Practice: Setting Up GemFire

Welcome to the GemFire introduction course. We have tried to make the lab setup as simple as possible. In this procedure it is assumed that you know how to configure environment variables for your operating system.

**What you will learn:**

* Install and configure GemFire, and the lab environment.

### GemFire Installation Prerequisite

1. Make sure that your system meets the [System Requirements](http://community.gemstone.com/display/gemfire/System+Requirements) listed. Refer to the product documentation at http://docs.gopivotal.com/gemfire/.
2. Check that your Java version is appropriate and that Java is on your path. To check your current Java version, type java -version at a command-line. Your output should look something like this:

java version "1.6.0\_26"  
Java(TM) SE Runtime Environment (build 1.6.0\_26-b03-384-10M3425)  
Java HotSpot(TM) 64-Bit Server VM (build 20.1-b02-384, mixed mode)

1. To install GemFire, you will need Java Runtime Environment 1.6.0 or higher. If this command returned an error, that means Java is either not installed, or not on your PATH.

You can download Sun/Oracle Java SE [here](http://www.oracle.com/technetwork/java/javase/downloads/index.html).  
<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

### Install GemFire

1. From the [Pivotal downloads](http://www.gopivotal.com/big-data/pivotal-gemfire) (http://www.gopivotal.com/big-data/pivotal-gemfire) page, select and download the evaluation version of Pivotal GemFire.
2. Download the ZIP distribution Pivotal GemFire distributed as a ZIP file.
3. Open the .zip file, and extract the product files to the desired installation location on your machine.

### Configuring the Command Line Interface (CLI) Environment

You might be required to use the CLI for executing some of the GemFire commands. Therefore, you need to set the environment variables before executing the GemFire commands:

1. Make sure JAVA\_HOME is set.
2. Set the GEMFIRE environment variable to point to your GemFire installation top-level directory (for example C:\ Pivotal\_GemFire\_702\_b45797)
3. Notice the PATH and CLASSPATH are set:

**Unix:**PATH=$PATH:$JAVA\_HOME/bin:$GEMFIRE/bin;  
export PATH  
CLASSPATH=$GEMFIRE/lib/gemfire.jar:$GEMFIRE/lib/  
antlr.jar:$GEMFIRE/lib/gfSecurityImpl.jar:$CLASSPATH;  
export CLASSPATH

**Windows:**set PATH=%PATH%;%JAVA\_HOME%\bin;%GEMFIRE%\bin  
set CLASSPATH=%GEMFIRE%\lib\gemfire.jar;%GEMFIRE%\lib\  
antlr.jar;%GEMFIRE%\lib\gfSecurityImpl.jar;%CLASSPATH%

### Setting up the QuickStart Examples

The quickstart samples demonstrate how to implement specific functionality in GemFire. You can find the quickstart sample applications within the  
 \ Pivotal\_GemFire\_702\_b45797\SampleCode directory.

To execute any of the sample applications, add the example class directories to your CLASSPATH. You need these examples subdirectories in your CLASSPATH to run all of the sample applications:

* tutorial/classes
* helloworld/classes
* quickstart/classes
* examples/dist/classes

**Windows:**

set CLASSPATH=  
< product\_directory>\SampleCode\tutorial\classes;

< product\_directory>\SampleCode\helloworld\classes;

< product\_directory>\SampleCode\quickstart\classes;

< product\_directory>\SampleCode\examples\dist\classes;

%CLASSPATH%

where <product\_directory> corresponds to the location where you installed Pivotal GemFire.