

# Use Subversion with GlassFishESB, OpenESB or Java CAPS 6

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## Introduction

Java CAPS 5.x came with its own, built-in version control system, which many people liked and many despised. Java CAPS 6 Repository still has that version control system. Unlike the repository-based components standard NetBeans components, EJBs, and the JBI-based components, developed through the OpenESB Project and supported, for a fee, in the GlassFishESB product, must use an external version control system, if they are to be placed under version control.

This note discusses how a Subversion VCS can be installed on a Windows platform and used to provide version control for non-Repository components in Java CAPS 6 product and for projects in the GlassFishESB product and OpenESB project.

Clearly, non-Windows platforms can be similarly configured to support Subversion.

This Note is a step-by-step guide to getting Subversion installed and configured to work with NetBeans 6.1. It is not a tutorial on version control.

## Download and Install Components

Download Subversion and related packages for your platform, starting at <http://subversion.tigris.org/>:

For windows I downloaded:

CollabNetSubversion-server-1.5.5-1.win32.exe

CollabNetSubversion-client-1.5.5-1.win32.exe

I also downloaded a TortoiseSVN client, which nicely integrates with the windows environment from <http://tortoisesvn.tigris.org/>:

TortoiseSVN-1.5.9.15518-win32-svn-1.5.6.msi

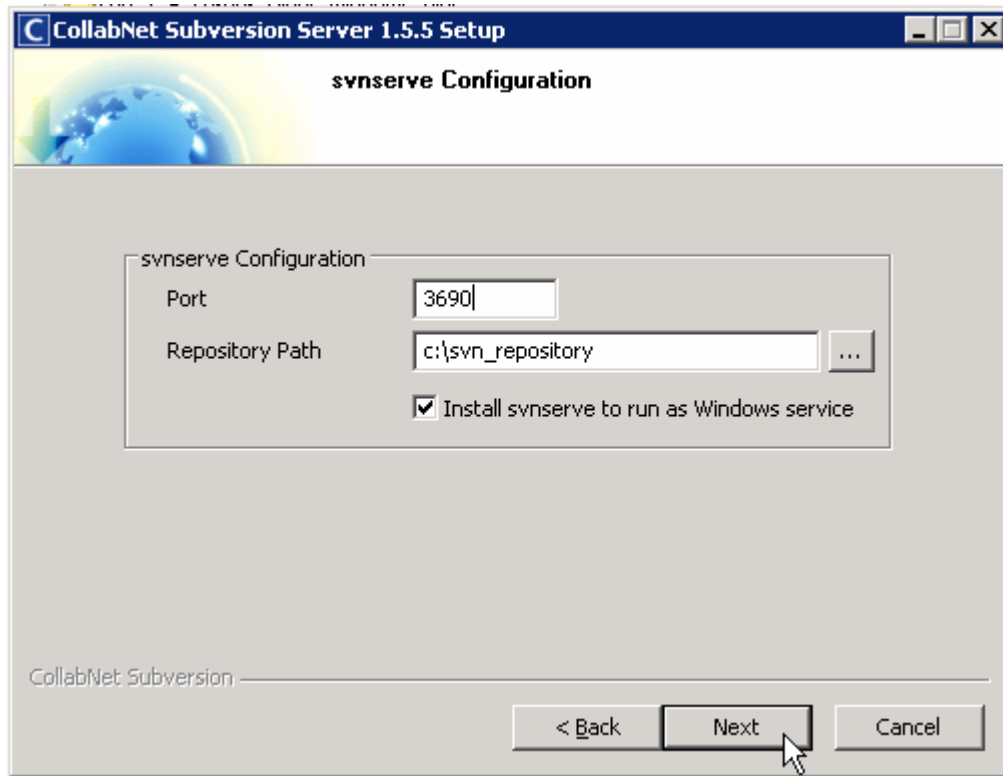
CollabNet Subversion cleitn and server for Windows need ActivePython to operate, see [http://downloads.open.collab.net/readmes/readme\\_Windows\\_Server.txt](http://downloads.open.collab.net/readmes/readme_Windows_Server.txt). I downloaded ActivePython from

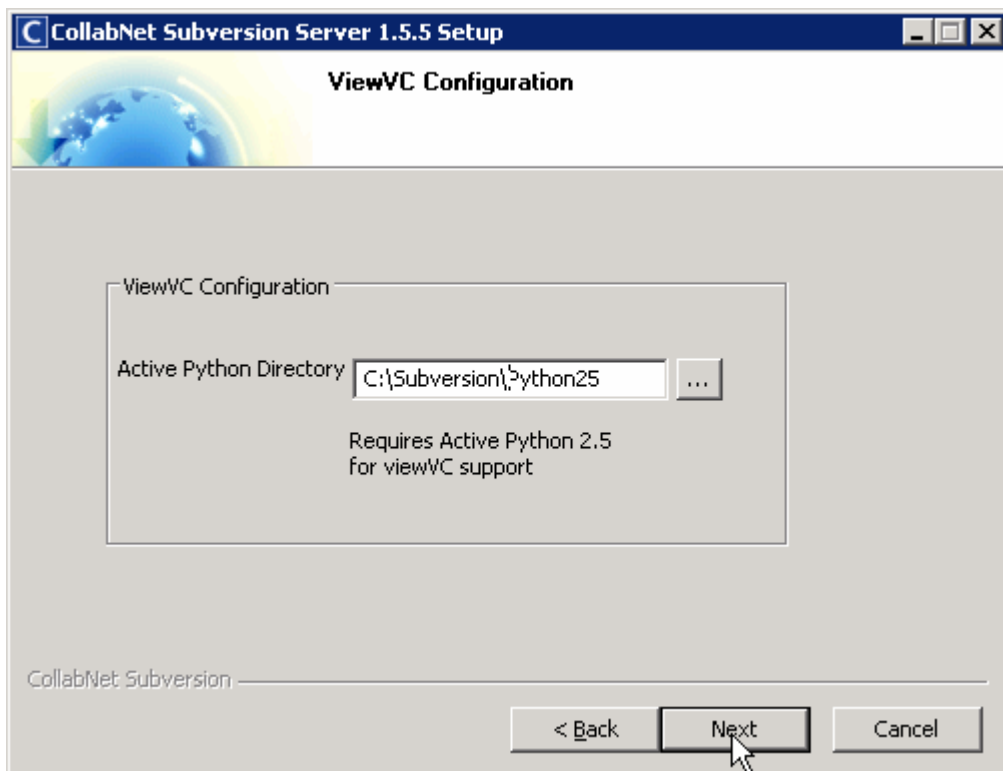
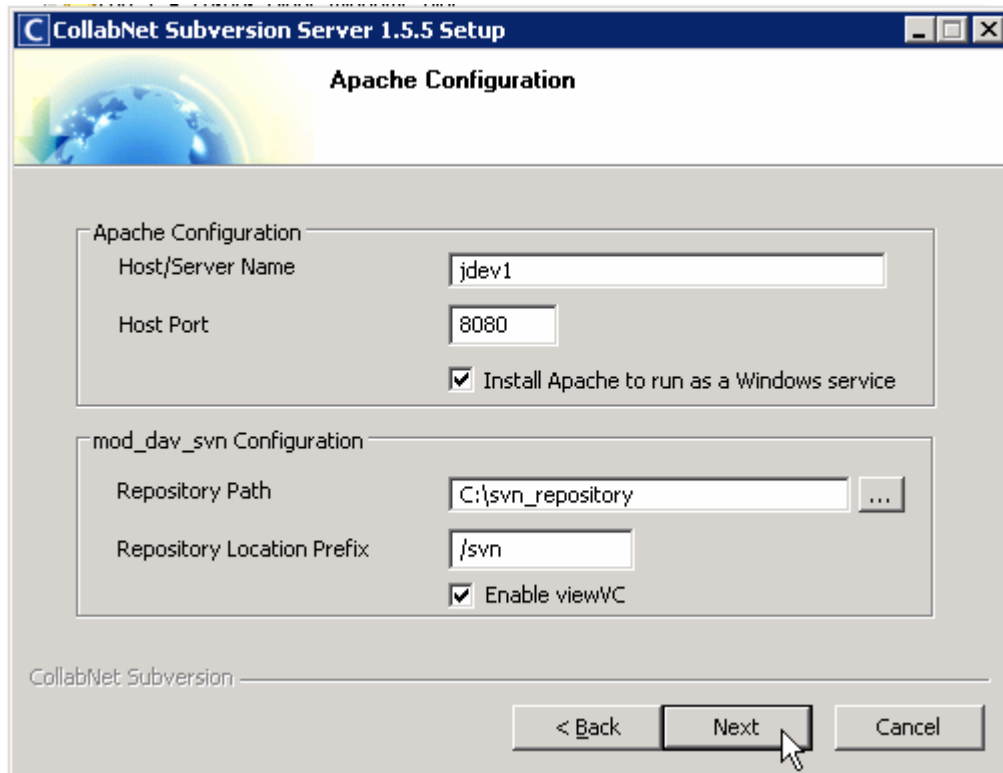
<http://www.activestate.com/Products/activepython/index.mhtml>:

