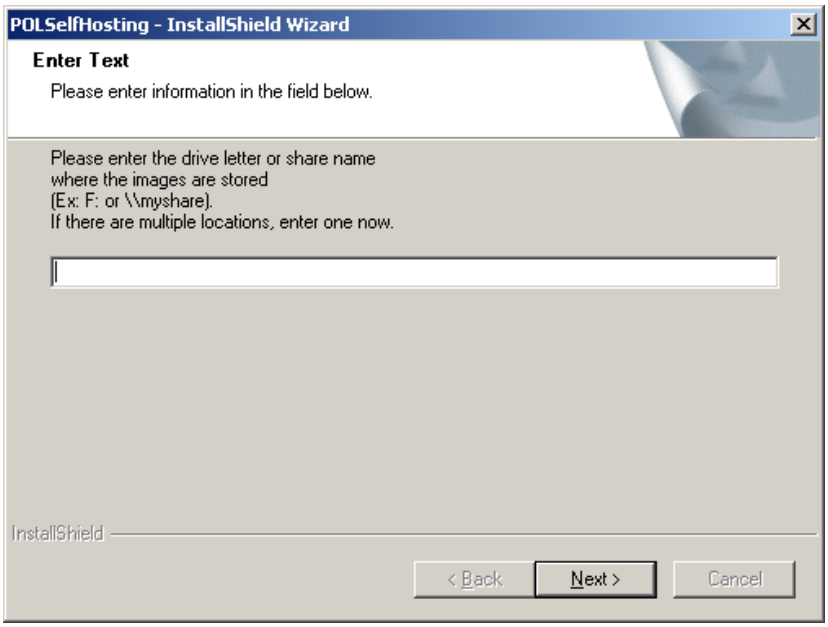
   On the next few windows, you'll enter information the Installer needs to configure IIS and POL.

8. *If you unchecked PHP on the Select Features window,* you'll need to specify the location of the php.ini file on the PHP Directory window.



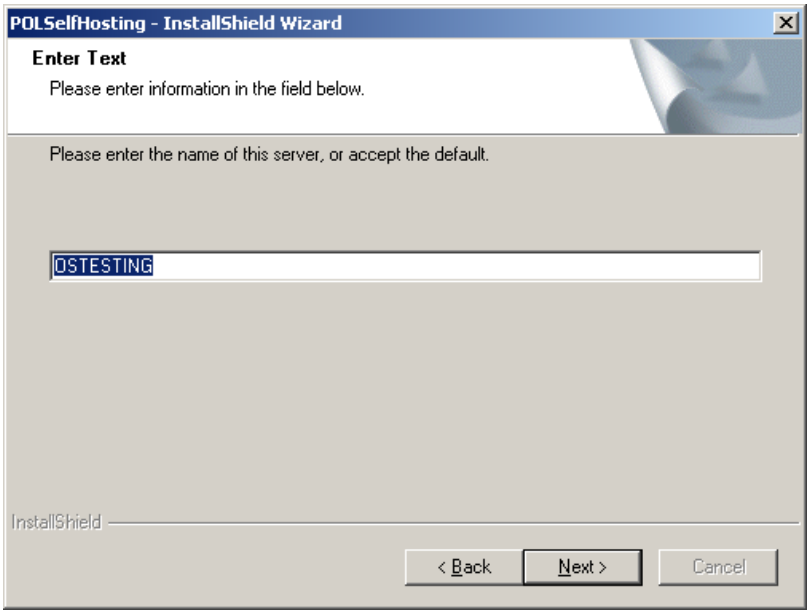
– Browse and select the location of the existing php.ini file and click **Next**.

The following window opens.



9. On the Enter Text window, type the drive letter or share name where your Pictometry images are stored (such as F: or \\servername\pictometry). If you have multiple image locations, enter one of them now.

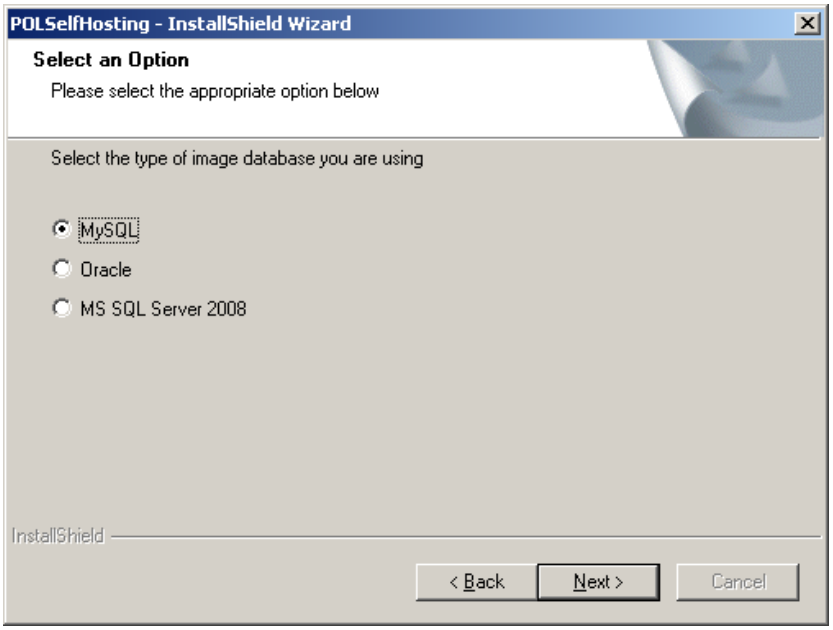
Another Enter Text window opens.



10. Type the name or IP address of the web server you're using for POL or accept the default and click **Next**.

> **Important**: You must enter a valid DNS name and/or IP address that all intended users can access. This will be used in the URL for the Self-Hosted POL web application.

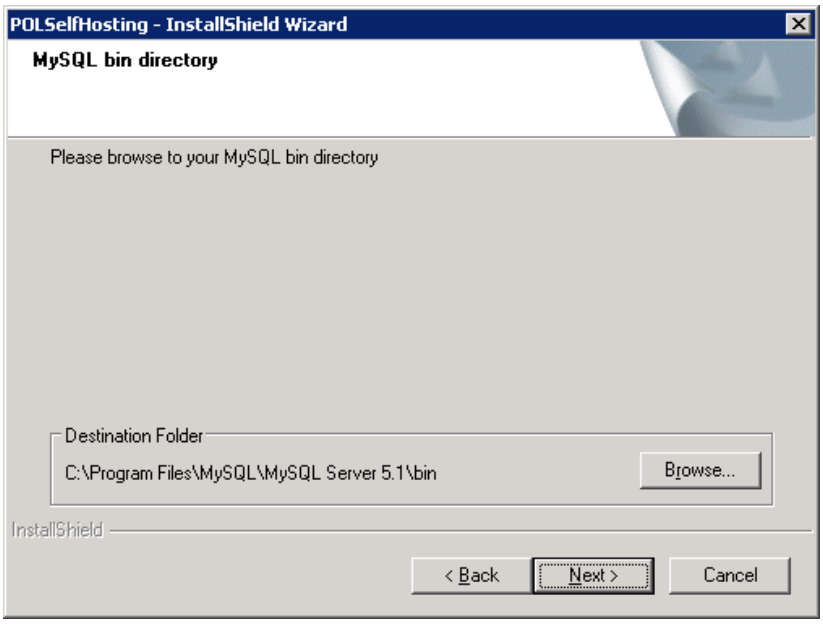
The following window opens.



11. Select the type of database you are using.

    The windows you see next depend on the database you selected.

12. *If you selected MySQL for the database*, the MySQL bin directory window (next page) opens.

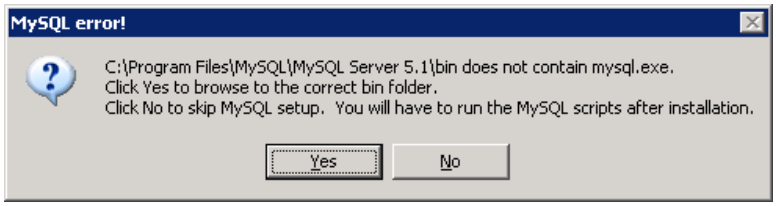


The window offers an appropriate default directory for your server type (32 or 64 bit).

Do the following:

a. If the default location for the MySQL program (not the database) is correct, accept the default; otherwise browse to the correct location, then click **Next**.

   If the location you selected is not correct, a warning message appears.



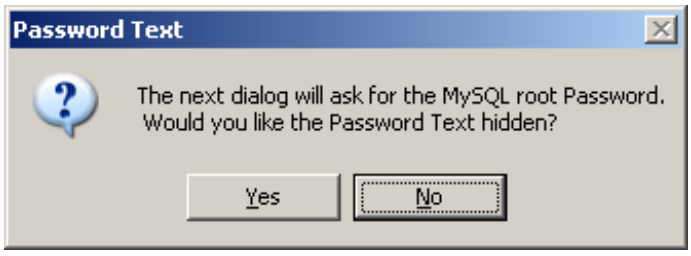
   – Click **Yes**, to browse for the correct bin folder, or click **No** to skip the MySQL setup.

     If you clicked "Yes," the MySQL bin directory window re-opens so you can browse to the correct location.

     Important: If you cannot locate the MySQL\bin directory, or if it does not contain mysql.exe, you will have to complete the MySQL set up after the Installer is finished. This includes manually running the MySQL scripts.

     If you clicked "No," the Installer skips the remaining steps for MySQL setup, and the Ready to Configure Self Hosting window opens. Skip to Step 15 to finish running the Installer.

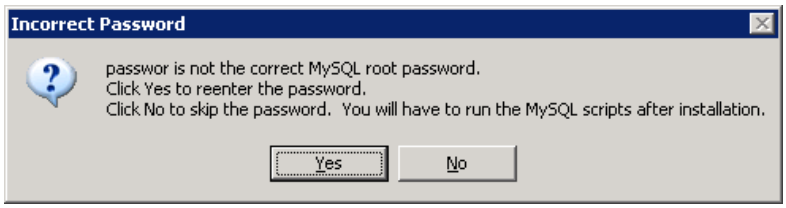
   If the location for the MySQL program is correct, a dialog asks if you want your MySQL root password hidden when you enter it.



b. Click **Yes** to hide the password or **No** to have it displayed in clear text.

c. On the next window, type the MySQL root password you created when you installed MySQL.

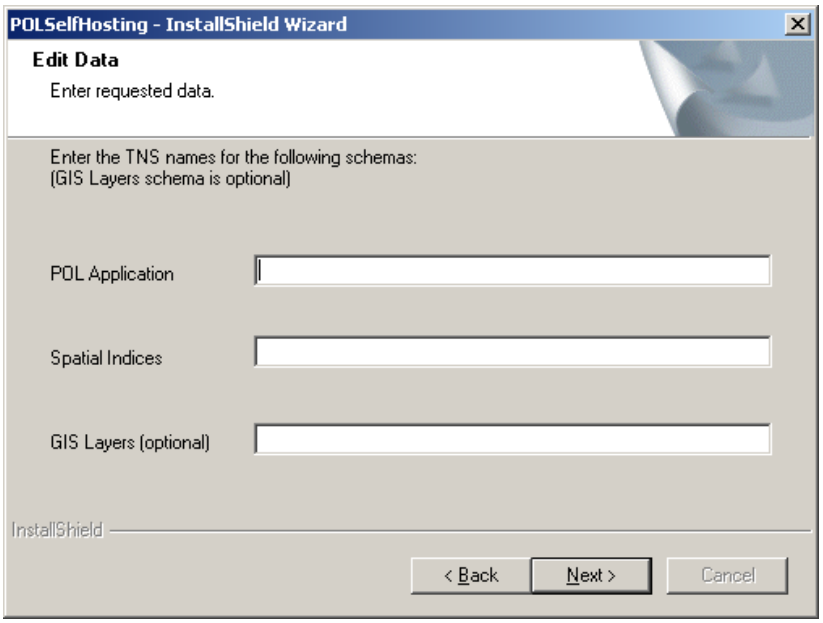
The installer verifies that the password is correct. If incorrect, a prompt appears so you can re-enter it.



d. Click **Yes** to reenter the password. If the password is unavailable, click **No** and run the MySQL scripts manually after installation.

The Ready to Configure Self Hosting window opens. Skip to Step 15.

13. *If you selected Oracle for the database*, the Edit Data window opens so you can enter the TNS Names for the schemas you set up.

