



Telosys 1.0.2 Starter Kit

How to create a new Telosys project in
Eclipse 3.2 WTP
and
how to generate the Data Access Layer

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1 – Install the “TelosysTools plug-in” in Eclipse

Stop Eclipse

Download **telosys-tools-plugin_X.X.X.zip** from the Telosys web site
<http://telosys.ow2.org/> → Download

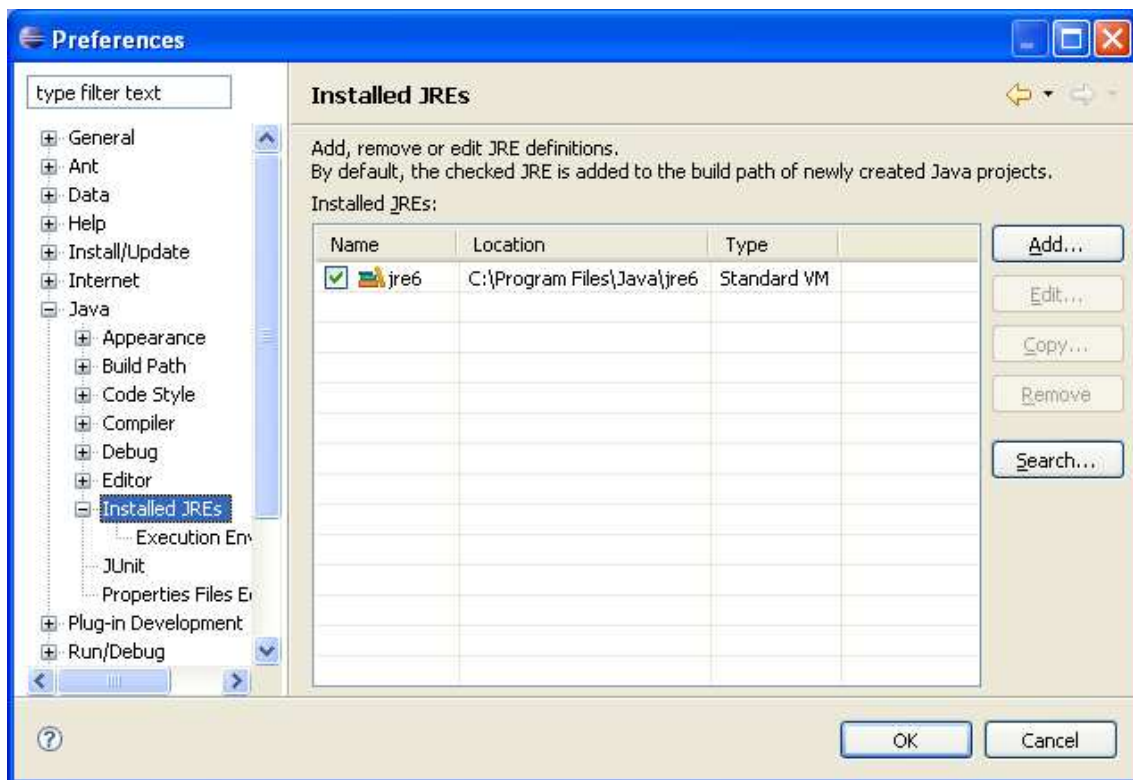
Unzip file **telosys-tools-plugin_X.X.X.zip** in the Eclipse « plugins » directory

Restart Eclipse

Check the “Plugin details” : “Help” → “About Eclipse” → “Plug-in details”
The Telosys Tools plug-in must be in the list.

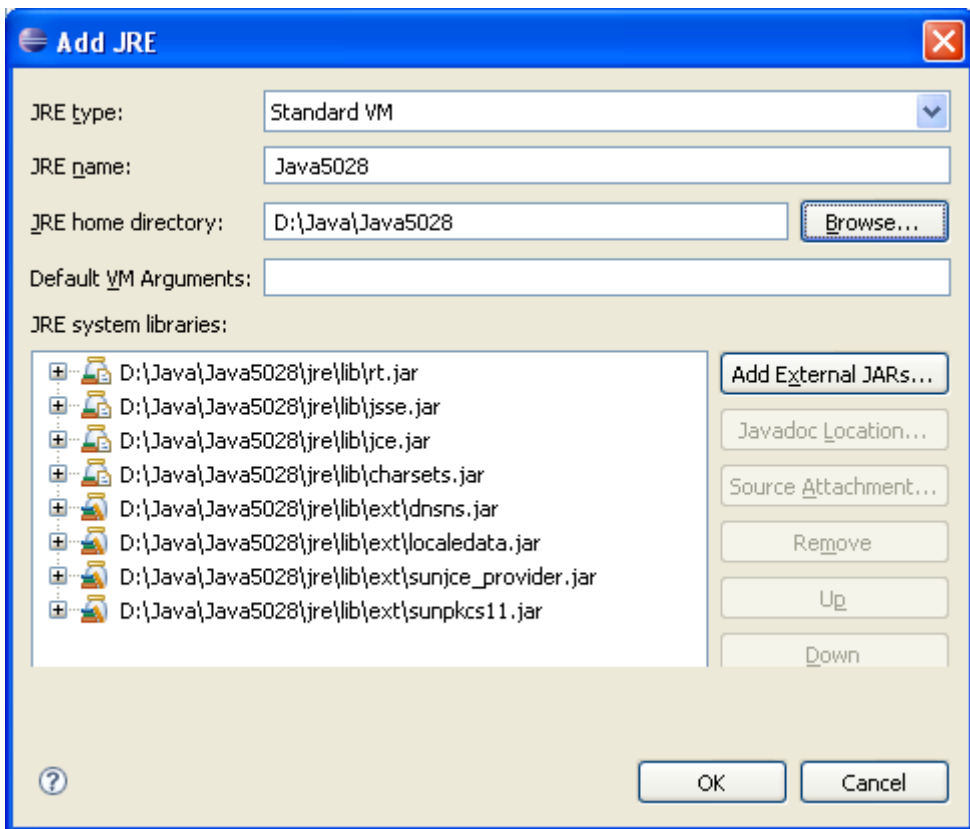
2 – Define the JRE

Window → Preferences ...

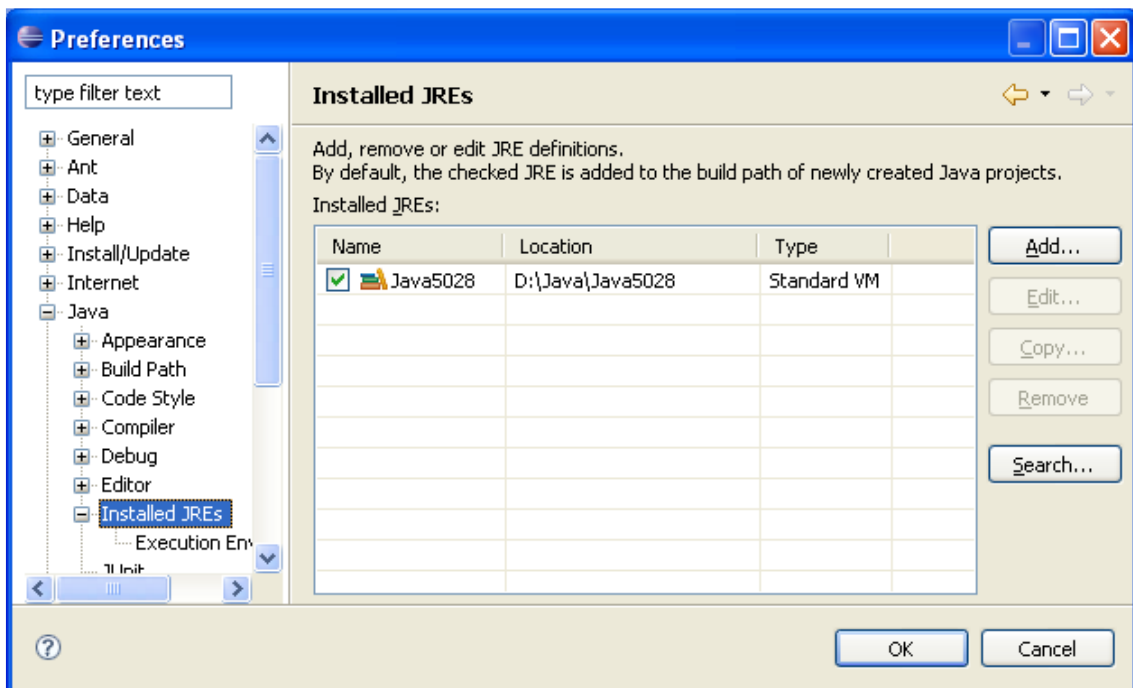


Select « Add » button and browse JRE home directory
Choose a full Java SDK, because a Java compiler is required (to compile the JSP)

