

Bot 2024

Building

Build all targets, and run the simulator.

```
./gradlew build
```

Deployment

Run the following command to deploy code to the roboRIO

```
./gradlew deploy
```

If it gives problems, cleaning the project could help. The `--info` option could give more information too.

```
./gradlew clean  
./gradlew deploy --info
```

Other Useful Terminal Commands

Useful Commands to Understand

```
git fetch          # Fetch changes from github (needed to check out new ones)  
git status -a      # Shows the status of all git branches  
git checkout .      # Resets current changes on the branch  
git checkout new_branch_name # Switches branches to new_branch_name from a differe  
git pull           # Pulls new code onto the branch
```

Simulation

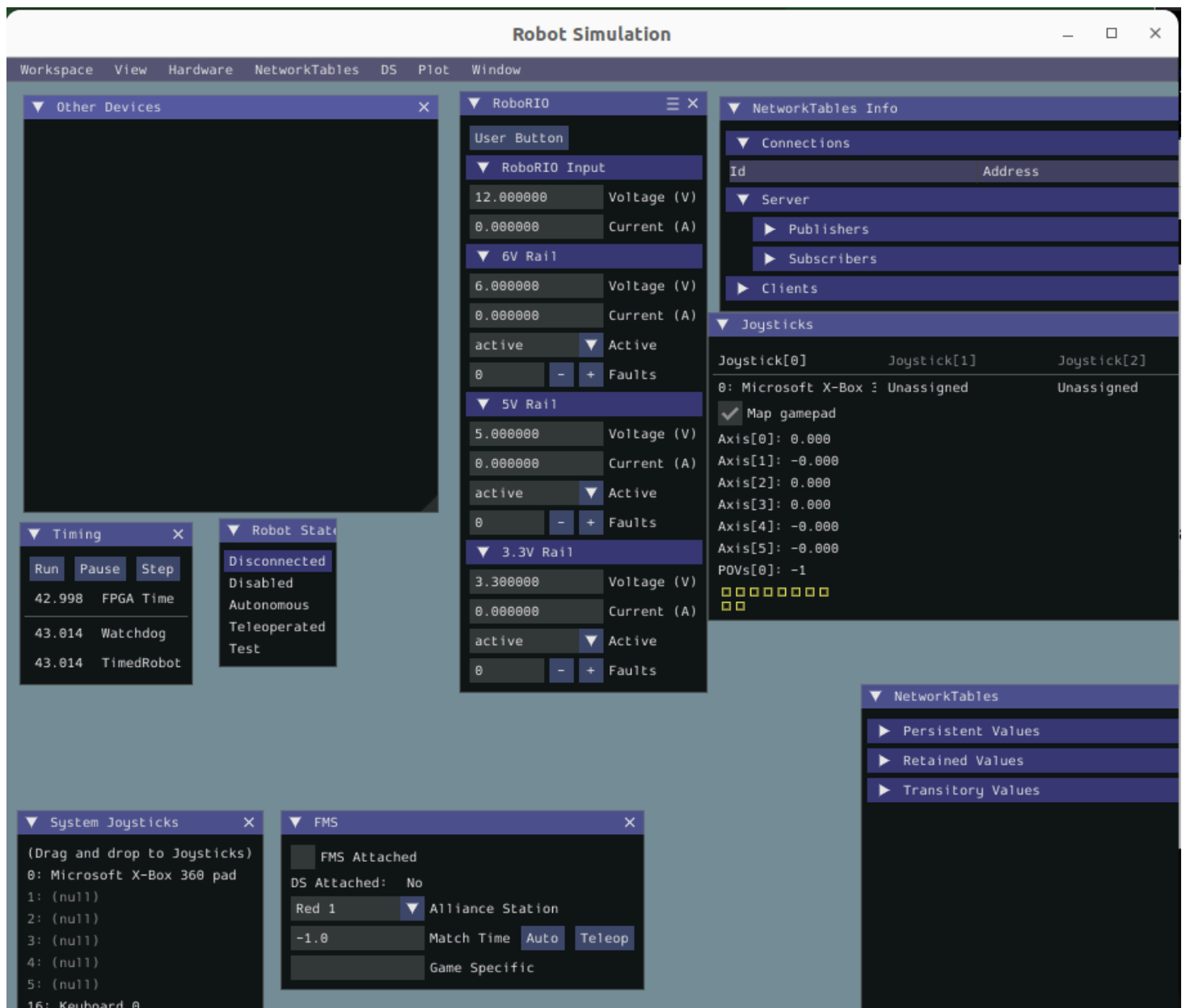
Bot simulation is available in a few ways...

IMPORTANT: The `Map gamepad` in the controllers list must be checked to mock the real bot.

Basic Simulator

This is the data-based simulator panel.

```
# run this from the command line to start the basic simulator
./gradlew simulateNative
```



Extern Sim With Real Driver Station

```
./gradlew simulateExternalNativeDebug
```

or

```
./gradlew simulateExternalNativeRelease
```

Feedforward and Feedback Control

[Picking a Control Mechanism](#)

Driver Station Tuning & Deployment

- [Flashing the OS](#)
- [Deployment Info](#)
- [Driver Station Best Practices](#)

Example Code

FRC provides [several examples](#) of how to utilize WPILib on GitHub. It is easier, and faster to copy and paste from these rather than generate new projects all the time.

- [All cpp Examples](#)

Differential Drive Help

- [PWM Controllers](#)
- [Drive classes](#)