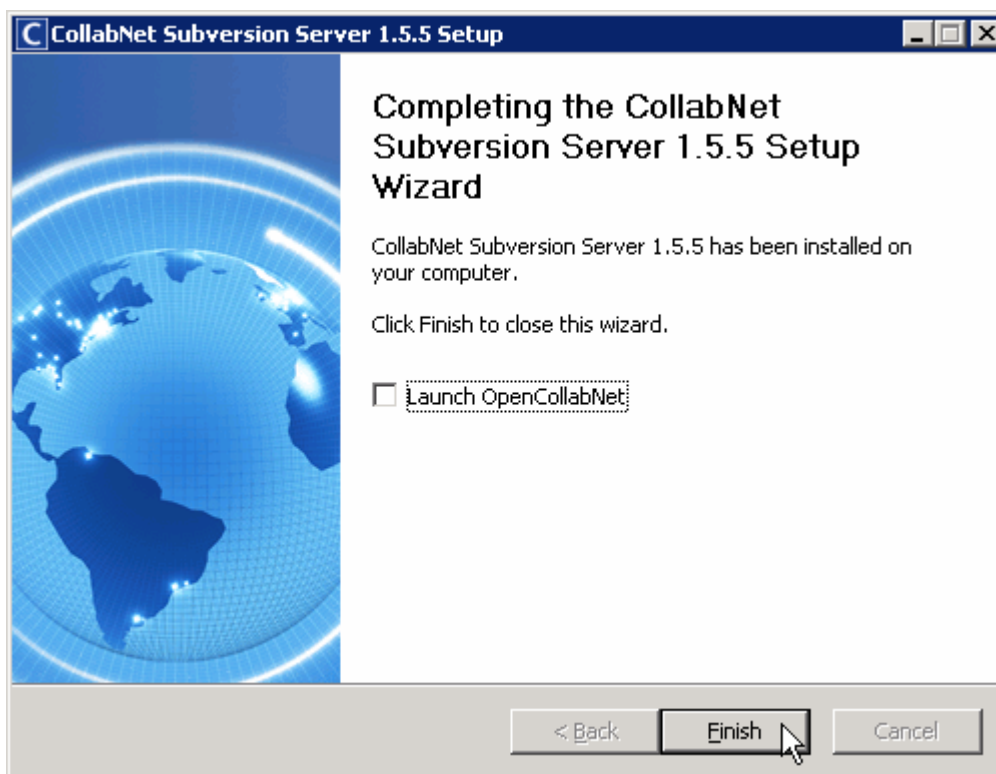
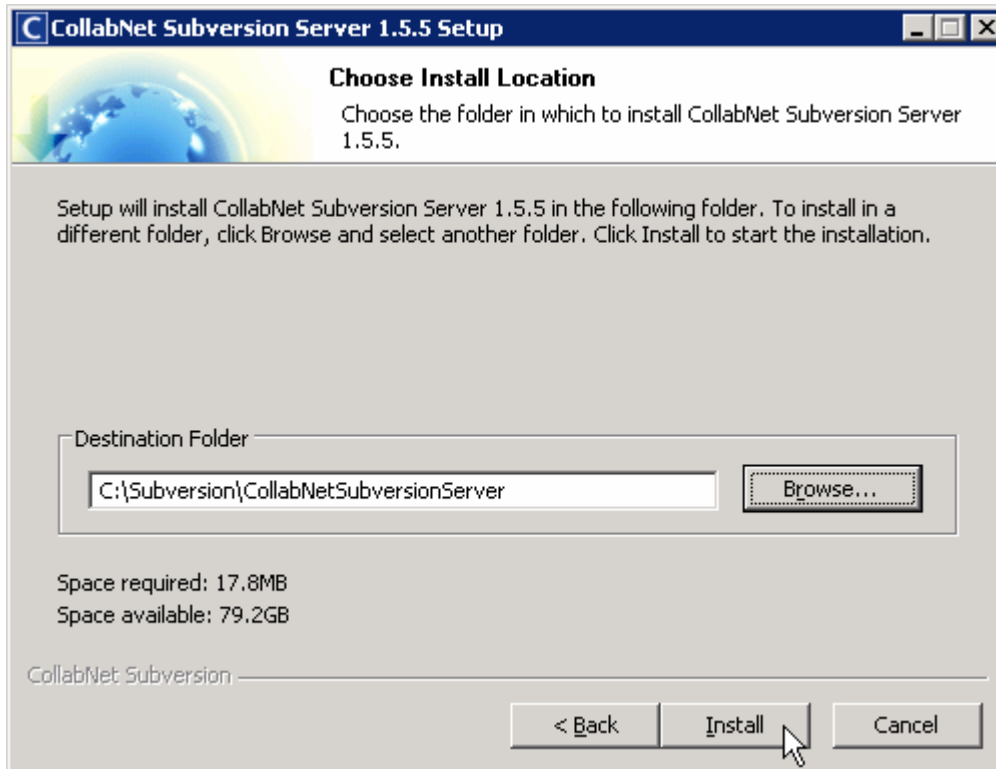
ActivePython-2.5.4.3-win32-x86.msi

Install Active Python. Note that this may require windows to re-start.

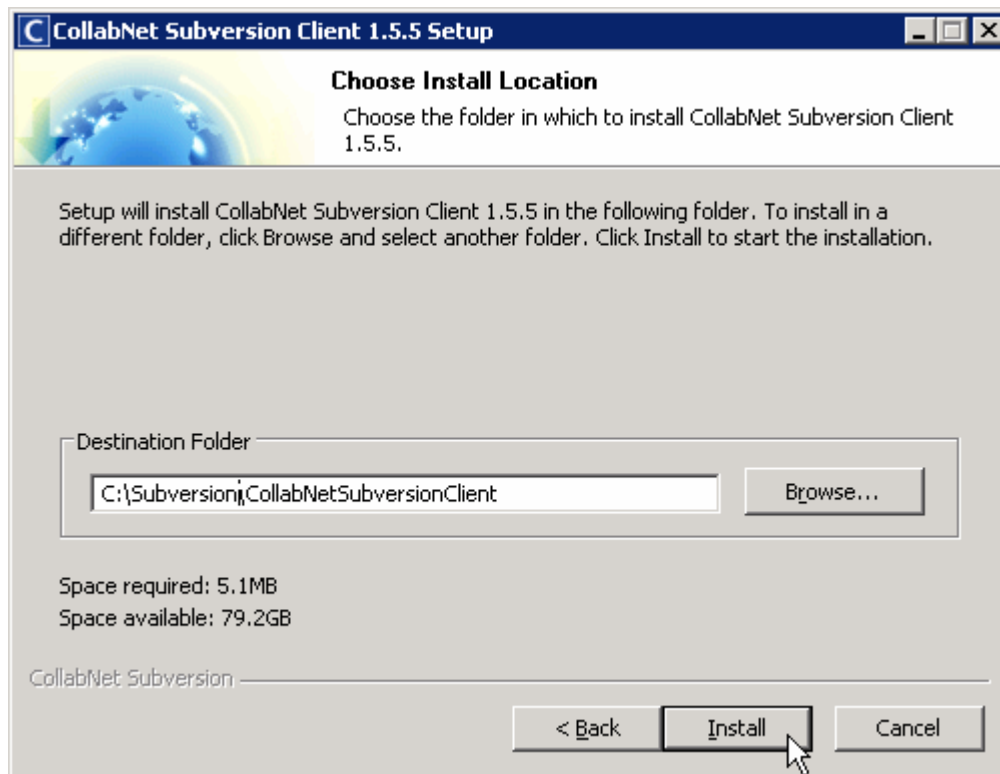
Install CollabNet Subversion Server first. I chose port 8080 for the server. You may have that port used by, for example Oracle. Pick a port that is not used by another server.