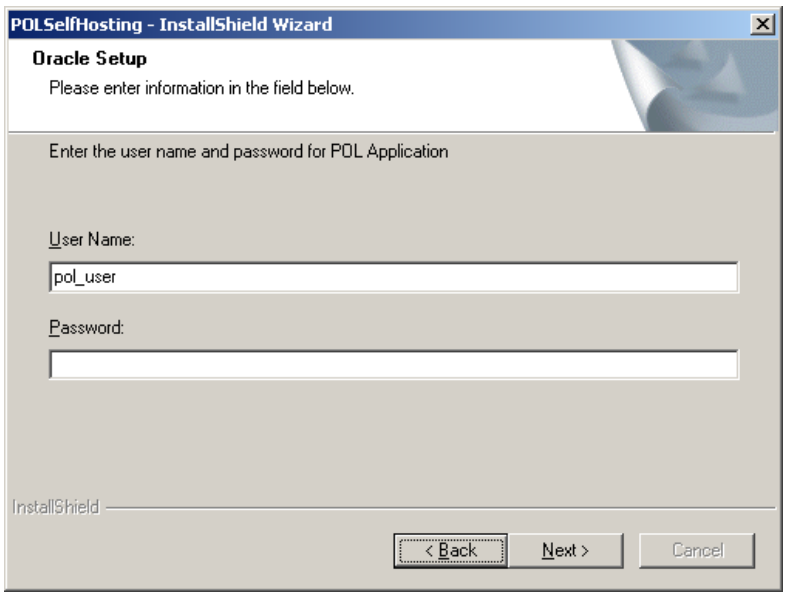


a. Type the TNS names for the POL Application, Spatial Indices, and GIS layers (if you are using them) and click **Next**.

On the next few windows, you'll enter a user name and password for these schemas.

Note: You can type user names or accept the default names, but you must type a password for each.

Here is the first window:



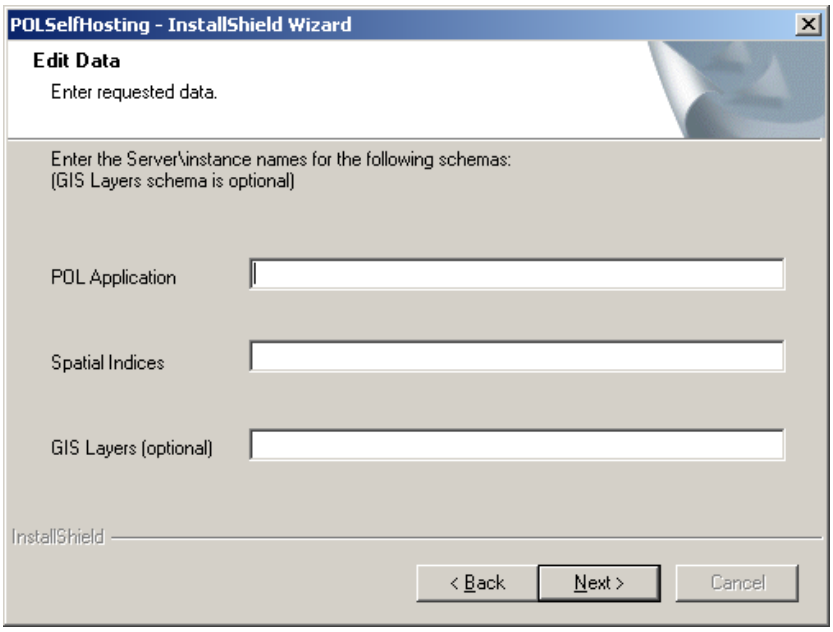
b. Type the user name and password for the POL Application schema.

c. On the next window, type the user name and password for the Spatial Indices schema.

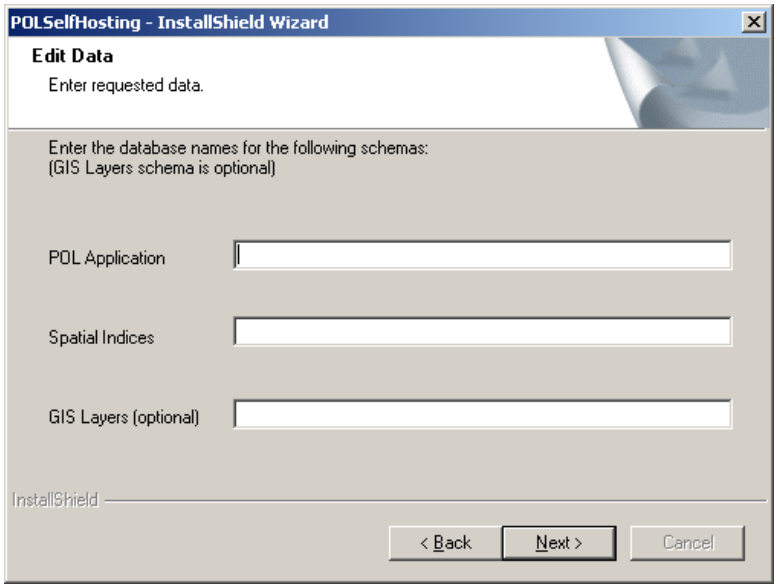
d. *If you entered a TNS Name for GIS Layers*, type the user name and password for the GIS Layers schema.

   The Ready to Configure Self Hosting window opens. Skip to Step 15.

14. *If you selected MS SQL Server 2008 for the database*, the Edit Data window (next page) opens so you can enter the Server\instance names for the schemas you set up.

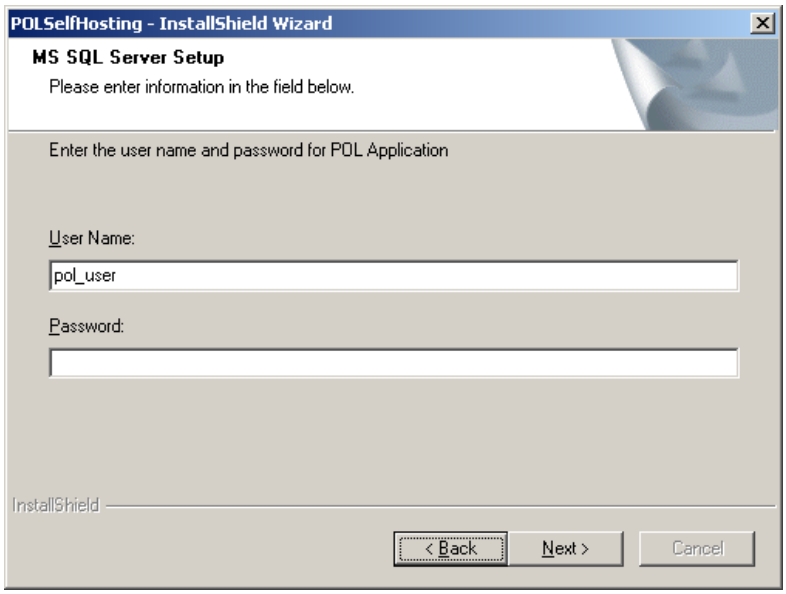


a. Type the Server\instance names for the POL Application, Spatial Indices, and GIS layers (if you are using them) and click **Next**. The database names window opens.



b. Type the database names for the POL Application, Spatial Indices, and GIS layers (if you are using them) and click **Next**.

The POL application window opens.



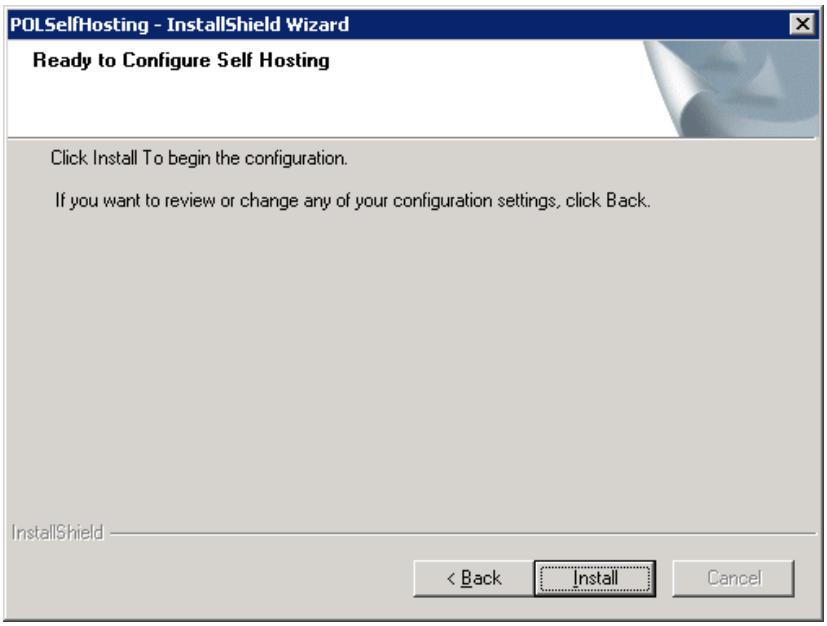
c. Type the user name and password for the POL application, and click **Next**. The spatial indices window opens.

d. Type the username and password for the spatial indices and click **Next**.

   If you are using GIS layers, the GIS layers window opens.

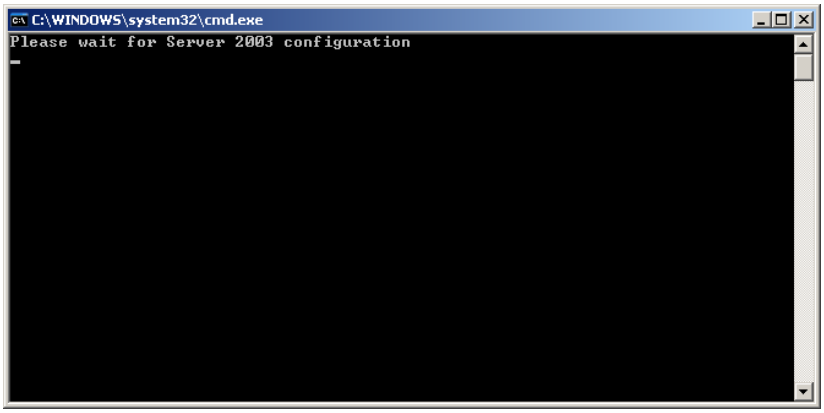
e. Type the user name and password for GIS layers and click **Next**.

After you enter database information, the Ready to Configure Self Hosting window opens.



15. If you're sure that your selections are correct, click **Install** on the Ready to Configure Self hosting window; otherwise, click **Back** and change selections as desired.

A command prompt opens and the configuration starts.



A warning message states that the installation of third-party tools might take several minutes. Various progress bars will appear briefly and there will be several periods of time in which you will not see any activity.

When the installation is done, the InstallShield Wizard Complete dialog opens.

16. Click **Finish**.

Proceed to the next topic "4 — Confirming the PHP Installation."

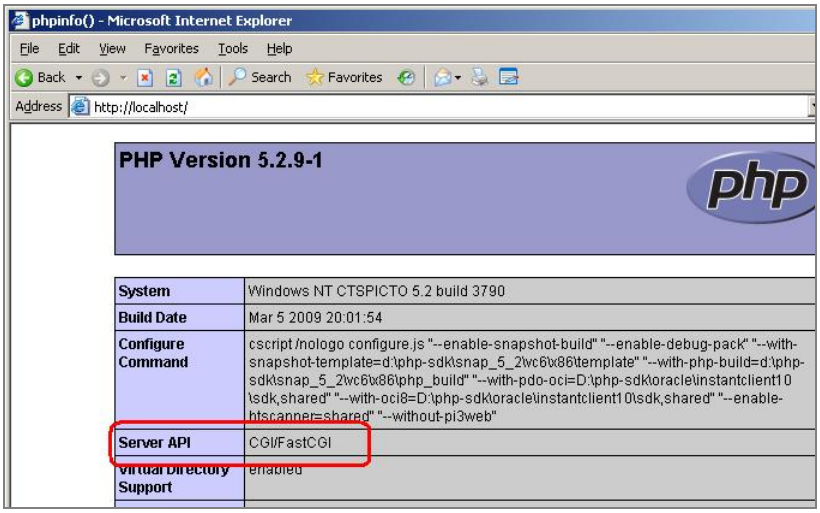
4 — Confirming the PHP Installation

Complete the following procedure after running the Pictometry Self-hosting Installer and configuring IIS default web site properties. In this procedure, you'll verify that PHP parameters are set to specific values and that certain sections are present on the PHP configuration page.

