

## Defining Geronimo server runtimes and servers

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A Geronimo Server Runtime in GEP associates a Geronimo 2.2 Server installation with a JRE to be used to run that server. A **Geronimo Server** in GEP associates a Geronimo Server Runtime with a profile consisting of Security settings, Publish Settings, Port Configuration, JVM settings to be used with that Geronimo Server Runtime. true

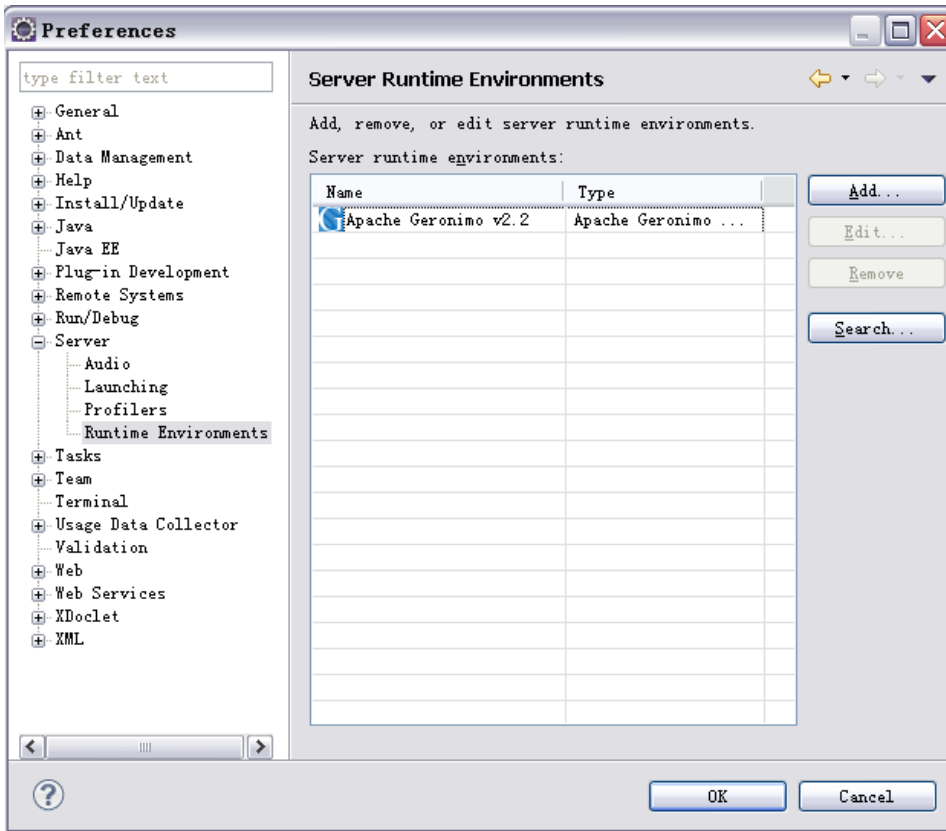
This page discusses how to define Geronimo servers and server runtimes in Eclipse.

Before defining a Geronimo server runtime, you have to install a [Geronimo Eclipse Plugin](#).

