

How to setup the BbSyncClientWS project in Eclipse

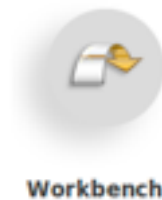
The root directory of the BbSyncClientWS project is an Eclipse IDE project that uses Apache Maven to assist with managing 3rd party dependencies. So, the easiest way to get started with this project is to use the Eclipse IDE.

Here's what you'll need to get started:

1. Install the [Java Developer Kit \(JDK\)](#). This tutorial was developed using JDK 1.8.0_45. However, this project is known to be compatible with Java 6 on.
2. Install the [Eclipse IDE](#). This tutorial was developed using Eclipse Java EE IDE for Web Developers, Version: Luna Service Release 2 (4.4.2). Apache Maven and EGit are also used by this project - both are included in Eclipse IDE.

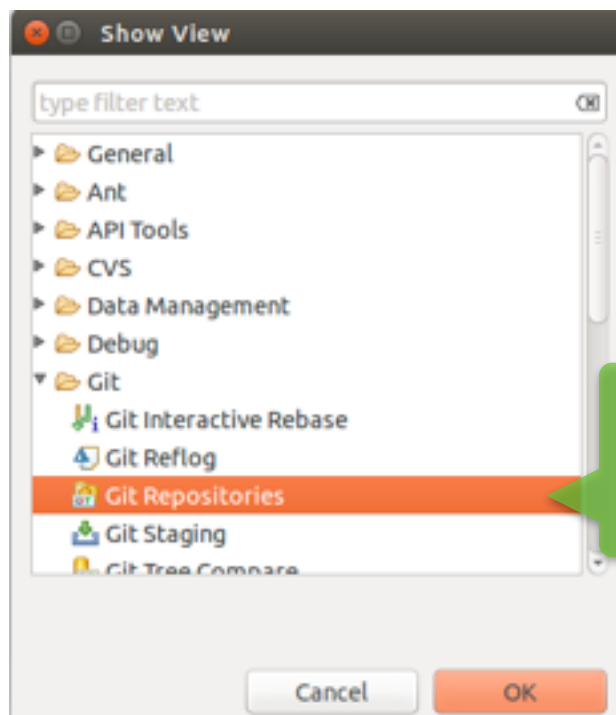
Step #1 - Clone the Repository in Eclipse:

1. Open Eclipse. If this is the first time opening Eclipse, click the "Workbench" button.



If you're starting up Eclipse for the first time, click this to get to the workbench.

2. When you are in the workspace, add the Git repositories view:
 - In the Eclipse menu bar, click Window > Show View > Other...
 - In the "Show View" panel, expand the Git folder & select "Git Repositories".
 - Click "OK". This will enable a Git Repositories tab in your workspace.



Show the Git repositories view so that you can configure EGit.

3. Navigate to <https://github.com/bbsync/BbSyncClientWS> & copy the “HTTPS clone URL”.

HTTPS clone URL

<https://github.com/bbsync/BbSyncClientWS>



Click this icon to copy the URL to your clipboard.

You can clone with [HTTPS](#) or [Subversion](#).

4. In the Git Repositories tab, select “Clone a Git repository”. If you copied the URL from the previous step, the “Clone Git Repository” panel should appear with everything filled in:
- Click “Next” to verify the repository information.
 - Select the master project branch and click “Next” again.
 - Finally, click “Finish” to set the destination directory and clone the repository.

The image shows a 'Clone Git Repository' dialog box with the following fields and options:

- Source Git Repository:** Enter the location of the source repository.
- Location:**
 - URI: <https://github.com/bbsync/BbSyncClientWS.git>
 - Host: [github.com](https://github.com/bbsync/BbSyncClientWS.git)
 - Repository path: [/bbsync/BbSyncClientWS.git](https://github.com/bbsync/BbSyncClientWS.git)
- Connection:**
 - Protocol: [https](https://github.com/bbsync/BbSyncClientWS.git)
 - Port: (empty)
- Authentication:**
 - User: (empty)
 - Password: (empty)
 - Store in Secure Store: ☐

Buttons at the bottom: < Back, Next > (highlighted), Cancel, Finish.

