

CC31xx SLS Reference Application

Overview and application details

The application demonstrates how to connect and work with XMPP server using CC31xx. It receives/sends an XMPP messages from/to the server.

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

1. main - Initializes the device, connects to an access-point and configures the email
2. xmpp - Wrapper functions to configure/connect to XMPP-Server and send/receive chat-messages. These functions are called from main
3. base64 - Functions to convert the raw bytes in quasi-big-endian order to Base64 string

Usage

- Log-in your 'gtalk' account and add 'slcc3100@gmail.com' to your friends' list
- Accept the connection request at the destination by logging w/ below credentials:

```
Username: slcc3100
Password: 3100slcc
```

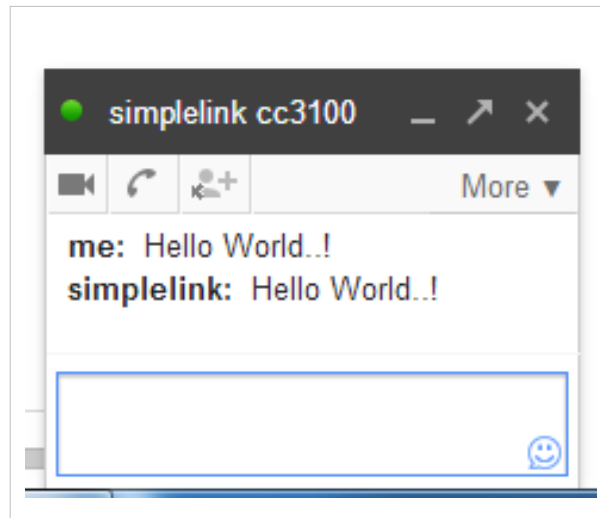
- Edit 'maic.c' - Modify the value for 'SSID_NAME' to establish connection w/ an internet enabled AP

```
#define SSID_NAME    "<ap_name>"
Ensure that the access-point is 'OPEN'
```

- Build the application using Visual-Studio or Eclipse. Download and execute it on the target device
- Once the connection is established successfully, wait for 'slcc3100@gmail.com' to appear ONLINE in your friends' list

A green circular status indicator followed by the text 'simplelink cc3100' in a blue font and 'Online' in a lighter blue font below it.

- When ONLINE, send messages to CC3100. The device shall receive and relay the messages back to the sender



Limitations/Known Issues

- The size of the message is currently limited to 48
- Since example doesn't implement a complete XMPP stack:
 1. Retrieving the full friend roster isn't supported
 2. Checking the remote friend status (online, offline) before sending him a message is not supported

Article Sources and Contributors

CC31xx SLS Reference Application *Source:* <http://ap-fpdsp-swapps.dal.design.ti.com/index.php?oldid=188571> *Contributors:* A0131814, Giansway

Image Sources, Licenses and Contributors

Image:Sls_XMPP_1.png *Source:* http://ap-fpdsp-swapps.dal.design.ti.com/index.php?title=File:Sls_XMPP_1.png *License:* unknown *Contributors:* A0131814

Image:Sls_XMPP_2.png *Source:* http://ap-fpdsp-swapps.dal.design.ti.com/index.php?title=File:Sls_XMPP_2.png *License:* unknown *Contributors:* A0131814