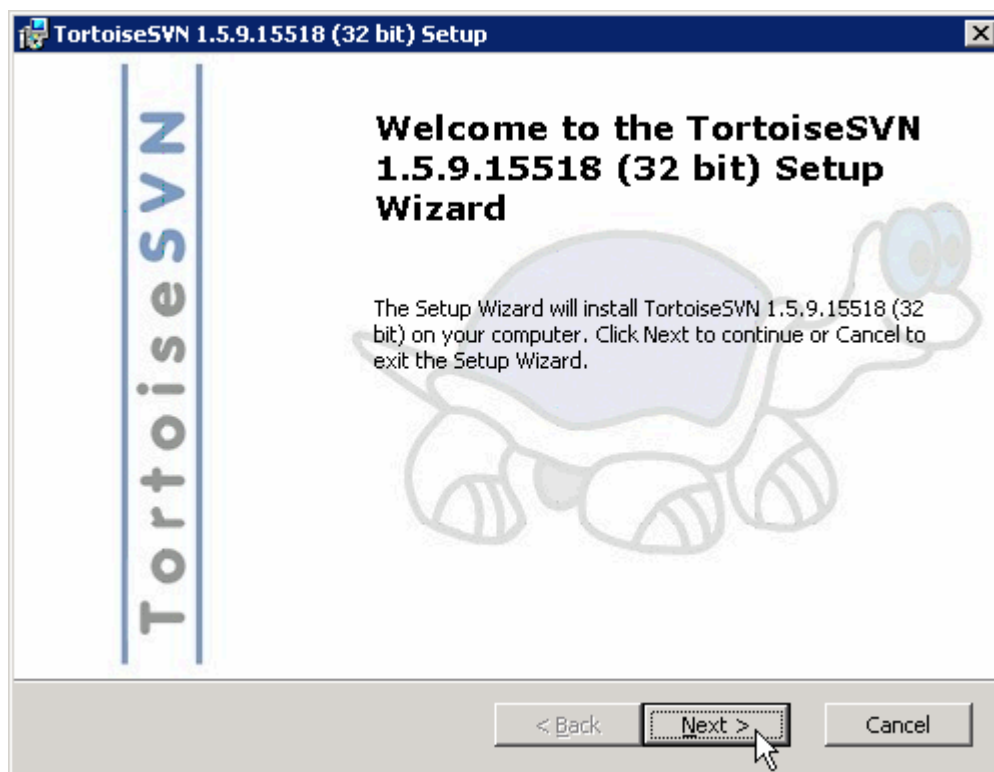


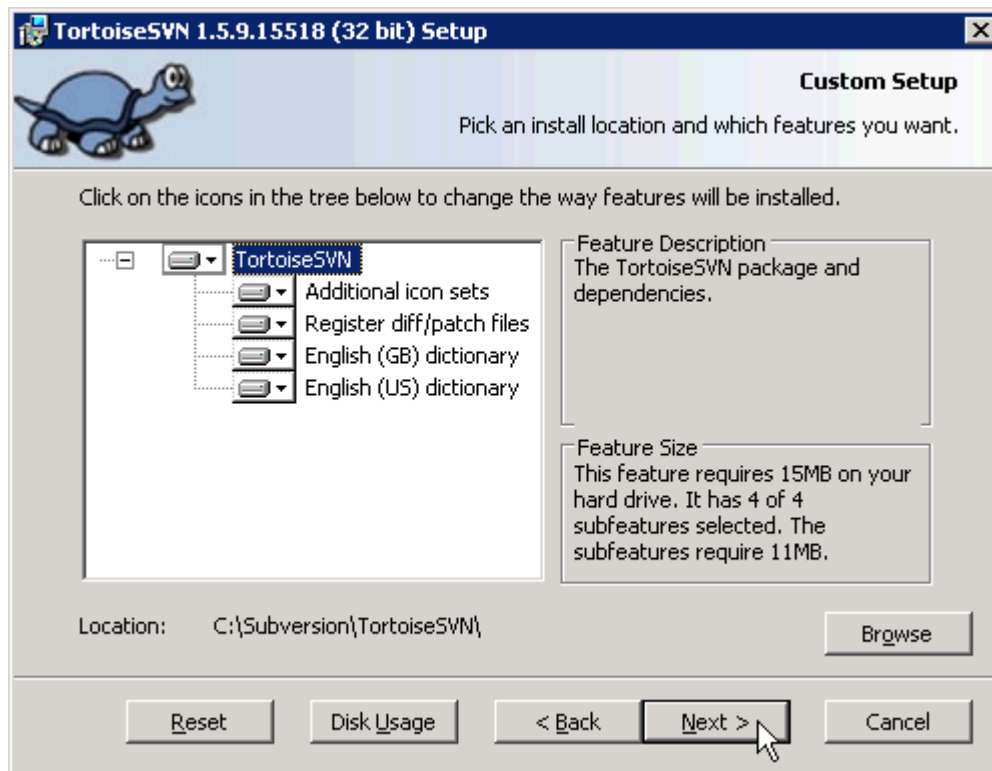
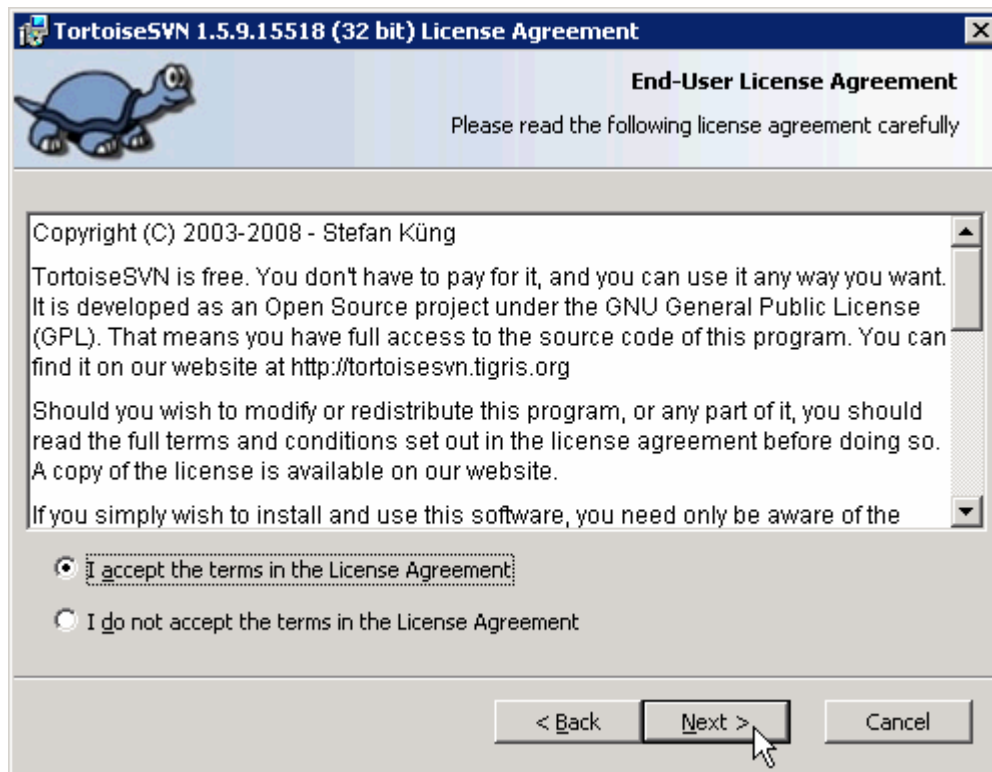


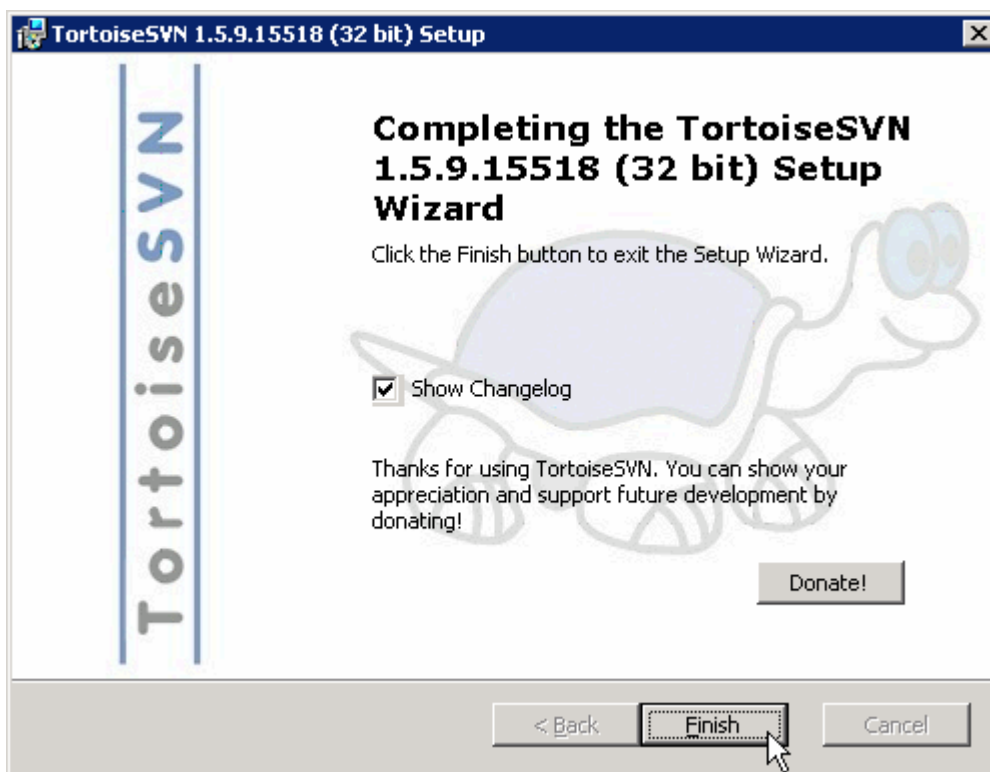
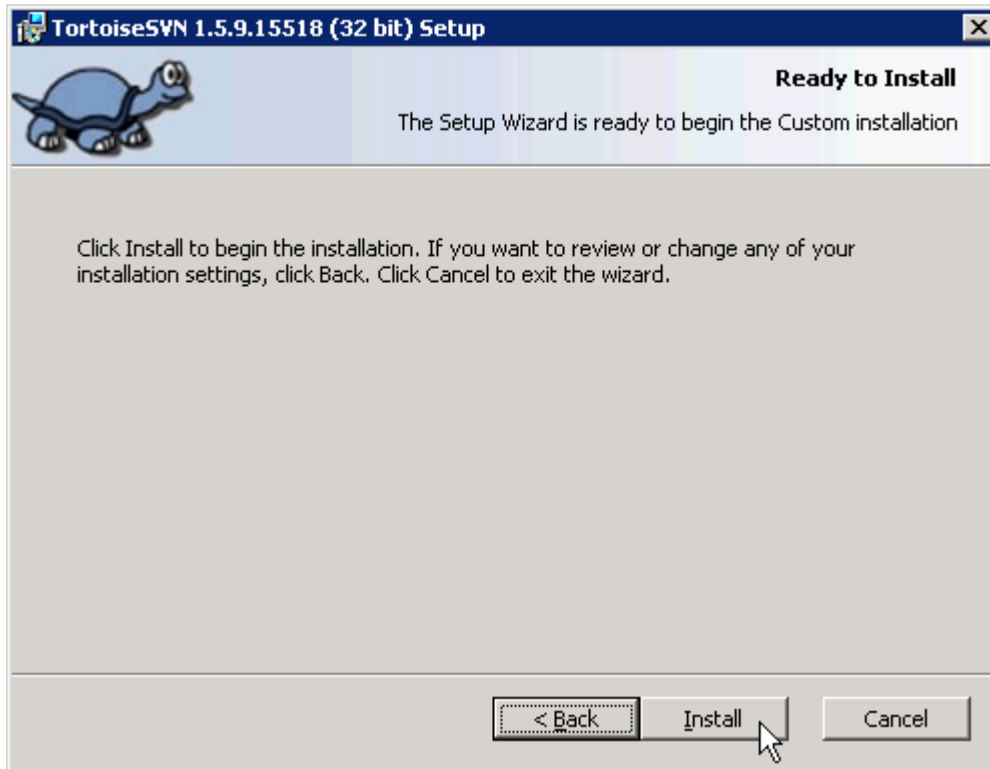
Install CollabNet Subversion Client next.



