firepickdelta

Installing Eclipse IDE and Running OpenPnP
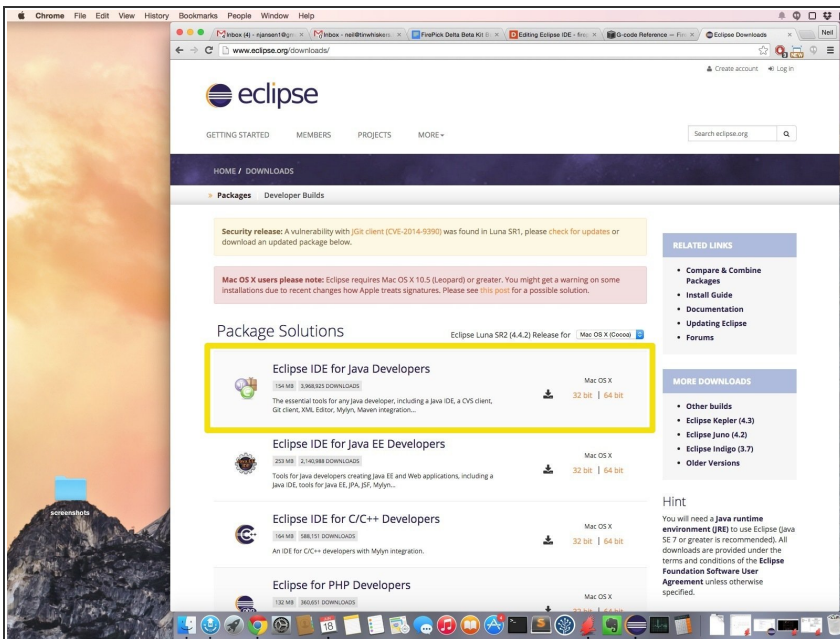
Written By: Neil Jansen

Step 1 — Introduction

- In this guide, we will:
  - Download and install Eclipse IDE
  - Download the OpenPnP source code from Github
  - Import the OpenPnP Maven project into Eclipse, and configure the project.
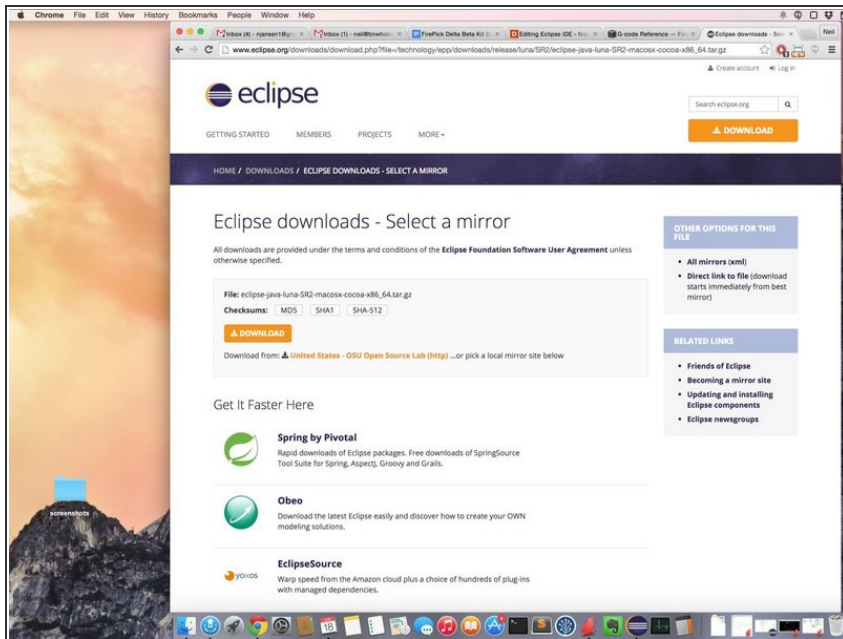 - Run OpenPnP for the first time

