0This document explains how to set up the buffalo in a different way than the two previous recommendations. The 3 benefits of this method are:
- Don't need to adjust anything when moving between wifi networks (e.g. home vs. on campus)
- Can browse the internet as usual while ssh'ed into the pi
- Don't need to carry buffalo on board the duckiebot

Instructions

Reset buffalo using pencil
Plug buffalo into laptop's ethernet and usb
Switch buffalo into 2.4 GHz mode
Log into Buffalo wifi on your laptop (e.g. Buffalo-G-772A, could still be <vehicle>-5)
Password is either from scuderia as the buffalo default, or still quackquack if set up earlier
Now that you're connected to your buffalo's wifi, go to 192.168.13.1 in a browser
Username/password are admin/scuderia numbers

Click the 3rd option - (wireless access point?)
Ssid <vehicle>-2
Password quackquack
Other stuff keep default
Reboot now
After reboot finishes, unplug buffalo from laptop

Directly connect to pi using ethernet from laptop (as done in previous labs)
Ssh into pi
Pi $ sudo nano /etc/wpa_supplicant/wpa_supplicant.conf
Replace duckietown network with the one your buffalo is going to transmit
That is, replace ssid="duckietown" with ssid="<vehicle>-2"
Leave the other stuff the same (scan_ssid, psk, priority)
Plug canakit wifi dongle into pi
Shutdown pi

Unplug ethernet cord from laptop
Plug buffalo into laptop usb and ethernet
Share ethernet connection with buffalo just like when sharing direct connection to pi
Connect to any wifi network on the laptop
Power up the pi
Wait for 30sec or so
On laptop run $ arp -e
A second ip address should show up (like 10.42.0.79 or something)
That is the pi
Laptop $ ssh <vehicle>.local

You're in

You can use the internet on the laptop as usual and are wirelessly connected to the pi