Telosys supports all the Java versions from 1.4



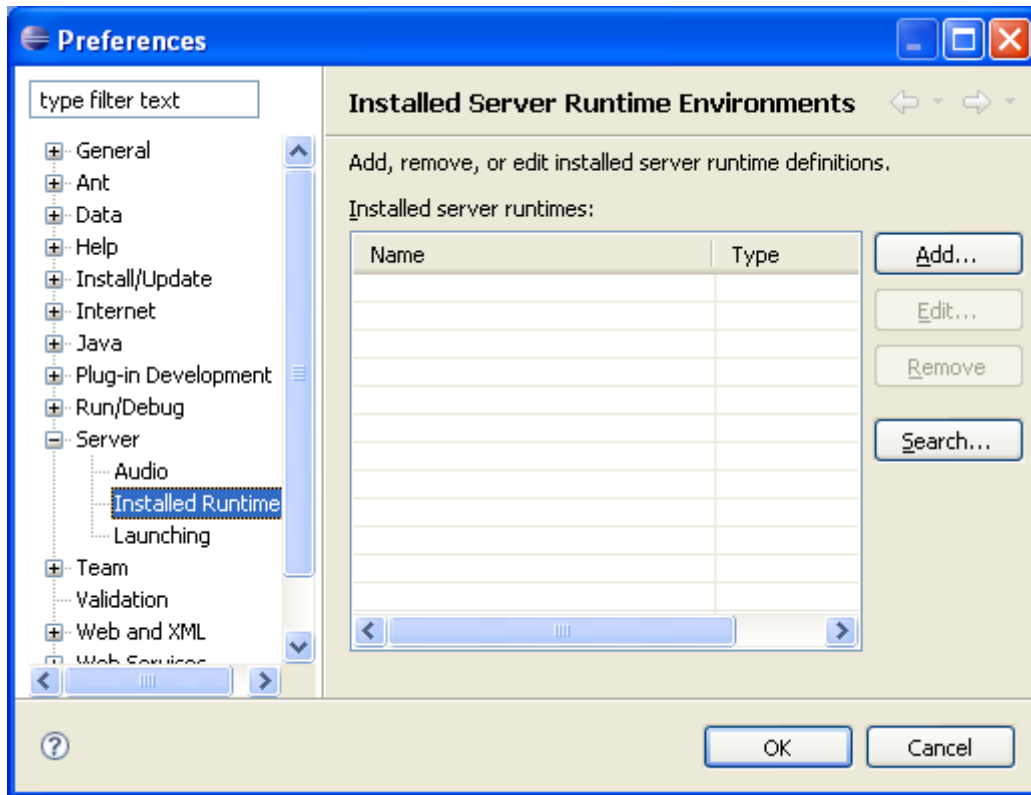
Select the JRE just added (other unused JRE can be removed)



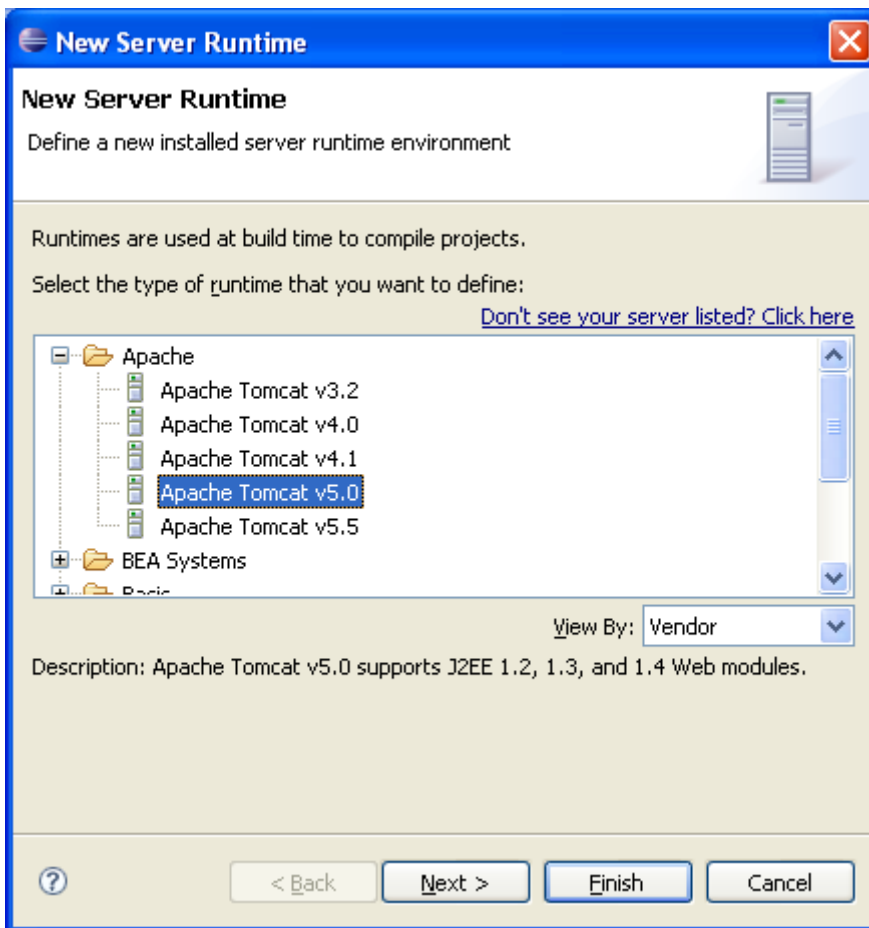
Select « OK » button

3 – Define the Tomcat server

Select Window → Preferences ...

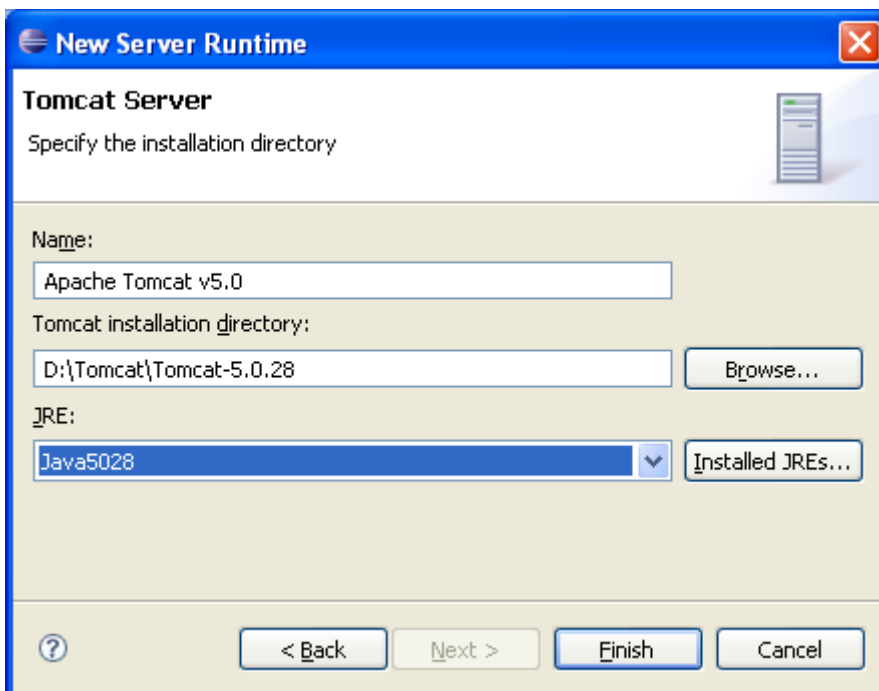


Select « Add » button



Select « Next » button and:

- browse for Tomcat installation directory
- select java version

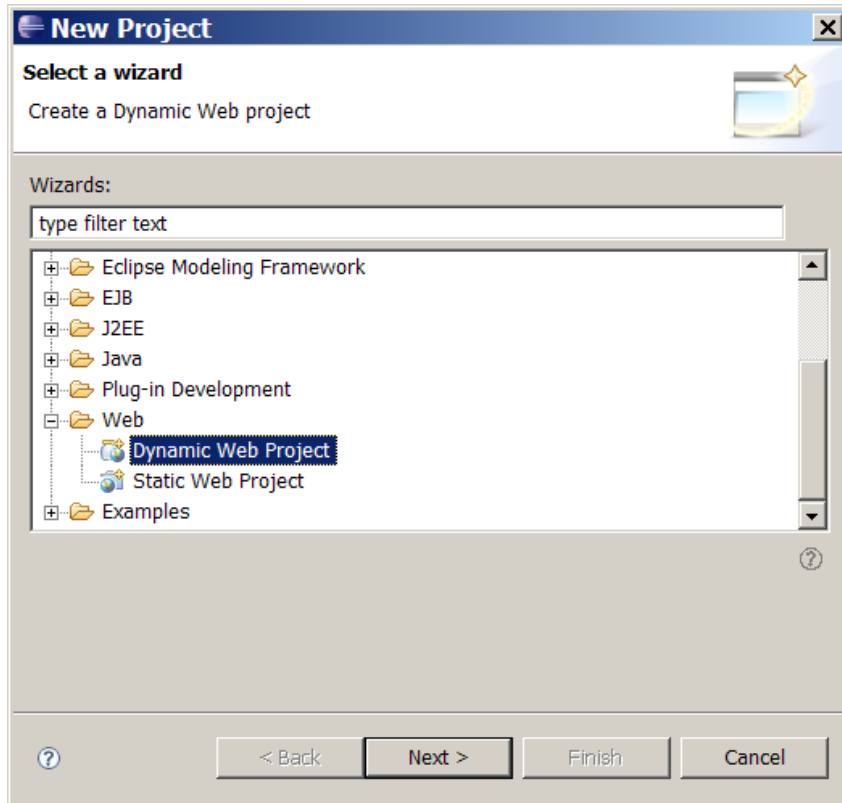


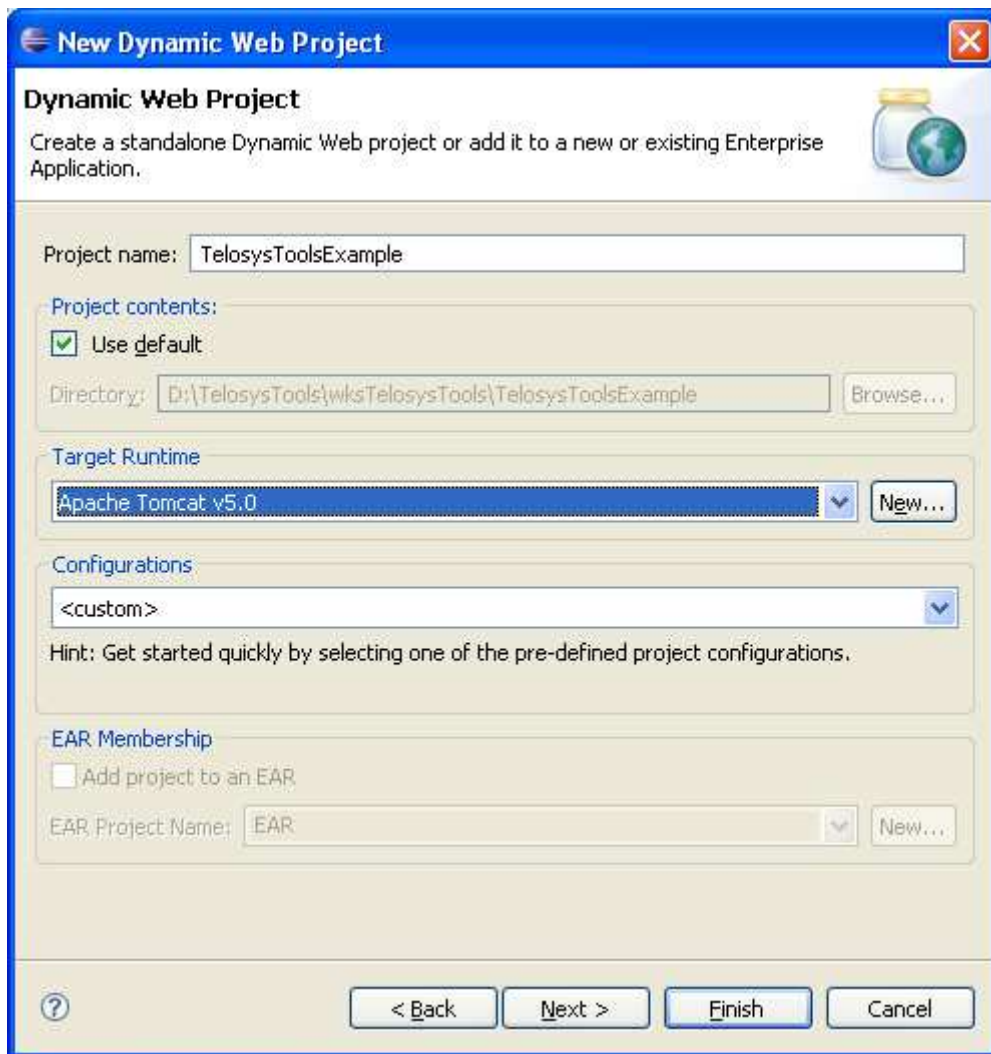
Select « Finish » button

4 – Create a standard Dynamic Web Project

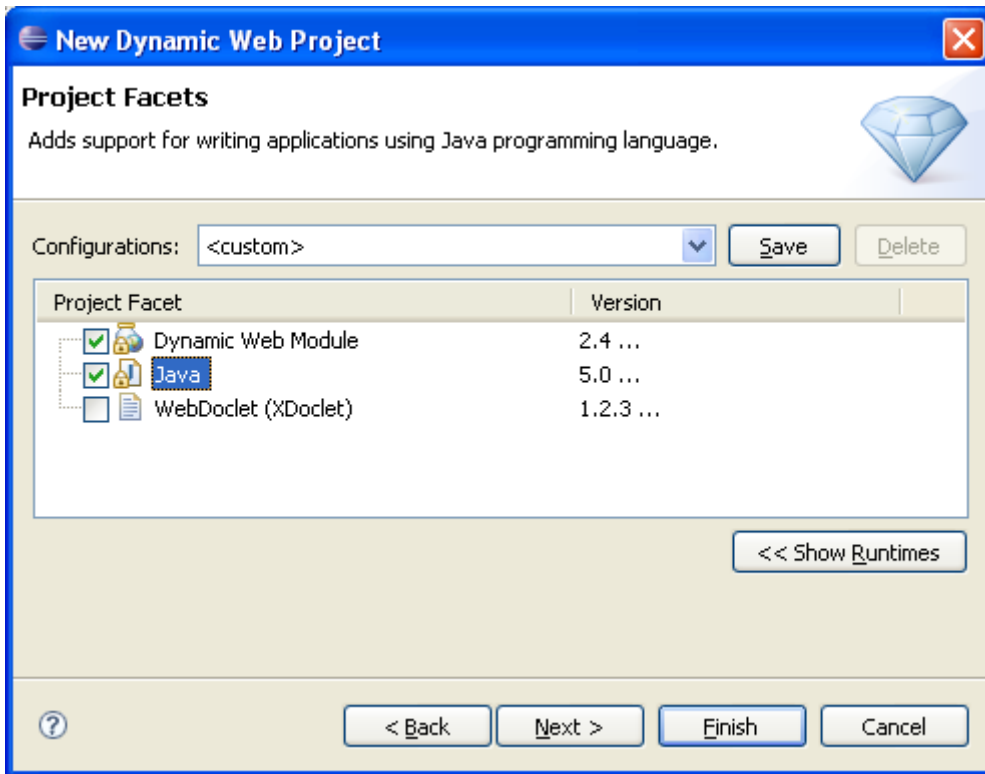
File → New (Alt+Shift+N) → Project ...

