

How to Build Geronimo Eclipse Plugin from Source

To build the Geronimo Eclipse Plugin (GEP) from source you need to have the following prerequisites installed.

- [Apache Maven 2.0.10+](#)
- [Subversion 1.4.6+](#)
- [Sun JDK 5.0+ downloads](#) or [Sun JDK 6.0+ downloads](#)
- Add the bin directories of maven and subversion to system variable **Path**.



Useful Information

You can also change the default location of m2repo by modifying <MAVEN_HOME>/conf/settings.xml and modify the following tag <localRepository>C:\m2repo</localRepository>

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Getting the source code

1. Create a directory gep in the root location.

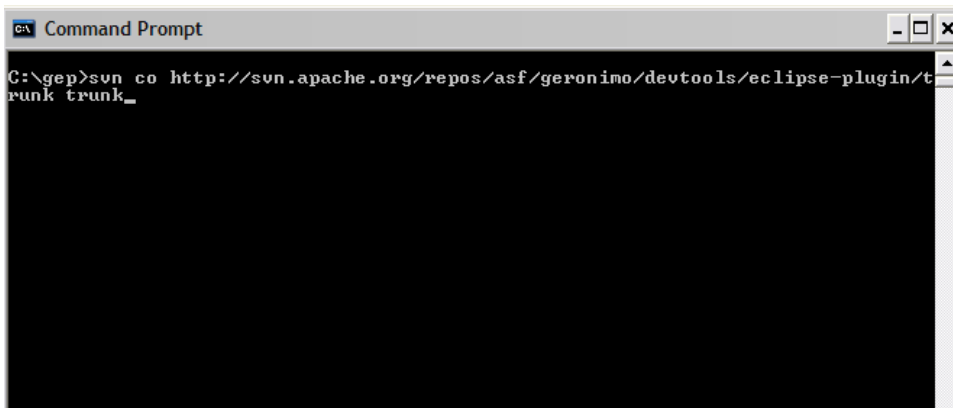


Useful Information

It is strongly recommended that you use a small directory name for the source code download. At times there have been issues due to long path.

2. Open a command prompt and change **gep** directory created before. Run the following command to start downloading the source.

```
svn co http://svn.apache.org/repos/asf/geronimo/devtools/eclipse-plugin/trunk trunk
```



3. Subversion will start downloading the source and the command window will show the progress information.

```
Command Prompt - svn co http://svn.apache.org/repos/asf/geronimo/devtools/eclipse-plugi...
nimo
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core\GeronimoServerInfo.java
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core\GeronimoRuntime.java
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core\operations
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core\operations\U21DeploymentPlanCreationOperation.java
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core\operations\GeronimoU21FacetInstallDelegate.java
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core\jaxb
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core\jaxb\JAXBObjectFactoryImpl.java
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core\jaxb\JAXBModelUtils.java
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core\GeronimoServer.java
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core\DeploymentPlanInstallConfig.java
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core\GeronimoU21Utils.java
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core\GeronimoServerBehaviour.java
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core\Activator.java
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core\GeronimoU21VersionHandler.java
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core\internal
A trunk\plugins\org.apache.geronimo.st.v21.core\src\main\java\org\apache\gero
nimo\st\v21\core\internal\Trace.java
```

4. On successful download you can see the revision number for the downloaded source.

```
Command Prompt
s\ui-tutorial\RemoteBusinessInterface.java
A trunk\testsuite\plugins\org.apache.geronimo.testsuite.v21\src\main\resource
s\ui-tutorial\MyServlet.java
A trunk\testsuite\plugins\org.apache.geronimo.testsuite.v21\options
A trunk\testsuite\plugins\org.apache.geronimo.testsuite.v21\pom.xml
A trunk\testsuite\plugins\org.apache.geronimo.testsuite.v21\plugin.xml
A trunk\testsuite\plugins\org.apache.geronimo.testsuite.v21\test.xml
A trunk\testsuite\pom.xml
A trunk\testsuite\eclipse
A trunk\testsuite\eclipse\pom.xml
A trunk\testsuite\eclipse\build.xml
A trunk\testsuite\server
A trunk\testsuite\server\pom.xml
A trunk\testsuite\pom.xml
A trunk\pom.xml
A trunk\features
A trunk\features\org.apache.geronimo.v20.feature
A trunk\features\org.apache.geronimo.v20.feature\NOTICE.txt
A trunk\features\org.apache.geronimo.v20.feature\LICENSE.txt
A trunk\features\org.apache.geronimo.v20.feature\project
A trunk\features\org.apache.geronimo.v20.feature\license.html
A trunk\features\org.apache.geronimo.v20.feature\feature.properties
A trunk\features\org.apache.geronimo.v20.feature\build.properties
A trunk\features\org.apache.geronimo.v20.feature\feature.xml
A trunk\features\org.apache.geronimo.v20.feature\pom.xml
A trunk\features\org.apache.geronimo.v21.feature
A trunk\features\org.apache.geronimo.v21.feature\NOTICE.txt
A trunk\features\org.apache.geronimo.v21.feature\LICENSE.txt
A trunk\features\org.apache.geronimo.v21.feature\project
A trunk\features\org.apache.geronimo.v21.feature\license.html
A trunk\features\org.apache.geronimo.v21.feature\feature.properties
A trunk\features\org.apache.geronimo.v21.feature\build.properties
A trunk\features\org.apache.geronimo.v21.feature\feature.xml
A trunk\features\pom.xml
A trunk\features\bigG.gif
U trunk
Checked out revision 688495.
C:\>gep>
```