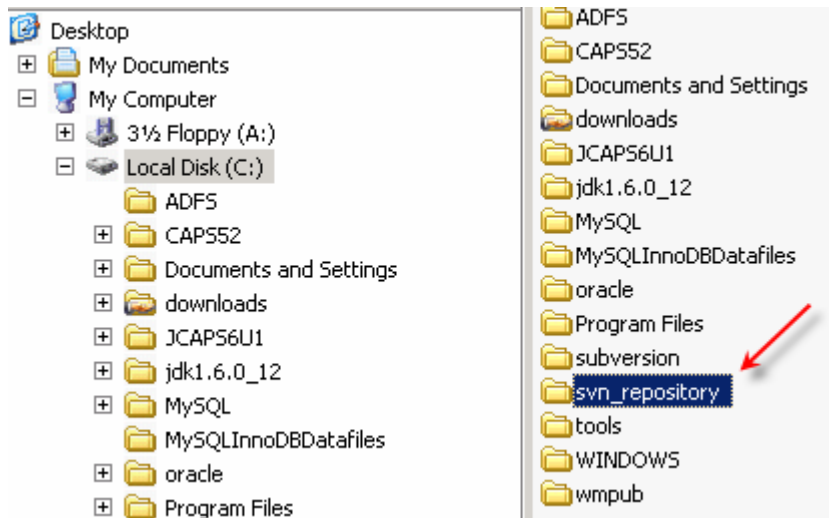
Install TortoiseSVN next. This is not a required component. I find it handy for interaction with Subversion outside the NetBeans environment using Windows Explorer extensions. Installation requires restart.







If you followed the instructions so far the installation would have created a folder `svn_repository` at the root of the C drive.



Follow instructions in [http://downloads.open.collab.net/readmes/readme\\_Windows\\_Server.txt](http://downloads.open.collab.net/readmes/readme_Windows_Server.txt), in section 6, Post-installation Instructions, past A. These are reproduced below.

#### 6. Post-installation instructions

The installer created a folder to store your repositories. You are not required to use this folder, but if you let the installer install the server to run as a service, then the server has also been configured to serve repositories from this location. It is a good idea to use the location you specified in the installer.

##### A. Using svnserve =====

To use svnserve as your server, follow these steps:

1. Open a new terminal (command prompt).

NOTE: If you have an old command prompt open (prior to the Subversion installation), remember to open a brand new command prompt.

2. Create a subversion repository.

```
cd <Repository_Path>
svnadmin create <Repository_Name>
```

For example:

```
cd \repositories
svnadmin create my-first-repos
```

3. Setup a password database.

Using notepad, edit the svnserve.conf file inside the conf directory of your repository.

For example:

If your repository is C:\repositories\my-first-repos  
svnserve.conf is:  
C:\repositories\my-first-repos\conf\svnserve.conf

Inside svnserve.conf, you see the following information:

```
### The password-db option controls the location of the password
### database file. Unless you specify a path starting with a /,
### the file's location is relative to the conf directory.
### Uncomment the line below to use the default password file.
#password-db = passwd
```

Follow the above instructions, and uncomment the "password-db=passwd" line, so that it simply says:



```
password-db = passwd
```

#### 4. Setup usernames and passwords.

Next, edit the passwd file. This passwd file is located in the same directory as svnserve.conf.

Inside the passwd file, you see the following information:

```
### This file is an example password file for svnserve.  
### Its format is similar to that of svnserve.conf. As shown in the  
### example below it contains one section labelled [users].  
### The name and password for each user follow, one account per line.
```

```
[users]  
#harry = harryssecret  
#sally = sallysecret
```

To add a new user account, add your own username and password inside the [users] section. For example, if your name is "joe", and you want to set your password to "super-secret", add a new line like this:

```
joe = super-secret
```

Add as many users as you like.

#### 5. Open Port on Windows firewall.

Before starting the server, the firewall must be notified that this particular port is going to be used. To enable this port in the Windows firewall, follow the instructions found here:

[http://www.microsoft.com/windowsxp/using/security/internet/sp2\\_wfexceptions.mspx](http://www.microsoft.com/windowsxp/using/security/internet/sp2_wfexceptions.mspx)

Note: svnserve.exe is the program name which needs to be added to the exceptions list. Alternatively, you can also use the port where you decide to run the server. By default, svnserve runs on 3690.

#### 6. Start svnserve.

If you elected to have the installer setup svnserve as a service, then open the Services application, find the entry for the Subversion server, and take the Start option. The service has been configured to start automatically on reboot. You can also run this command from the command line:

```
net start svnserve
```

If you did not install svnserve as a service and want to start the server manually, run this command:

```
svnserve -d -r <Repository_Path>
```

For example: `svnserve -d -r C:\repositories`

#### 7. To provide read and write access to anonymous users, modify the conf/svnserve.conf file inside the repository.

```
anon-access = write
```

To restrict an anonymous user from the repository:

```
anon-access = none
```

#### 8. Check out the repository.

```
svn co svn://localhost/<Repository_Name>
```

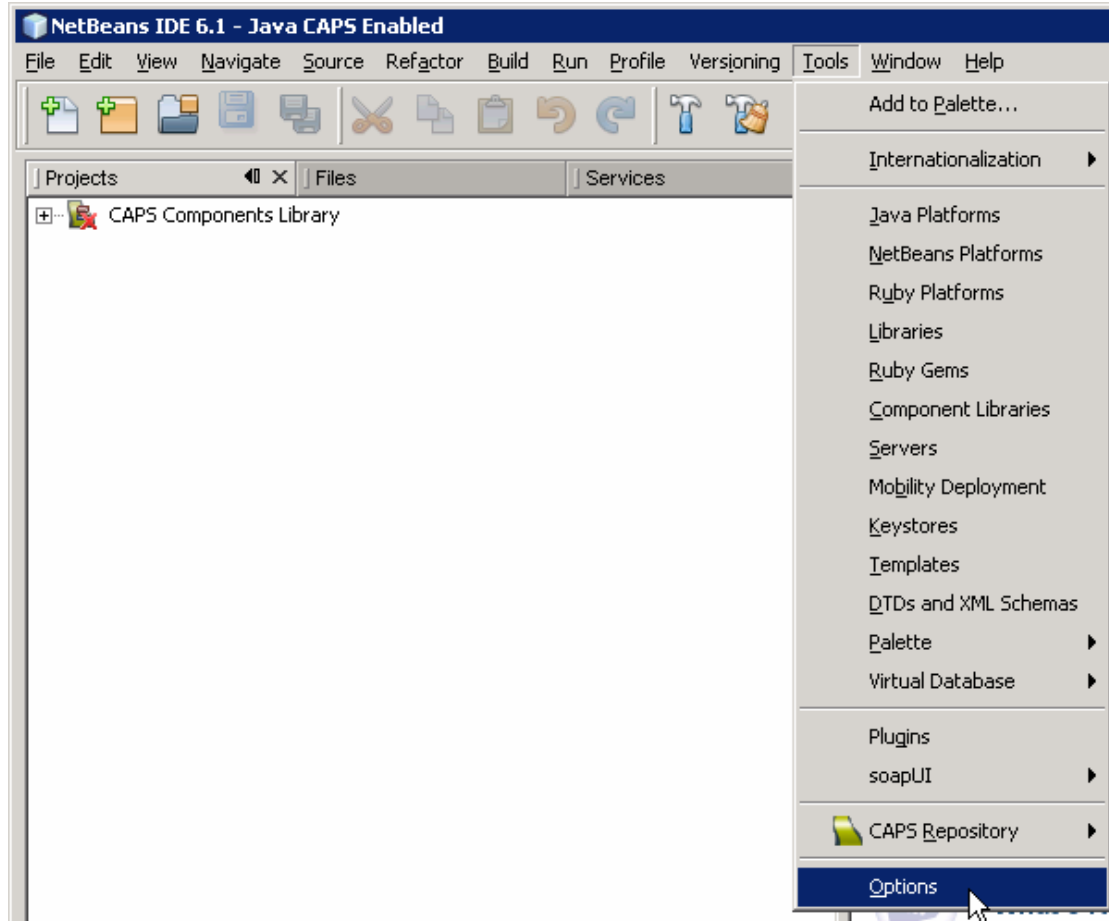
For example: `svn co svn://localhost/my-first-repos`

Tip: If you check out your Subversion repository from a different computer, replace 'localhost' with the IP address or hostname of the machine which hosts the Subversion repository.

