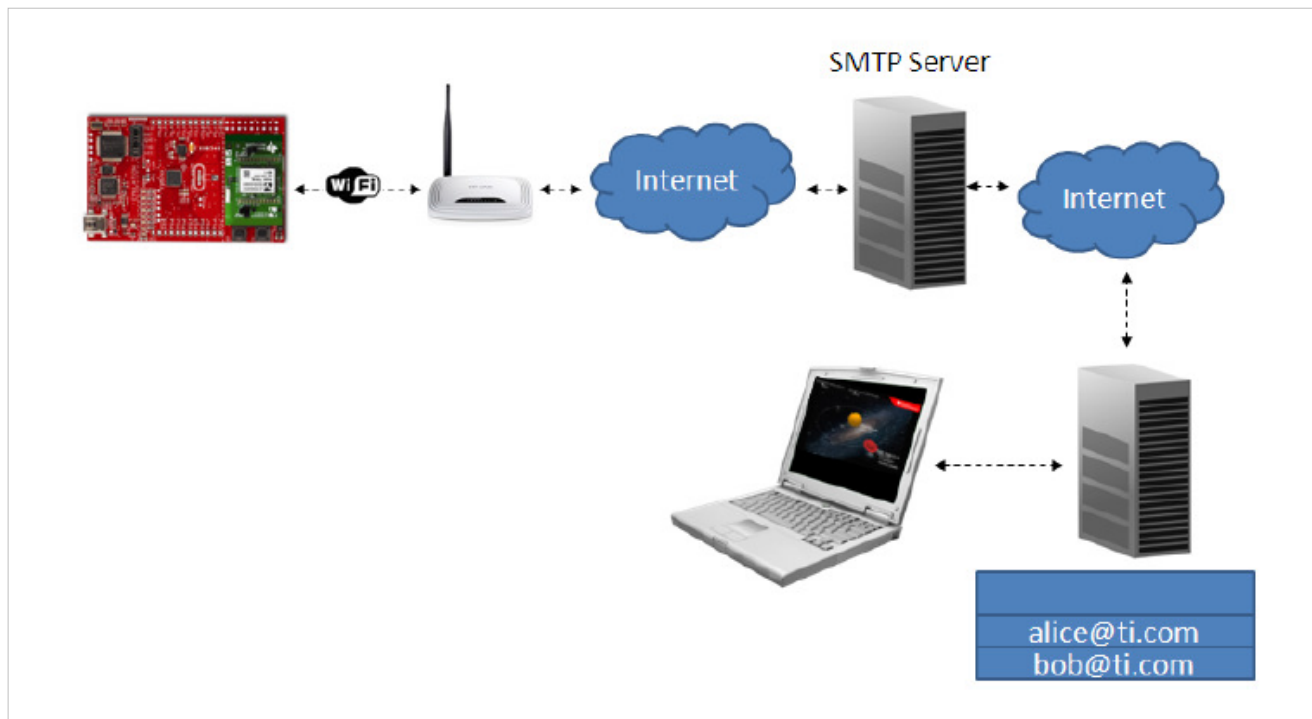


CC31xx SLS Email Demo Application

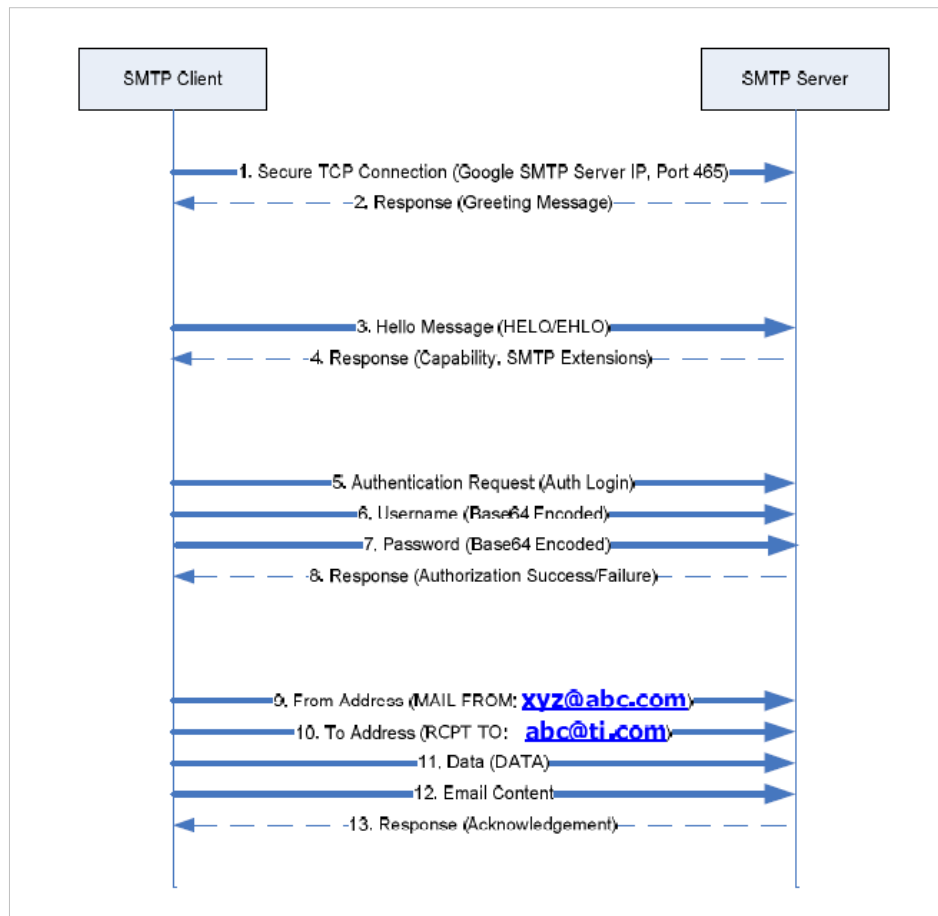
Overview and application details

This sample application demonstrates how an email could be sent over SMTP - The application allows users to send an e-mail message to a destination e-mail ID.

CC3100 connects to the SMTP server via an AP (w/ internet connectivity) - The email is sent to the SMTP server which forwards it to the recipient's email-server. Recipient receives the email from his email-server using IMAP/POP3 and/or other proprietary protocol.



Email application's sequence



- Client first makes a TCP connection with SMTP server.
- SMTP server replies back w/ response-code and greeting-message containing FQDN
- HELO/EHLO – Client sends Hello Message to the server. ESMTP accepts EHLO
- The SMTP server replies with Code 250 and Hello Message. ESMTP Server replies with SMTP extensions it supports such as Email maximum Size, authentication etc.
- If SMTP server requires authentication, the client sends “auth login” followed by “Username” and “Password” encoded with proper encryption accepted by SMTP Server.

auth login

334 VXNlcm5hbWU6

- Client sends "Username" encoded with proper encryption accepted by SMTP server

a2F1c2hmdmdmdmhbGt1a2thckBnhfjdhdjjsksbWFpbC5jb20

- Client sends "Password" encoded with proper encryption accepted by SMTP Server

334 UGFzc3dvcmQ6

Mklkdldldl21haWxhYjskdkskjs2Mzc3M=

- SMTP server replies with Authentication Success/Failure.

535 Incorrect authentication data/ 235 Authentication Successful

- SMTP client then sends From-Address

MAIL FROM: xyz@abc.com

- SMTP client sends To-Address

