CC32xx Provisioning AP

Overview

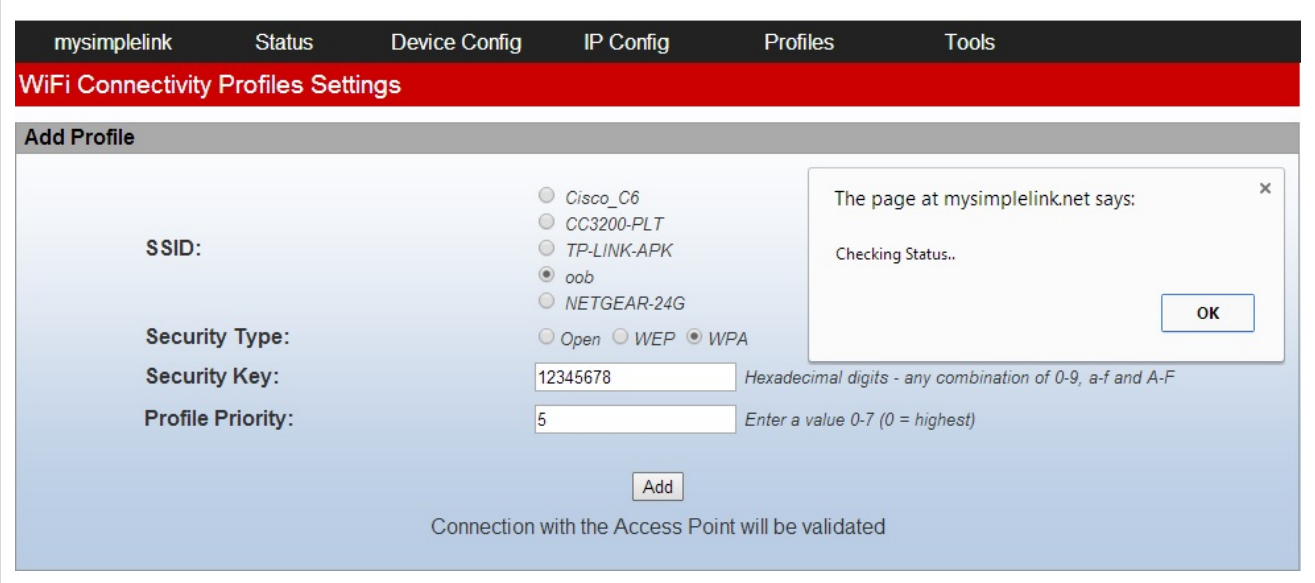
CC3200 AP Provisioning is method by which user can configure the AP information on the CC3200 device from a Browser. The CC3200 device scans the Access Points, stores them in the memory and create an HTML page with the list of APs. User can open the HTML page and select the AP which he/she wants to configure.