Web → Dynamic Web Project (with Tomcat 5.0)

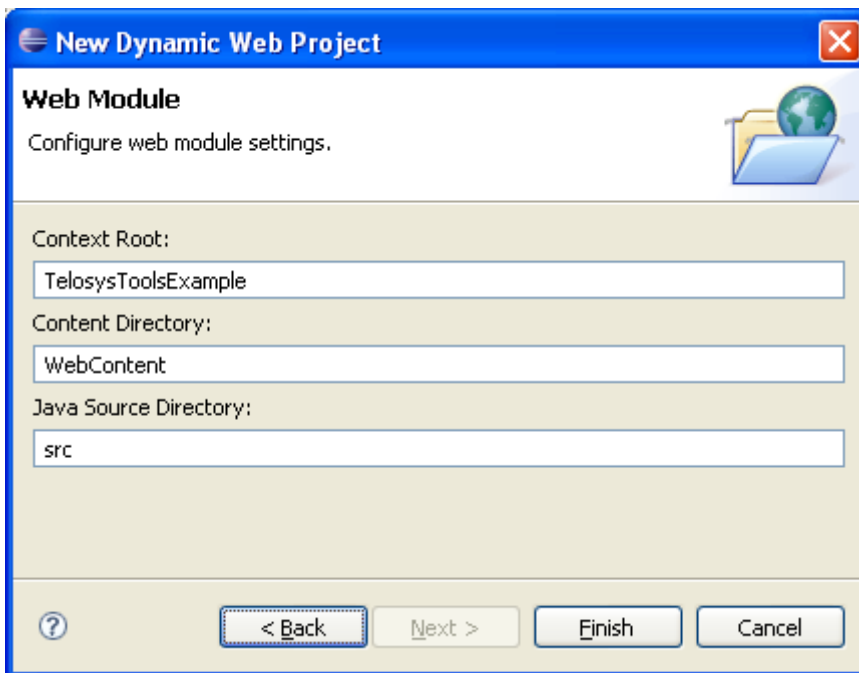




Select « Next » button



Select « Next » button

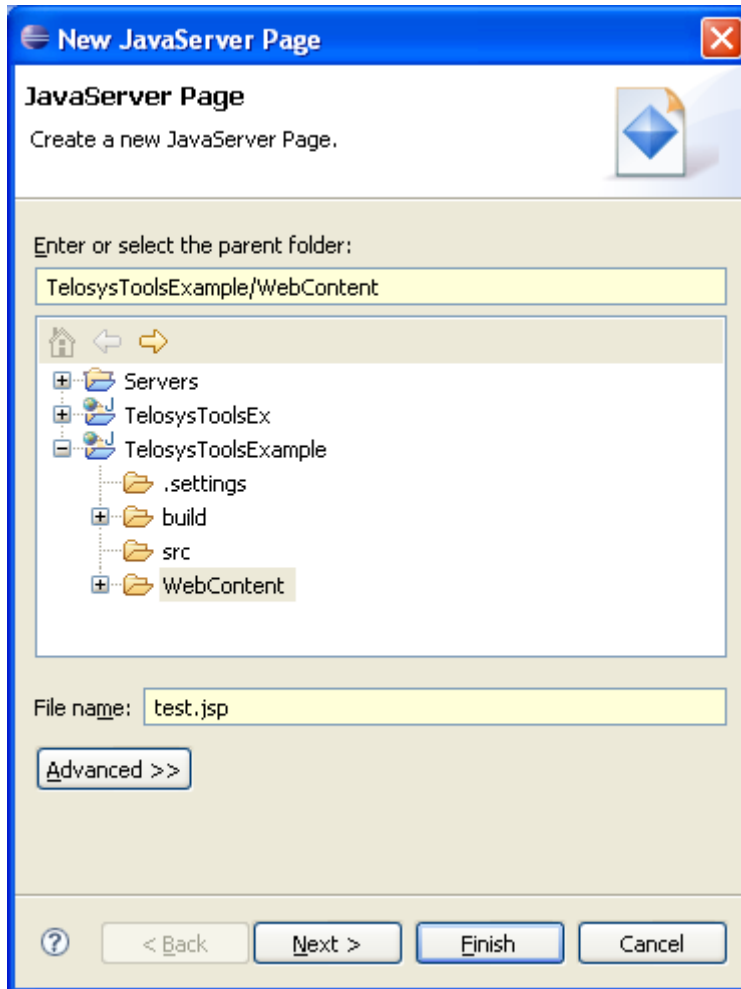


Select « Finish » button

5 – Test projet with Tomcat

Create the « test.jsp » file in **WebContent** directory

Right click on **WebContent** directory → New → JSP