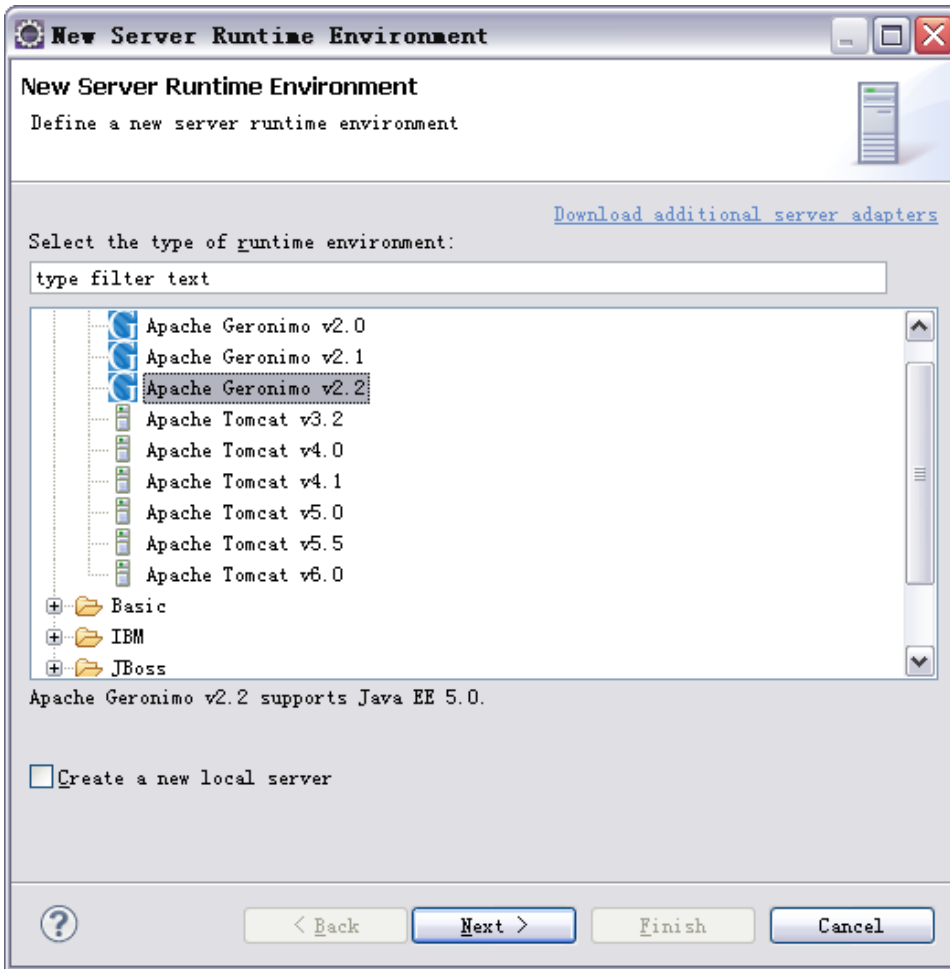
## Defining a Geronimo server runtime

In order to define a new Geronimo Server v2.2 Runtime, follow the steps below:

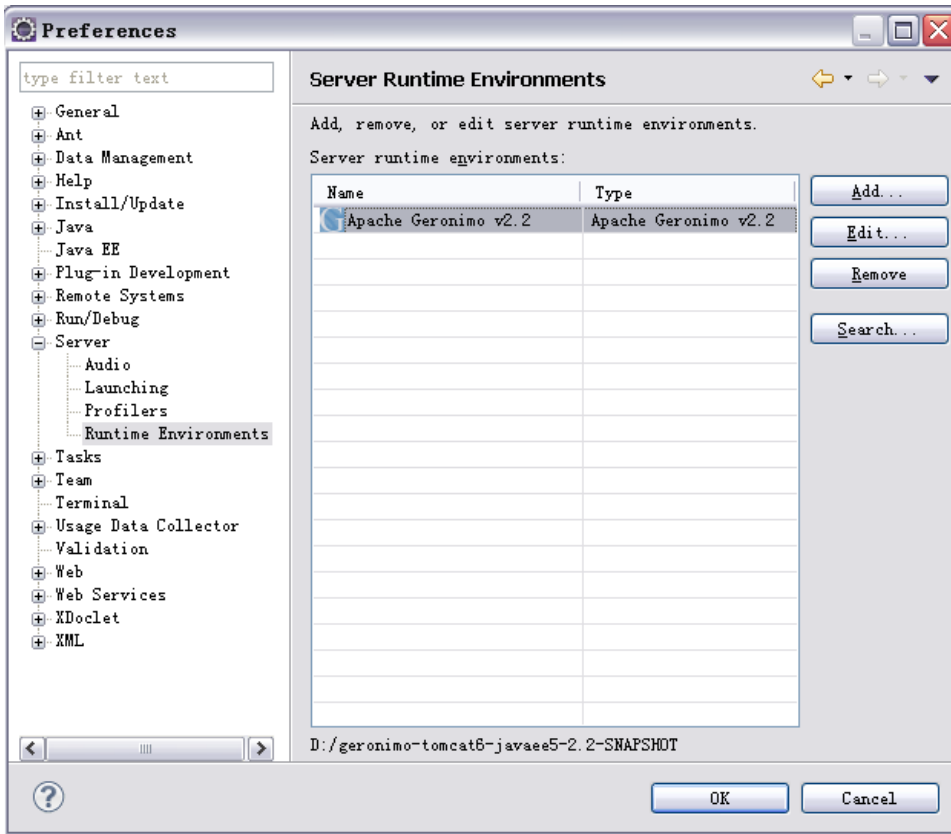
1. Click **Window -> Preferences -> Server -> Runtime Environments.**



2. Click **Add** to launch *New Server Runtime Environment* dialog.
3. Select **Apache Geronimo v2.2**, uncheck **Create a new local server** (we will discuss about the use of this option later) and click **Next**.



