Adafruit WiFi Shield Setup

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This tutorial will get a test program running on the Adafruit WiFi shield CC3000 (<https://www.adafruit.com/products/1491>) The things you will need to change is going to be consistent **for all programs** you write for the WiFi shield. For additional help, I followed this tutorial: <https://learn.adafruit.com/adafruit-cc3000-wifi/buildtest>

1. Plug your WiFi shield onto the Arduino.
2. Plug the Arduino into the computer **and** a external power supply (your computer cannot supply enough power for the board and shield)
3. If you don’t already, download the Arduino IDE from <https://www.arduino.cc/en/Main/OldSoftwareReleases#previous>
4. The version you **need** is Arduino 1.0.6 or less
5. Once Arduino is downloaded go to:

 Documents->Arduino ->libraries

Note: if this folder does not exist make a folder in Arduino called ‘libraries’

1. Download <https://learn.adafruit.com/adafruit-cc3000-wifi/cc3000-library-software>
2. Unzip and drag that folder into the libraries folder and rename the download to ‘Adafruit\_CC3000’
3. Open Arduino (note if it was already open you need to restart Arduino)
4. In the toolbar go:

 File -> Examples -> Adafruit\_CC3000 -> buildtest

1. In buildtest scroll down till you see

#define WLAN\_SSID

#define WLAN\_PASS

1. Replace “myNetwork” with “UDel”

Replace: #define WLAN\_SECURITY WLAN\_SEC\_WPA2

With: #define WLAN\_SECURITY WLAN\_SEC\_UNSEC

1. Run the program. It should output something like what is below in the serial monitor (magnifying glass in top right corner). Make sure it says ping successful, this indicates everything is working properly. If you are seeing gibberish your baud rate is most likely wrong. Change it to 115200. Otherwise it works!

Hello, CC3000!

RX Buffer : 131 bytes

TX Buffer : 131 bytes

Free RAM: 1221

Initialising the CC3000 ...

Firmware V. : 1.24

MAC Address : 0x70 0xFF 0x76 0x02 0x7F 0x35

Networks found: 8

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SSID Name : UDel

RSSI : 51

Security Mode: 0

SSID Name : UDel Secure

RSSI : 45

Security Mode: 3

SSID Name : eduroam

RSSI : 43

Security Mode: 3

SSID Name : 360WiFi-VJ

RSSI : 49

Security Mode: 3

SSID Name : dd-wrt

RSSI : 35

Security Mode: 0

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Deleting old connection profiles

Attempting to connect to UDel

Connected!

Request DHCP

IP Addr: 128.4.80.133

Netmask: 255.255.248.0

Gateway: 128.4.80.1

DHCPsrv: 128.175.13.14

DNSserv: 128.175.56.98

www.adafruit.com -> 207.58.139.247

Pinging 207.58.139.247...5 replies

Ping successful!

Closing the connection

For Future Programs:

It is important that you change the network to “UDel” and the security to WLAN\_SEC\_UNSEC as that is what will connect you to our UDel WiFi.