- 📌 Note: machine configuration and running SMT jobs will be covered in other guides.
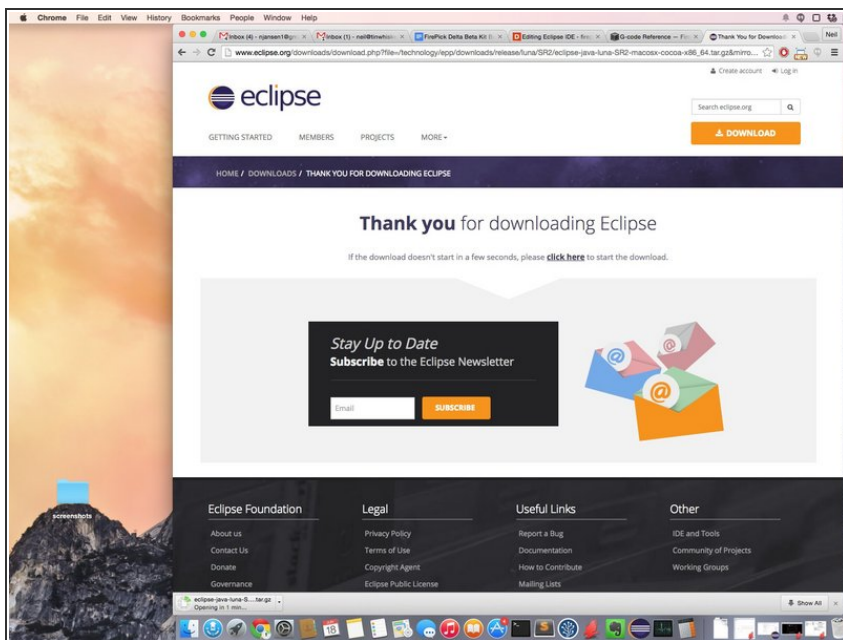
Step 2 — Download the Eclipse IDE

- Head to: http://eclipse.org/downloads/

- It should auto-detect your OS. You might have to select 32-bit or 64-bit.

- Under "Eclipse IDE for Java Developers", click the appropriate download link.

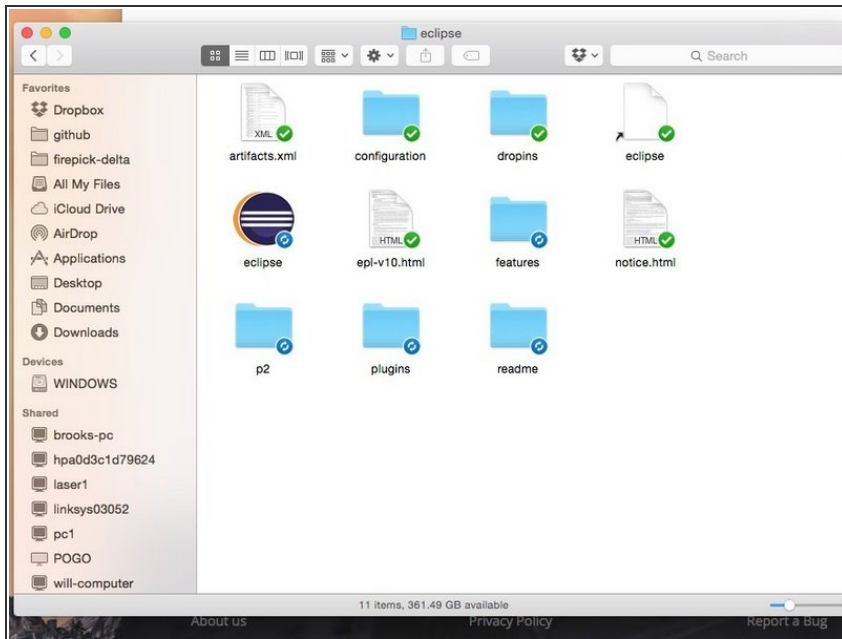This document was generated on 2021-12-23 02:53:35 PM (MST).

Step 3 — Click 'Download Now'

- Click 'Download now'

Step 4 — Wait for the download to finish.

- Wait for the download to finish.