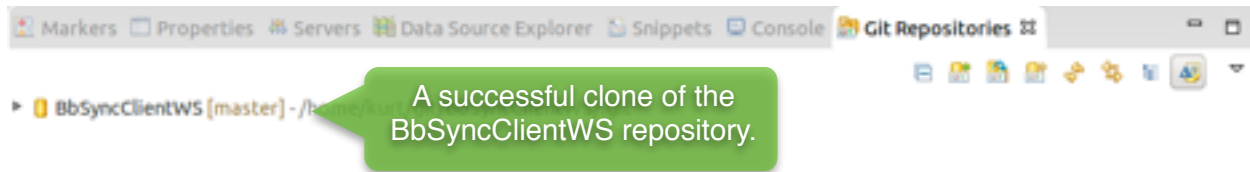
A green callout bubble points to the URI, Host, and Repository path fields, stating: "If you completed the previous step, these values should fill in automatically."

Select one of the following to add a repository to this view:

- [Add an existing local Git repository](#)
- [Clone a Git repository](#)
- [Create a new local Git repository](#)

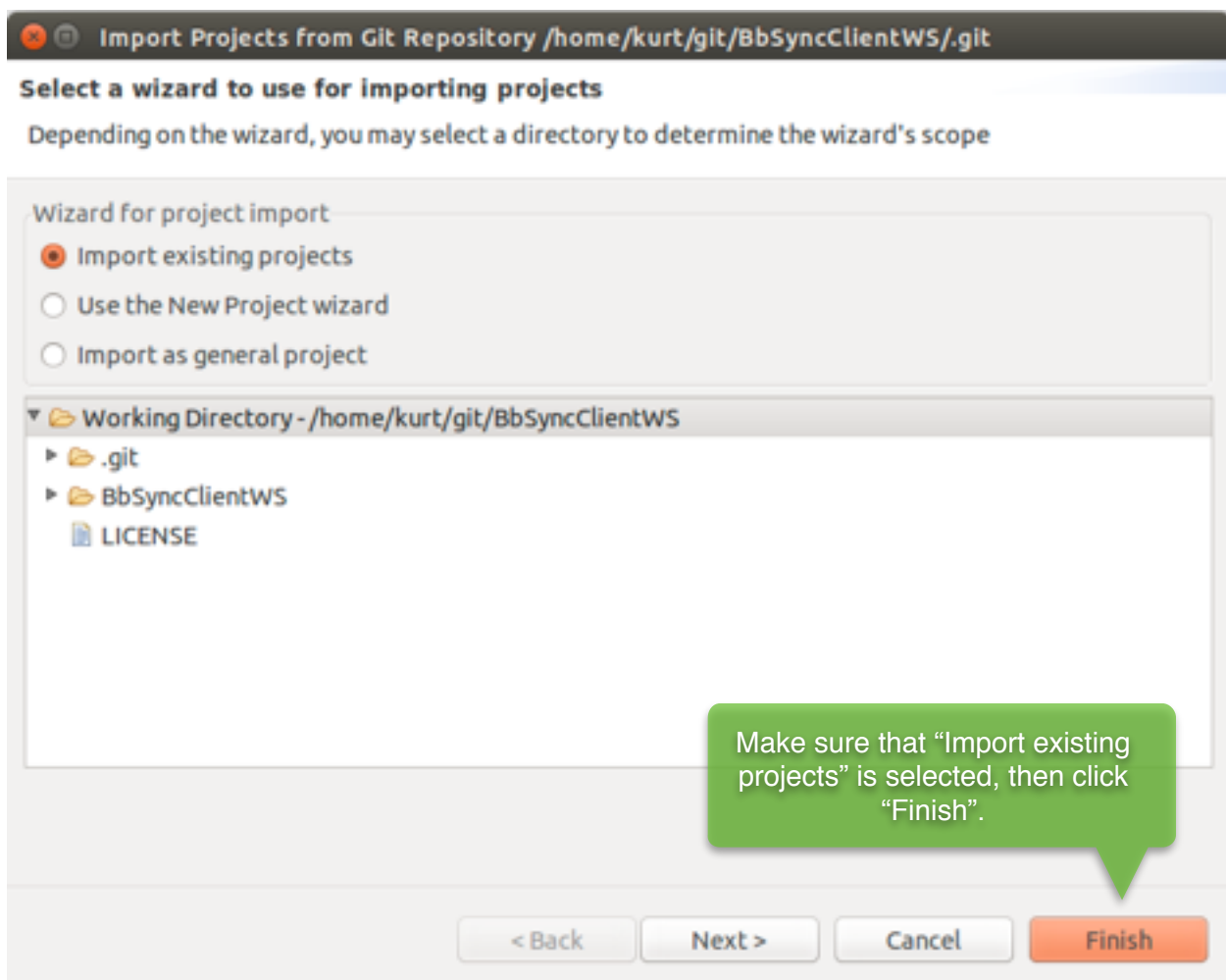
Click this link to open the “Clone Git Repository” panel.