Building Source

1. Modify heap settings for JVM as follows.



The following environment variable needs to be set to properly configure the JVM to meet memory requirements.
MAVEN_OPTS="-Xms512m -Xmx512m -XX:MaxPermSize=256m"

On Windows use the following command to set the environment variable (note that double quotes should not be used):
set MAVEN_OPTS=-Xms512m -Xmx512m -XX:MaxPermSize=128m

2. Change to the trunk directory of the source you have downloaded and run the following command

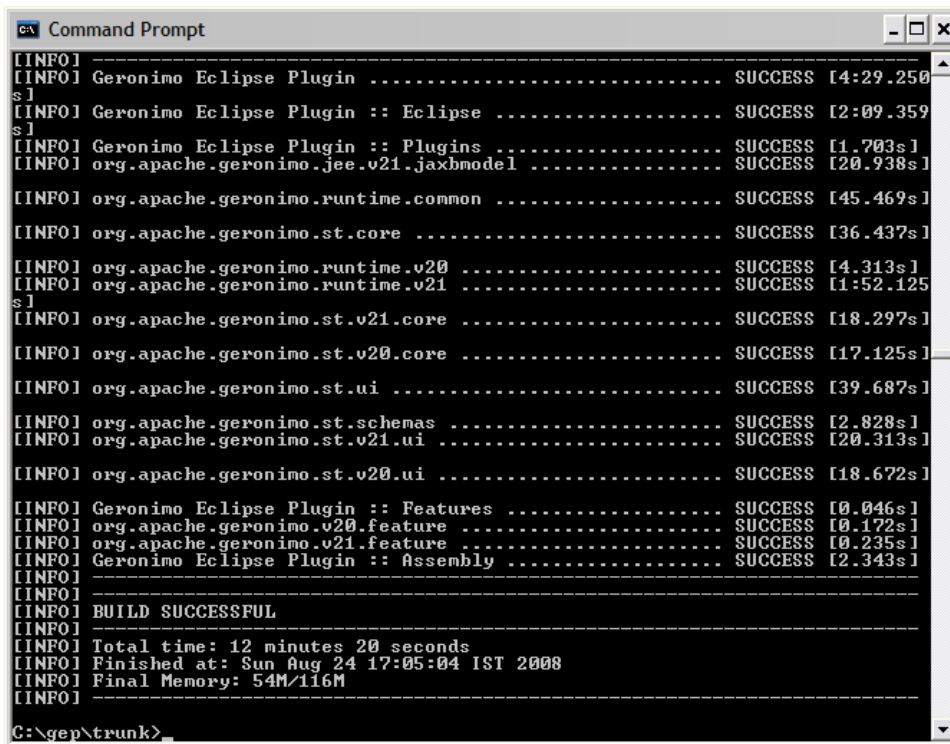
```
mvn clean install
```

```
C:\gep\trunk>mvn clean install_
```