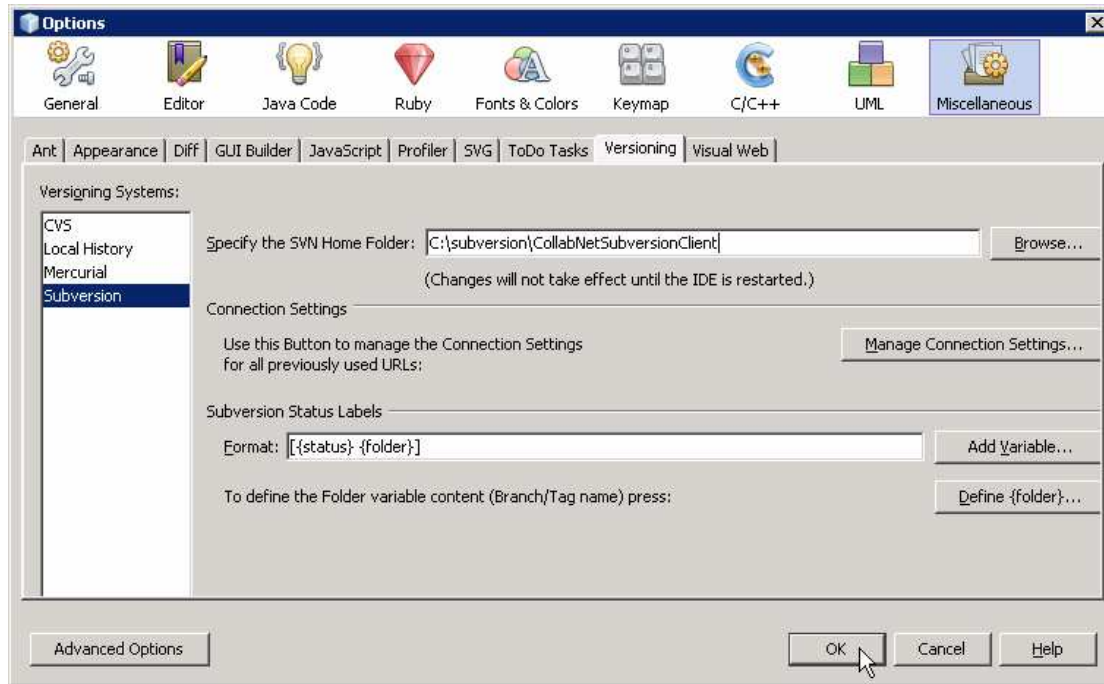
## Integration with NetBeans 6.1

Start the NetBeans 6.1 IDE, which was installed as part of the GlassFishESB, OpenESB or Java CAPS 6 installation.

Choose Tools->Options

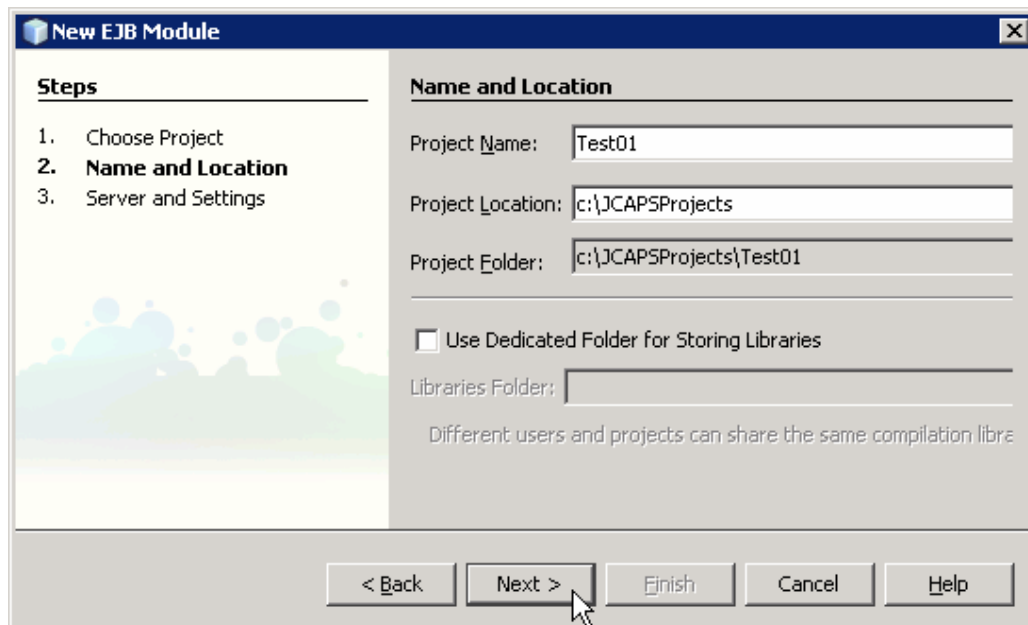


Specify the path of the Subversion CollabNet Subversion Client, for example `c:\Subversion\CollabnetSubversionClient`, and re-start the IDE