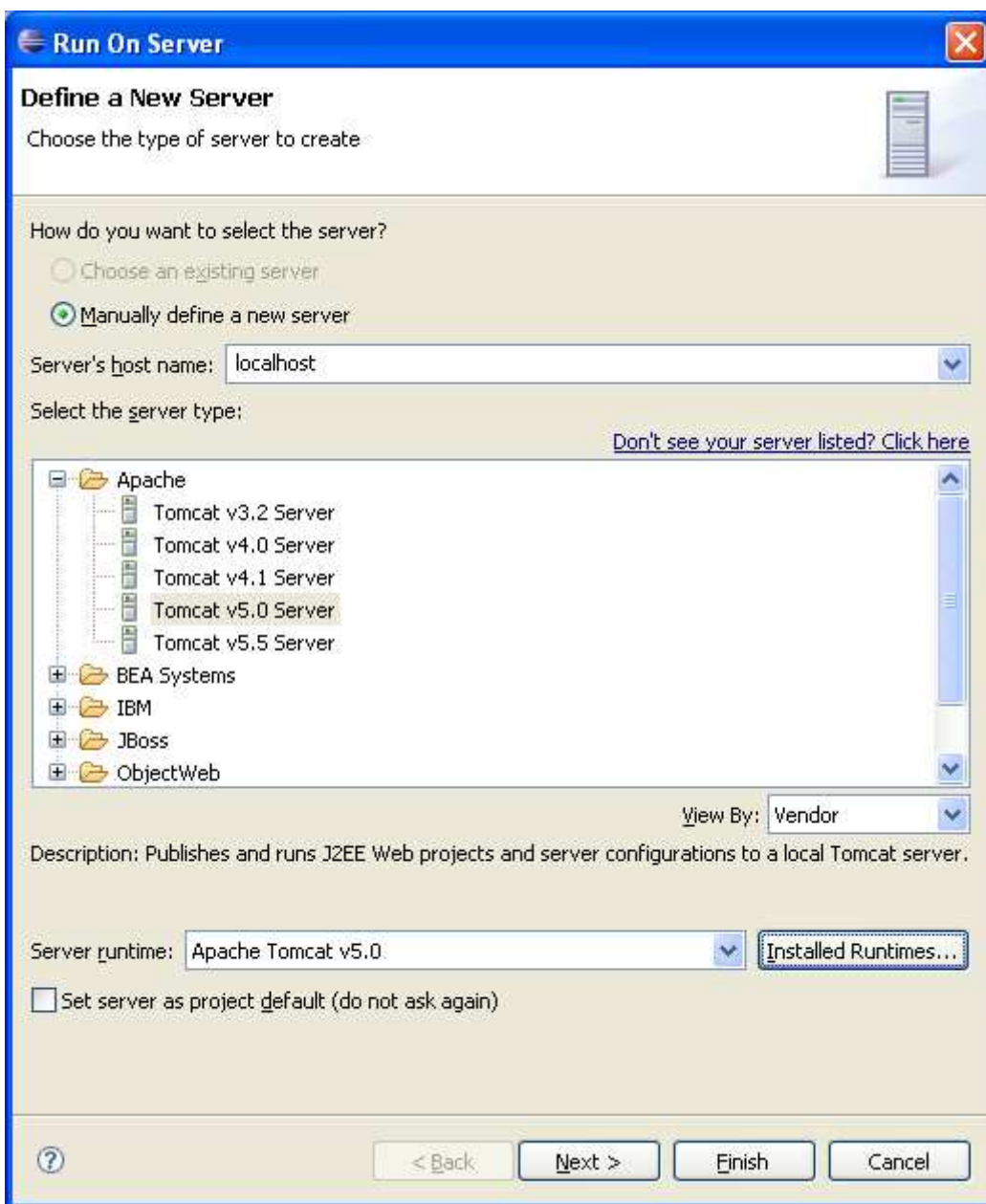


Select « Finish » button

Insert “hello” in the <body> tag of the JSP file

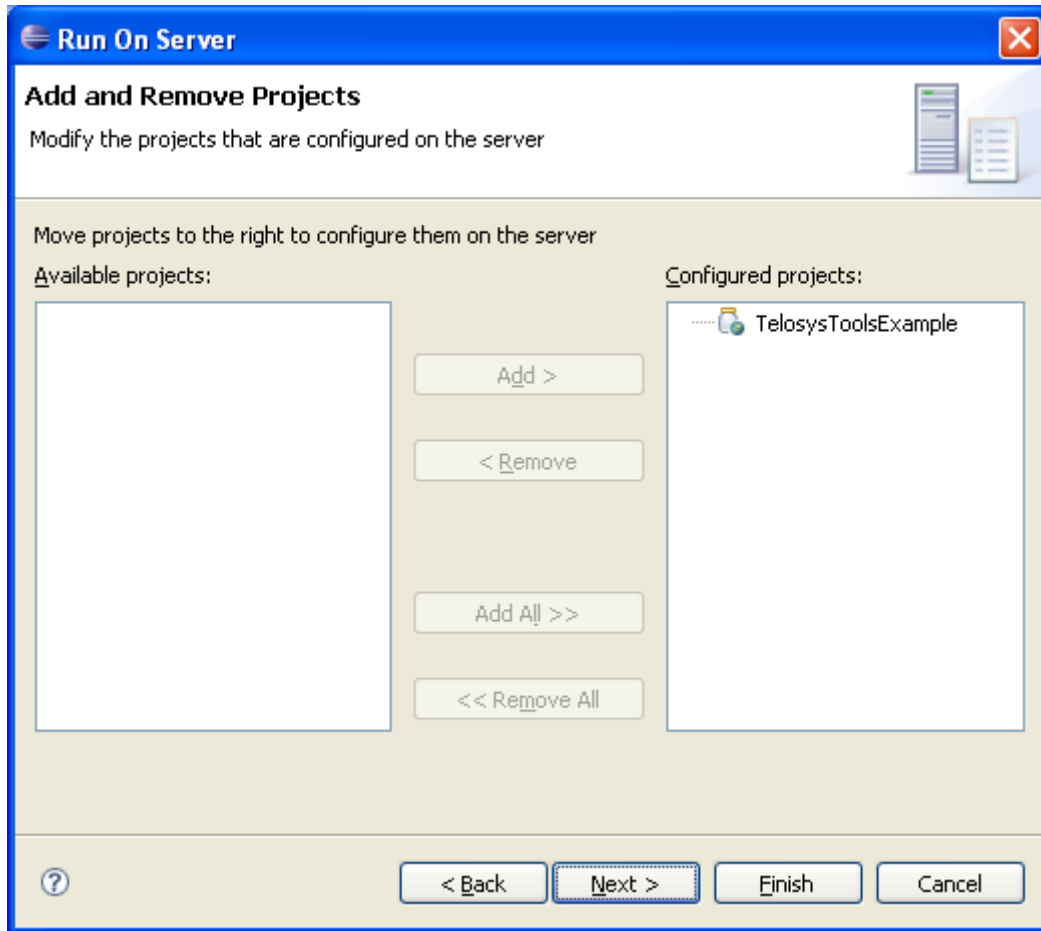
```
test.jsp x
<%@ page language="java" contentType="text/html; charset=ISO-8859-1" %>
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1" %>
<title>Insert title here</title>
</head>
<body>
    hello
</body>
</html>
```

