A Quick Guide to creating OMNeT++ Projects with Existing Source Code

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Howdy! Often times when working with the Eclipse IDE (used as the IDE for OMNeT++), you will want to create new projects for source code already written. OMNeT++ projects, which I will refer to as *simulation models,* often are shipped without any Eclipse-specific project information (or to be more specific, simulation models I write, such as the Jammer for HW2, will not contain any project configuration :-)). There are reasons for this, such as path mismatches, build system misconfigurations, internal structure conflicts, etc. OMNeT++'s IDE will configure new projects correctly, all that is missing is the existing code.

But never fear! Follow these simple steps, and soon you'll be able to import any simulation models you want, without needing any Eclipse project configuration stuff beforehand.

- In the OMNeT++ IDE, goto **File → New → OMNeT++ Project...**
- Type in a name for your project, leave the two checkboxes checked, and click **Next>**
- Under **Select template**, select **Empty project,** and click **Finish**

Now you have a new, blank project setup, with all the awesome OMNeT++ defaults. Now do the following:

- Your newly created project will be open by default in the *Project-Explorer*. Expanding the root project folder will yield two items: *includes* and **package.ned**
- If your source code already contains a **package.ned**, please delete the **package.ned** that was created in your new project. Always use the **package.ned** which comes with your source code.
- You will need to reference any simulation models that your source code uses. Usually this will be *inet.* To add inet as a referenced simulation model, right-click on your new project root folder in the *Project-Explorer,* and goto **Properties → Project References**
- Check the checkbox next to *inet* in the list. If you need other simulation models referenced, check the appropriate checkboxes here.

Now you have your newly created project prepped for source code copying action. To do that, follow these totally tubular steps:

- Using a file explorer (file manager, shell, etc), navigate to your OMNeT++ workspace root folder. By default this is located here: **/omnetpp-4.6/samples/**
- Find the folder which has the name of your project. When you open it, you will find nothing inside except some hidden project configuration files that the IDE created for you (the *includes* folder that shows up in the OMNeT++ IDE *Project-Explorer* is virtual).
- Copy all your source code into this folder.
- You will see the files update in the OMNeT++ IDE. If you are getting errors, check to make sure you are not missing anything. For example, if your source code does not have a **package.ned** file, you may get package path errors. Also make sure all the dependent simulation models and other projects are referenced correctly to your new project.

At this point your project should have no errors (some warnings may be present). To build the project, do the following:

- Open the **omnetpp.ini** file which came with your source code.
- Click the green arrow whose tooltip text is *Run <Project Name>*. This is located in the toolbar at the top of the IDE.
- You will get a dialog box about creating a new profile. Click ok.
- Now at this point the build will probably fail with an *executable not found* error. No worries, simply click the green button again and the build system will actually be invoked to build your project.

Now sit back and enjoy some network simulation awesomeness!!