How to Set Up GeoEvent Processor Development Environment

- Windows 7 or higher
- Java SE 7 Development Kit (With 'JAVA_HOME' and 'PATH' Environment Variable setup)
- ArcGIS for Server 10.2.1 or higher
- Eclipse for J2EE

Steps to set up the environment:

1. Install GeoEvent Processor for Server

2. Validate your Java Environment is setup correctly by executing 'java –version' in 'Windows – All Programs – Accessories – Command Prompt'.

```
C:\Users\guo7711>java -version
java version "1.7.0_55"
Java(TM) SE Runtime Environment (build 1.7.0_55-b13)
Java HotSpot(TM) 64-Bit Server VM (build 24.55-b03, mixed mode)
```

3. Install Maven.
   a. Download Maven from http://maven.apache.org/download.cgi
   b. Unzip the distribution archive, i.e. *apache-maven-3.2.2-bin.zip* to the directory you wish to install Maven 3.2.2.
   c. Add the 'M2_HOME' environment variable to the apache-maven-3.2.2 folder under the directory you unzipped the distribution archive. (Make sure there is no space in the path, if you are using Maven2.0, the last character should not be '\')
   d. In the same dialog, add the M2 environment variable in the user variables with the value %M2_HOME%\bin.
   e. In the same dialog, update/create the Path environment variable in the user variables and prepend the value %M2% to add Maven available in the command line.
   f. Validate your Maven Environment is setup correctly by executing 'mvn --version' in 'Windows – All Programs – Accessories – Command Prompt'.

```
C:\Users\guo7711>mvn --version
Apache Maven 3.2.2 (45f7c06d68e745d05611f7fd14efb6594181933e; 2014-06-17T06:51:
2-07:00)
Maven home: C:\Program Files\apache-maven-3.2.2
Java version: 1.7.0_45, vendor: Oracle Corporation
Java home: C:\Program Files\Java\jdk1.7.0_45\jre
Default locale: en_US, platform encoding: Cp1252
OS name: "windows 7", version: "6.1", arch: "amd64", family: "windows"
```

       If 'mvn' is not recognized, you can check if the environment variables are set correctly. It may help to set the 'M2' value to the value stored in'M2_HOME' instead of %M2_HOME%. (The same thing goes for the 'Path' variable).

4. You can check out the API reference at Windows – All programs – ArcGIS – ArcGIS 10.2.2 for Server – ArcGIS GeoEvent Processor – SDK. It also contains a developer guide that introduces the System Structure.

5. You can check out the SDK and sample code in the {ArcGIS Server install path}\GeoEventProcessor\sdk folder. (Example: C:\Program Files\ArcGIS\Server\GeoEventProcessor\sdk)
6. Open Eclipse (J2EE), click on the Help menu, and select "Eclipse Marketplace". In the "Find" box type "Maven" and press Enter. Scroll down to "Maven Integration for Eclipse" and install it. (If your Eclipse is Luna, it is already installed.)

Play with the sample:

1. Under the File menu, select "Import". Expand the "Maven" folder and select "Existing Maven Projects". Click "Next".
2. In the "Root Directory:" input box, navigate to the folder containing the Sample Adapter project's pom.xml file. Select the folder containing the pom.xml file, not the file itself. Click Finish.
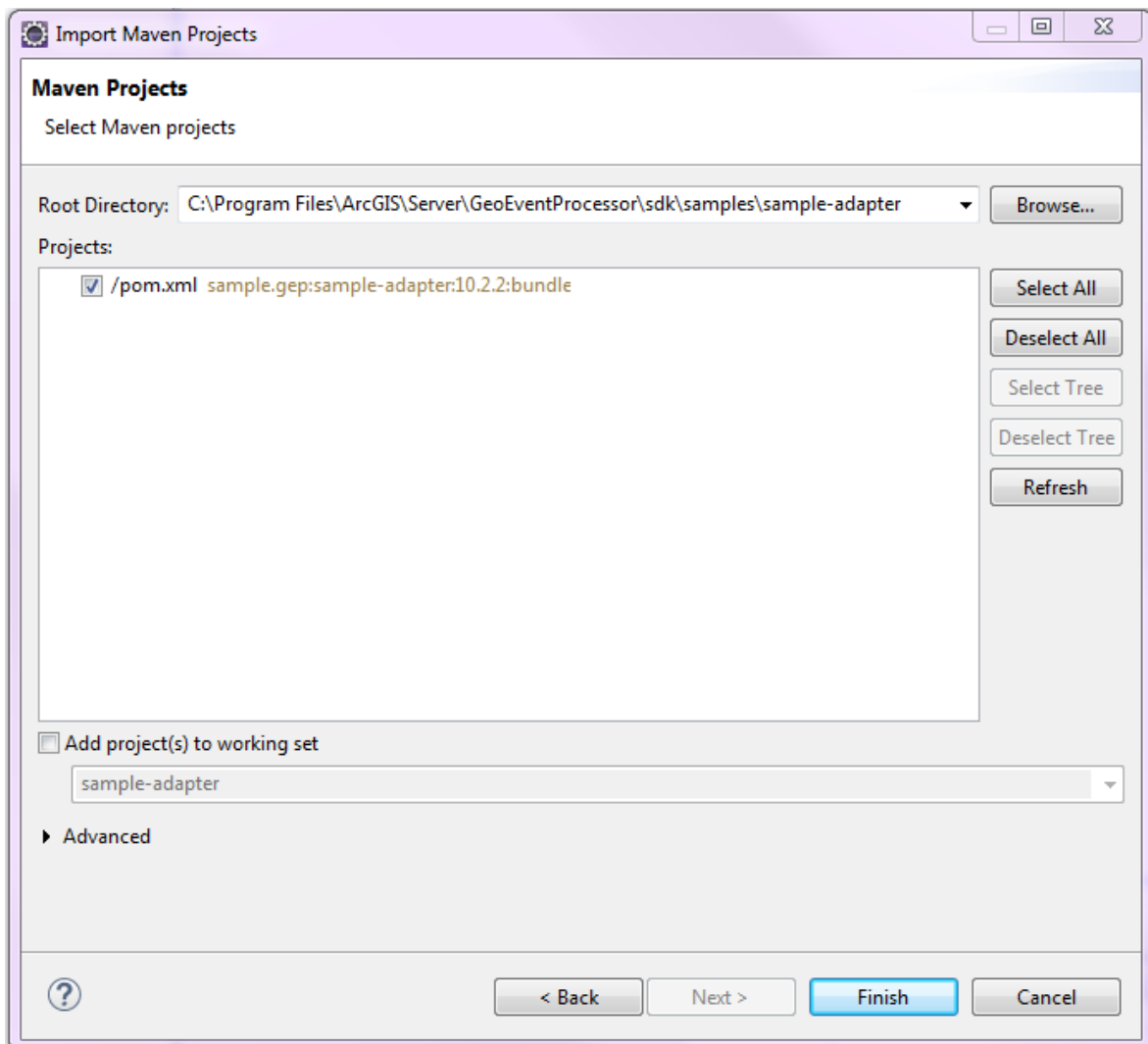
3. Open a command prompt and navigate to the folder containing the pom.xml file.

```
08/06/2014  02:08 PM    <DIR>          .
08/06/2014  02:08 PM    <DIR>          ..
08/06/2014  02:08 PM              1,226 .classpath
08/06/2014  02:08 PM                566 .project
08/06/2014  02:08 PM    <DIR>          .settings
02/19/2014  06:54 PM              2,070 pom.xml
06/11/2014  12:36 PM    <DIR>          src
08/06/2014  02:08 PM    <DIR>          target
               3 File(s)          3,862 bytes
               5 Dir(s)  126,475,210,752 bytes free

C:\Program Files\ArcGIS\Server\GeoEventProcessor\sdk\samples\sample-adapter>
```

4. Run the command: **mvn clean install**

```
C:\Program Files\ArcGIS\Server\GeoEventProcessor\sdk\samples\sample-adapter>mvn
clean install
[INFO] Scanning for projects...
[INFO]
[INFO] ------------------------------------------------------------------------
[INFO] Building Sample Adapter 10.2.2
[INFO] ------------------------------------------------------------------------
```

5. If the build completes successfully, copy the resulting jar file from the "target" folder of your project into the "deploy" folder of the GeoEvent Processor. This will load your custom component.