Right click on **test.jsp** file → Run As → Run on Server



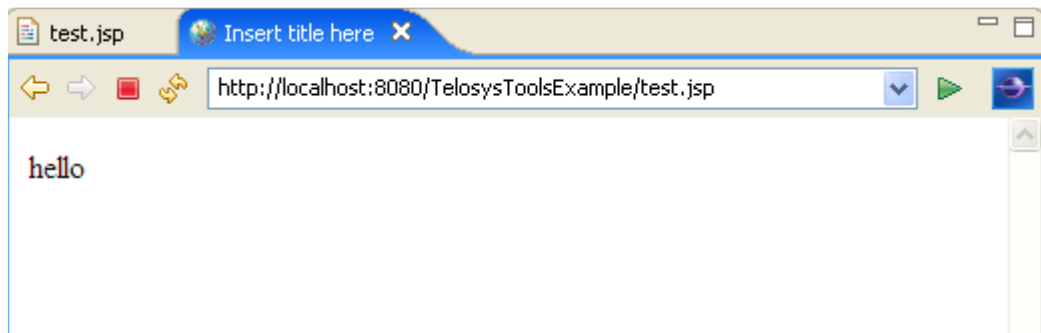
Select « Next » button

Make sure that your project is in the « Configured projects » part



Select « Finish » button

Verify the good execution of your JSP file

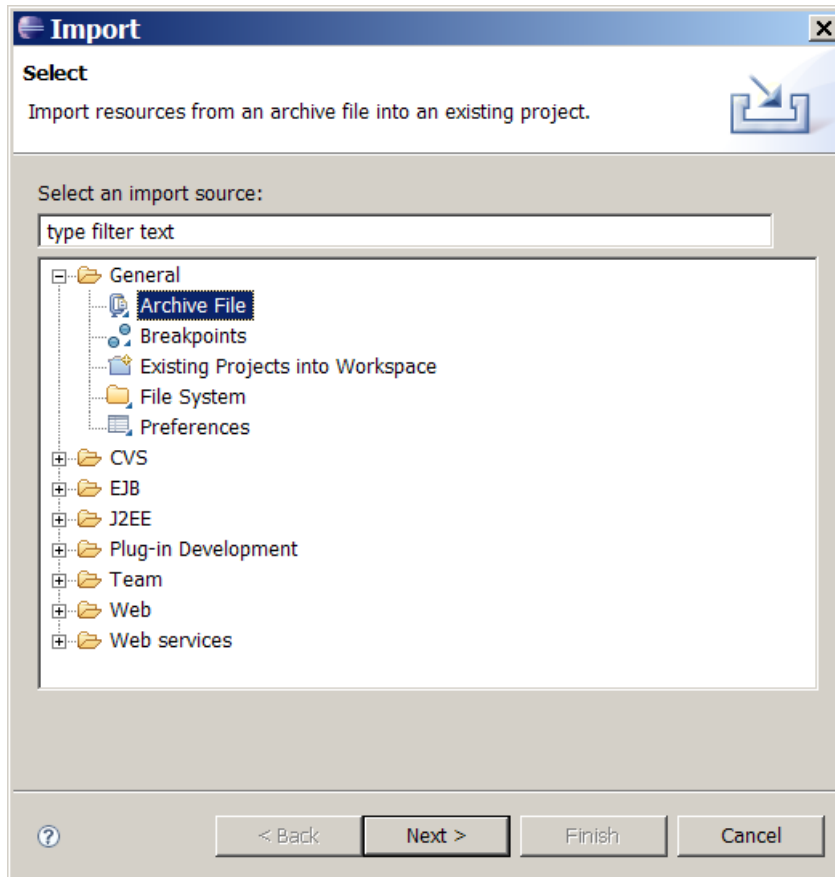


6 – Import the Telosys Starter Kit in the project

Stop Tomcat server

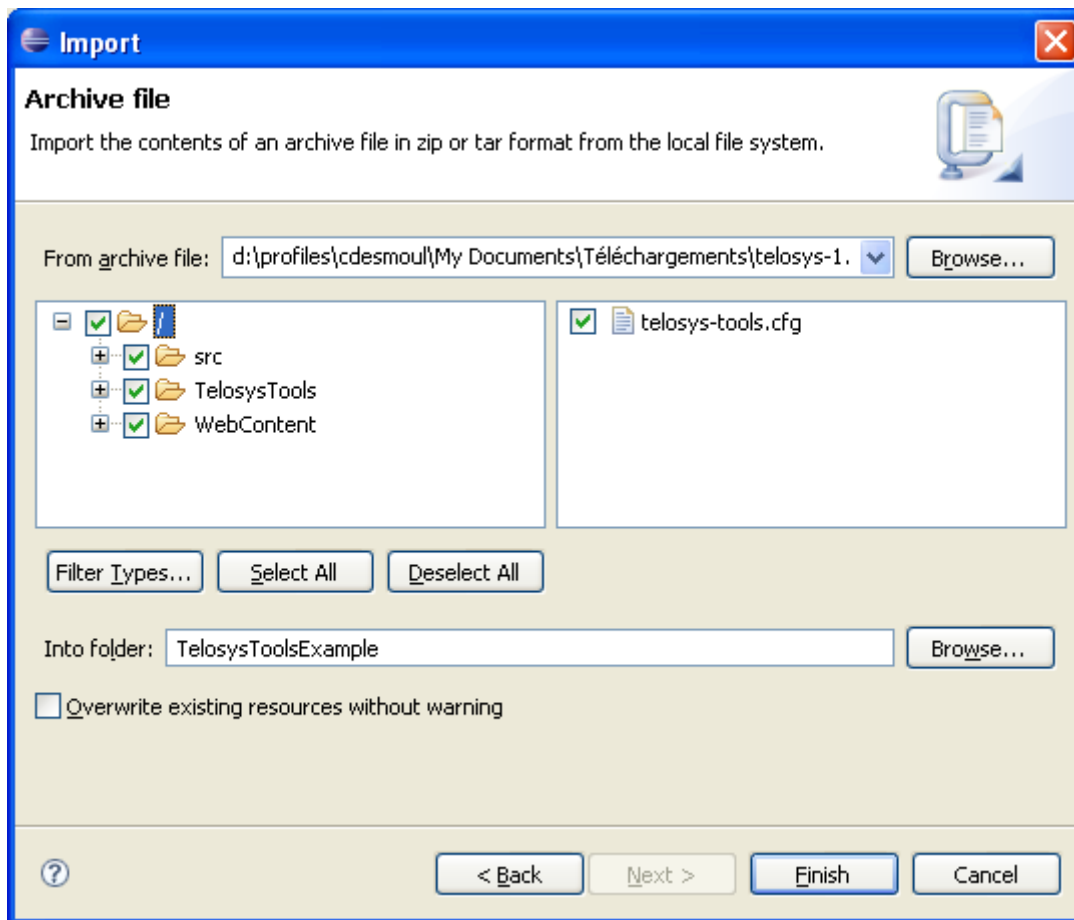
Right click on your project → File → Import → Import ...

Select General → Archive File



Select « Next » button

Browse to select the file **telosys-x.x.x-StarterKit.zip** ...



Select « Finish » button

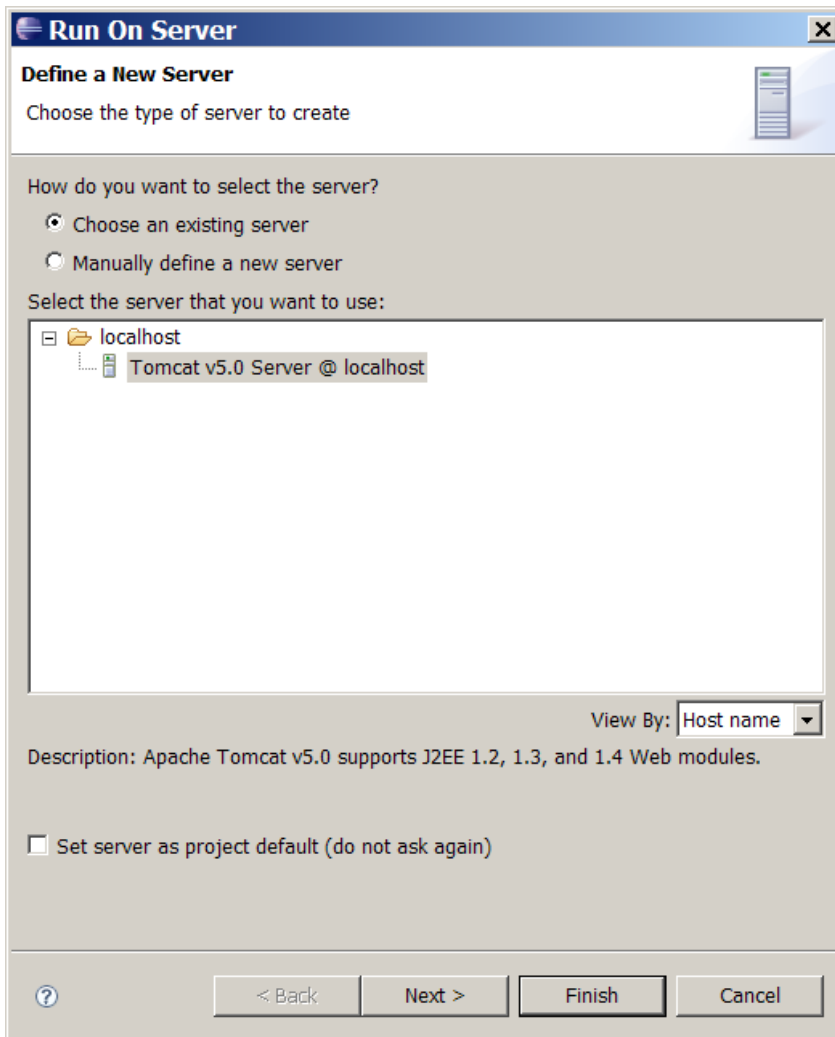
Overwrite **web.xml** in folder **xxx/WebContent/WEB-INF** ? → **Yes**

That's all !

Your project is now a “Telosys project”.

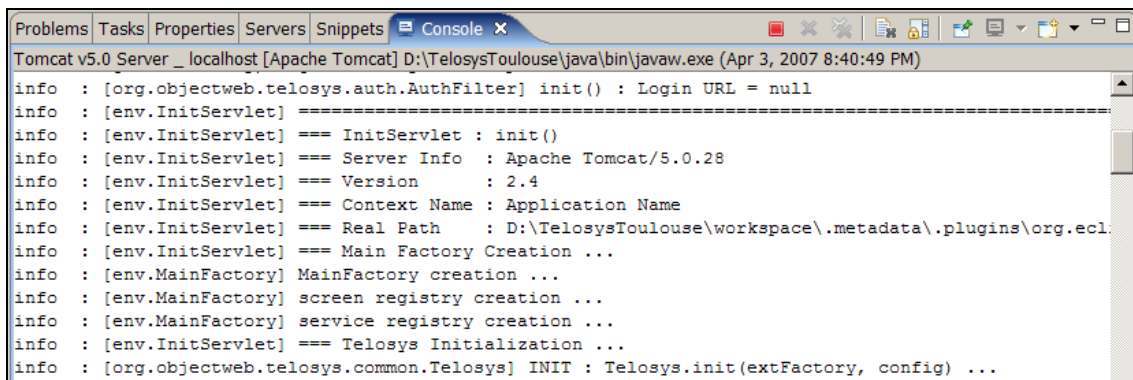
7 – Run the project

Right click on your project → Run As → Run on server





Check there's no error in the console.



