**Linux (Ubuntu)**

This video explains how to set up eclipse to work with the BeagleBone: <http://www.youtube.com/watch?v=vFv_-ykLppo>

In short follow these instructions:

1. Install eclipse (sudo apt-get install eclipse)
2. Start eclipse, and once in select Help/Install Updates. Put the following website in the box next to work with –http://download.eclipse.org/releases/indigo. Select C/C++ Development tools and C/C++ Library API Documentation Hover Help (Incubation)
3. Get RSE-runtime-3.3.2.zip from <http://download.eclipse.org/tm/downloads/drops/R-3.3.2-201202061000/> (The zip is also in GitHub)
4. In the zip file, go to eclipse/features and extract all folders to your computer at the destination: user\_name/.eclipse/org.eclipse.platform\_X.X.X\_XXXXXXXXX/features
5. In the zip file, go to eclipse/plugins and extract all folders to your computer at the destination: user\_name/.eclipse/org.eclipse.platform\_X.X.X\_XXXXXXXXX/plugins
6. Run eclipse and go to Window/Show View/Other/Remote Systems/Remote Systems. Right click in the Remote Tab and select New/Connection. Choose Linux and then type the IP address of the beaglebone in the host name. (if unsure about the ip address use the IP address beaglebone.local or run linux terminal and type “ifconfig”). After that always check the box with ssh in it for the next several steps until done. Your beaglebone should now be connected.
7. Right click on your ssh terminals and select launch terminal to create a terminal. (the login is root and there is no password).

These next steps will explain how to create and build a c file for the beaglebone

1. Go to File/New/Project and select C or C++ project (whichever you prefer). You can start out with the Hello World project with the wizard. It may ask to switch perspective, so do it.
2. To compile and build it correctly several settings need to be changed . On your computer, launch a terminal and type “sudo apt-get install gcc-4.4-arm-linux-gnueabi” (if that doesn’t work try “sudo apt-get install g++-arm-linux-gnueabi” and “sudo apt-get install gcc-arm-linux-gnueabi)
3. Next in your eclipse project, select Project/Properties. Under C/C++ Build select settings. On the left side is several setting names like GCC C++ Compiler. Don’t worry about the indented settings but only the 4 main ones. Select them and in the command box bugg “arm-linux-gnueabi-“ before the already set command.
4. Still in properties go to C/C++ General and then select Paths and Symbols. Under Includes go to GNU C and select Add. This will bring up a new window. In this window check off Add to all configurations and then select File system. Now go to /usr/arm-linux-gnueabi/ and add in include. Go to GNU C++ and do the same thing.
5. Near the top there should be a Library Paths tab that needs to be selected. Once in there select Add and do the same thing as the step above except choose lib instead of include.
6. Now this should have configured all the settings. Go to Project/Build All. If there is an error then something went wrong and I’d advise watching the video. With the c program built, under the project tabs (probably on the right) select your project and expand the Debug folder. There should be a file that ends with [arm/le]. This is your built c file. Simply copy and paste this file into your remote system.
7. Although the file is on the beaglebone now, it isn’t executable yet. To do this go to the directory where you stored the file and type in “chmod +x project\_name”. Now in order to run the file just type in “./project\_name”.