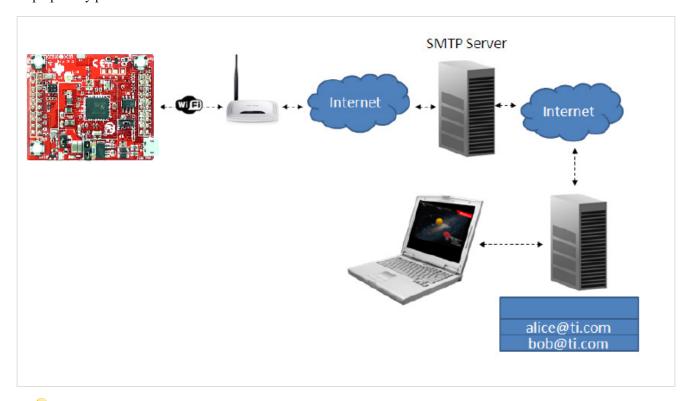
# CC31xx Email Demo Application

# Overview and application details

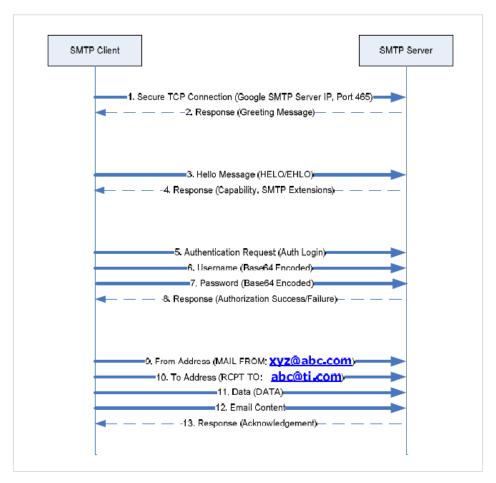
This sample application demonstrates how CC3100 can be used to send an email over SMTP. The application configures CC3100 to connect w/ an SMTP server and sends email to it. SMTP server forwards it to the recipient's email-server and the recipient receives the email from his email-server using IMAP/POP3 and/or other proprietary protocol.





Note: This wiki page is only applicable for CC3100-SDK v0.5.2 and upward releases. For documentation on older SDKs' examples, refer corresponding file in <cc3100-sdk-installation-location>\cc3100-sdk\docs\examples\

### **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

### a2F1c2hmmdmdmhbGt1a2thckBnhfjdhfdjjsksbWFpbC5jb20

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

### 334 UGFzc3dvcmQ6

## Mlklkdldldl21haWxhYjskjdkskjss2Mzc3M=

• 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

### Source Files briefly explained

- 1. main Initializes the device, connects to an access-point and configures the email
- 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**

**Prerequisite:** This application requires an access-point with internet connectivity

- Connect the board to a Windows-PC and configure the terminal-program for seeing the logs [I
   CC31xx\_&\_CC32xx\_Terminal\_Setting\_Wiki [1]] has detailed instructions for configuring the terminal-program
- Open config.h and change SSID\_NAME, SEC\_TYPE and PASSKEY as per your access-point properties -SimpleLink device will connect to this AP when the application is executed
- Edit the same file and change values for DESTINATION\_EMAIL, EMAIL\_SUBJECT and EMAIL\_MESSAGE for setting up the email properties
- USER and PASS has source-email properties Change these value if email has to be sent from a different email-address
- Compile and run the application
- See the self explanatory logs on the terminal-program's console. On success, below message will be displayed on the terminal and an email is sent to the destination email-ID

```
Email application — Version 1.0.0

*****************************

Device is configured in default state

Device started as STATION

Connection established w/ AP and IP is acquired

Sending email

Device successfully sent the email

Device alsconnected from the Hr on application's request
```

### **Limitations/Known Issues**

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

## References

[1] http://processors.wiki.ti.com/index.php/CC31xx\_&\_CC32xx\_Terminal\_Setting

# **Article Sources and Contributors**

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