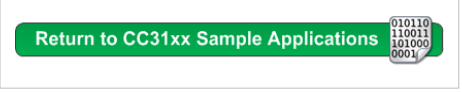
CC31xx HTTP Server

Overview



This sample application demonstrates the capability of CC3100 device to work as a web-server and allowing the end-users to communicate w/ it using standard web-browsers.

For more information refer to **HTTP Server** section of Programmers Guide [1]

Note: This wiki page is only applicable for **CC3100-SDK v1.0.0** and upward releases. For documentation on older SDKs' examples, refer corresponding file in **<cc3100-sdk-installation-location>\cc3100-sdk\docs\examples**

Application details

This application configures the CC3100 in AP mode with a pre-defined SSID-NAME and uses the sample HTML pages to toggle on-board LEDs. **GET** and **POST** tokens are used to get the LEDs' status and toggle the LEDs respectively. Clients can connect to CC3100 and request for web-pages using the IP of device from any standard web browser. The HTML pages provided with the sample application needs to be downloaded on serial-flash using CCS_UniFlash [2] utility. The authentication parameters and domain name can be changed using corresponding host-driver APIs.

Usage

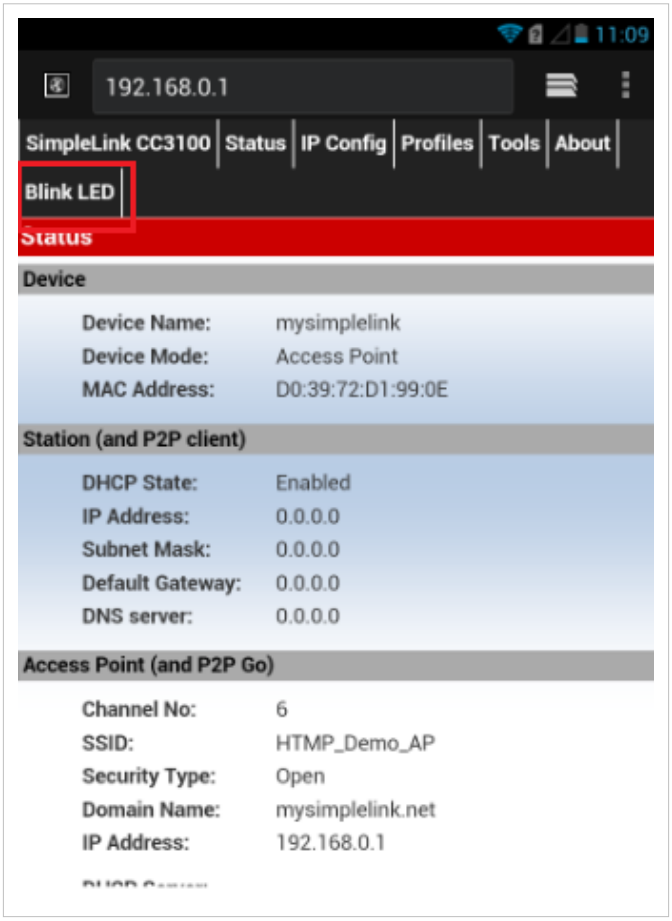
- Flash 'main.html' and 'blink_led.html' on serial-flash by following the below steps:
  1. Open the Configuration-file at '<cc3100-sdk-installation>/examples/http_server/uniflash_template/http_server.ucf' in Uniflash
  2. Flash the files on the device. Uniflash_User_Guide has detailed instructions for flashing
- Configure the terminal program for seeing the logs - [| CC31xx_&_CC32xx_Terminal_Setting_Wiki [3]] has detailed instructions for flashing
- Edit **sl_common.h** and modify the value for **SSID_AP_MODE**, **PASSWORD_AP_MODE** and **SEC_TYPE_AP_MODE**.
- Build and launch the project. CC3100 will come-up in AP mode w/ the value set above as its SSID name
- Connect a client w/ CC3100 using its SSID name
- Open a web-browser on the client and enter the IP of CC3100 in the client's address bar

```
Default IP address is 192.168.1.1
Alternatively, 'mysimplelink.net' can also be entered for accessing the web page
```

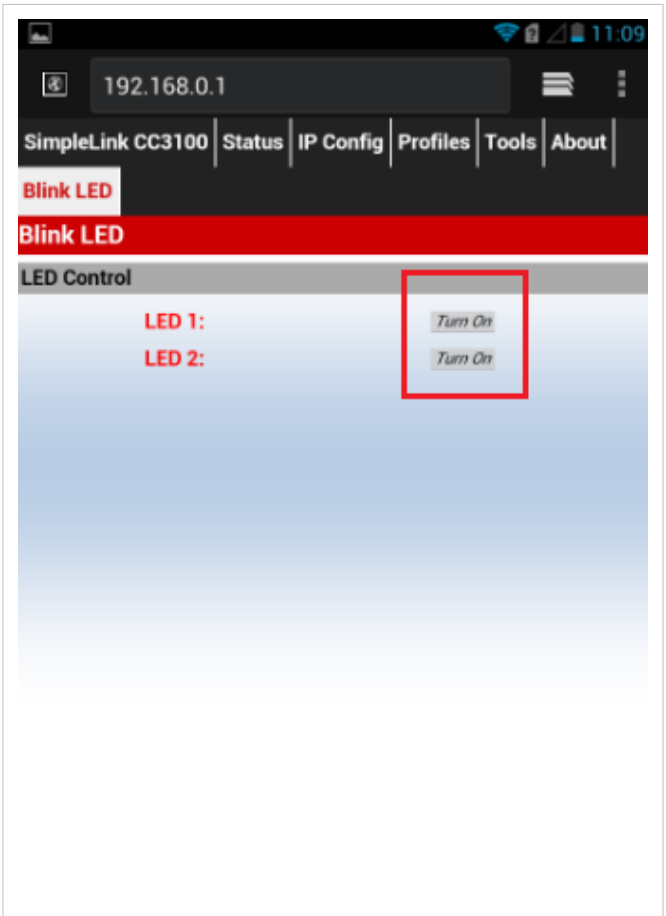
- Use authentication parameters displayed on the terminal to log in.

```
HTTP Server application - Version 1.1.0
************************************************************
Device is configured in default state

Device is configured in AP mode
Waiting for client to connect
Client connected

Authentication parameters:
Name = admin
Password = admin
Realm = Simple Link CC31xx

Domain name = mysimplelink.net
Device URN = mysimplelink
```

- On the page that gets displayed, click on the 'Blink LED'



- Use LED buttons to turn ON/OFF the LEDs on the MCU board.



Note: : User needs to reconfigure the device in 'Station-Mode' for executing other sample applications. Refer function **configureSimpleLinkToDefaultState** in this example's **main.c** for configuring the device in 'Station-Mode'.

Limitations/Known Issues

- Supports HTTP 1.0 only

References

[1] http://www.ti.com/lit/pdf/swru368
[2] http://www.ti.com/tool/uniflash
[3] http://processors.wiki.ti.com/index.php/CC31xx_&_CC32xx_Terminal_Setting

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