CC32xx XMPP Reference Application

Overview

This example code demonstrate how to connect and work with Extensible Messaging and Presence Protocol(XMPP) server using CC32xx. This code doesn't implement a full XMPP SW stack\library. Please check the Limitation Section for more details.



Application details

The application performs the following steps:

- · Initializes the device networking layers.
- Connect to Access Point with SSID "cc3200demo" and Security as "Open"
- Wait for the Connection to the AP
- Once AP connection is done, It Configures the XMPP Server and Login Information
- It then Connects to Configured XMPP Server (google.com) followed by authentication using Base64 Encrypted Login Credential
- Once Authentication is Successful, It waits for a chat message from another Client
- · Once it receives the Chat Message, It replies back with the Same message

Note: Use your own email-id (CLIENT_USER_NAME) & password(CLIENT_PASSWORD) in source code (main.c) and build the project before running the application.

This example can be used either on TI-RTOS or FreeRTOS.

For the application to work with TI-RTOS, ti_rtos_config project needs 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

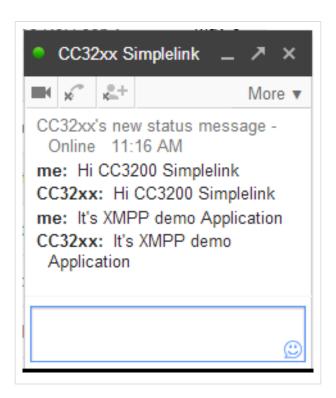
Source Files briefly explained

- main Simple Application demonstrating XMPP Client Functionalities.
- netapps\xmpp\client libxmpp is Platform Independent Library and can be Integrated to any XMPP Client Software using below APIs
 - 1. sl_NetAppXmppSet Configure XMPP Server, Login Information
 - 2. sl_NetAppXmppConnect- Connect to XMPP Server
 - 3. sl_NetAppXmppSend Send Chat Message to another XMPP Client
 - 4. sl_NetAppXmppRecv Receive Chat Message from another XMPP Client

Usage

- 1. Choose an AP and Configure the SSID as "cc3200demo" and Security as Open
- 2. In source code set e-mail username and password

- 1. Login into Your Gmail Account on Chat/Hangout Application and add cc32xx.apps@gmail.com as Contact
- Login into Gmail Account with cc32xx.apps@gmail.com and accept Invite on Chat/Hangout Application. Logout from cc3200 apps Account.
- 3. Login into Your Gmail Account on Chat/Hangout Application
- 4. Run the reference application (Flashing the bin/IAR/CCS)
 - Open the Project as mentioned in the 'docs\CC3200-Getting Started Guide.pdf' or flash xmpp.bin to the device.
 - XMPP Reference Application on CCS runs on TI RTOS which requires additional tools to be Installed. Refer
 to CC3200 TI-RTOS for more information.
 - Build and download the application to the board
- 5. Run Application and Wait for it connect to XMPP Server
- 6. Wait till you see "CC3200 SimpleLink" in your Chat/Hangout Application
- 7. Send Chat Message to "CC3200 SimpleLink"
- 8. Check the Reply



LED Status Notification

- · Red LED will glow when device is connected to AP
- Orange LED will glow when device gets any chat message from the server.

Limitations/Known Issues

• It only implements a limited set of functionality and has some limitations.

E.g:

- 1. Retreiving the full friend roster isn't supported
- 2. Not checking the remote friend status (online, off line) before sending him a message

Article Sources and Contributors

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