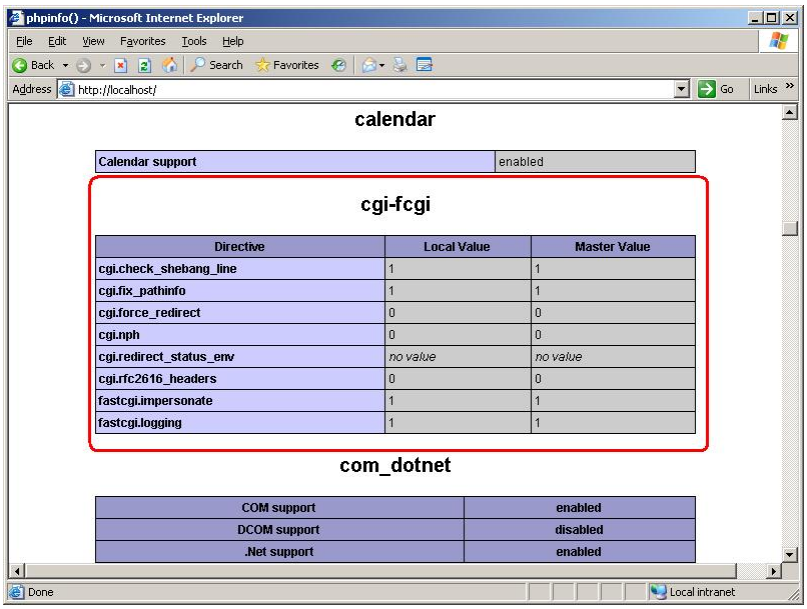
Note: If anything is missing or incorrect in the configuration, please contact Pictometry's Customer Technical Support (domestic customers), or your Pictometry Representative (international customers).

♦ To verify that PHP was installed correctly:

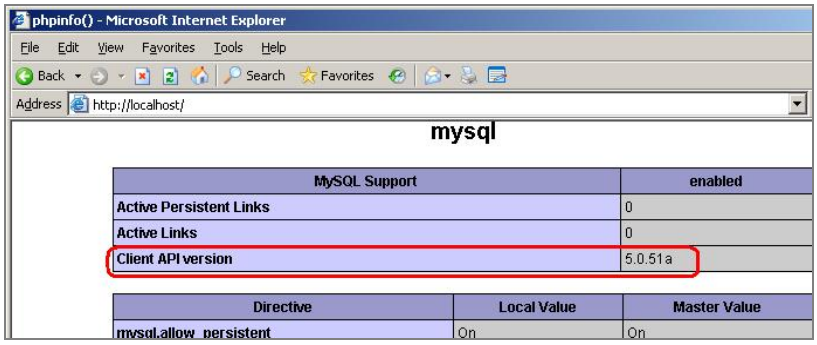
1. Open a web browser.
2. Point your web browser to either **http://localhost** or **http://servername**. You should see a PHP configuration page. (You might have to click your browser's reload button.)
3. In the first section, check that the Server API is "CGI/FastCGI".



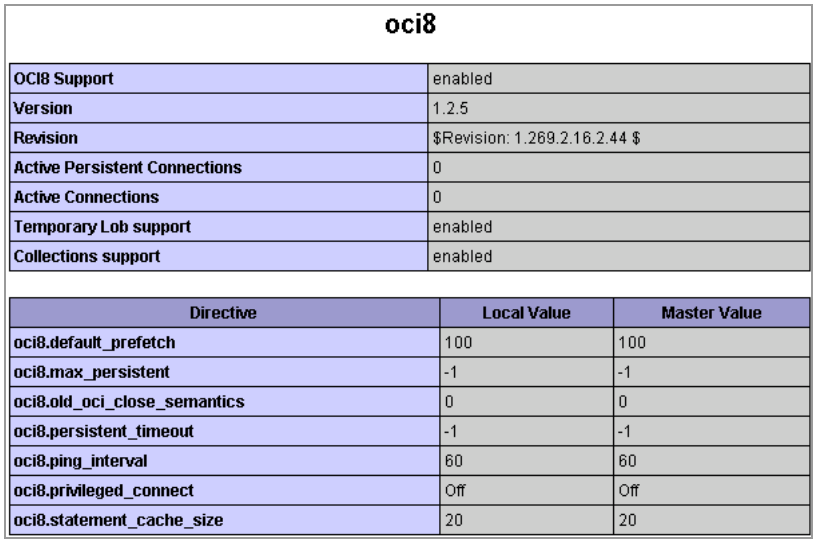
4. Scroll down and verify that there's a section called "cgi-fcgi".



5. If you're using a MySQL database, scroll down to the section labeled "mysql" and verify that Client API Version is "5.0.51a".



If you're using an Oracle database, scroll down to the section labeled "oci8".



Note: There is no section for Microsoft SQL Server.

6. Rename the file called "default.php" (in C:\Inetpub\wwwroot) to one of the following: **default.php.bkp** or **default.php.tst**.
7. If your web server is running Windows Server 2008, re-boot the server now. Then proceed to "5 — Configuring Pictometry Online."

5 — Configuring Pictometry Online

After installing Pictometry Online, you'll configure it by using Pictometry Online Administration. You'll do the following tasks:

- Create an organization and administrator ID for each department that needs access to Pictometry Online.
- Add users (you can do this or the department administrator can).
- Customize each organization.
- Provide access to shape file data.

Configuring POL for a WFS server

If you are not using a WFS server or if you are using ArcGIS server for WFS, you do not need to make this configuration change to POL. Skip this section.

In your Inetpub directory, navigate to Inetpub\ImageNavigator\portal and find the file ServerConfig.xml. Open this file in an editor (such as Notepad).

Near the bottom of the file, find the following line:

<CrsUri>urn:x-ogc:def:crs:EPSG:4326</CrsUri>

Remove the text from the middle of the line so it reads:

<CrsUri></CrsUri>

Check that the line is exactly as above and save and close the file.

Setting up shape files in POL

Before setting up your shape files in POL Administration, you should create a directory called "C:\projects" and copy the shape files that have been converted to WGS84 to the new "C:\projects" directory.

Procedure for configuring POL

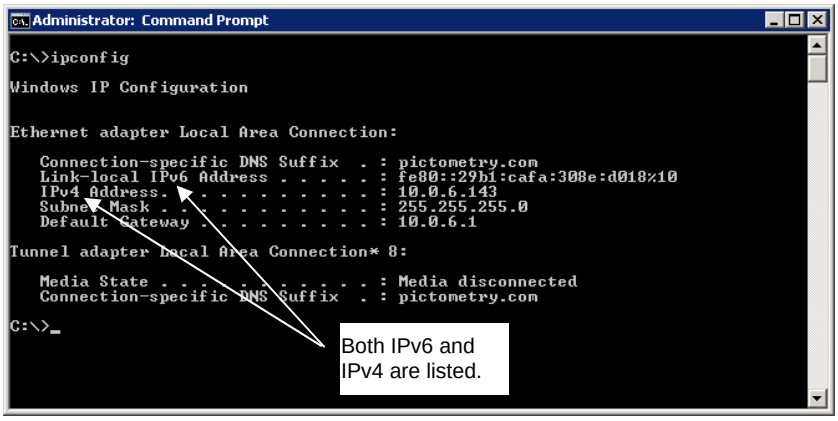
Before configuring POL (if using Windows Server 2008)

Windows Server 2008 might use IPv6 addresses internally. If you're using Server 2008, check if your web browser is using IPv6 for the IP address *before* you configure POL. If it is, you'll need to configure your browser to use IPv4 instead.

If your computer uses IPv6 for an IP address and you log in to POL Administration to configure POL, your login might fail. This occurs only if you're accessing POL Administration by using the browser on the web server, not if you're accessing it from a browser on another computer.

♦ To determine if IPv6 addresses are used:

1. Open a command prompt.
2. Type **ipconfig** and press **ENTER**.



3. Note the IP address listed for IPv4 in the ipconfig output (10.0.6.143 in this example). You'll need this if you use Internet Explorer.

If an IPv6 address is listed in the ipconfig output, you will have to use a workaround for your browser to use IPv4.

Workarounds for Internet Explorer and Firefox

This section describes workarounds for Internet Explorer and Firefox browsers. (If you use a different browser, consult your browser's documentation to find out how to disable IPv6 and use IPv4 instead.)

Internet Explorer workaround

If you're using Internet Explorer, use the IPv4 address rather than the server name in the URL to access POL Administration. (Step 1 of the procedure for configuring Pictometry Online).

For example: **http://10.0.6.143/EFS**

Firefox workaround

Follow these steps to disable IPv6 addresses when using Firefox. This will cause Windows Server 2008 to use the IPv4 address instead.

♦ To disable IPv6 addresses in Firefox:

1. Open the Firefox browser.
2. In the address box type **about:config** and press **ENTER**.
3. Click the **I'll be careful** button.
4. In the filter box, type **network.dns**.
5. Double-click the line that shows: "network.dns.disableIPv6" to set its value to true.
6. Close Firefox.

   Windows Server 2008 will now use only IPv4 addresses.

Configuring Pictometry Online

Use the following procedure to configure your Pictometry Online application by using POL Administration.

♦ To configure Pictometry Online:

1. Point your web browser to **http://<server name>/EFS**. (If you're using a workaround for Internet Explorer, use the IPv4 address rather than the server name.)

   The POL login page opens.

2. Log in with the following credentials:

   Email address: **admin@selfhosting.com**
   Password: **password**

   Important: If the login failed, see "Before configuring POL (if using Windows Server 2008"on page 25 for information.

3. Select **Administration** for the Application.

4. *If you're using a self-signed certificate*, a security alert dialog appears. Accept the certificate as required by the browser you are using.

   Note: Each user will need to accept the certificate once on their computer.

   Pictometry Online Administration opens.

   Note: The Help system contains instructions for using the features of POL Administration.

   Next, you'll set up one or more organizations. You can set up each department that needs access to Pictometry Online as an organization.

5. To add organizations to Pictometry Online, select **Select/Create Organization**. Open the Help topic for adding an organization and follow its instructions.

   You'll add one administrator account for each organization you create. That administrator can then set up and manage individual user accounts.

6. Follow the Help system directions for customizing an organization. Your XML code will need to point to the base map and tile server you are using for POL.

7. Repeat Step 5 – 6 for each organization you wish to set up.

8. For directions about integrating your GIS data with Pictometry Online, see the Help topics for "Managing GIS resources."

   Note: See your Pictometry self-hosting specialist for details about integrating GIS data from ArcGIS Server 9.3.

9. After setting up your organizations, you can create user accounts for each organization (or each organization's administrator can do it). To set up user accounts, you'll need to select the organization first. See the POL Administration Help system for directions.
10. Click **Log out** when done setting up organizations and users.

6 — Accessing Images on a Network Share

Note: This step is required only if your images are accessed via a remote share.

If your images reside on a network share, IIS must be configured in a way that provides Pictometry Online access to the network share. To accomplish this, you'll create a "user" account in IIS and assign that account to POL as described in the following procedure.

Important: Customer on-site IT personnel should create this account.

The user account must be recognized on both the local system and the remote system that contains the network share. Depending on your configuration, there are two ways to do this:

- **Domain User Account** — If the servers are within a domain, you can create a domain user that both systems can recognize. The user name and password are then used to access the imagery from Pictometry Online.
- **Local User Account** — You can create a local user on both the local and remote systems with the exact same user name and password.

Follow these instructions to modify the IIS configuration so that POL can access imagery on a network share.

♦ To configure IIS for network share access:

1. Start IIS Manager on the POL web server.
2. For Server 2003, specify the user name and password as follows:
   a. Expand **Internet Information Services** (left pane), and click **Web Sites**.
   b. Click **Default Web Site**.
   c. Right-click **Image Navigator** and select **Properties** from the context menu. The Properties dialog opens on the right.

      Complete these steps to set up Image Navigator properties:
   d. On the Properties dialog, click the **Directory Security** tab.
   e. In the Authentication and access control box, click **Edit**.

f. In the User name field, do one of the following:

For a …	Type …
domain account	<domain name>\<user name> Example: Pictometry\IUSR_POL
local account	<user name> Example: IUSR_POL

Note: For consistency with IIS naming conventions, we recommend using **IUSR_POL** for the user name.

g. In the Password field, type the password you wish to create.

h. Click **OK** to close the dialog. A confirmation dialog opens. Re-type the password.

i. Click **OK** again to close the Properties dialog.

3. For Server 2008, specify the user name and password as follows:

If you're using a local account and have not already set it up, do the following:

a. Start Server Manager and click **Configuration⇨Local Users and Groups**.

b. Create the user account and password. Be sure to uncheck **User Must Change Password at Next Logon** and check **Password Never Expires**.

c. Close Server Manager.

For both domain or local accounts, do the following:

a. In IIS Manager's left pane, click **ImageNavigator**, then double-click **Authentication** (center pane).

b. Select **Anonymous Authentication**, and click **Edit** (right pane). A dialog opens.

c. Select **Specific user** and click **Set**. Type the user name and password for Server 2008. Re-type the password.

4. Verify that Image Navigator properties appear for the Image Navigator portal application.

For Server 2003, do the following:

a. Double-click **ImageNavigator**.

b. Right-click **portal** and select **Properties** from the context menu.

c. On the Properties dialog, click the **Directory Security** tab.

d. In the Authentication and access control box, click **Edit**.

e. Verify that what you entered in Step 2f for the user name is shown for the portal. If not, enter the user name as instructed in Step 2f above.

For Server 2008, do the following:

a. Click **portal** (left pane), double-click **Authentication** (center pane), select **Anonymous Authentication,** and click **Edit** (right pane).

b. Verify that the correct user name is shown for portal.

