

```
#include <WiFlyHQ.h>
```

```
#include <SoftwareSerial.h>  
SoftwareSerial wifiSerial(8,9);
```

```
//#include <AltSoftSerial.h>  
//AltSoftSerial wifiSerial(8,9);
```

```
WiFly wifly;
```

```
/* Change these to match your WiFi network */  
const char mySSID[] = "myssid";  
const char myPassword[] = "my-wpa-password";
```

```
//const char site[] = "arduino.cc";  
//const char site[] = "www.google.co.nz";  
const char site[] = "hunt.net.nz";
```

```
void terminal();
```

```
void setup()  
{  
    char buf[32];
```

```
    Serial.begin(115200);  
    Serial.println("Starting");  
    Serial.print("Free memory: ");  
    Serial.println(wifly.getFreeMemory(),DEC);
```

```
    wifiSerial.begin(9600);  
    if (!wifly.begin(&wifiSerial, &Serial)) {  
        Serial.println("Failed to start wifly");  
        terminal();  
    }
```

```
    /* Join wifi network if not already associated */  
    if (!wifly.isAssociated()) {
```

```

/* Setup the WiFly to connect to a wifi network */
Serial.println("Joining network");
wifly.setSSID(mySSID);
wifly.setPassphrase(myPassword);
wifly.enableDHCP();

if (wifly.join()) {
    Serial.println("Joined wifi network");
} else {
    Serial.println("Failed to join wifi network");
    terminal();
}
} else {
    Serial.println("Already joined network");
}

//terminal();

Serial.print("MAC: ");
Serial.println(wifly.getMAC(buf, sizeof(buf)));
Serial.print("IP: ");
Serial.println(wifly.getIP(buf, sizeof(buf)));
Serial.print("Netmask: ");
Serial.println(wifly.getNetmask(buf, sizeof(buf)));
Serial.print("Gateway: ");
Serial.println(wifly.getGateway(buf, sizeof(buf)));

wifly.setDeviceID("Wifly-WebClient");
Serial.print("DeviceID: ");
Serial.println(wifly.getDeviceID(buf, sizeof(buf)));

if (wifly.isConnected()) {
    Serial.println("Old connection active. Closing");
    wifly.close();
}

if (wifly.open(site, 80)) {
    Serial.print("Connected to ");
    Serial.println(site);
}

```

```
        /* Send the request */
        wifly.println("GET / HTTP/1.0");
        wifly.println();
    } else {
        Serial.println("Failed to connect");
    }
}
```

```
void loop()
{
    if (wifly.available() > 0) {
        char ch = wifly.read();
        Serial.write(ch);
        if (ch == '\n') {
            /* add a carriage return */
            Serial.write('\r');
        }
    }
}
```

```
    if (Serial.available() > 0) {
        wifly.write(Serial.read());
    }
}
```

```
/* Connect the WiFly serial to the serial monitor. */
void terminal()
{
    while (1) {
        if (wifly.available() > 0) {
            Serial.write(wifly.read());
        }
    }
}
```

```
    if (Serial.available() > 0) {
        wifly.write(Serial.read());
    }
}
}
```