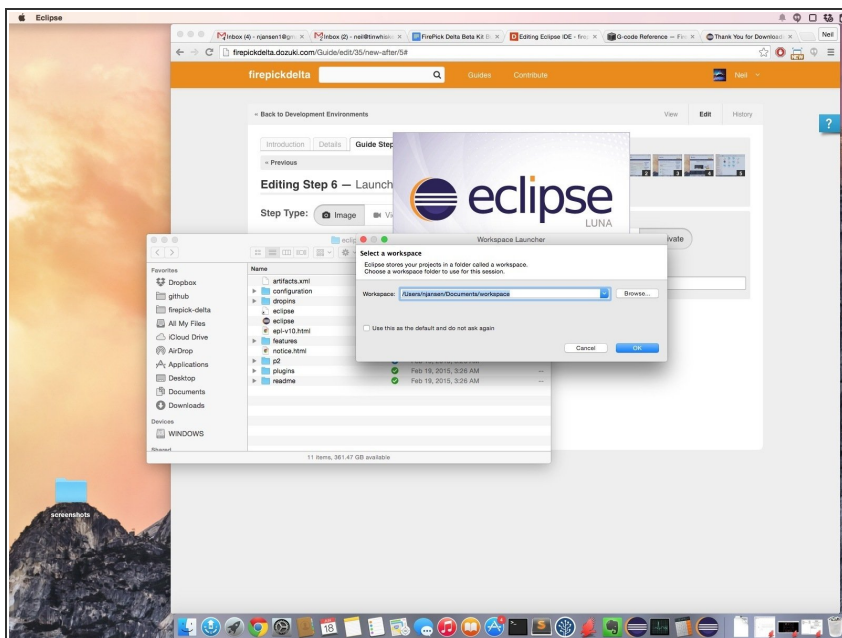This document was generated on 2021-12-23 02:53:35 PM (MST).

Step 5 — Note: Eclipse Doesn't Come With An Installer.
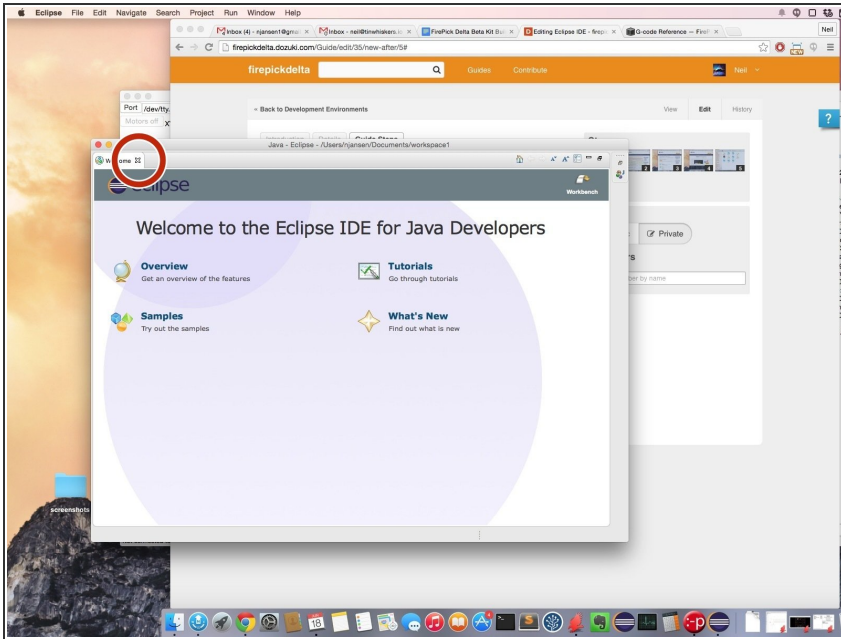

📌 Note: Eclipse doesn't come with an installer.

● Instead, when the download completes, and the download is unzipped, you'll end up with a bunch of files and folders, including an Eclipse executable.

● Place these files and folders somewhere safe, like *C:\projects\eclipse* or */home/username/eclipse*

Step 6 — Launch Eclipse

● Launch Eclipse.

● Eclipse will ask you to select a workspace. Select the default unless you want to put it somewhere else.