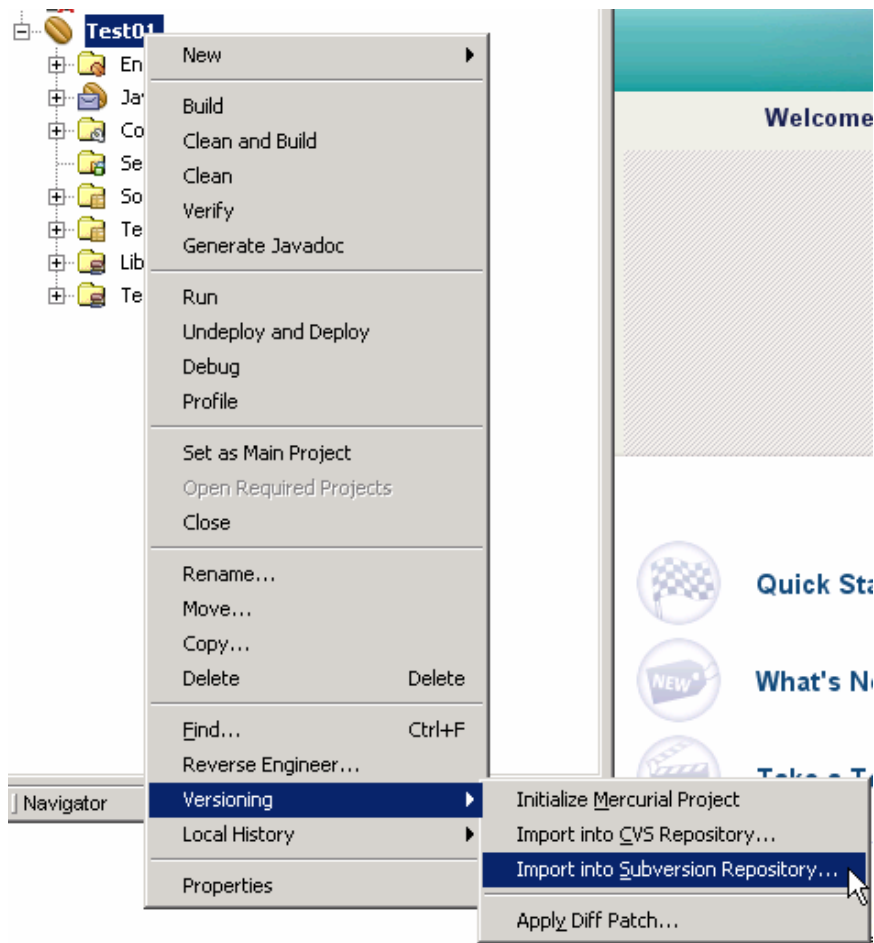


## Working with Subversion in NetBeans (very brief)

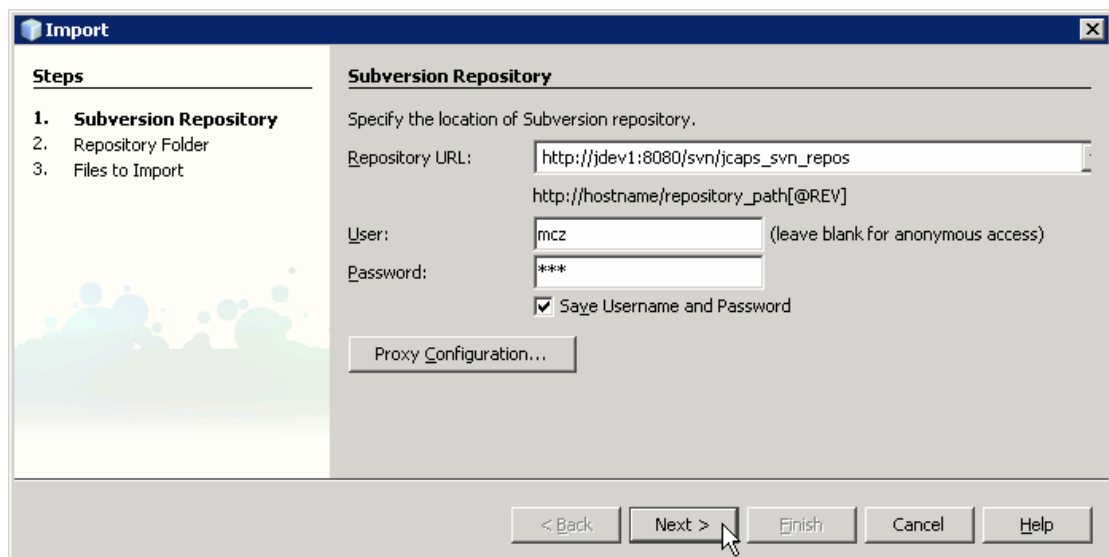
To test the installation and make sure all is well create a new EJB Module.



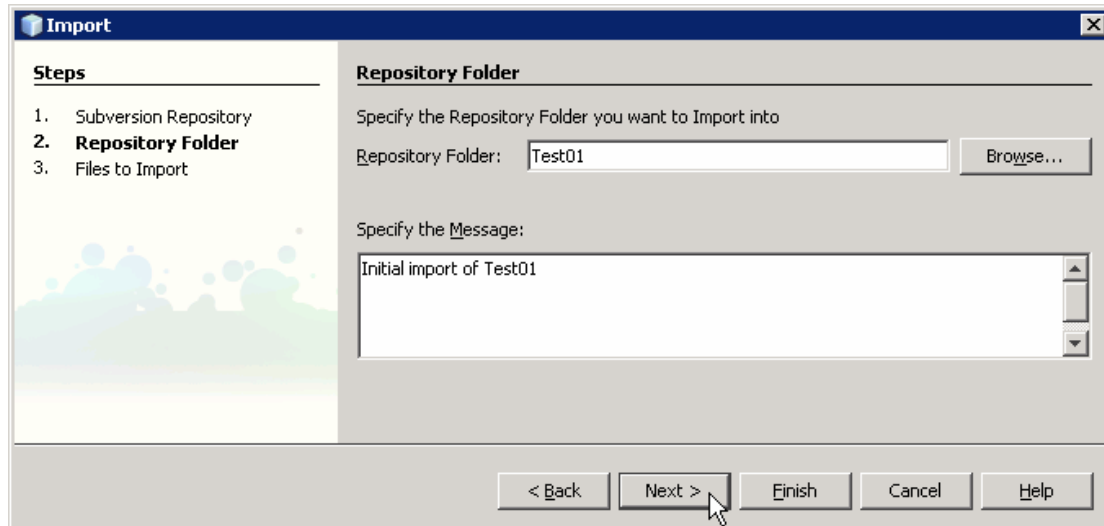
Right-click Module name and choose Versioning->Import into Subversion Repository



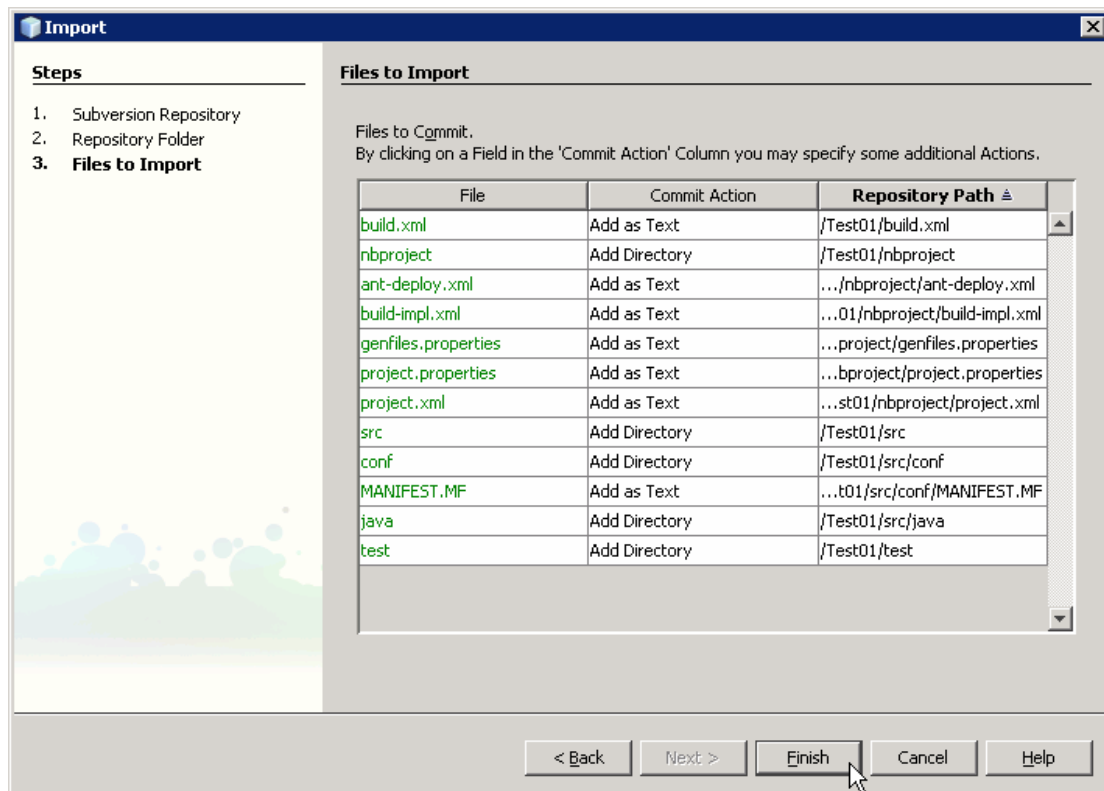
Specify the URL using /svn as the base servlet context followed by the name of the repository created earlier.



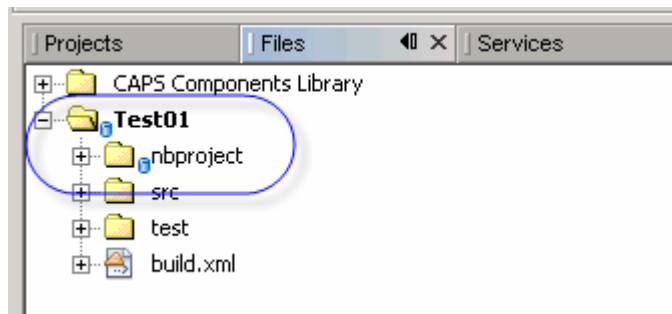
Provide an appropriate message and click Next.



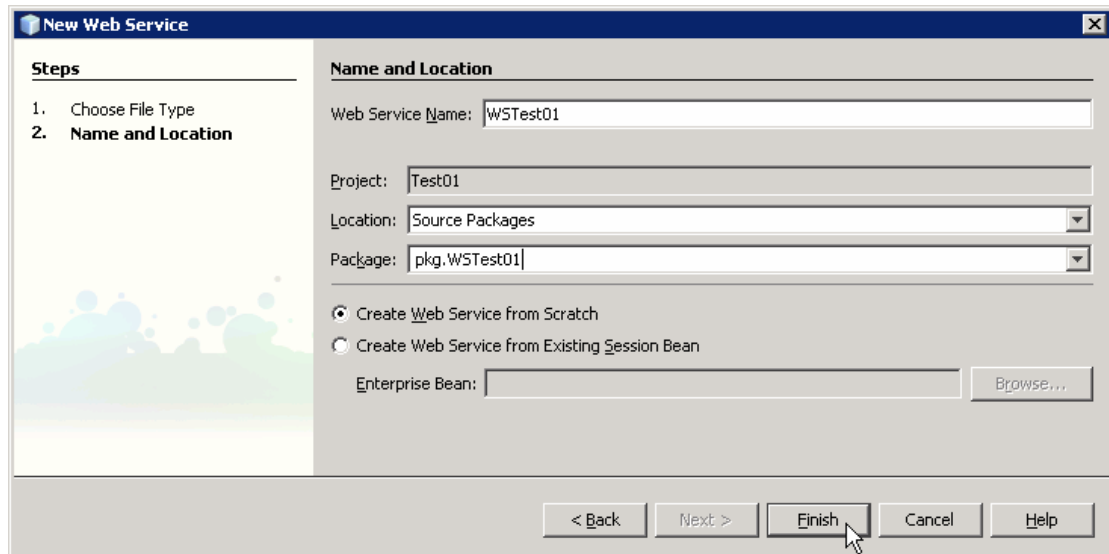
Note all the objects being added to the repository.