4. Select **Workbench default JRE** (Click **Installed JREs** to add any new JREs and return to this dialog once done). Note that you are recommended to run Geronimo 2.2 on Sun JDK 1.6. See [Installing prerequisite software](#) for more information about the JRE.
5. You must already have a Geronimo v2.2 installation that you want to use with GEP; enter the directory name or browse to **<GERONIMO\_HOME>** and click **Next**.
6. Select the location of the archive containing Geronimo source. This is required only if you intend to debug into Geronimo source code.
7. Click **Finish** to return to *Server Runtime Environments* dialog.

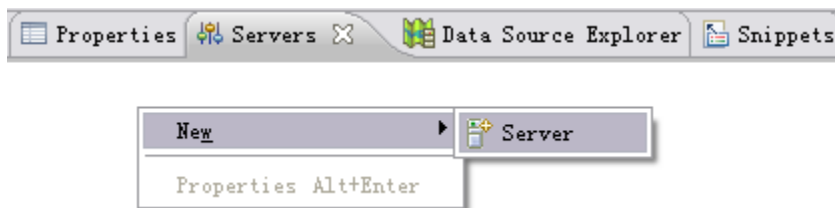


Additional Server Runtimes to use a different Geronimo server installation or a different JRE can be added in a similar manner.

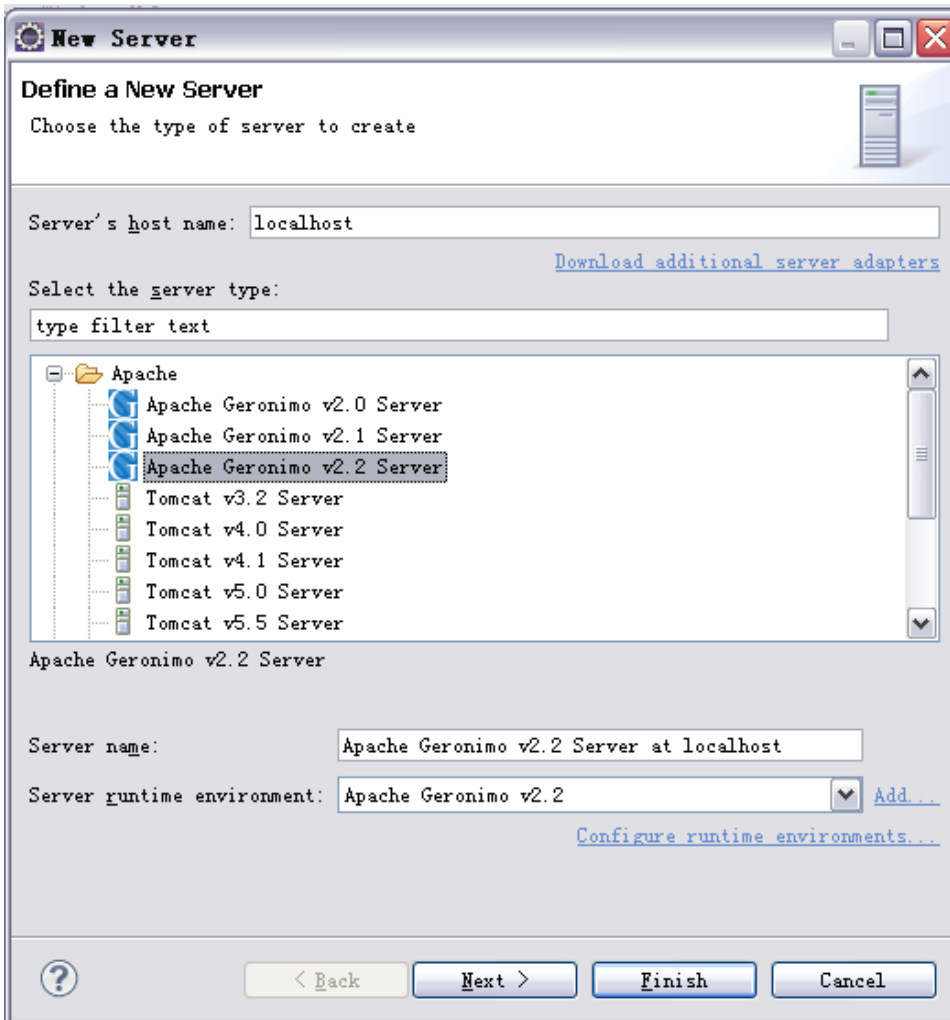
## Defining a Geronimo server

Follow the steps below to define a new Geronimo v2.2 Server:

1. Launch the **Define a New Server** dialog using one of the following:
  - From the **Servers** view in the Java EE Perspective: Right-click, and **New -> Server**.
  - From any Perspective: Select **File -> New -> Other -> Server**.