5. Verify that Image Navigator properties appear for the Image Navigator render application.

   For Server 2003, do the following:

   a. Right-click **render** and select **Properties** from the context menu.

   b. On the Properties dialog, click the **Directory Security** tab.

   c. In the Authentication and access control box, select **Edit**.

   d. Verify that what you entered in Step 2f for the user name is shown for render. If not, enter the user name as instructed in Step 2f above.

   For Server 2008, do the following:

   a. Click **render** (left pane), double click **Authentication** (center pane), select **Anonymous Authentication,** and click **Edit** (right pane).

   b. Verify that the correct user name is shown for render.

6. In the left pane, select **Default Web Site**.

7. Set up the tiles application as follows:

   For Server 2003, do the following:

   a. Right-click **tiles** and select **Properties** from the context menu. The Properties dialog opens on the right.

   b. On the Properties dialog, select the **Directory Security** tab.

   c. In the Authentication and access control box, select **Edit**.

   d. In the User name field, do one of the following:

For a …	Type …
domain account	<domain name>\<user name> (This must match what you typed in Step 2f.)
local account	<user name> (This must match what you typed in Step 2f.)

Important: You must type the same user name and password you used in Steps 2f and 2g.

   e. In the Password field, type the same password you used in Step 2g above.

   f. Click **OK** to close the dialog. A confirmation dialog opens. Re-type the password.

   g. Click **OK** again to close the Properties dialog.

For Server 2008, do the following:

a. Click **tiles** (left pane), double-click **Authentication** (center pane), select **Anonymous Authentication**, and click **Edit** (right pane). A dialog opens.

b. Select **Specific user** and click **Set**. Type the user name and password for Server 2008. Re-type the password.

8. Set up the DbServices application as follows:

For Server 2003, do the following:

a. Right-click **DbServices** and select **Properties** from the context menu. The Properties dialog opens on the right.

b. On the Properties dialog, select the **Directory Security** tab.

c. In the Authentication and access control box, select **Edit**.

d. In the User name field, do one of the following:

For a …	Type …
domain account	<domain name>\<user name> (This must match what you typed in Step 2f.)
local account	<user name> (This must match what you typed in Step 2f.)

Important: You must type the same user name and password you used in Steps 2f and 2g.

e. In the Password field, type the same password you used in Step 2g above.

f. Click **OK** to close the dialog. A confirmation dialog opens. Re-type the password.

g. Click **OK** again to close the Properties dialog.

For Server 2008, do the following:

a. Click **DbServices** (left pane), double-click **Authentication** (center pane), select **Anonymous Authentication**, and click **Edit** (right pane). A dialog opens.

b. Select **Specific user** and click **Set**. Type the user name and password for Server 2008. Re-type the password.

9. Close IIS Manager.

7 — Post Installation Steps

After you're done with all installation and configuration tasks, Pictometry International recommends that you back up your IIS configuration.

Backing up IIS 6 (Windows Server 2003)

Note: This information is taken from http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/d40b56ee-90d4-45e1-9b82-4aaea90eb02e.mspx?mfr=true.

You can create backup files by using IIS Manager or by using a programmatic administration script. The backup files are copies of the metabase configuration file (MetaBase.xml) and the matching metabase schema file (MBSchema.xml). If necessary, you can restore the metabase from the backup files by using the metabase configuration backup and restore feature.

Important: You must be a member of the Administrators group on the local computer to perform the following procedure or procedures.

Best Practice: For security reasons, log on to your computer by using an account that is not in the Administrators group, and then use the **runas** command to run IIS Manager as an administrator.

At a command prompt, type **runas /user:Administrative_AccountName "mmc %systemroot%\system32\inetsrv\iis.msc"**.

♦ To create a portable backup (password required):

1. In IIS Manager, right-click the local computer, point to **All Tasks**, and click **Backup/Restore Configuration**.
2. Click **Create Backup**.
3. In the Configuration backup name box, type a name for the backup file.
4. Select the **Encrypt backup using password** check box, type a password into the **Password** box, and then type the same password in the **Confirm password** box.
5. Click **OK**, and then click **Close**.

♦ To create a non-portable backup (password not required)

1. In IIS Manager, right-click the local computer, point to **All Tasks**, and click **Backup/Restore Configuration**.
2. Click **Create Backup**.
3. In the Configuration backup name box, type a name for the backup file.

4. Click **OK**, and click **Close**.

♦ **To restore the metabase backup**

1. In IIS Manager, right-click the local computer, point to **All Tasks**, and click **Backup/Restore Configuration**.
2. In the Backups list box, click the version of the Automatic Backup file that you want to restore, and click **Restore**. If prompted for a password, type the password you chose to secure the backup.
3. When a confirmation message appears, click **Yes**.
4. Click **OK**, and then click **Close**.

Backing up IIS 7 or later (Windows Server 2008)

Note: This information is taken from http://blogs.iis.net/bills/archive/2008/03/24/how-to-backup-restore-iis7-configuration.aspx.

For IIS 7 or later, you'll backup or restore via the command line. To back up your IIS7 configuration, you'll simply copy the \windows\system32\inetsrv\config directory (and subdirectories) into a backup directory, or write a custom script to copy it. Include this directory in whatever your OS/content back-up plan is.

There is a simple command-line option to AppCmd.exe that makes management of backup/restore sets easy. For example,

♦ **To back up the configuration:**

Run this command:

```
> %windir%\system32\inetsrv\appcmd.exe add backup "My
Backup Name"
```

♦ **To restore a backup:**

Run this command:

```
> %windir%\system32\inetsrv\appcmd.exe restore backup
"My Backup Name"
```

♦ **To delete a backup:**

Run this command:

```
> %windir%\system32\inetsrv\appcmd.exe delete backup "My
Backup Name"
```

IIS automatically makes history snapshots of ApplicationHost.config each time a change is detected, enabling you to easily restore to a prior version. By default, IIS checks for a new version every 2 minutes, and will keep 10 prior versions of the file. IIS7 stores these snapshots in the %systemdrive%\inetpub\history folder by default.

You can change any of these settings by editing the <system.applicationHost/configHistory> section in ApplicationHost.config. This is explained in detail at http://learn.iis.net/page.aspx/129/using-iis-70-configuration-history/

- **To restore a snapshot:**

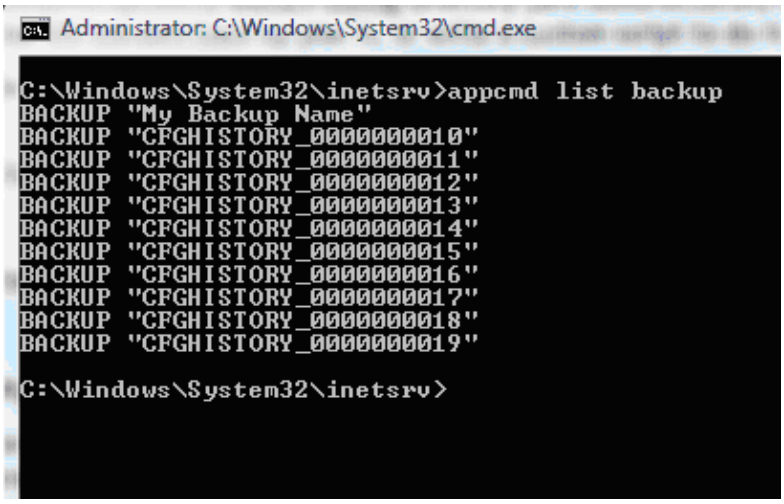
  Do one of the following:

  - Go to the \inetpub\history\cfgHistory_NNNNNNNNNN directory and copy the applicationHost.config file into it's proper place: \windows\sytem32\inetsrv\config
  - Use the command (described above) for restoring a backup to restore a configuration history file.

- **To enumerate a list of backups and configuration history files:**

  Run this command:

  ```
  > %windir%\system32\inetsrv\appcmd.exe list backup
  ```



The configuration history files are listed as backups. Use WinDiff or some other tool to figure out which configuration history you want to restore, then use the AppCmd.exe restore backup command to restore it.

8 — Upgrading From a Previous Version

This chapter describes the procedure for updating your Pictometry Online web server with a newer version of Pictometry Online Self Hosting. (To install POL the first time, see "3 — Running the Pictometry Self-hosting Installer.")

Before running the Installer, make sure that your Oracle or SQL Server database is up-to-date.

Installing updates to POL

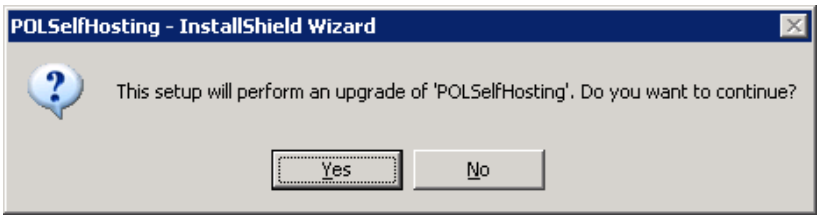
If a previous version of POL Self Hosting is installed on your server, the Installer automatically upgrades POL to the latest version.

Use the following procedure as a general guideline. This procedure might vary slightly, depending on which version of POL is currently installed on your web server.

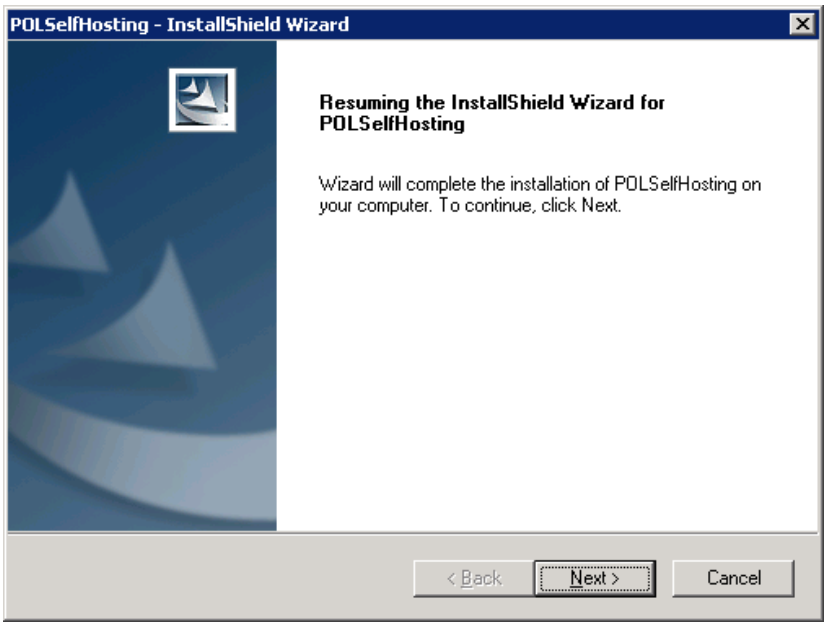
WARNING: During the upgrade, the Installer will need to stop and restart the web server.

♦ To install a newer version of POL Self-hosting:

1. Run **Setup.exe**. The following dialog opens.

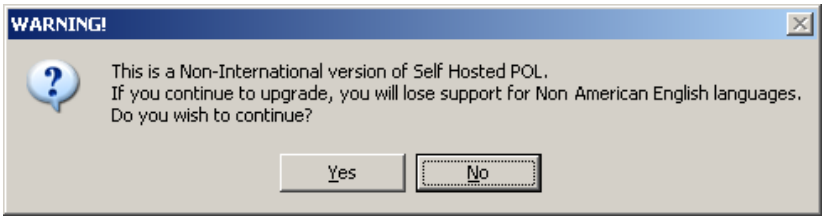


2. Click **Yes**. After a few seconds, the POL Self Hosting InstallShield Wizard (next page) opens.



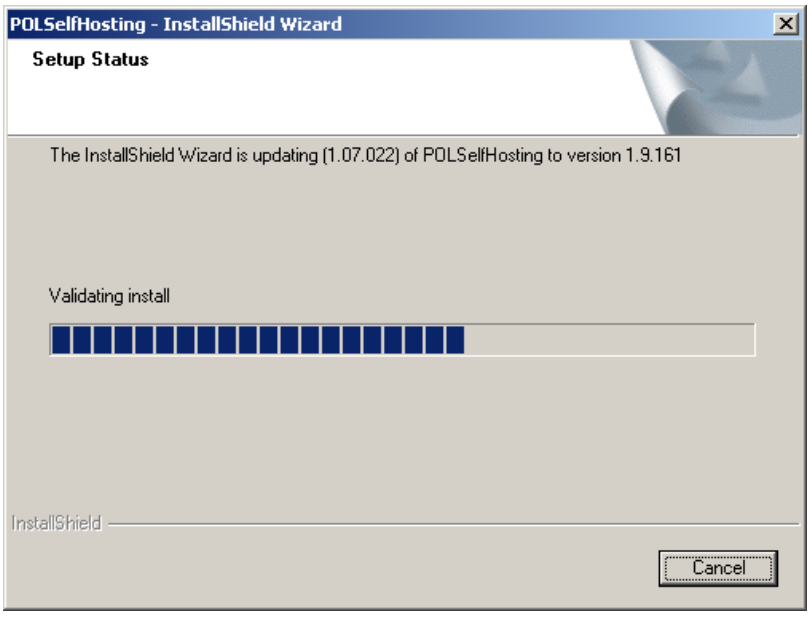
3. Click **Next**.

