Installing Eclipse and Java

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Abstract

This document contains instructions to set up the necessary integrated development environment (IDE) for FRC programming. There are three steps:

1. Install the correct Java SE Development Kit (JDK)
2. Install Eclipse IDE
3. Install the correct plugin for code deployment.

A guide could be found online at `https://wpilib.screenstepslive.com/s/4485/m/13503/l/599679-installing-eclipse-c-java`

Install JDK

1. Download the most recent JDK from Oracle's website. As of time of writing, go to `www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html` and select *Java SE Development Kit 8u112*

2. Make sure that you select the correct version for your operating system, e.g., *.exe for Windows, *.dmg for Mac OSX, and *.tar.gz for Linux

3. Double click on the downloaded file to start the installer

4. Install the JDK by following the installation instructions

Install (or Update) Eclipse

1. Go to `https://eclipse.org/downloads/eclipse-packages/`

2. Click on the corresponding installer, 32 bit or 64 bit (if you don't know the version of OS present, choose the 32 bit installer)

3. Download the installer to a known location (ex. Downloads or Desktop)

4. Execute the installer file

5. Select Eclipse IDE for Java Developers

6. Confirm install location and select preferred shortcut locations

7. Accept EULA

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9. Launch Eclipse Neon and set up preferences, line numbers are highly recommended

Install the WPILib Plugin for Eclipse

1. Open Eclipse

2. Go to Window - Preferences, it should pop up a new window

3. Go to Java - Installed JREs and press "Add"

4. Click "Standard VM", and find the folder that you installed JDK 8u112, and select it to be the JRE home folder.

5. Click "Finish", and now you have the correct JDK for deploying code onto the robot.

6. Make sure to select the JDK on the Installed JREs page.

7. Now we will install the WPILib plugin for java

8. Go to Help - Install new software

9. Type `http://first.wpi.edu/FRC/roborio/release/eclipse/` into the "Work with: " text box, and then press "Add"

10. Expand the WPILib Robot Development option, and select Robot Java Development

11. Click "Next", and follow the instructions to complete the installation

12. Now you are set up to deploy code onto the RoboRio!