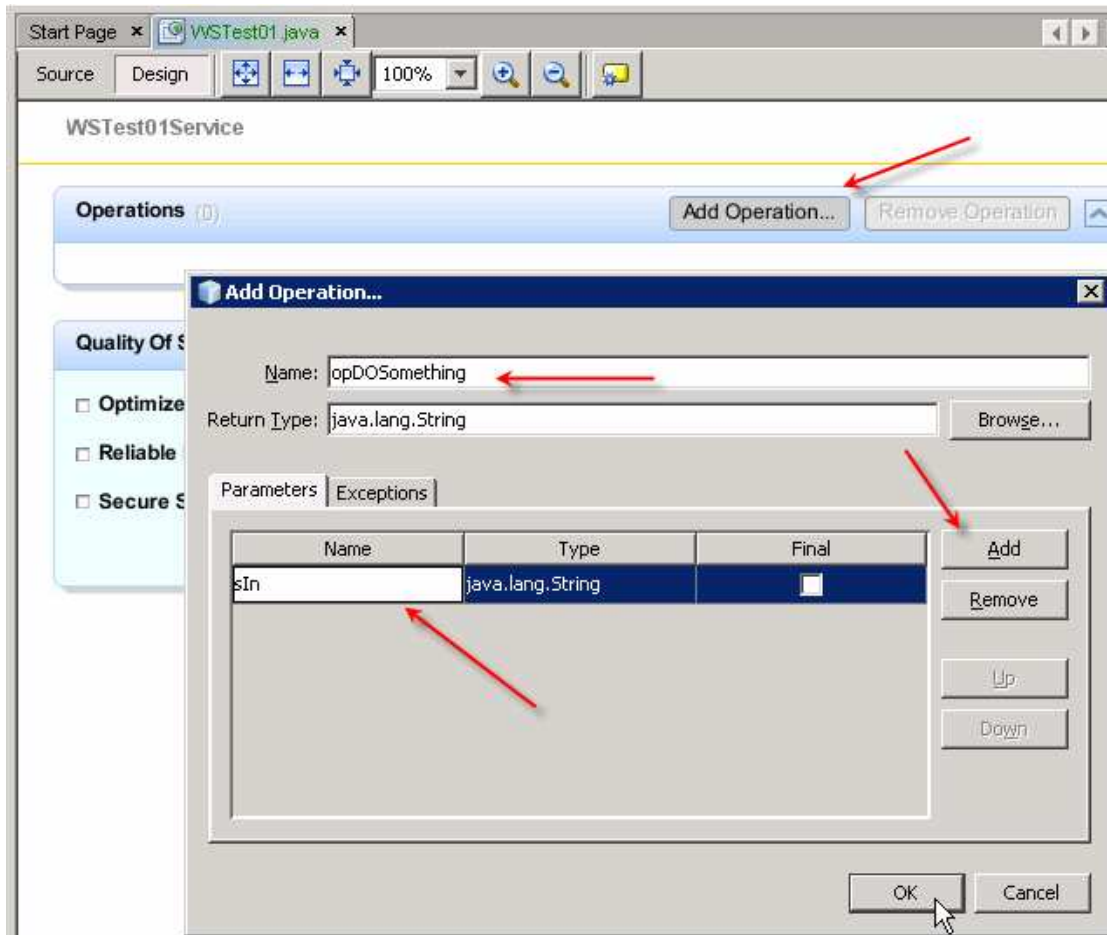
If you switch to Files tab you will notice the repository icons overlaid onto some of the objects.



Let's create a new web service, WSTest01.



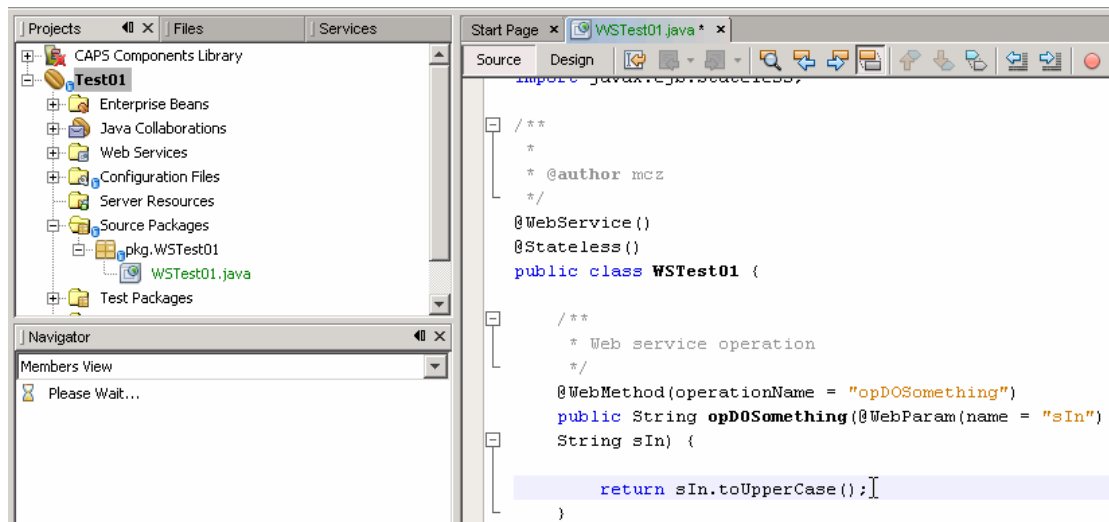
Click "Add Operation", name the operation, add an input parameter and click OK.



Notice that new objects are automatically placed under version control.

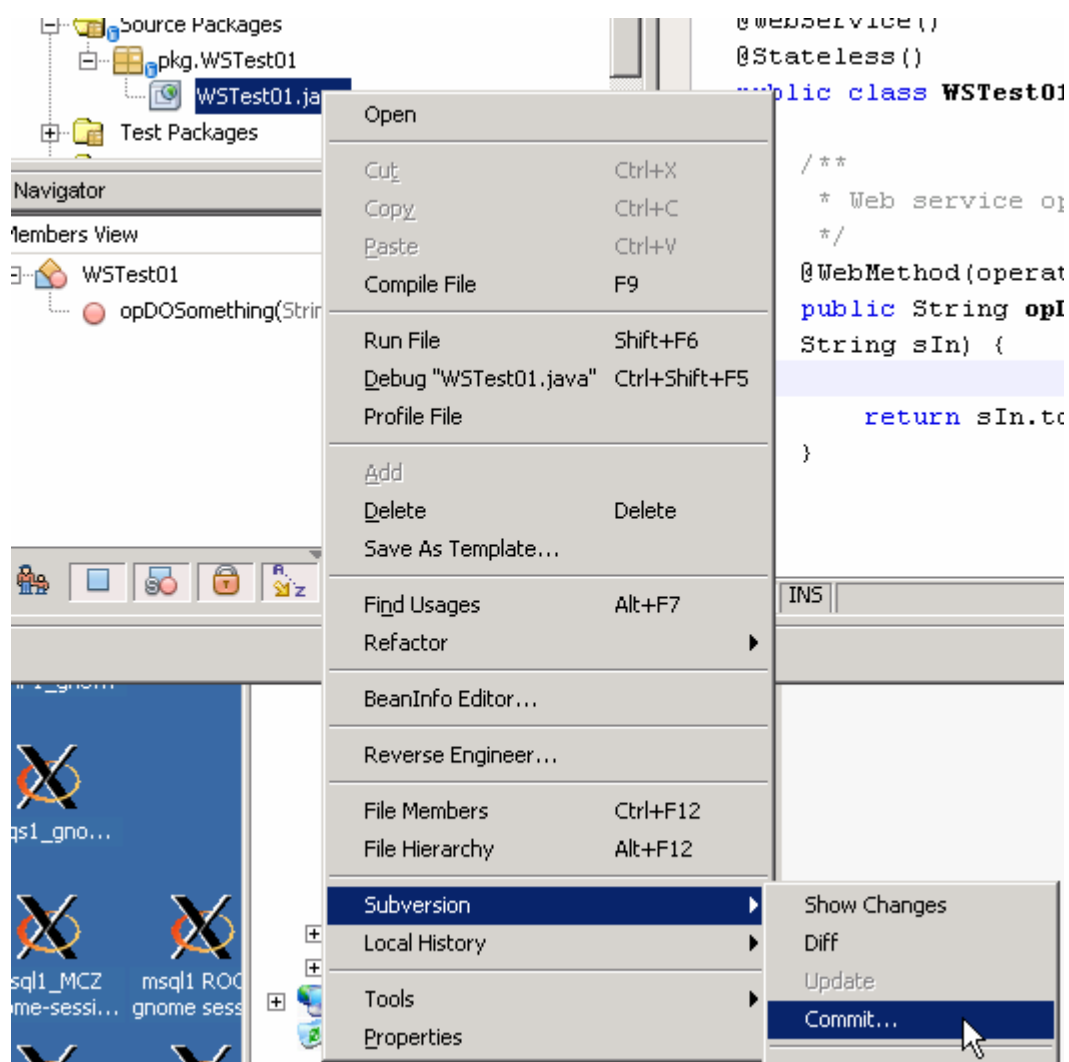


In the Web Service Editor window switch to Source view and add:  
Return = sIn.toUpperCase();



