Setting up a new robot (Roborio)

Rio and Radio setup

1. Flash rio
   - If it's a rio 2, use balena etcher
     - follow the guide from WPILib docs
   - If it's a rio 1, use the roborio imaging tool
     - follow the guide from WPILib docs
2. Set the roborio's team number
   - Although there is a roborio team number setter tool, it sucks and sometimes doesn't work. Use the roborio imaging tool to set the team number regardless of it's a rio 1 or 2
3. Flash radio
   1. Connect to the radio over ethernet
   2. Go to http://radio.local
   3. Set the team number
   4. Set the robot name
   5. Set the password to YETI3506
   6. Hit apply
4. **Power cycle**
5. Deploy code

CTRE Setup

1. Connect to robot
2. Verify CAN busses are all good
   - All devices should be flashing orange
3. Make sure all IDs are unique
   - Devices of different types can have the same ID. Devices of the same type **cannot** have the same ID
     - e.g. A Kraken X60 and a Pigeon can both have ID 1, but there can only be one Kraken X60 with the ID of 1
4. Update CTRE firmware
5. License motors
6. Name motors
7. Set IDs
   - Sync with code
8. Confirm motor directions
9. Sync motor directions with CANcoders
10. Zero CANcoders

11. Save CANcoder offsets in code
12. Deploy code
13. **Power cycle**

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