5. You should now see the BbSyncClientWS repository in your Git Repositories view.



Step #2 Import the BbSyncClientWS project into Eclipse:

1. In the Git Repositories view, right-click on the BbSyncClientWS repository and select, "Import Projects..."
2. In the "Import Projects from Git..." panel that opens, be sure that "Import existing projects" is selected as the wizard for project import, then click "Finish".

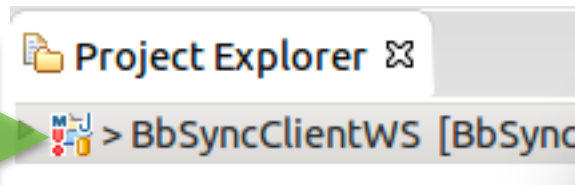


At this point, the Eclipse project will be imported from the repository into the Project Explorer and Maven will download all of the required 3rd party dependencies (about 31 MB). It may take some time depending on the speed of your Internet connection.

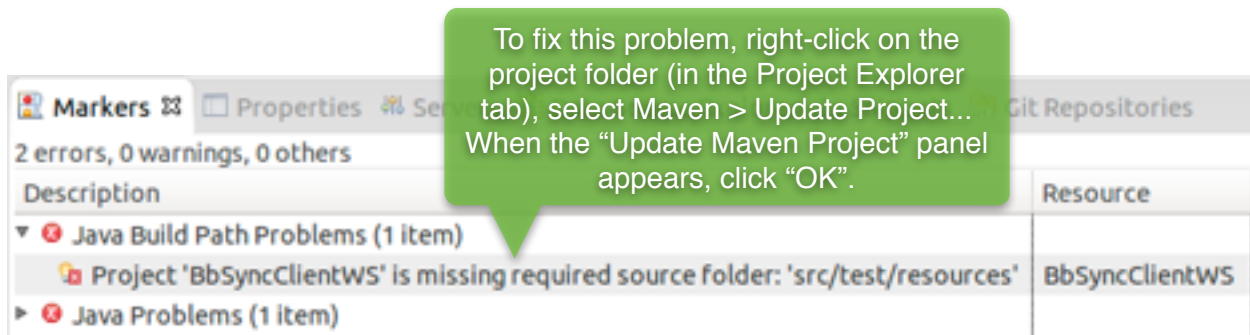
Step #3 Correct build path problems:

When the import is done, you will notice a red exclamation point over the project folder indicating that there is a problem.

The red exclamation point indicates that there are problems with the project. Click the “Markers” tab for more information.

