**Enable WiFi diagnostic**

<https://github.com/esp8266/Arduino/blob/master/doc/esp8266wifi/readme.md#enable-wi-fi-diagnostic>

**We should be using WiFi station, not client!**

Stations reconnect to access points if the connection is lost

Find all the classes (first link) and the station examples (second link)

<https://github.com/esp8266/Arduino/tree/master/doc/esp8266wifi>

<https://github.com/esp8266/Arduino/blob/master/doc/esp8266wifi/station-examples.md>

**Wifi Events:**

esp8266 library\Arduino-master\Arduino-master\libraries\ESP8266WiFi\examples\WiFiEvents

Blinks an LED when Device is connected or disconnected… Very useful for GPIO!!!!

**Multiple Saved Wifi networks**

esp8266 library\Arduino-master\Arduino-master\libraries\ESP8266WiFi\examples\WiFiMulti

Allows you to connect to one of multiple wifi networks, this might be useful? At least for testing

**Scan and show wifi networks**

esp8266 library\Arduino-master\Arduino-master\libraries\ESP8266WiFi\examples\WiFiScan

Scan multiple networks

**Send data via TCP**

<https://github.com/esp8266/Arduino/blob/master/libraries/ESP8266WiFi/examples/WiFiClientBasic/WiFiClientBasic.ino>

**Receive TCP data and set a pin low/high**

<https://github.com/esp8266/Arduino/blob/4897e0006b5b0123a2fa31f67b14a3fff65ce561/libraries/ESP8266WiFi/examples/WiFiWebServer/WiFiWebServer.ino>

Search client.print

**WPS Client…** Can’t find anything about setting softAP into WPS mode

<https://github.com/esp8266/Arduino/issues/2628>

<https://github.com/rudi48/WiFiTelnetToSerialWPS>

**Gas sensor example**

<http://www.geekstips.com/mq4-sensor-natural-gas-methane-arduino/>

Can we do a pseudo WPS mode somehow?