RCPT TO: abc@ti.com

- SMTP client sends DATA command

DATA

- SMTP client sends email data.
- SMTP server responds with the acknowledgement

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 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. email - Wrapper functions to connect to SMTP-Server and send the configured email. These functions are called from main
3. base64 - Functions to convert the raw bytes in quasi-big-endian order to Base64 string

Usage

- Edit 'config.h' to
 1. Change 'SSID_NAME', 'PASSKEY' and 'SEC_TYPE' as per your access-point properties
 2. 'USER' and 'PASS' has source-email properties - Change these value if email has to be sent from a different email-address

```
CC3100 will try to establish connection w/ this AP when instructed
by the user.
Ensure the access-point has internet connectivity
```

- Compile and run the application using Visual-Studio or Eclipse
- Enter '01' to connect to the configured AP

```
This is the AP that was configured at step#1 above
```

- Enter '03,<destination email>,<subject>' to set the destination e-mail address and subject
- Enter '04,<message>'
- Enter '05' to send the email
- On success, below message will be displayed on the console

```
01 to connect
03,<to>,<subject>
04,<message>
05 to send message

01
OK
03,a.praneet.kumar@gmail.com,Hello World..!
OK
04,Welcome..!!
OK
05

Message Sent

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

Limitations/Known Issues

- The size of the message is currently 64.
- Subject should be less than 30 characters
- Destination email should be less than 30 characters.

Article Sources and Contributors

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