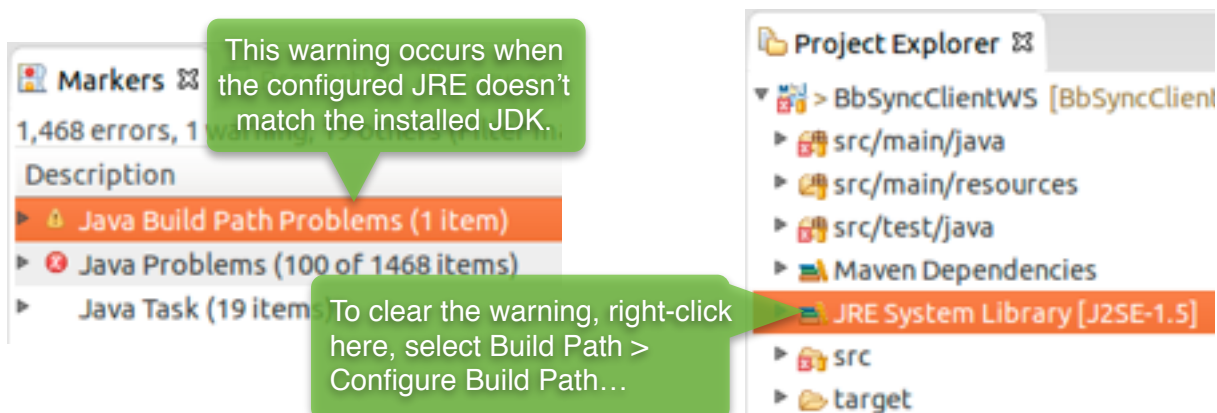


Click on the “Markers” tab at the bottom of the screen to see what is wrong. You should see two problems. The first being a Java build path problem. If you expand the description of the first problem, you'll see that there's a required source folder missing. This particular folder was a default folder created by Maven in my original project and was never used. It seems as though GitHub ignored this folder when I pushed up the original project – probably because it was empty.