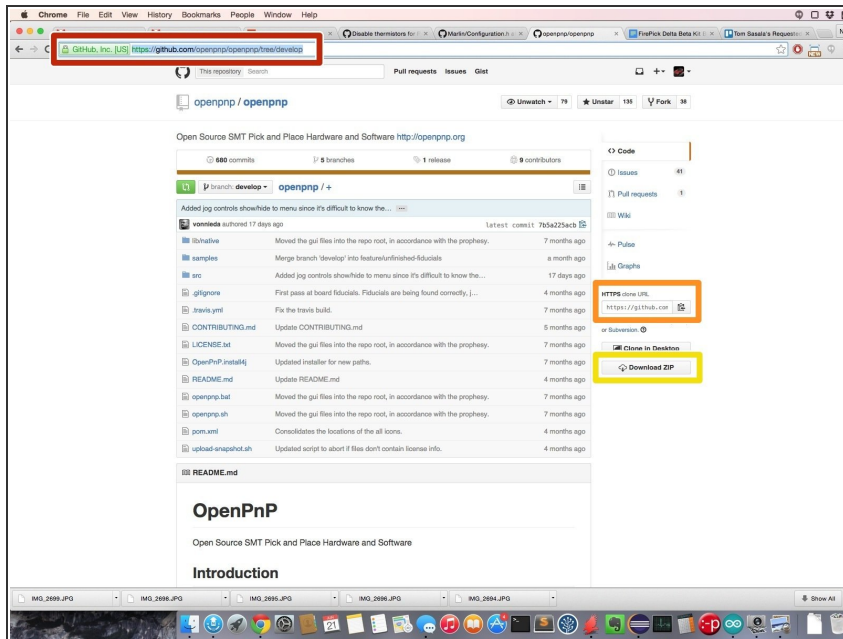This document was generated on 2021-12-23 02:53:35 PM (MST).

Step 7 — Escape the Welcome Screen

(i) Eclipse will throw up this stupid welcome screen, that hides the entire IDE window, making it confusing for some new users. Close it.
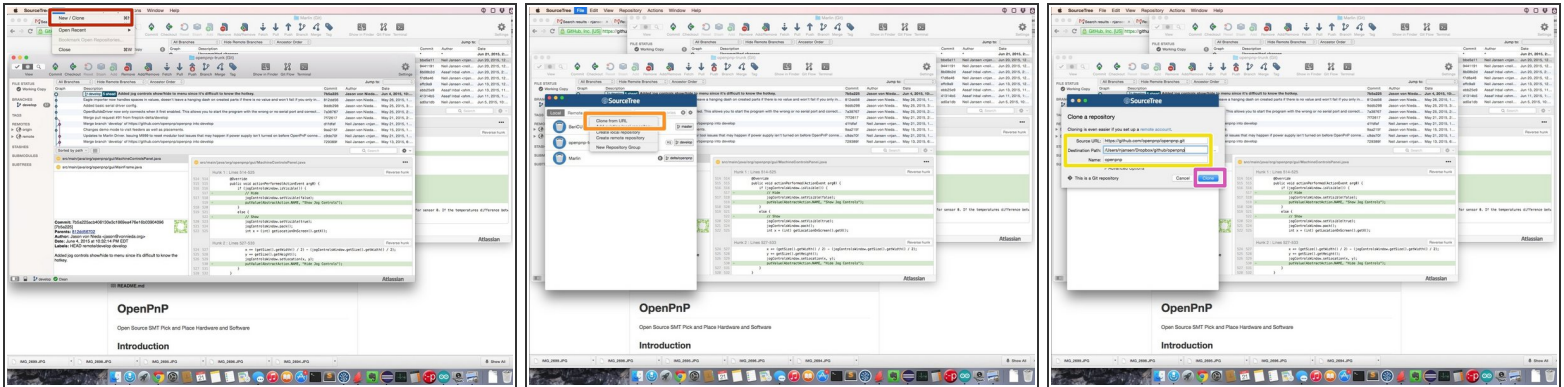
● Click the 'x' in the tab bar (circled in RED in the picture to the left).

This document was generated on 2021-12-23 02:53:35 PM (MST).

Step 8 — Switching Gears a bit...

- At this point, we'll minimize the Eclipse IDE and download OpenPnP.

- Head over to the OpenPnP Github repository

- Highlighted in orange, is the **HTTPS clone URL**. With this URL, you can clone the repo using your favorite Github client. **This is the recommended way of cloning OpenPnP.**

- Highlighted in yellow, is the Download ZIP button. This will allow you to download a snapshot of the repo. **This is NOT recommended,** because it will make it difficult to pull in new changes as the repo is updated. It will, however work in a pinch if you're in a hurry and don't care about having the latest and greatest code.

This document was generated on 2021-12-23 02:53:35 PM (MST).

© 2021   firepickdelta.dozuki.com/   Page 6 of 12

Step 9 — Clone the OpenPnP Git Repo (Atlassian SourceTree)

(i) I'll use Atlassian SourceTree for this demonstration.

