# HTTP Client

This example for a Yún device shows how create a basic HTTP client that connects to the internet and downloads content. In this case, you'll connect to the Arduino website and download a version of the logo as ASCII text.

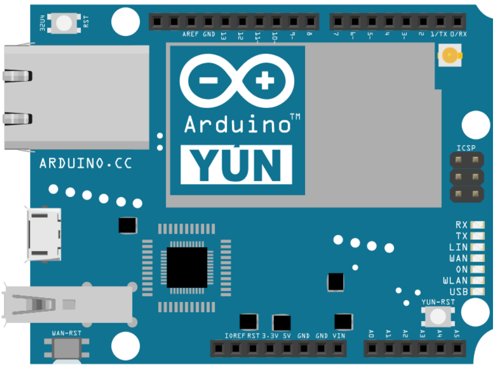
Open the Serial Monitor in the IDE once you've programmed the board.

## Hardware Required

- Yún board or shield
- a wireless network connection to the internet

## Circuit

There is no circuit for this example.



(//www.arduino.cc/en/uploads/Tutorial/Yun_Fritzing.png)

image developed using Fritzing (http://www.fritzing.org). For more circuit examples, see the Fritzing project page (http://fritzing.org/projects/)

## Code

Include both the Bridge and HttpClient libraries

```
#include <Bridge.h>
#include <HttpClient.h>
```

[Get Code] (//www.arduino.cc/en/Tutorial/HttpClient?action=sourceblock&num=2)

In `setup()` start Bridge, and wait for a serial connection before going into `loop()` .

```
void setup() {
  pinMode(13, OUTPUT);
  digitalWrite(13, LOW);
  Bridge.begin();
  Serial.begin(9600);
  while(!Serial);
}
```

[Get Code] (//www.arduino.cc/en/Tutorial/HttpClient?action=sourceblock&num=3)

In `loop()` , create a named instance of HttpClient, and call a URL with `client.get(url)` .

```
void loop() {
  HttpClient client;
  client.get("http://www.arduino.cc/asciilogo.txt");
```

[Get Code] (//www.arduino.cc/en/Tutorial/HttpClient?action=sourceblock&num=4)

As long as there are bytes from the server in the client buffer, read the bytes and print them to the serial monitor. Repeat every 5 seconds.

```
while (client.available()) {
    char c = client.read();
    Serial.print(c);
  }
  Serial.flush();

  delay(5000);
}
```

[Get Code] (//www.arduino.cc/en/Tutorial/HttpClient?action=sourceblock&num=5)

The complete sketch is below :

```
/*
  Yún HTTP Client

 This example for the YunShield/Yún shows how create a basic
 HTTP client that connects to the internet and downloads
 content. In this case, you'll connect to the Arduino
 website and download a version of the logo as ASCII text.

 created by Tom igoe
 May 2013

 This example code is in the public domain.

 http://www.arduino.cc/en/Tutorial/HttpClient

 */

#include <Bridge.h>
#include <HttpClient.h>

void setup() {
  // Bridge takes about two seconds to start up
  // it can be helpful to use the on-board LED
  // as an indicator for when it has initialized
  pinMode(13, OUTPUT);
  digitalWrite(13, LOW);
  Bridge.begin();
  digitalWrite(13, HIGH);

  SerialUSB.begin(9600);

  while (!SerialUSB); // wait for a serial connection
}

void loop() {
  // Initialize the client library
  HttpClient client;

  // Make a HTTP request:
  client.get("http://www.arduino.cc/asciilogo.txt");

  // if there are incoming bytes available
  // from the server, read them and print them:
  while (client.available()) {
    char c = client.read();
    SerialUSB.print(c);
  }
  SerialUSB.flush();

  delay(5000);
}
```

[Get Code] (//www.arduino.cc/en/Tutorial/HttpClient?action=sourceblock&num=1)

# See Also

- Bridge Library (//www.arduino.cc/en/Reference/YunBridgeLibrary) - Your reference to the Bridge Library
- Bridge (//www.arduino.cc/en/Tutorial/Bridge) – Simple REST style calls to access analog and digital pins
- Console Ascii Table (//www.arduino.cc/en/Tutorial/ConsoleAsciiTable) – A complete ASCII table printed to the Console
- Console Pixel (//www.arduino.cc/en/Tutorial/ConsolePixel) – Turn an LED on and off through the Console
- Console Read (//www.arduino.cc/en/Tutorial/ConsoleRead) - Read data coming from bridge using the Console.read() function

- Data Logger (//www.arduino.cc/en/Tutorial/YunDatalogger) - Log data from three analog sensors to an SD card.

- File Write (//www.arduino.cc/en/Tutorial/FileWriteScript) - How to write file into the Yún filesystem.
- Http Client Console (//www.arduino.cc/en/Tutorial/HttpClientConsole) - HTTP client that connects, downloads content and shows it using WiFi and Console.
- Mailbox Read Message (//www.arduino.cc/en/Tutorial/MailboxReadMessage) - How to read the messages queue, called Mailbox, using the Bridge library.
- Process (//www.arduino.cc/en/Tutorial/Process) - How to run linux processes using an Yún.
- Remote Due Blink (//www.arduino.cc/en/Tutorial/RemoteDueBlink) - How to upload remotely a sketch on DUE boards.
- Shell Commands (//www.arduino.cc/en/Tutorial/ShellCommands) - How to run linux shell commands using a Yún.
- Temperature Web Panel (//www.arduino.cc/en/Tutorial/TemperatureWebPanel) - How to serve data from an analog input via the Yún's built-in webserver.
- Time check (//www.arduino.cc/en/Tutorial/TimeCheck) - Gets the time from Linux via Bridge then parses out hours, minutes and seconds.
- WiFi Status (//www.arduino.cc/en/Tutorial/WiFiStatus) - Prints information about the status of your wifi connection.
- Yún First Configuration (//www.arduino.cc/en/Tutorial/YunFirstConfig) - Easily configure your Yún device using Serial Monitor and USB port.
- Serial Terminal (//www.arduino.cc/en/Tutorial/YunSerialTerminal) - Use the Yún's 32U4 processor as a serial terminal for the Linux side on the Yún.

*Last revision 2016/05/25 by SM*

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