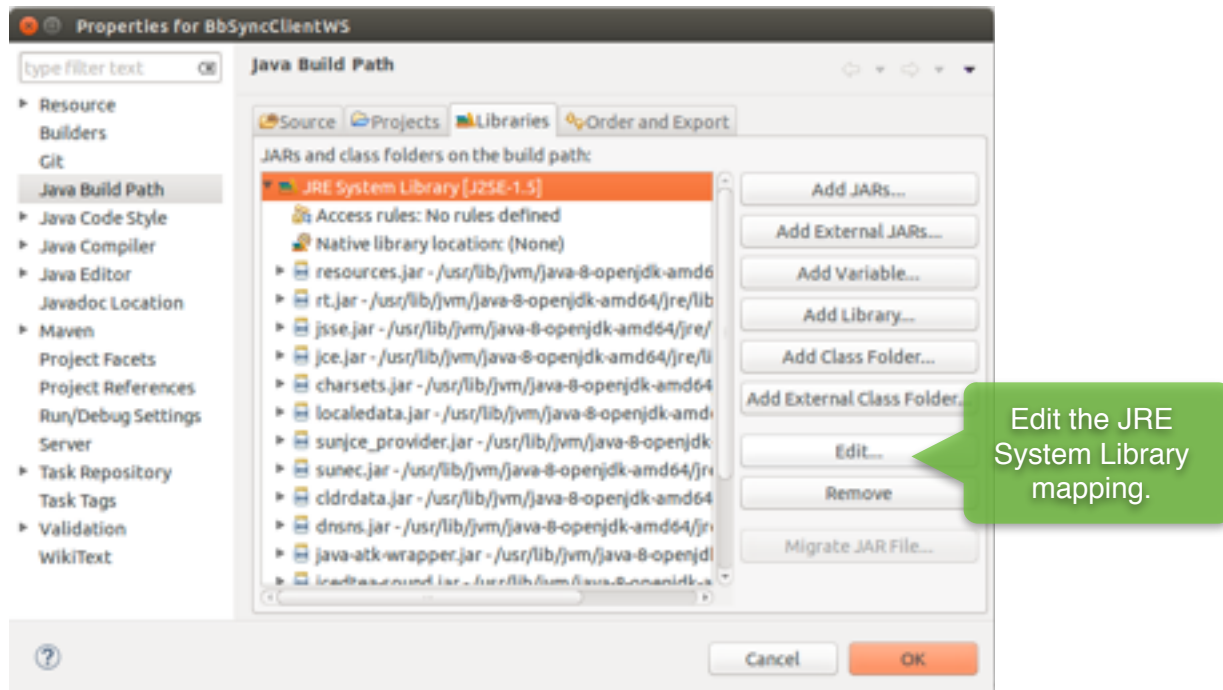


To fix this problem, all you need to do is right-click on the BbSyncClientWS project (in the Project Explorer tab), select Maven > Update Project... When the “Update Maven Project” panel appears, click “OK”.

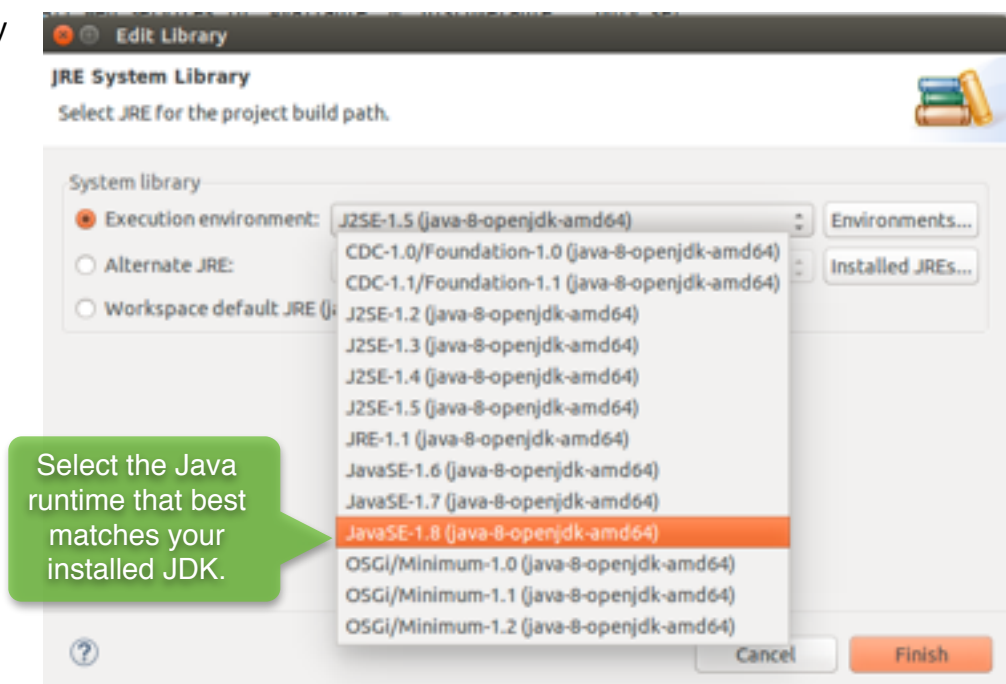
The next problem that you'll likely encounter is a Java build path warning. For some reason, Eclipse seems to prefer using J2SE-1.5 as the default JRE System Library. If you're seeing this warning, it's because you don't have JDK 1.5 installed on your system.



To fix this problem, you need to manually specify a JRE that matches the JDK you have installed. Start by right-clicking on the project's JRE System Library. Then select "Build Path" > "Configure Build path..." This will bring up the Java Build Path panel. In the Libraries tab, select the JRE System Library, then click on the "Edit..." button.



In the "Edit Library" panel, pull down the "Execution environment" menu and select the JRE System Library that matches your JDK. The choices in this menu will vary depending on the Java implementation installed on your system. This tutorial was created using Ubuntu Linux & Open JDK 8, your menu choices may be different.



Congratulations! You have now completed the BbSycClientWS project setup. Please note that at this point, you will still have build path errors. This is because this project doesn't include the source code for the web services that you're trying to connect to. This source code comes from the Blackboard Learn server that you're trying to connect to. Please see the README.txt file in the BbSycClientWS project directory for detailed instructions on how to obtain this source code and complete the build process.