Stop Tomcat Server

8 – Configure the project

Edit the Telosys project properties :

Select your project + right click → “Properties” → Telosys

You can define here :

- The repository’s folder
- The templates folder
- The names of the Java packages
- The construction of the classes names
- etc ...

9 – Install the “Bookstore” DERBY database for tests

Download **bookstoreX.X_derby_X.X.X.zip** from the Telosys web site
<http://telosys.ow2.org/> → Download

Unzip the file in a folder (this folder will be the DERBY_HOME folder)

Start DERBY by running the command file

DERBY_HOME/start.bat

or

DERBY_HOME/bin/startNetworkServer.bat (Windows)

DERBY_HOME/bin/startNetworkServer (shell Unix/Linux)

The database engine is running in a command window, and is now ready to accept connections.

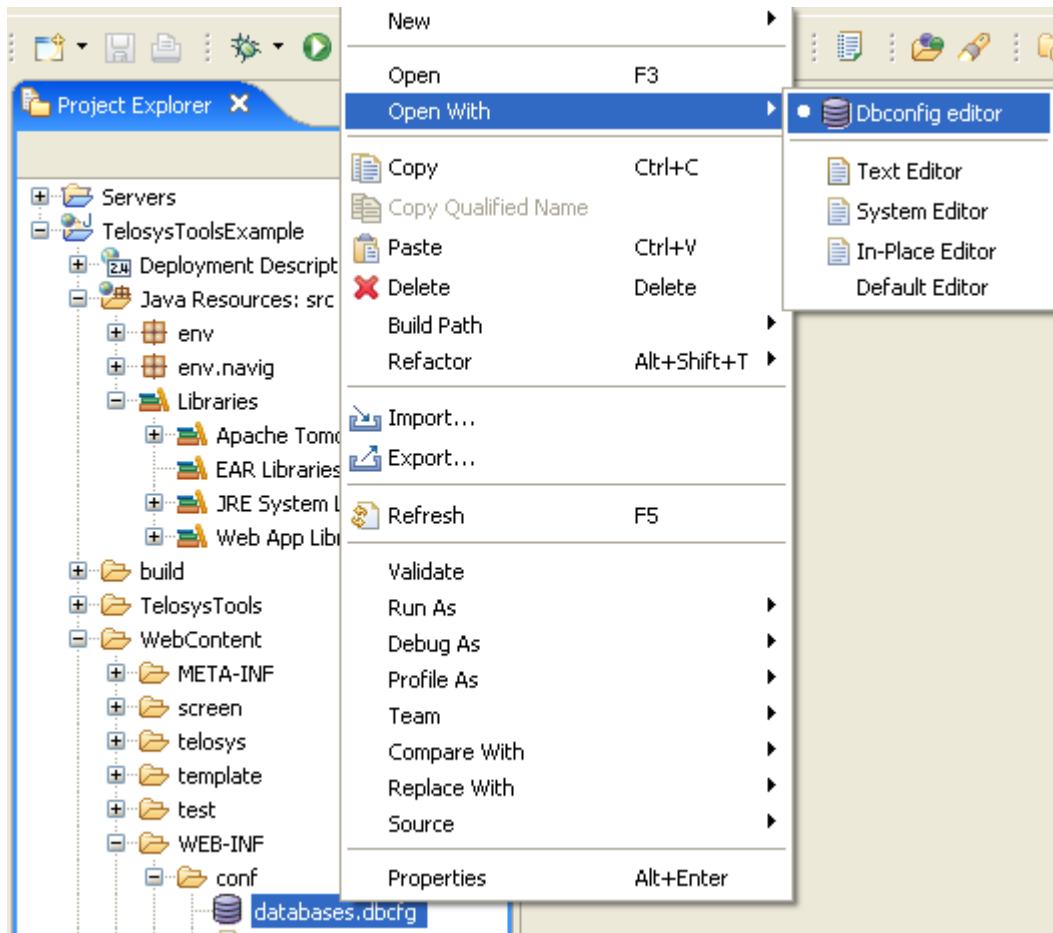
To stop the Derby database : just close this window.

10 – Connect to DERBY database

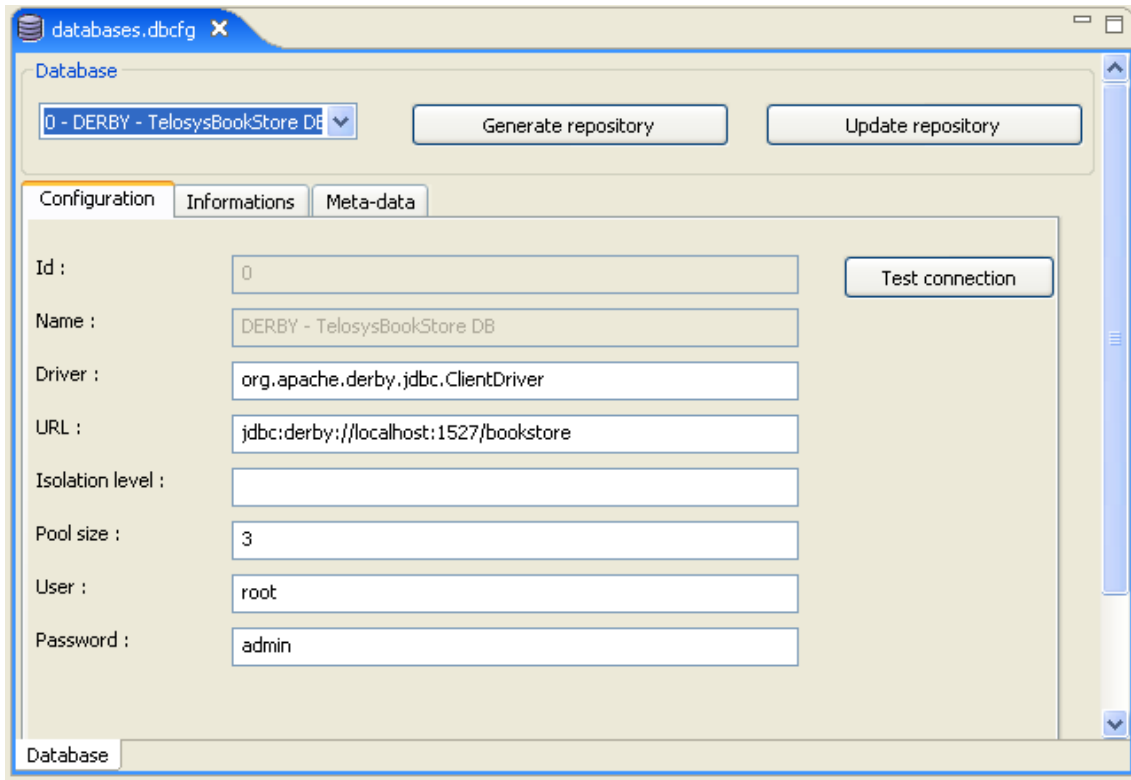
Edit the “**databases.dbcfg**” file with a “text editor” and uncomment DERBY part

```
<db id = "0"
  name = "DERBY - TelosysBookStore DB"
  driver = "org.apache.derby.jdbc.ClientDriver"
  url = "jdbc:derby://localhost:1527/bookstore"
  isolationLevel = ""
  poolSize = "3" >
  <property name="user" value="root" />
  <property name="password" value="admin" />
  <metadata catalog="" schema="ROOT" table-name-pattern="%*" table-types="TABLE VIEW " />
</db>
```