Return to CC31xx & CC32xx Home Page

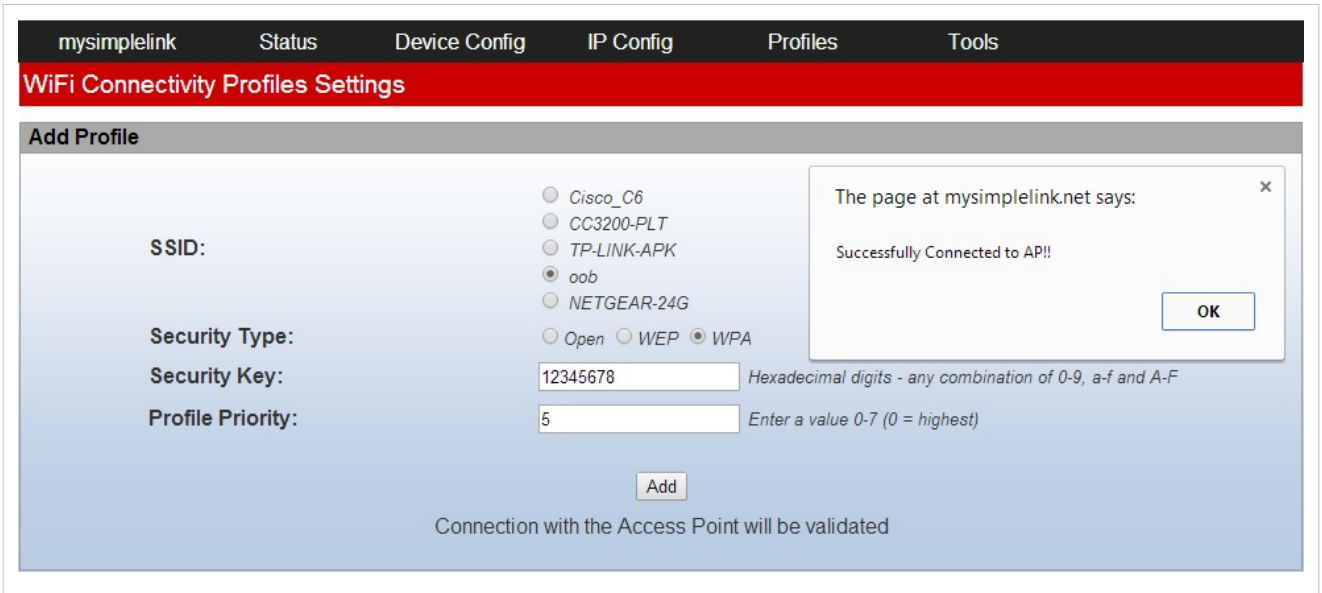
Return to CC31xx Sample Applications

Usage

- Flash Example Content(html,js,mcu binary)on serial flash by following below steps.
  - Open **<cc3200-sdk>\examples\provisioning_ap\html\provisioning_ap.ucf** session file in Uniflash.
  - Flash the files to the device. Detailed instructions at Uniflash User Guide.
- Run the reference application
  1. Run From IDE (IAR/CCS)
     - Open the Example Project as mentioned in the <cc3200-sdk>\docs\CC3200-Getting Started Guide.pdf
     - Build and download the application to the board
  2. Run From Flashed Binary
     - Remove SOP-2 Jumper on Board and Press Reset. Refer CC3200 Getting Started guide for detailed Information
- CC3200 Device first comes up in STA mode, scans for visible access-points. Next, it restarts and comes up in AP mode (Default SSID: mysimplelink-<MacAddr>)
- User connects his/her WIFI enabled device PC/MAC/Smartphone to above AP
- User opens Browser and type "mysimplelink.net\profiles_config.html"
- Profile page displays the list of the Access Points
- User select the AP by clicking on the Radio Button
- User also need to provide **Security Type**, **Security Key** and **Profile Priority** in the corresponding fields
- User clicks **Add** Button



- Device then switches to Station Mode and connects to the selected AP
- After the Connection is Successful or Failed, Alert Message is Displayed



Source Files briefly explained

- main.c
  1. Scans and Stores AP information
  2. Handles HTTP GET request to provide AP List
  3. Handles HTTP POST request to receive command to connect to Selected AP
  4. Connection to the selected AP
- startup_ewarm.c
  1. Implements interrupt vector table when using IAR ewarm tool chain

Note: This example can be used either on TI-RTOS or FreeRTOS. For the application to work with TI-RTOS, ti_rtos_config project need to be imported into the application workspace. These projects can be found in CC3200-SDK under ti_rtos folder. Please follow this link for CC3200 TI-RTOS usage CC3200 TI-RTOS

Limitations/Known Issues

- Only 5 APs are displayed
- Duplicate SSIDs are displayed when the SSID has multiple BSSIDs
- During Connection Status Check, User Device PC/MAC/Smartphone might connect to different AP, User need to reconnect to the SimpleLink AP Again

Article Sources and Contributors

CC32xx Provisioning AP *Source*: http://processors.wiki.ti.com/index.php?oldid=184836 *Contributors*: A0221015, Codycooke, Jitgupta, Kaushal, Malokyle

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