📌 We will cover doing this from the commandline in the next step. You can use either of these, or your favorite Git client.
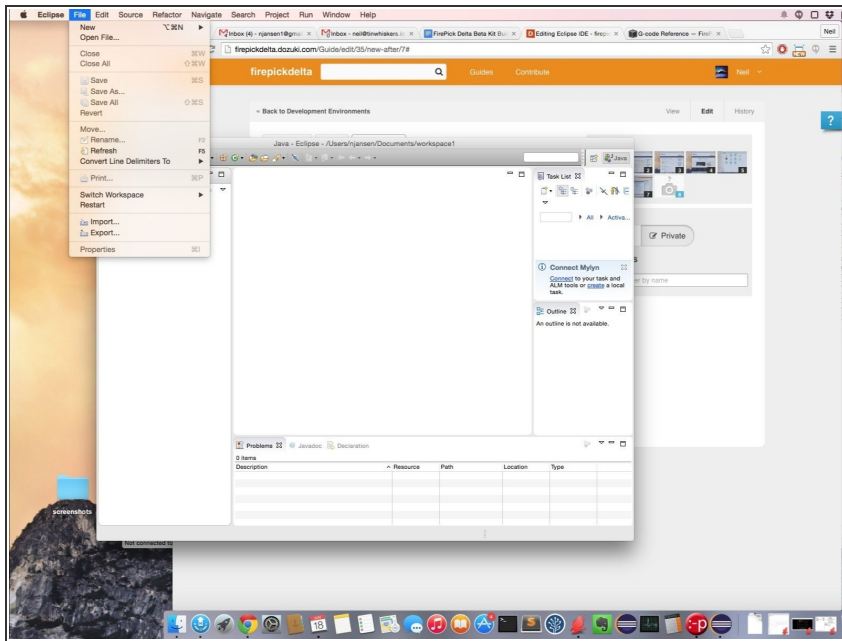
- Download and install [Atlassian SourceTree](#). NOTE: It will ask for you to create a login.

- Open SourceTree and click **File -> New** / **Clone**

- Click **Clone from URL**

- Paste the URL, and select a destination path.

- Hit **Clone**. This will clone the repo onto your local PC, into the path that you selected.

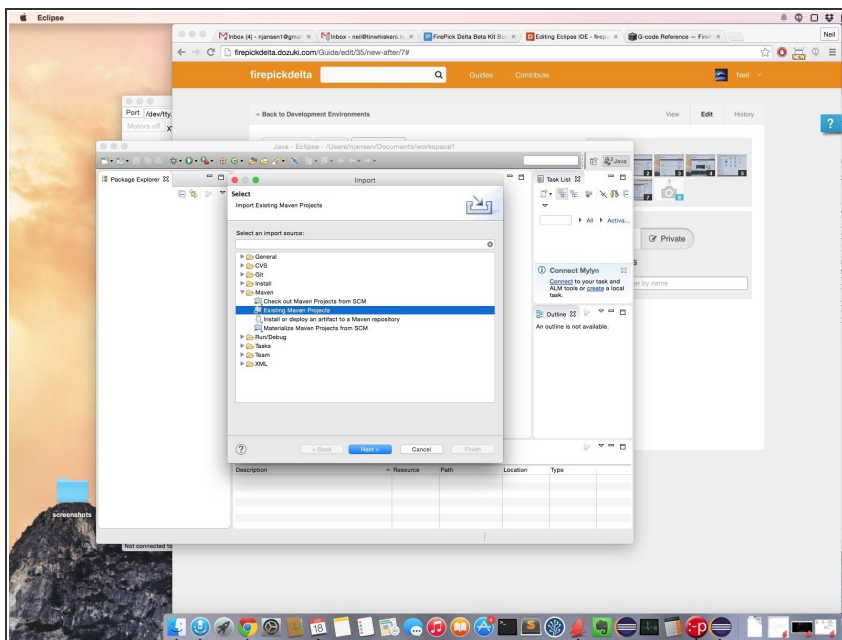## Step 10 — Clone the OpenPnP Git Repo (Git commandline)

