

CC3100 Get Weather Application

Overview and application details

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This sample application demonstrates how to connect to **openweathermap.org** server and request for weather details of a city. The application opens a TCP socket w/ the server and sends a HTTP **Get** request to get the weather details. The received data is processed and displayed on the console

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\'`

Source Files briefly explained

i. main - Initializes the device, connects to an AP, opens a TCP socket, requests and displays the weather information.

Usage

Prerequisite: This application requires an access-point with internet connectivity

- Connect the board to a Windows-PC and configure the terminal-program for seeing the logs - CC3100 & CC3200 Terminal Setting has detailed instructions for configuring the terminal-program
- From openweathermap.org create an API Key and modify the 'API Key' value in **main.c** found below:

```
#define POST_BUFFER      "%mode=xml&units=imperial&APPID=<API KEY> HTTP/1.1\r\nHost:api.openweathermap.org\r\nAccept: */"
```

- Edit **sl_common.h** and modify the values of below macros for the device to connect to the AP

```
#define SSID_NAME        "<ap_name>"  
#define SEC_TYPE        SL_SEC_TYPE_OPEN  
#define PASSKEY         ""
```

- Edit below parameters in **main.c** for getting the weather information from server:

```
#define CITY_NAME        "<city>"
```

- Build and launch the application
- See the self explanatory logs on the terminal-program's console.
 - The application connects to the weather-server and opens an TCP socket to communicate w/ it.
 - It receives and processes the weather-information and displays it on the console
- On success, below message will be displayed on the terminal

```
Get weather application - Uersion 1.2.0
*****
Device is configured in default state
Device started as STATION
Connection established w/ AP and IP is acquired

*****

City: Bangalore
Temperature: 78.48 F
Weather Condition: Sky is Clear

*****

Device disconnected from the AP on application's request
```

Limitations/Known Issues

None

Article Sources and Contributors

CC3100 Get Weather Application *Source:* <http://processors.wiki.ti.com/index.php?oldid=233545> *Contributors:* A0131814, A0132173, A0221015, Codycooke, Malokyle, SarahP

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