   If you are upgrading an International version of Self Hosted POL with a non-International version, the following warning appears:

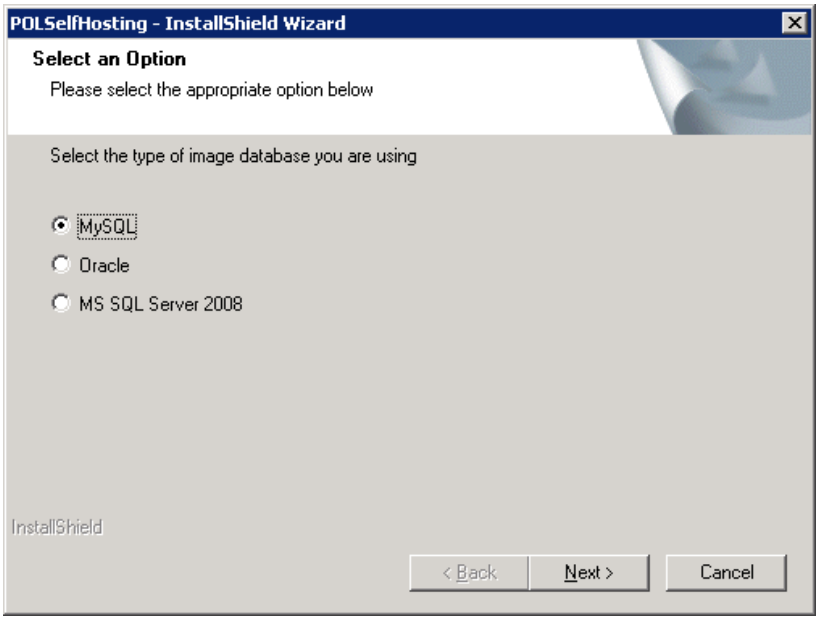


4. Click **No** to terminate the upgrade, or click **Yes** if you wish to continue with this upgrade procedure.

   The Setup Status window appears while files are copied.



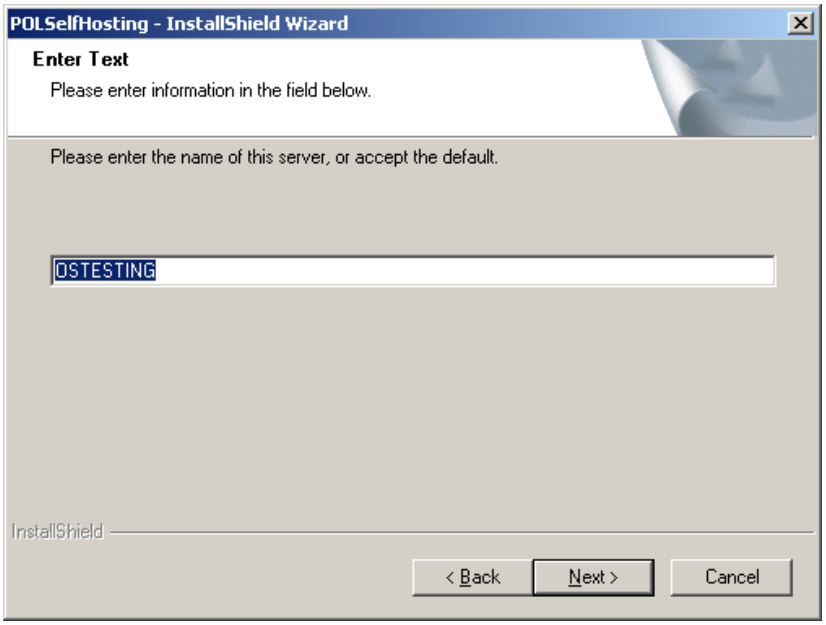
When this finishes, the following dialog opens:



5. Select the type of database you are using and click **Next**.

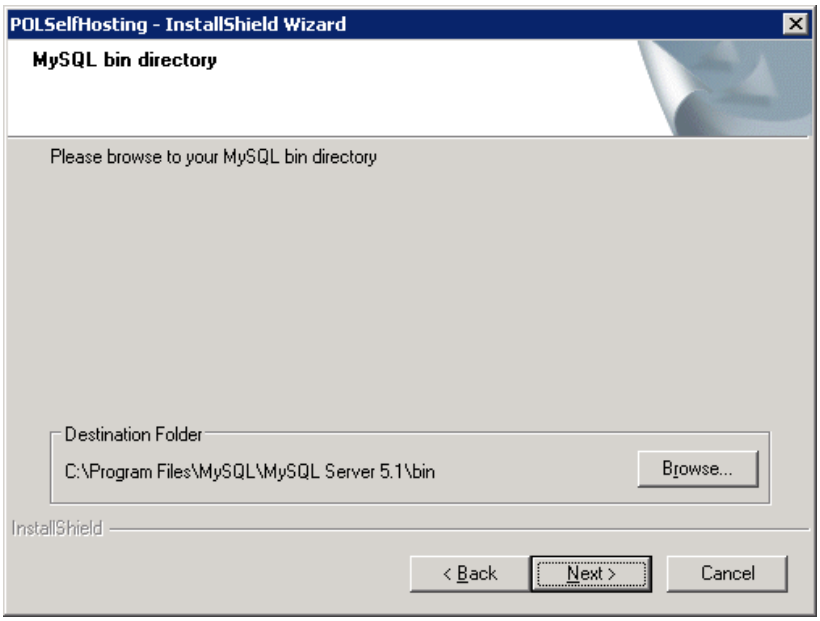
   If you chose Oracle or MS SQL Server, a DOS window flashes briefly, and then the Installer finishes.

   If you chose MySQL, the following dialog opens.



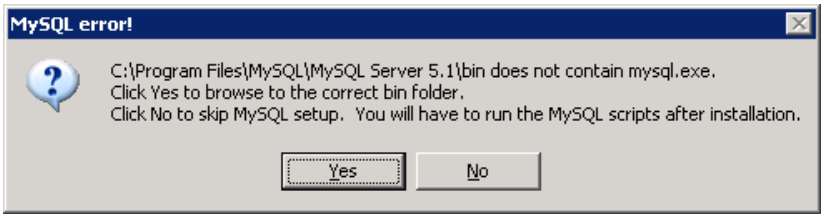
6. Accept the default or type the name of the web server you're using for POL. Click **Next**.

The following window opens.



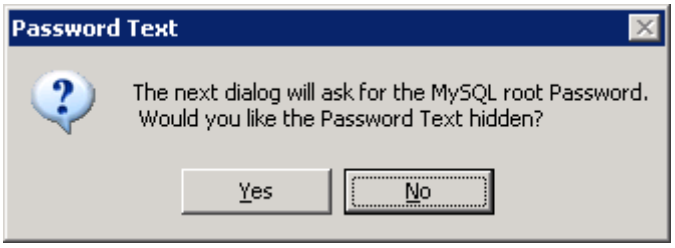
7. On the MySQL bin directory dialog, if the default Destination Folder is correct, click **Next**; otherwise, browse to the correct location and click **Next**.

   If the folder does not contain mysql.exe, the following dialog appears:



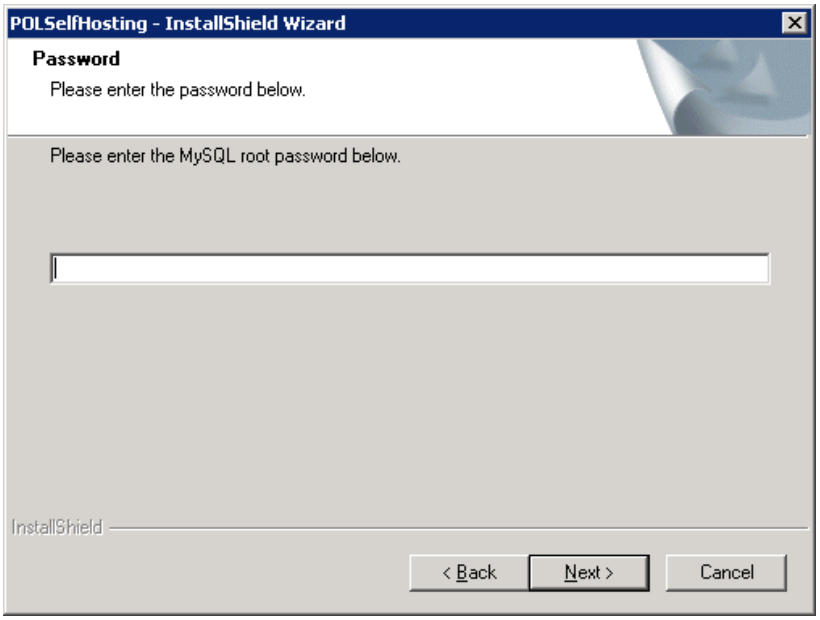
8. Click **Yes** to browse to a different folder. If you choose **No**, the Installer will not be able to run the MySQL update scripts and you will have to run them after the Installer is done.

   If you chose "No" skip to Step 12. If you chose "Yes," the following dialog opens.



9. Click **Yes** to hide the password as you enter it, or **No** to show it.

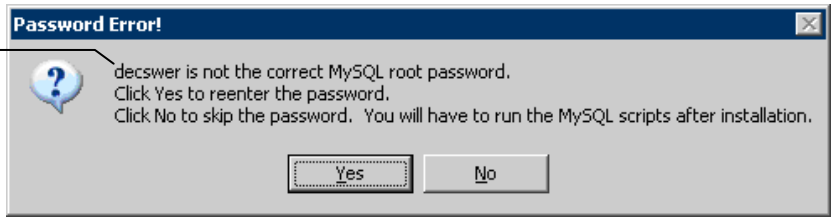
The following dialog opens so you can enter the password.



10. Enter the MySQL root password and click **Next**.

    The installer checks the validity of the password. If the password is incorrect, the following dialog opens so you can re-enter it.

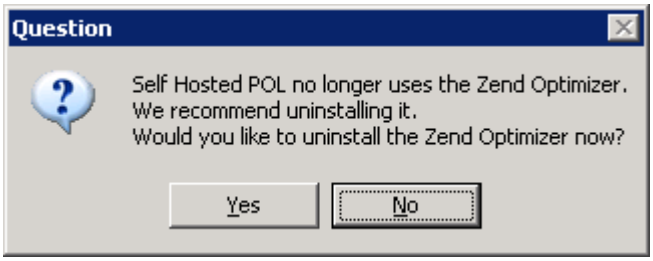
The password you entered



11. Click **Yes** and re-enter the password, or click **No** if you don't want to re-enter the password.

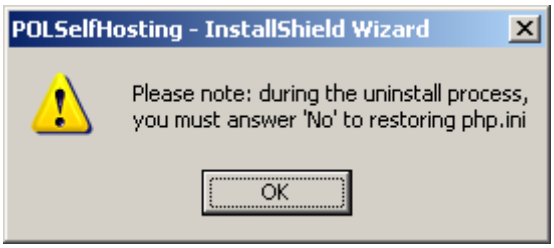
    If you do not enter a correct password, the Installer cannot run the MySQL update scripts and you will need to run them after the Installer is done.

12. POL Self Hosting no longer uses the Zend Optimizer. When the following dialog opens, click **Yes** to remove the Zend Optimizer. To leave the Zend Optimizer, click **No** and skip to Step 18.



The next several steps pertain to uninstalling the Zend Optimizer.

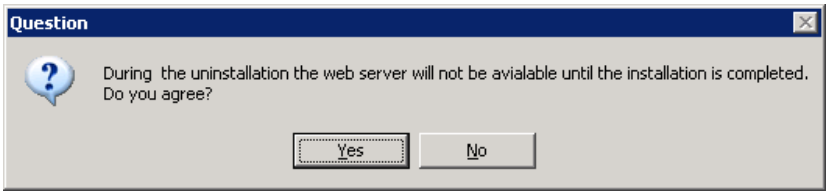
13. The next dialog is informational only. It simply states that you will be asked (later during the uninstall process) if you want to restore your php.ini.