- TBD

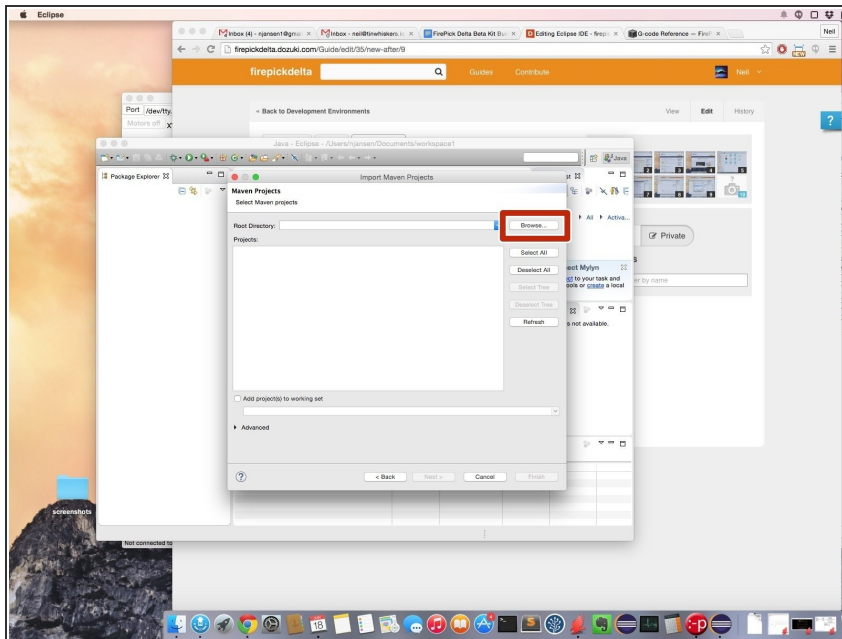This document was generated on 2021-12-23 02:53:35 PM (MST).

Step 11 — Import Project

- Click File -> Import...

Step 12 — Import Existing Maven Project

- Click 'Import Existing Maven Project'

This document was generated on 2021-12-23 02:53:35 PM (MST).
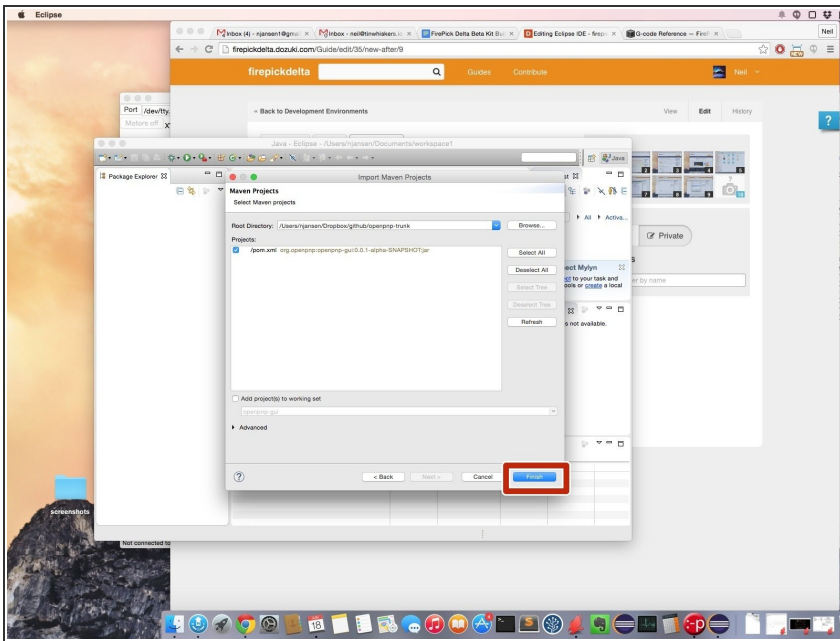
Step 13 — Click 'Browse...'

- Click 'Browse...'
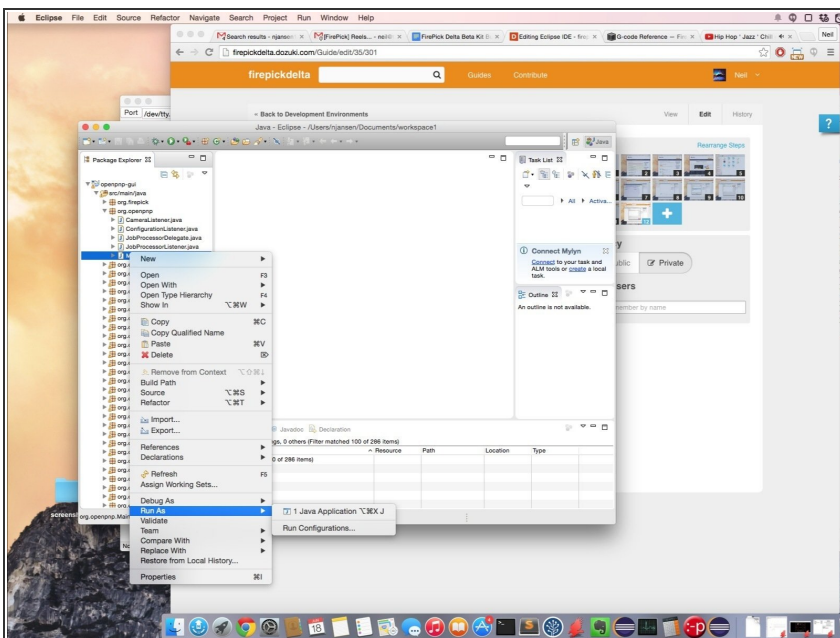
Step 14 — Navigate to the Project Directory