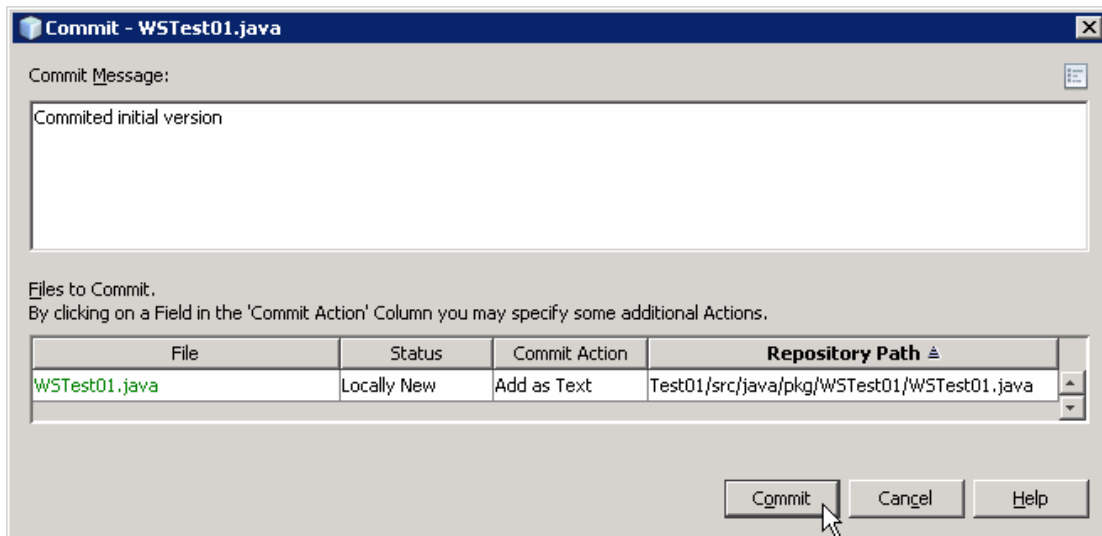
Save the source.

Right-click the name of the Java component in the project explorer, choose Subversion and Commit.

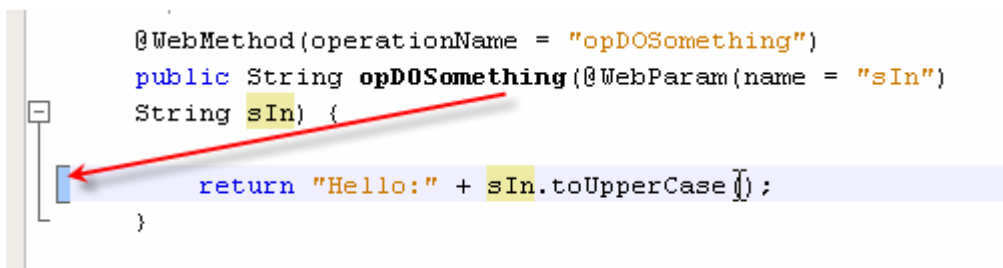




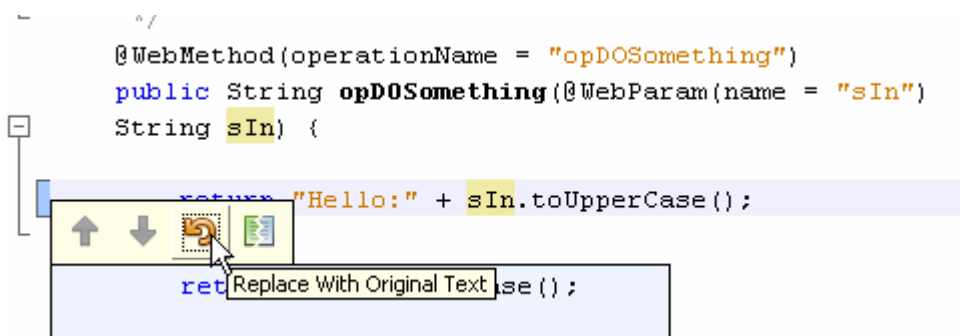
Provide an appropriate message and click Commit.



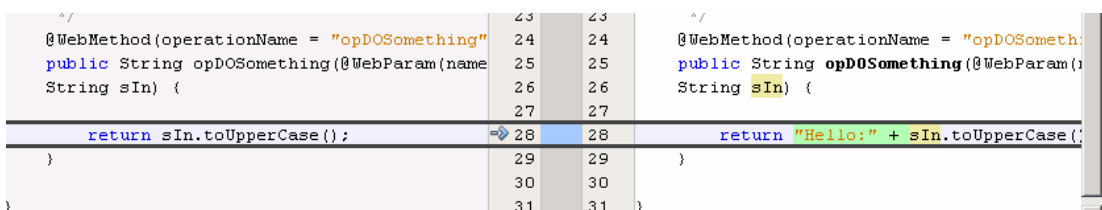
Modify the source and observe the change bar in the source window.



Click on the change bar. Note the "Revert" and Diff icons.



The one, when clicked, would revert the source to the previous committed version. The other would show the differences between versions, similar to what is shown below.



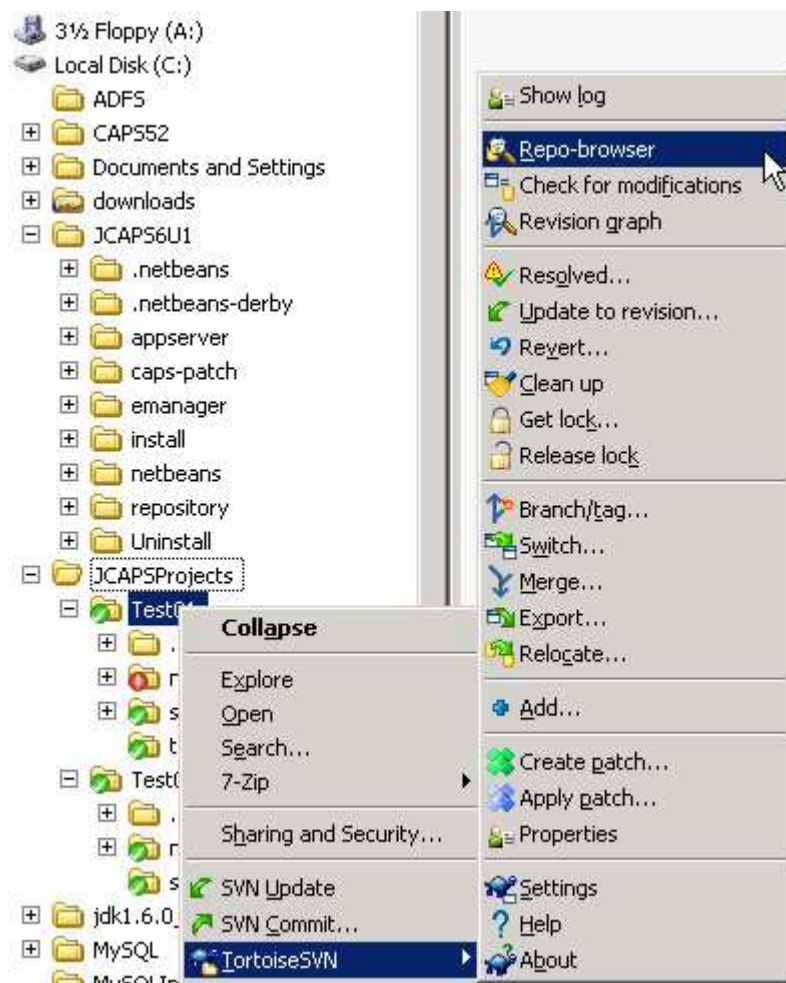
## Final Notes

Exploration of the various facilities provided by Subversion is well beyond the scope of this Note. See <http://svnbook.red-bean.com/>, <http://svnbook.red-bean.com/en/1.4/svn-book.pdf> and, particularly, <http://www.netbeans.org/kb/60/ide/subversion.html>

As you create new projects and need to place them under version control use the Versioning->Subversion->”Import into Subversion Repository” menu options. Once objects are created and committed, they will be version controlled, providing diff and revert facilities, amongst others. BPEL Modules and other kinds of objects are as good as EJB Modules.

Explore the facilities added by version control to see how they can help you in your development work.

With TortoiseSVN installed on Windows integration with the Windows Explorer gives you the ability to interact with the Subversion Repository and objects directly through the Windows Explorer right-click context menu.



By virtue of this integration windows folders are marked with overlay icons to indicate their status with respect to version control.

Again, there is a great deal that can be learned about what all these things mean and what they do. Put a little time and you will get rewards, I have no doubt.