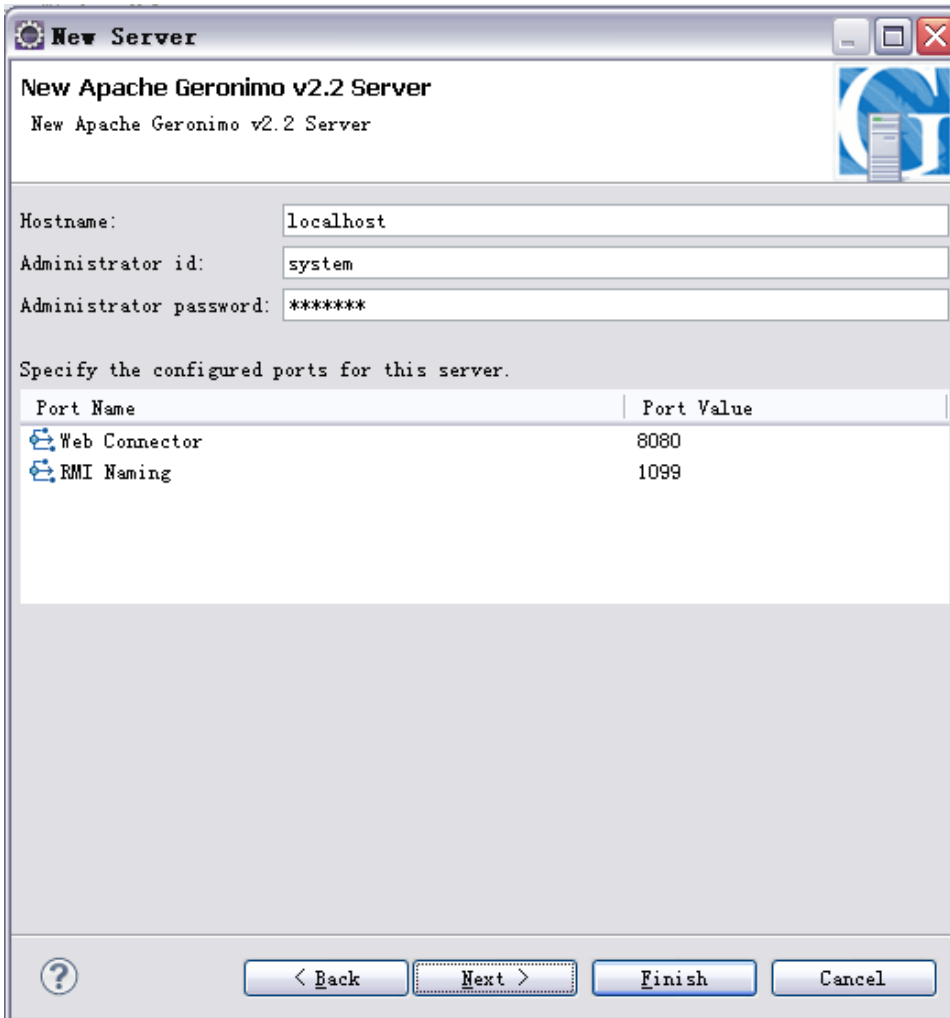


2. Select **Apache Geronimo v2.2 Server**, specify the server name (by default *Apache Geronimo v2.2 Server at localhost*), and select an **Apache Geronimo v2.2** from the *Server runtime environment* dropdown and click **Next**.

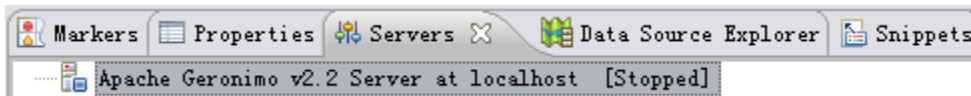


Additional Server Runtimes can be installed by clicking on **Configure runtime environments...** button and return to this step once done to select the newly added server runtime. Or you can add another Geronimo 2.2 runtime environment by clicking "Add..."