- Navigate to the directory that contains OpenPnP (or whatever other project you're trying to import)

- There should be a 'pom.xml' in the folder that you are trying to select.

- Click 'Open'

This document was generated on 2021-12-23 02:53:35 PM (MST).

Step 15 — Click Finish

- Click Finish.

- Eclipse will now import the Maven project. This shouldn't take long.

Step 16 — Run

- Find 'Main.java' inside of the org.openpnp java package (that is located in src/main/java).

- Right click on 'Main.java', and click 'Run As -> Java Application'

This document was generated on 2021-12-23 02:53:35 PM (MST).

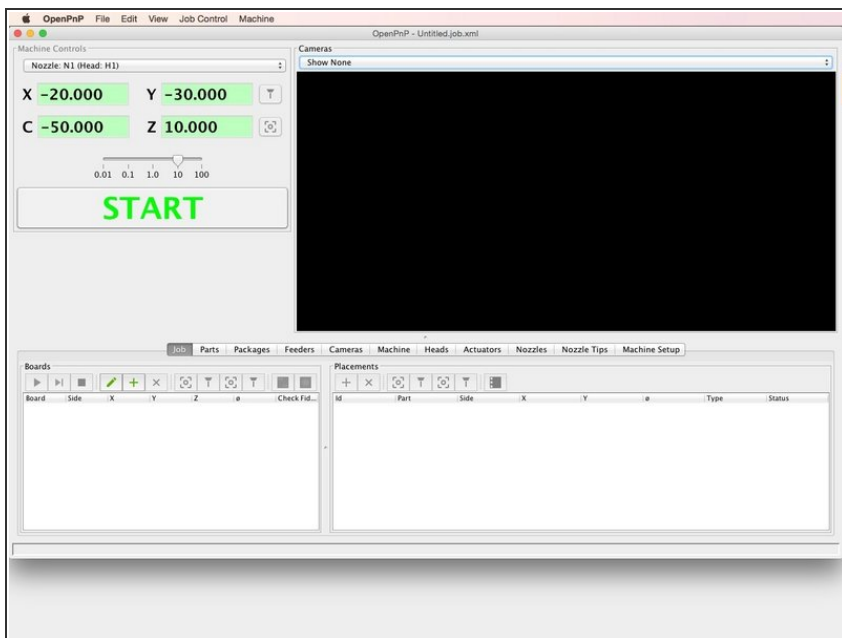## Step 17 — Windows only: Set the Native Library Path

(i) NOTE: **This step is for Windows users only. Mac** and Linux users can skip this step.

● Specify the native library path to OpenCV. Right click Main.java>Run As>Run Configurations Under the tab 'Arguments' in the section 'VM Arguments', add:

● **-Djava.library.path=lib\native\windows\x64** for Win64, or:

● **-Djava.library.path=lib\native\windows\x86** for Win32.

(★) Make sure to separate with a space if you are adding to existing arguments.

Step 18 — OpenPnP should start.

(i) At this point, OpenPnP should start. At this point, it is not configured to work with a FirePick Delta. You can play around with the interface, but it won't do PnP until you've configured it to use the camera(s) and the motion controller, at a minimum.

(★) It is recommended at this point to configure your machine.xml so that OpenPnP can see your hardware.

This document was generated on 2021-12-23 02:53:35 PM (MST).

This document was generated on 2021-12-23 02:53:35 PM (MST).

© 2021   firepickdelta.dozuki.com/   Page 12 of 12