3. Once done various dependencies will be downloaded to your m2 repository. If you are building GEP for the first time it may take considerable time.

```
Command Prompt - mvn clean install
ers/1.0-beta-3/maven-scm-providers-1.0-beta-3.pom
1K downloaded
Downloading: http://commons.ucalgary.ca/pub/m2/org/apache/maven/scm/maven-scm/1.0-beta-3/maven-scm-1.0-beta-3.pom
Downloading: http://download.java.net/maven/1/org/apache/maven/scm/poms/maven-scm-1.0-beta-3.pom
Downloading: http://repo1.maven.org/maven2/org/apache/maven/scm/maven-scm/1.0-beta-3/maven-scm-1.0-beta-3.pom
3K downloaded
Downloading: http://commons.ucalgary.ca/pub/m2/org/apache/maven/scm/maven-scm-api/1.0-beta-3/maven-scm-api-1.0-beta-3.pom
Downloading: http://download.java.net/maven/1/org/apache/maven/scm/poms/maven-scm-api-1.0-beta-3.pom
Downloading: http://repo1.maven.org/maven2/org/apache/maven/scm/maven-scm-api/1.0-beta-3/maven-scm-api-1.0-beta-3.pom
591b downloaded
Downloading: http://commons.ucalgary.ca/pub/m2/org/apache/maven/maven-plugin-api/2.0.2/maven-plugin-api-2.0.2.pom
Downloading: http://download.java.net/maven/1/org/apache/maven/poms/maven-plugin-api-2.0.2.pom
Downloading: http://repo1.maven.org/maven2/org/apache/maven/maven-plugin-api/2.0.2/maven-plugin-api-2.0.2.pom
643b downloaded
Downloading: http://commons.ucalgary.ca/pub/m2/org/apache/maven/scm/maven-scm-provider-cvsexec/1.0-beta-3/maven-scm-provider-cvsexec-1.0-beta-3.pom
Downloading: http://download.java.net/maven/1/org/apache/maven/scm/poms/maven-scm-provider-cvsexec-1.0-beta-3.pom
Downloading: http://repo1.maven.org/maven2/org/apache/maven/scm/maven-scm-provider-cvsexec/1.0-beta-3/maven-scm-provider-cvsexec-1.0-beta-3.pom
895b downloaded
Downloading: http://commons.ucalgary.ca/pub/m2/org/apache/maven/scm/maven-scm-providers-cvs/1.0-beta-3/maven-scm-providers-cvs-1.0-beta-3.pom
Downloading: http://download.java.net/maven/1/org/apache/maven/scm/poms/maven-scm-providers-cvs-1.0-beta-3.pom
Downloading: http://repo1.maven.org/maven2/org/apache/maven/scm/maven-scm-providers-cvs/1.0-beta-3/maven-scm-providers-cvs-1.0-beta-3.pom
Downloading: http://people.apache.org/repo/m2-snapshot-repository/org/apache/maven/scm/maven-scm-providers-cvs/1.0-beta-3/maven-scm-providers-cvs-1.0-beta-3.pom
```

4. On the success of build you can see a **Build Successful** message on the command prompt.



```
[INFO] -----
[INFO] Geronimo Eclipse Plugin ..... SUCCESS [4:29.250s]
[INFO] Geronimo Eclipse Plugin :: Eclipse ..... SUCCESS [2:09.359s]
[INFO] Geronimo Eclipse Plugin :: Plugins ..... SUCCESS [1.703s]
[INFO] org.apache.geronimo.jee.v21.jaxbmodel ..... SUCCESS [20.938s]
[INFO] org.apache.geronimo.runtime.common ..... SUCCESS [45.469s]
[INFO] org.apache.geronimo.st.core ..... SUCCESS [36.437s]
[INFO] org.apache.geronimo.runtime.v20 ..... SUCCESS [4.313s]
[INFO] org.apache.geronimo.runtime.v21 ..... SUCCESS [1:52.125s]
[INFO] org.apache.geronimo.st.v21.core ..... SUCCESS [18.297s]
[INFO] org.apache.geronimo.st.v20.core ..... SUCCESS [17.125s]
[INFO] org.apache.geronimo.st.ui ..... SUCCESS [39.687s]
[INFO] org.apache.geronimo.st.schemas ..... SUCCESS [2.828s]
[INFO] org.apache.geronimo.st.v21.ui ..... SUCCESS [20.313s]
[INFO] org.apache.geronimo.st.v20.ui ..... SUCCESS [18.672s]
[INFO] Geronimo Eclipse Plugin :: Features ..... SUCCESS [0.046s]
[INFO] org.apache.geronimo.v20.feature ..... SUCCESS [0.172s]
[INFO] org.apache.geronimo.v21.feature ..... SUCCESS [0.235s]
[INFO] Geronimo Eclipse Plugin :: Assembly ..... SUCCESS [2.343s]
[INFO] -----
[INFO] BUILD SUCCESSFUL
[INFO] -----
[INFO] Total time: 12 minutes 20 seconds
[INFO] Finished at: Sun Aug 24 17:05:04 IST 2008
[INFO] Final Memory: 54M/116M
[INFO] -----
C:\gep\trunk>
```



You do not need to manually download Eclipse or the web tools project to build. This is taken care of for you automatically during the build process. You can find the downloads at <Local_M2_Repo>\eclipse-downloads

Other Maven options

Skip Test

At times your build may fail due to test case failure. You can skip the test by running the following command

```
mvn clean -Dmaven.test.skip=true -Dmaven.itest.skip=true install
```



If you want to run integration test against GEP source code, use **mvn clean install -Ptestsuite** to build the GEP. But be aware that this command could result in GEP build failure because lots of jar files on which GEP depends are not available in the maven central repository any more, and another reason is that source code in trunk is not stable yet.