14. Click **OK.** The uninstall wizard continues.

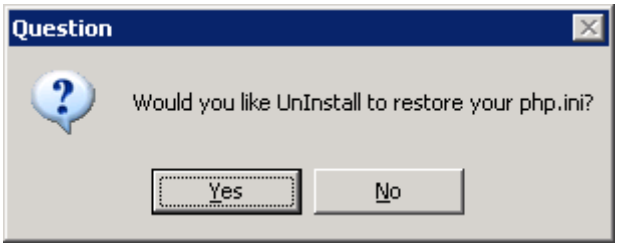
    Eventually, the following prompt appears:

15. Click **Yes**. A confirmation message states that the web server will be unavailable while Zend is being uninstalled.



16. Click **Yes** in response to the confirmation message.

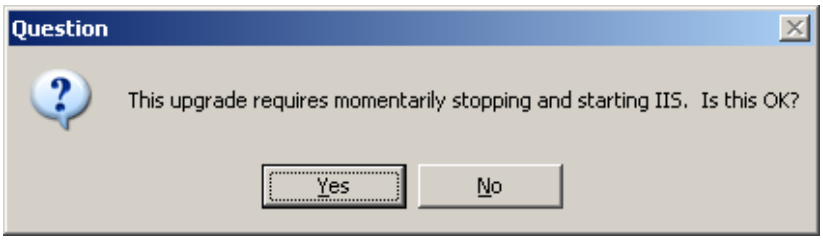
    The Web server stops and a prompt asks if you want Uninstall to replace your php.ini.



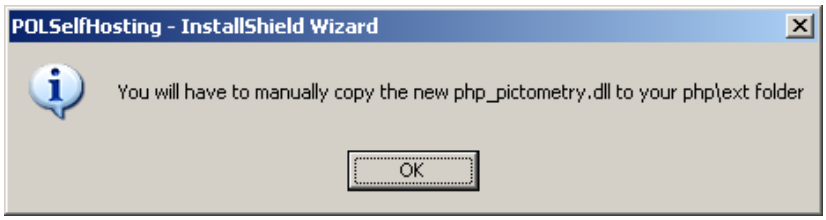
17. Click **No**.

    The Zend Optimizer is uninstalled and the Web server is restarted.

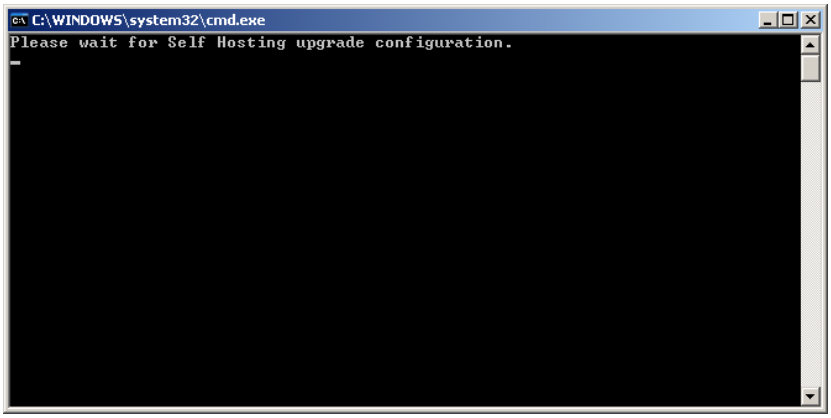
18. When you see the following dialog, click **Yes** if it is okay to stop and restart IIS, or **No** if you do not want to stop and then restart IIS.



If you click "No," the following message appears:



The following cmd window opens for a short time.



19. When the Update Complete dialog appears, click **Finish**.

Appendix A — Installing and Configuring MySQL

This section describes what you need to do to install MySQL and MySQL GUI Tools, and to set up the MySQL database.

Note: The Self Hosting installer will configure the necessary MySQL schema. If Self hosting upgrades require changes to the schema, they will be done automatically by the upgrade installer.

Note: The hard drive supplied by Pictometry contains the install files for MySQL 5.1 Community Edition, both 32- and 64-bit versions, which are freely downloadable versions of the open-source database product provided under the Open GPL License. They are provided by Pictometry as a ready-to-use database solution, but support and questions about the product should be directed to active community forums such as http://dev.mysql.org or other forums easily found with a search engine.

Before installing MySQL

Before installing MySQL, you must do the following:

- If not already installed, install IIS (Microsoft Internet Information Services) on your server.
- *Except as noted below*, it's a good idea to copy your images from the supplied hard drive to your Web Server or Tile Server (if using a separate server for images) before installing MySQL.

  Note: If you received a NAS unit from Pictometry, then do not copy your images to the tile server or web server.
- Open Port 3306 in your firewall. (See the documentation provided with your firewall for instructions.)
- Temporarily disable your anti-virus software.
- Copy the MySQL install file (either **mysql-5.1.31-win32.msi or mysql-5.1.41-winx64.msi)** and **MySQL-gui-tools-5.0-r17-win32.msi** from the supplied external hard drive to a temporary location on your computer or network. Then "Safely Remove" and turn off all attached external drives—including the one supplied by Pictometry. (This is necessary *only* during the installation of MySQL and MySQL GUI Tools. This document will tell you when to turn your external drives back on.)

  Note: The MySQL install files are found in the F:\SelfHosting\MySQL\MySQLInstallers folder on the supplied hard drive.

Installing MySQL

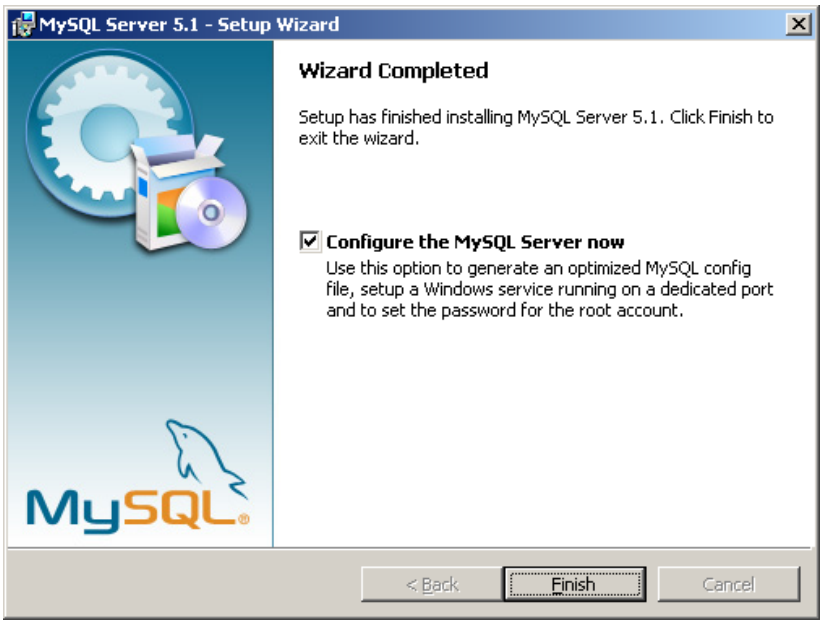
The following procedure installs MySQL on your Pictometry Online server (or on your database server if you're using a separate server for your MySQL database).

You'll install MySQL from the temporary location to which you copied the MySQL install files. (See "Before installing MySQL" above.) Follow the on-screen instructions. When you're done with each window, click **Next** to move to the next one. If necessary, see the documentation provided with MySQL.

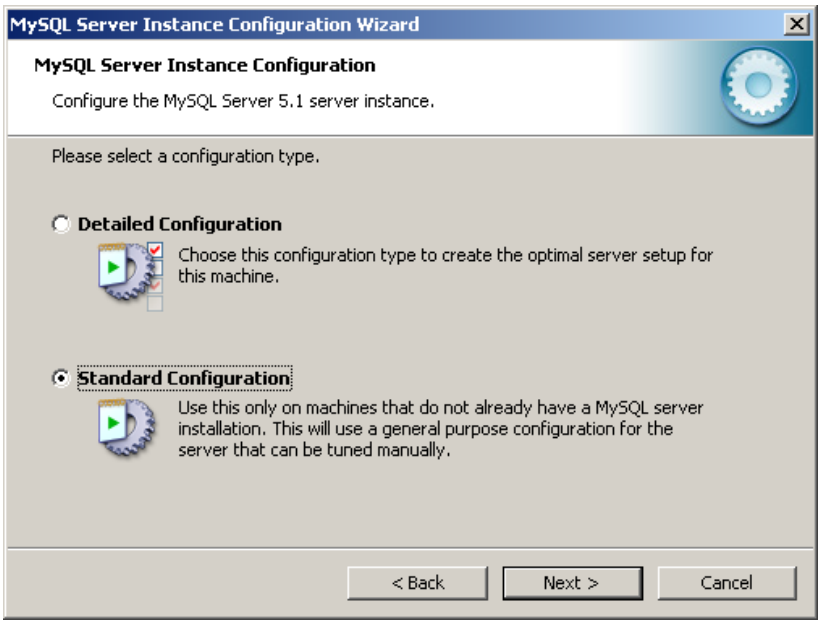
♦ To install MySQL:

1. Run the file called **mysql-5.1.31-win32.msi** or mysql5.1.41-winx64.msi for a 64 bit server (which you previously copied from F:\SelfHosting\MySQL\MySQLInstallers folder of the supplied hard drive to a temporary location). Follow the directions provided by the Installation Wizard until the Setup Type window opens.

2. Select **Complete** for the setup type.
3. Click **Next** until the Wizard Completed window (next page) opens.



4. On the Wizard Completed window, check **Configure the MySQL Server now**.
5. Click **Finish**. MySQL is now installed. The Setup Wizard closes and the Configuration Wizard opens automatically.



6. Select **Standard Configuration** for the configuration type.
7. Follow the directions provided by the Installation Wizard until the following window (next page) opens.

8. On the MySQL Server Instance Configuration window, make sure that the Service Name is **MySQL** and that the following are checked:

   Install as Windows Service

   Launch the MySQL Server automatically

   Include Bin Directory in Windows PATH

9. Follow the directions provided by the Installation Wizard until the following window opens.

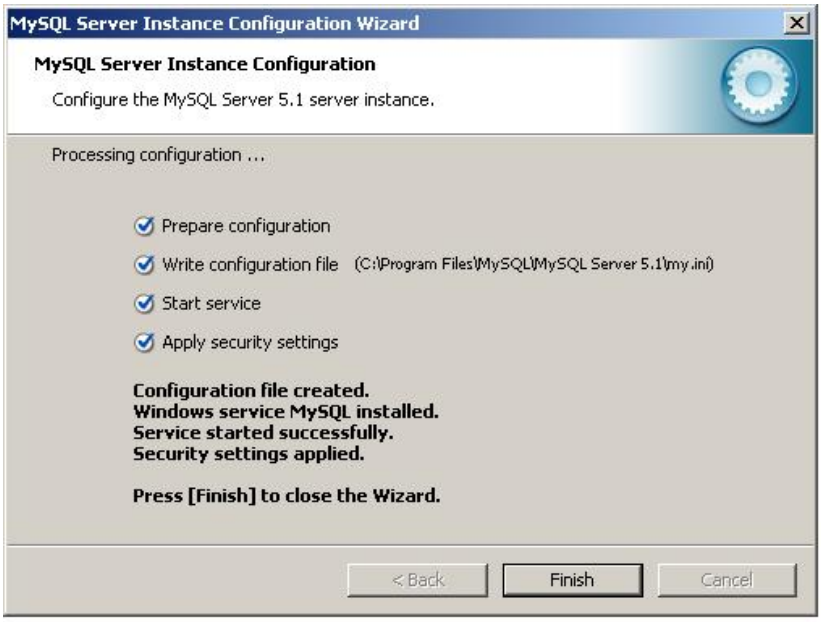
10. Create a password for the root administrator account and write it down. (You'll need it when you set up the MySQL database and when you configure POL.)

On this window do the following:

a. Type and re-type the root password.

b. Check **Enable root access from remote machines**.

11. Click **Next**. The server is configured and the final installation window opens.



12. Click **Finish**.

    The configuration begins. When the configuration is complete, the MySQL Server Instance Configuration Wizard closes.

Next you need to install the MySQL GUI tools.

Installing MySQL GUI Tools

You'll install MySQL GUI Tools from the temporary location to which you copied the MySQL install files. (See "Before installing MySQL" on page 45.) Follow the on-screen instructions. When you're done with each window, click **Next** to move to the next one.

Use this procedure to install MySQL GUI Tools on your POL web server.

♦ To install MySQL GUI Tools:

1. Run the file **MySQL-gui-tools-5.0-r17-win32.msi** (which you previously copied from F:\SelfHosting\MySQL\MySQLInstallers folder of the supplied hard drive to a temporary location).
2. Follow the directions provided by the Installation Wizard. When prompted, accept the end-user license agreement. Select **Complete** for the setup type and defaults on all other windows.

3. If you disabled your anti-virus software before installing MySQL, re-enable it now.

Now you should set up the MySQL database.

Setting up the MySQL database

Use the following procedure to install the MySQL database on your POL server.

