

CC31xx SLS Get Time Application

Overview and application details

This sample application demonstrates the usage of 'Simplelink-Studio' (SLS) environment and UDP sockets to communicate w/ an SNTP server. SLS Get-Time application connects to the SNTP server and requests for time information. It 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 'Environment Setup' section of 'simplelink_studio_guide' in '<cc3100/>docs/app_notes' folder.

To use the CC3100 UART interface define 'SL_IF_TYPE_UART' in the project property. Change the COMM_PORT_NUM in 'main.c' to first com-port that gets enumerated for 'J1' of 'CC31xx FTDI Debug Brd'.

Source Files briefly explained

i. main - Initializes the device, connects to a AP, open a UDP socket, requests and processes the time information.

Usage

- Edit 'main.c' to set the SNTP server's name - Any server from the below list can be used for demo

```

/*! ##### List of SNTP servers
#####
*! ##
*! ##          hostname          |          IP          |
location
*! ##
-----
*! ## ntp.inode.at                | 195.58.160.5         | Vienna
*! ## ntp3.proserve.nl           | 212.204.198.85       | Amsterdam
*! ## ntp1.madavi.de             | 194.50.97.12         | Stuttgart,
Germany
*! ## ntp.spadhausen.com         | 109.168.118.249      | Milano -
Italy
*! ## ntp3.tcpd.net              | 23.23.128.218        | London, UK
*! ## dmz0.la-archdiocese.net   | 209.151.225.100      | Los
Angeles, CA
*! ## Optimussupreme.64bitVPS.com | 216.128.88.62        | Brooklyn,
New York
*! ## ntp.mazzanet.id.au         | 203.206.205.83       | Australia
*! ## a.ntp.br                  | 200.160.0.8          | Sao Paulo,
Brazil
*!
#####
*/

const char SNTPserver[MAX_SSID_LEN] = "ntp.inode.at"; /* 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

Note: AP should have internet connectivity for executing this sample application

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

```
Started Get-Time SimpleLink Application
Please input the SSID you wish to connect to: CC3101-PLT-APK
Encryption Types:
1: Open
2: WEP
3: WPA
Please enter the corresponding number for the encryption type: 1
Connecting to AP CC3101-PLT-APK...
Connected to AP CC3101-PLT-APK. IP acquired
Enter the GMT value of the Zone (HH:MM): 05:30
response from server: ntp.inode.at
Tue May 6 2014 10:47:53

Thank you!
Press any key to continue . . .
```

Limitations/Known Issues

None

Article Sources and Contributors

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