CC31xx SLS Get Time Application

Overview and application details

This sample application demonstrates how to connect to an SNTP server and request for time information. The application processes the received data and displays the time on console.

For information on how to use Visual-Studio or Eclipse to compile and run this application, refer to cc3100_getting_started_guide_swru375 [1] in '<cc3100/>docs' folder.

By default, this application communicates w/ CC3100 over SPI. The SDK has UART-Drivers as well for 'SimpleLink Studio' platform. For using the UART interface to communicate w/ CC3100, macro **SL_IF_TYPE_UART** has to be defined in the application-project's properties. Also, 'COMM_PORT_NUM **in** main.c **needs to be changed to the first com-port that gets enumerated for 'J6' of 'CC31xxEMUBOOST Brd'. In case four ports are getting enumerated, user should use the third com-port.**

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 a AP, open a UDP socket, requests and processes the time information.

Usage

- Prerequisite: Internet connectivity is required to work w/ this sample application
- Edit main.c to set the SNTP server's name (in variable SNTPserver) - Any server from the below list can be used for demo

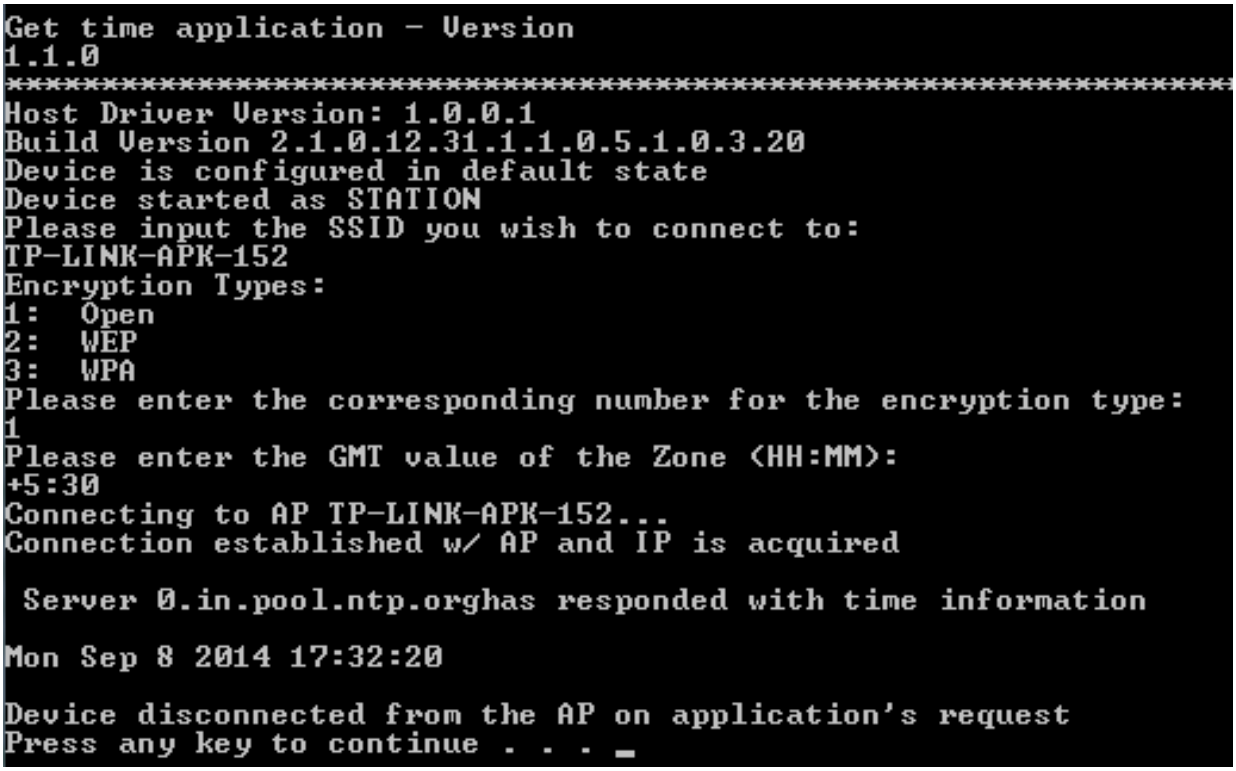
```
/*! ************************ List of SNTP servers ****************************
 *! ##
 *! ##          hostname          |        IP        |       location
 *! ## ------------------------------------------------------------------------
 *! ## nist1-nj2.ustiming.org     | 165.193.126.229  | Weehawken, NJ
 *! ## nist1-pa.ustiming.org      | 206.246.122.250  | Hatfield, PA
 *! ## time-a.nist.gov            | 129.6.15.28      | NIST, Gaithersburg, Maryland
 *! ## time-b.nist.gov            | 129.6.15.29      | NIST, Gaithersburg, Maryland
 *! ## time-c.nist.gov            | 129.6.15.30      | NIST, Gaithersburg, Maryland
 *! ## ntp-nist.ldsbc.edu         | 198.60.73.8      | LDSBC, Salt Lake City, Utah
 *! ## nist1-macon.macon.ga.us    | 98.175.203.200   | Macon, Georgia
 *! ## 0.in.pool.ntp.org          | 123.108.225.6    | India

 *! ## For more SNTP server link visit 'http://tf.nist.gov/tf-cgi/servers.cgi'
 *! ***************************************************************************
 */
const char SNTPserver[MAX_SSID_LEN] = "nist1-nj2.ustiming.org"; /* Add one of the above servers */
```

- Build and launch the application using Visual-Studio or Eclipse.

- The application requests user for the AP's SSID and security parameters for establishing the connection. It also requests user for the time-zone for getting the time-data. Enter the required information on the console.

```
   The application connects to the SNTP server and opens an UDP socket
to communicate w/ it. It receives and processes the time-information
and displays it on the console
```

- On success, below message will be displayed on the terminal



Limitations/Known Issues

None

References

[1] http://www.ti.com/lit/pdf/swru375

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