3. Modify *Hostname*, *Administrator Id*, *Administrator password*, *Web Connector port* and *RMI Naming port* if necessary and click **Finish**. Normally you will not have to change the default values for these fields for a newly installed Geronimo 2.2 server.



This completes defining a new Geronimo 2.2 server. The newly added server will appear in the *Servers* view. The server can be started by selecting the server and clicking on the **Start server** button.



A Geronimo Server can also be defined while creating a Geronimo Server Runtime by checking the option **Create a new local server**. This will present an additional dialog to configure the hostname, ports, etc.

## Administering the server

To view the server status in the Java EE perspective, open the *Servers* view. GEP monitors the server's status and sets the stopped, starting, and started indicators appropriately. This information is accurate even if you do not start or stop the server using Eclipse.

### Starting the server

Use this procedure to start a server using the Eclipse framework.

1. In the Java EE perspective, open the *Servers* view.
2. On the *Server* panel, right click on the server to be started.
3. On the resulting context menu, click **Start**.

Note that you can start the server in debug or profiling mode if you installed [Test and Performance Tools Platform \(TPTP\)](#) eclipse plugin.

### Stopping the server

Use this procedure to stop a server using the Eclipse framework.

1. In the Java EE perspective, open the *Servers* view.
2. On the *Server* panel, right click on the server to be stopped.
3. On the resulting context menu, click **Stop**.

## Launching the administrative console

Use this procedure to launch the server's administrative console in Eclipse.

1. In the Java EE perspective, open the *Servers* view.
2. On the *Server* panel, right click on the server to be managed.
3. On the resulting context menu, click **Launch WASCE Console**.

**Note:** The server must be started for this option to be available and for it to work.

## Launching the support

Use this procedure to launch the server's support page in Eclipse.

1. In the Java EE perspective, open the *Servers* view.
2. On the *Server* panel, right click on the server to be managed.
3. On the resulting context menu, click **Launch WASCE Support**.

## Debugging the server

Use this procedure to start a server in debug mode using the Eclipse framework.

1. In the Java EE perspective, open the *Servers* view.
2. On the *Server* panel, right click on the server to be started.
3. On the resulting context menu, click **Debug**.

## Creating custom server assemblies

Starting from Geronimo 2.2, you can customize server assemblies with GEP in Eclipse. See [Assembling a server using GEP](#) for more details about creating server assemblies using GEP.

## Deploying and debugging applications

You can deploy or test your assets using GEP. See [Deploying and debugging applications using GEP](#) for more information about how to deploy or test applications in Eclipse.

## Creating a new project

Once Geronimo Server Runtimes are defined, Eclipse provides these runtime for selecting as a target runtime while creating an EJB, Web and Java EE projects. Notice the *Target Runtime* field in the *Dynamic Web Project* dialog shown in the figure below.

**New Dynamic Web Project**

**Dynamic Web Project**  
Create a standalone Dynamic Web project or add it to a new or existing Enterprise Application.

Project name:

**Project contents**  
☒ Use default  
Directory:

**Target runtime**

**Dynamic web module version**

**Configuration**  
   
A good starting point for working with Apache Geronimo v2.2 runtime. Additional facets can later be installed to add new functionality to the project.

**EAR membership**  
☐ Add project to an EAR  
EAR project name:

**Working sets**  
☐ Add project to working sets  
Working sets:

Upon adding the Geronimo 2.2 server runtime as the target runtime, the Geronimo server libraries and Java EE specification libraries get automatically added to the build path of the project. GEP will also create Geronimo specific deployment plans.

In order to run an application on Geronimo, follow the steps below:

1. Right click on the project and click **Run As -> Run on Server**.
2. Click **Choose and existing server**, select **Apache Geronimo v2.2 Server at localhost** and click **Finish**.

The application can also be run on Geronimo by adding the project to the Geronimo server explicitly as given below:

1. In the *Servers* view, right click on **Apache Geronimo v2.2 Server at localhost** and select **Add and Remove Projects**.
2. In the *Add and Remove Projects* dialog, select the project under *Available projects* and click on **Add** button. The project will now be listed under *Configured projects*.
3. Click **Finish**.
4. If the server status is shown as **Republish**, right click on the server and select **Publish**.