Save and close **databases.dbcfg** file and open it with the “**Dbconfig editor**”



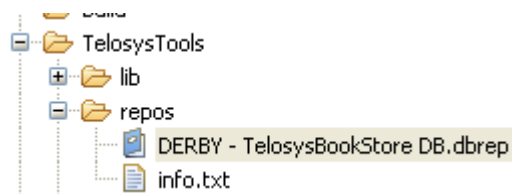
Select database



Select « **Test connection** » button to test connection to database

Select « **Generate repository** » button

Repository is generate in **TelosysTools/repos** directory



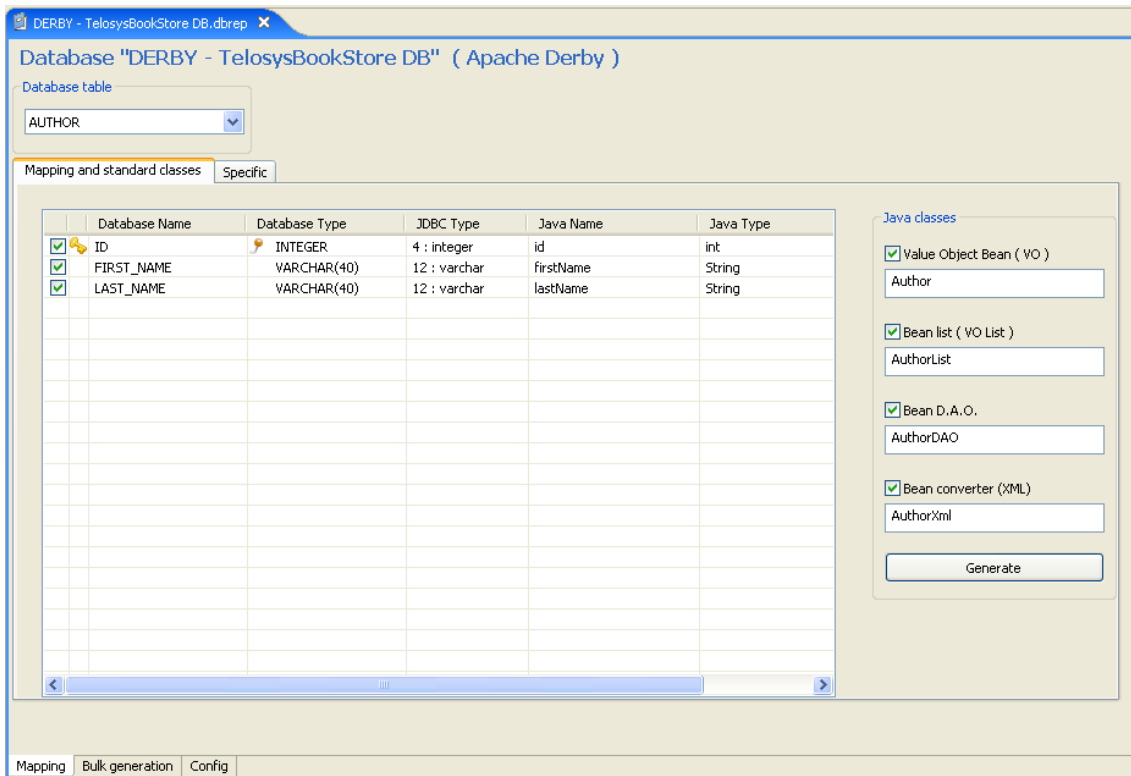
To allow the dynamic association between the entity name and its Value Object bean and its DAO edit **WebContent/WEB-INF/conf/telosys.properties** and uncomment these two properties “daoclass” and “recordclass” :

```
# DAO class name pattern for dynamic DAO registry/regist
daoclass = vo.dao.#{BEANNAME}DAO
# daoclass = vo.dao.db#{DBID}.#{BEANNAME}DAO

# Value Object Bean class name pattern to determine the
# ( NB : can be overridden in 'databases.dbcfg' )
recordclass=vo.#{BEANNAME}
```

Be sure that the classes names are conform to the Eclipse project properties (packages and classes names)

Double click on the repository file to edit database tables



Generate tables one by one :

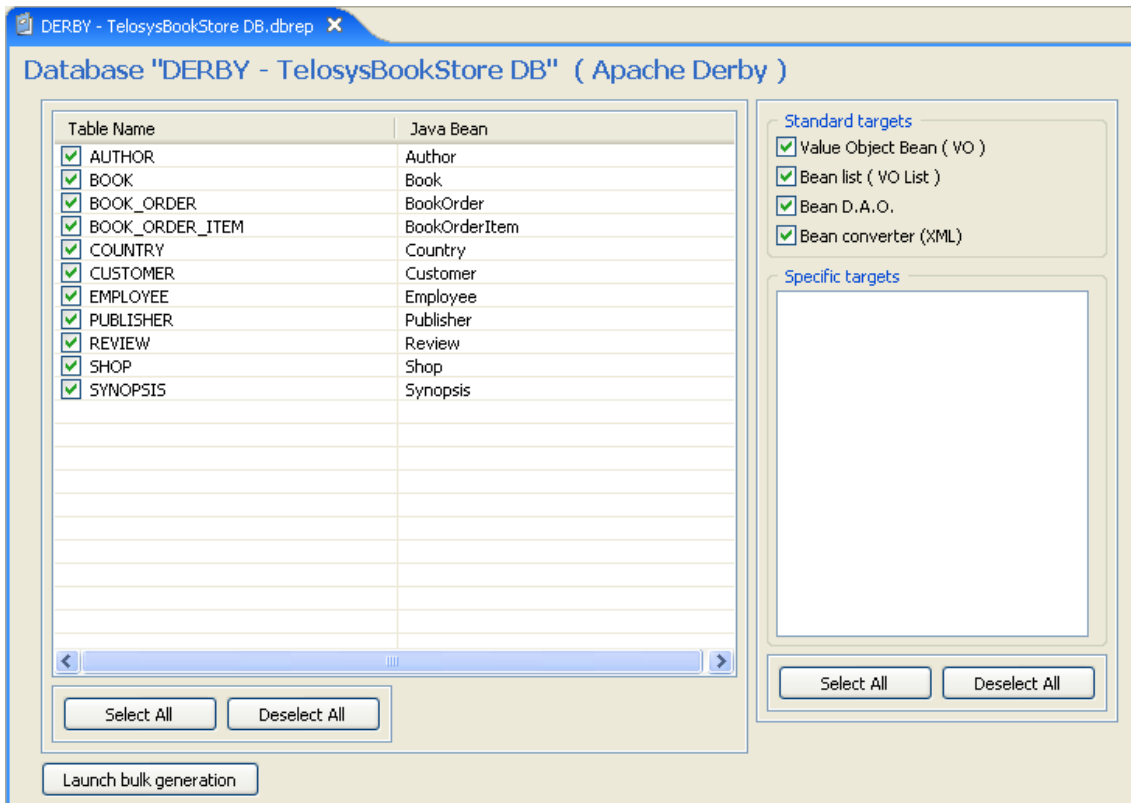
You can generate files for a table by selecting « Generate » button.

These files are create in packages defines in **telosys-tools.cfg** file (if packages definition are modify in this file, you have to regenerate repository)

Select « Config » tab to see defined packages.

Generate all the tables :

Select « **Bulk generation** » tab



Select « Select All » buttons

Select « Launch bulk generation» button

The project “Data Access Layer” is now ready to use.

11 – Test the project “Data Access Layer” with the database

Right click on your project → Run As → Run on server

By default each DAO can be called in REST mode (via an URL) :

How to call a DAO in REST mode (request examples)

[/dao/Author/loadlist](#)

[/dao/Author/loadlist?where=id < 5](#)

[/dao/Author/load?id=1](#)

Select one of the links to see the results