♦ To install the MySQL database:

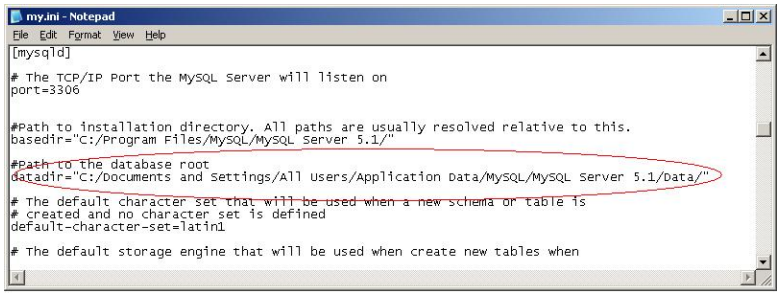
1. Turn *on* the external hard drive supplied by Pictometry and any external hard drives that you turned off prior to installing MySQL.
2. (*Optional*) If you want your MySQL database to be in a location other than the default location (under C:\Documents and settings\...), do the following:
   a. Create a folder for the database tables (for example, C:\MySQLData).

   Note: The folder does not have to be on drive C: and it can be called whatever you wish.

   b. Find the file called **my.ini** and open it.

   Note: You'll likely find the file in the path C:\Program Files\MySQL\MySQLServer5.1 or C:\Program Files (x86)\MySQL\MySQLServer5.1 (for 64 bit systems).

   c. Look for the line that begins with **datadir**. This indicates where the MySQL database is located.



   d. Open the Data folder and copy the folder **Mysql** to the folder you created in Step 2a.

   Important: Copy the Mysql folder; *do not* move it.

3. Copy the **state_tables** folder from F:\SelfHosting\MySQL\MySQLData\state_tables on the supplied hard drive to one of the following locations:

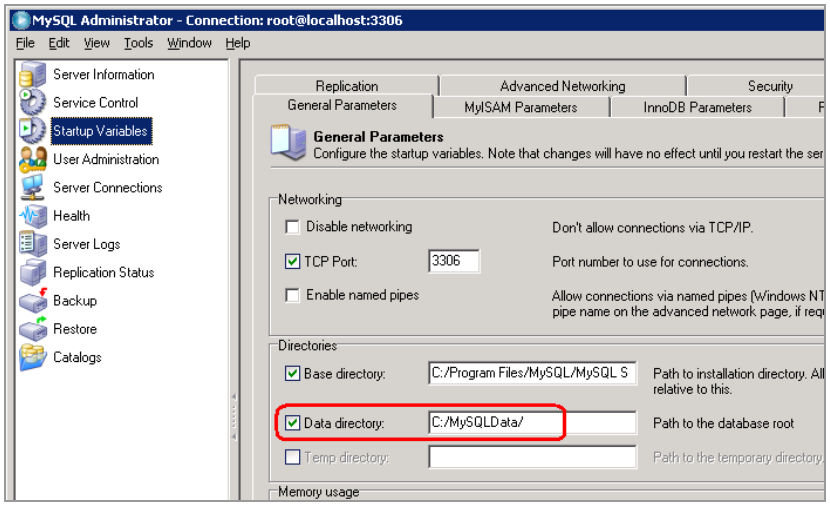
If you …	Copy the state_tables folder to …
Are using the default "Data" folder	the Data folder
Created a new folder in Step 2a	the new folder you created

4. Locate and start the MySQL Administrator application (Click **Start⇨All Programs⇨MySQL⇨MySQL Administrator**.)

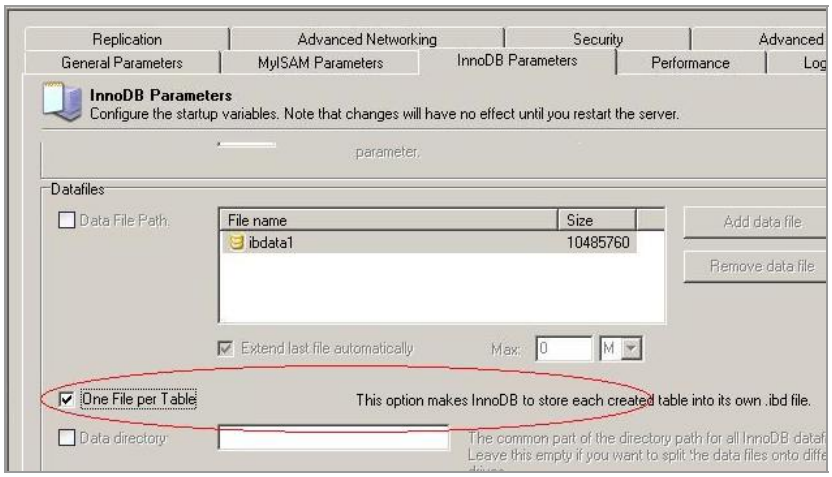
5. Log in to MySQL Administrator using the root administrator credentials:
   a. Type **localhost** for the Server Host. (The Port defaults to 3306.)
   b. Type **root** for the Username.
   c. Type the root password you created when you installed MySQL.

   MySQL Administrator opens.
6. In the left pane, click **Startup Variables**.
7. If you copied the MySQL database to a different location, then in the Startup Variables window on the right, change the Data directory to the folder you created in Step 2a of this procedure. (Be sure to use forward slashes "/" and a trailing slash.)

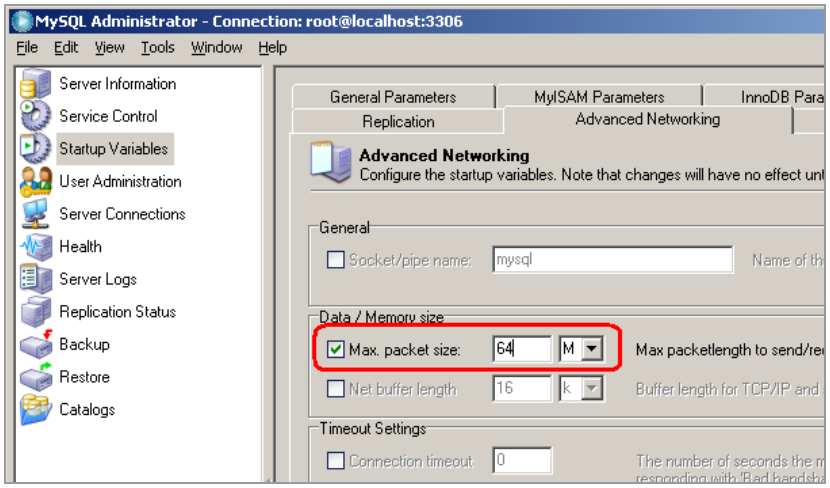
Tip: As you type in the Data directory field, MySQL Administrator checks to see if the folder exists. If it doesn't, the path is highlighted in red.



8. Click the **InnoDB Parameters** tab, scroll down, and check the **One File per Table** box. (You might have to scroll down to see it.)

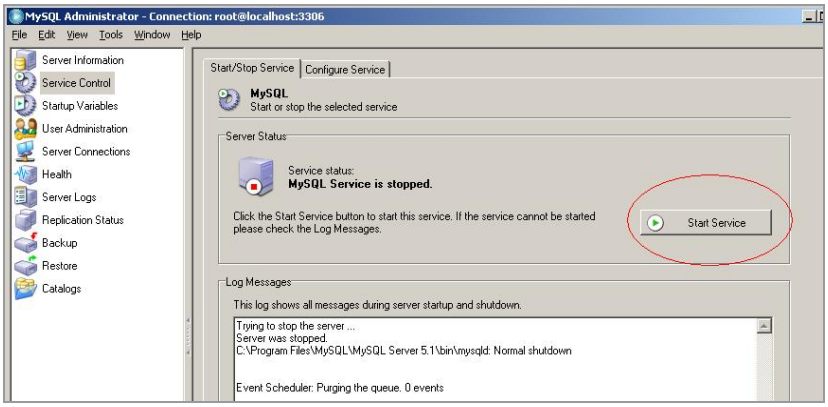


9. Click the **Advanced Networking** tab, check **Max packet size**, and set it to **64 M**.



10. Click **Apply Changes**.

11. In the left pane, click **Service Control**.
12. Click **Stop Service**. It might take a few seconds for the MySQL server to shut down. After it's shut down, the Start Service button appears.



13. Click **Start Service** to restart your MySQL server.
14. Close MySQL Administrator.

Appendix B — Configuring Oracle

This appendix describes what you need to do to configure your Oracle database for Pictometry Online. It assumes that you are either an Oracle Database Administrator or that you know how to configure Oracle databases.

Note: If future upgrades to Self Hosting require changes to the database schema, Pictometry will provide upgrade scripts that your Oracle Database Administrator must run.

Before configuring Oracle

Before configuring Oracle for Pictometry Online, you must do the following:

- If not already installed, install the Oracle client on your Pictometry Online web server. If you are using a 64 bit server, you will have to install the Oracle 32-bit client.
- Configure the Oracle client to connect to the Oracle server.
- Use Oracle SQL Developer or another Oracle database client tool to verify that your POL web server can connect to the Oracle database.

  Note: POL requires a TNS connection to the Oracle database server. Basic connections and JDBC connections are not supported.
- Record the TNS Name (the entry in TNSNAMES.ORA) you will be using to connect to the Oracle server. You'll need to enter it when the Pictometry Self-hosting Installer asks for TNS names for the schemas you set up.

For Oracle Instant Client users

If you use Oracle Instant Client, you must do the following to enable TNS connections:

- Make sure the path to the Oracle Instant Client directory exists in your PATH environment variable before any other Oracle directories.
- Create nested directories "network\admin" inside the Oracle Instant Client directory.
- Create (or copy) a valid TNSNAMES.ORA file inside the "network\admin" directory.

Configuring the Oracle database

Use the following procedure to configure the Oracle database on your POL server.

♦ To configure the Oracle database:

1. Create the following users in Oracle:

   POL_USER
   STATE_TABLES
   GIS_LAYER (Optional – needed only if storing layer data in Oracle)

2. Set roles and permissions for these users as follows:

   a. Assign the CONNECT and RESOURCE roles to all users.

   b. Assign the STATE_TABLES user the following object privileges:

Assign this privilege …	On …
EXECUTE	Package SYS.DBMS_CRYPTO
READ and WRITE	The Oracle directory defined for imports. (See "Configuring Oracle Data Pump" below if you have not already defined an import folder.) **Note**: This privilege is needed only for the initial configuration. If you wish, you can remove it after the STATE_TABLES schema is imported.

3. Run the table/data creation scripts for the POL_USER schema as follows:

   a. Connect to Oracle as user POL_USER.

   b. Run the following SQL scripts, located in the F:\SelfHosting\Oracle\Scripts directory on the Self Hosting hard drive. (If you did not receive an installation drive, these files are located in the installer at \Inetpub\wwwroot\EFS\database\oracle\)

   ```
   pol_db_create_oracle_1_tables.sql
   pol_db_create_oracle_2_data.sql
   pol_db_create_oracle_3_constraints.sql
   ```

4. Copy the **state_tables.dmp** file from the F:\SelfHosting\Oracle\state_tables folder on the supplied hard drive to the import folder on your Oracle server.

   Note: This is a folder on your Oracle server, not on the POL self-hosting web server.

   (See "Configuring Oracle Data Pump" below if you have not already defined an Import folder.)

5. Execute the following command on your Oracle server to import the state_tables.dmp file to the STATE_TABLES schema on the Oracle server:

```
> impdp STATE_TABLES/<password for STATE_TABLES user>
DIRECTORY=<datapump directory defined in Oracle>
SERVICE_NAME=<Database TNS Name>
DUMPFILE=STATE_TABLES.DMP
LOGFILE=state_tables_import.log
TABLE_EXISTS_ACTION=APPEND
```

Example:
> impdp STATE_TABLES/abcd1234 DIRECTORY=dp_dir
SERVICE_NAME=PICTOMETRY DUMPFILE=STATE_TABLES.DMP
LOGFILE=state_tables_import.log TABLE_EXISTS_ACTION=APPEND

Configuring Oracle Data Pump

Before you can use Oracle Data Pump to import a file from a directory on the Oracle server, you must define that directory in Oracle and give it a name for Oracle to use when referencing it.

♦ To define the Oracle directory:

1. Create a directory on the Oracle server (for example, C:\OracleDataPump).
2. Connect to Oracle as a user with the "create directory" privilege and execute the following command to define the directory:

```
> CREATE DIRECTORY dp_dir AS 'C:\OracleDataPump';
```

3. Execute the following command to grant the STATE_TABLES user access to the directory:

```
> GRANT READ ON DIRECTORY dp_dir TO STATE_TABLES;
```

Appendix C — Configuring Microsoft SQL Server 2008

This appendix describes what you need to do to configure your Microsoft SQL Server 2008 database for Pictometry Online. It assumes that you are either a Microsoft SQL Server Database Administrator or that you know how to configure Microsoft SQL Server 2008 databases.

Note: If future upgrades to Self Hosting require changes to the database schema, Pictometry will provide upgrade scripts that your SQL Server Database Administrator must run.

This appendix assumes that you are either a Microsoft SQL Server 2008 Database Administrator or that you know how to configure Microsoft SQL Server 2008 databases.

Before configuring SQL Server 2008

Before configuring Microsoft SQL Server 2008 for Pictometry Online, you must do the following:

- If not already installed, install Microsoft SQL Server Native Client 10.0 on your Pictometry Online web server.
- Use Microsoft SQL Server Management Studio or another Microsoft SQL Server 2008 database client tool to verify that your POL web server can connect to the Microsoft SQL Server 2008 server instance.
- Create a database on your Microsoft SQL Server 2008 server instance for the POL software. We suggest using the name "pictometry" for the database, but this is not required.

Configuring the SQL Server 2008 database

Use the following procedure to configure the Microsoft SQL Server 2008 database for your POL server.

♦ To configure the SQL Server 2008 database:

1. Create the following logins in your server instance, and the corresponding users in the Pictometry Online database:

   pol_user
   state_tables
   gis_layer (Optional – needed only if storing layer data in Microsoft SQL Server 2008)

2. Create the following schemas in the Pictometry Online database:

   pol_user
   state_tables
   gis_layer (Optional – needed only if storing layer data in Microsoft SQL Server 2008)

3. Set "pol_user" to be the default schema for the pol_user user, "state_tables" to be the default schema for the state_tables user, and "gis_layer" to be the default schema for the gis_layer user.
4. If using the gis_layer user and schema, grant the "CREATE TABLE" privilege to the gis_layer user and assign the "db_ddladmin" role to that user.
5. Run the table/data creation scripts for the pol_user schema as follows:
   a. Connect to the appropriate Microsoft SQL Server 2008 server instance as the sa user (or other user with the "CREATE TABLE" privilege and access to the "pol_user" schema).
   b. Run the following SQL scripts, located in the F:\SelfHosting\SQLServer2008\Scripts directory on the Self Hosting hard drive (If you did not receive an installation drive, these files are located in the installer at \Inetpub\wwwroot\EFS\database\mssqlsvr\):
      `pol_db_mssqlsvr_1_tables.sql`
      `pol_db_mssqlsvr_2_data.sql`
6. Run the table creation script for the state_tables schema as follows:
   a. Connect to the appropriate Microsoft SQL Server 2008 server instance as the sa user (or other user with the "CREATE TABLE" privilege and access to the "state_tables" schema).
   b. Run the following SQL script, located in the F:\SelfHosting\SqlServer2008\state_tables directory on the Self Hosting hard drive:
      `create_spatial_define_tables.sql`
7. Import the data for the state_tables schema as follows:
   a. Create a directory on the C: drive of the Pictometry Online web server to temporarily store the import files (for example, C:\pol_import).
   b. Copy the following files from the F:\SelfHosting\SQLServer2008\state_tables directory to the import directory you created:
      `state_tables_county_map_sp.bcp`
      `state_tables_whpathprefix.bcp`
      `state_tables_XX.bcp` (The actual file name will vary depending on your location; and in rare cases, there may be more than one such file.)

c. Open a command prompt window, navigate to the import directory you created, and execute the following commands to perform the import:

```
C:\pol_import> bcp <database
name>.state_tables.county_map_sp in
state_tables_county_map_sp.bcp -N -q -S <server
name>\<server instance name> -U state_tables -P
<password for state_tables user>

C:\pol_import> bcp <database
name>.state_tables.whpathprefix in
state_tables_whpathprefix.bcp -N -q -S <server
name>\<server instance name> -U state_tables -P
<password for state_tables user>

C:\pol_import> bcp <database
name>.state_tables.<state code> in
state_tables_<state code>.bcp -N -q -S <server
name>\<server instance name> -U state_tables -P
<password for state_tables user>
```

(If there is more than one such file, perform this command once for each file.)

Example

```
C:\pol_import> bcp pictometry.state_tables.county_map_sp
in state_tables_county_map_sp.bcp -N -q -S
dbserver1\instance1 -U state_tables -P abcd1234

C:\pol_import> bcp pictometry.state_tables.whpathprefix
in state_tables_whpathprefix.bcp -N -q -S
dbserver1\instance1 -U state_tables -P abcd1234

C:\pol_import> bcp pictometry.state_tables.ny in
state_tables_ny.bcp -N -q -S dbserver1\instance1 -U
state_tables -P abcd1234
```

Appendix D — Managing Image Warehouse Locations

If you have a large number of image warehouses, or if the total size of all your image warehouses is very large, you may need to store different warehouses on different hard drives or network volumes.

Whenever the path to an image warehouse changes (for example, if you move a warehouse to a different hard drive, network volume, or different directory on the same volume), the database entries that enable POL to find the warehouse must be updated in order for imagery to be displayed.

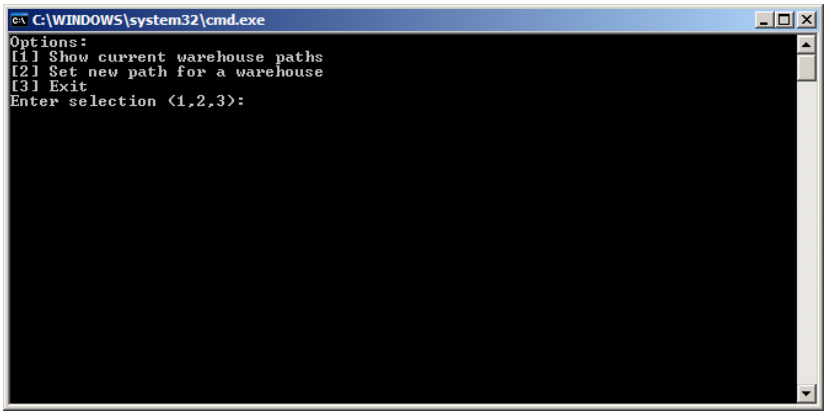
This appendix describes how to use the POL Self Hosting Warehouse Path Management Utility to change image warehouse paths in the POL database.

Changing image warehouse paths

♦ **To change image warehouse paths:**

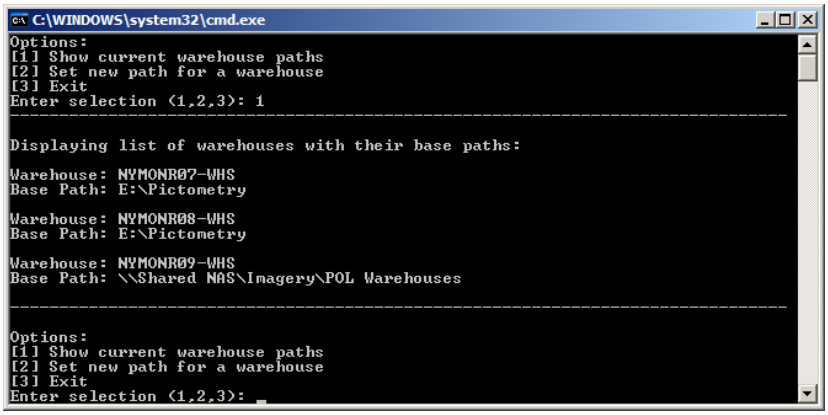
1. Access the EFS directory, (typically C:\inetpub\wwwroot\efs) on your Pictometry Online web server.
2. Navigate to selfhosting\tools\warehouse_setup
3. Double-click the file **manage_warehouse_paths.bat**.

   A screen similar to this one appears.

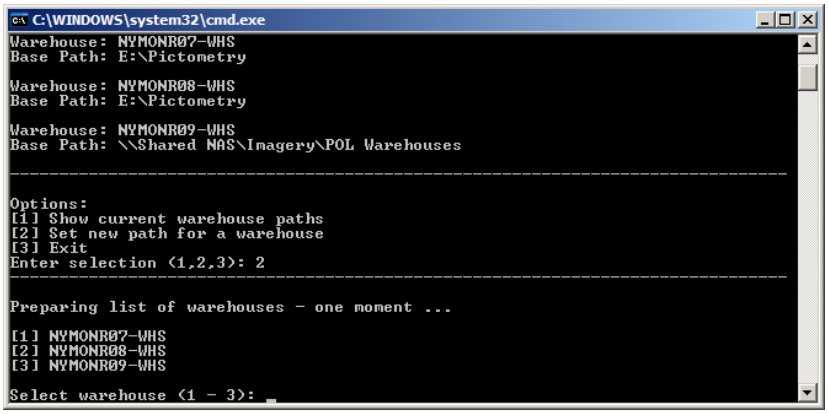


4. To view the list of current warehouses and their paths, type **1** and press **ENTER**.

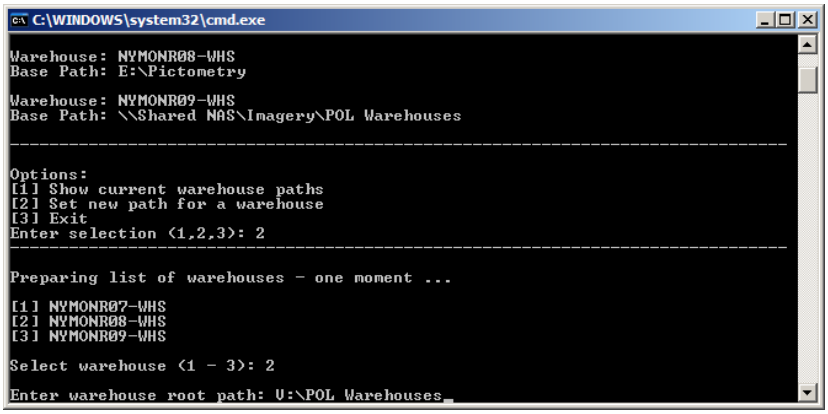
All image warehouses in your database are listed, along with their current locations. An options list is displayed.



5. To set a new path for an image warehouse, type **2** and press **ENTER**. A numbered list of all image warehouses in your database appears.

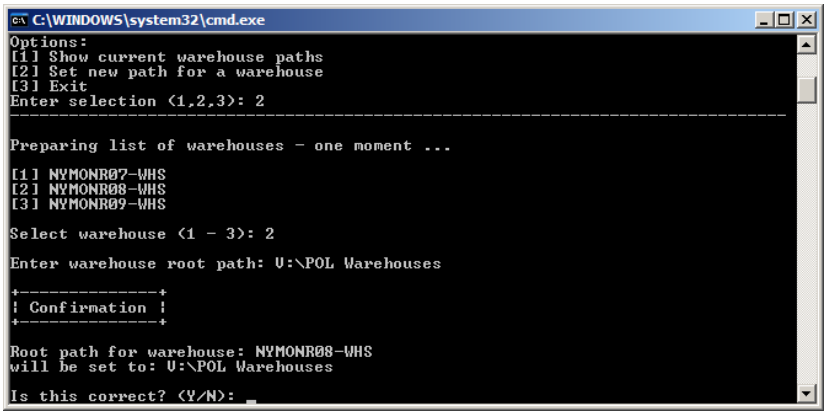


6. Type the number corresponding to the warehouse whose path you want to change and press **ENTER**.



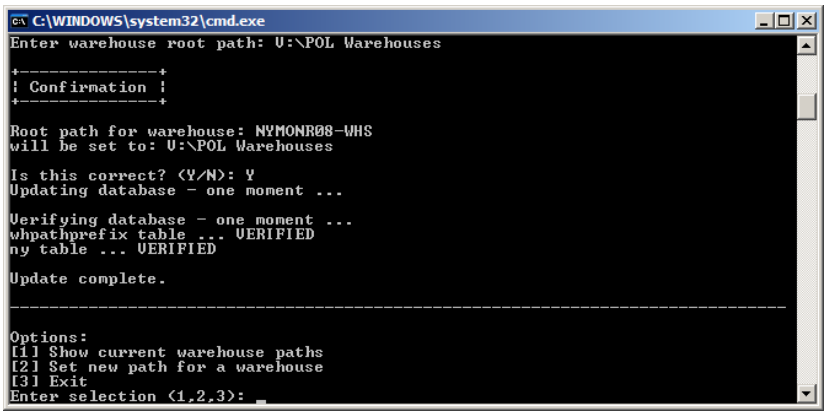
7. Type the new path for that warehouse and press **ENTER**.

The utility displays the warehouse being updated and the new root path. A prompt appears asking you to confirm the change.



8. If the information is correct, type **Y** and press **ENTER**.

   The utility updates all necessary database tables, and then verifies that the data was updated correctly.



9. To change the paths for other warehouses, repeat Steps 4 – 8 for each warehouse to be updated.
10. When you're done changing warehouse paths, type **3** and press **ENTER** to exit the utility.