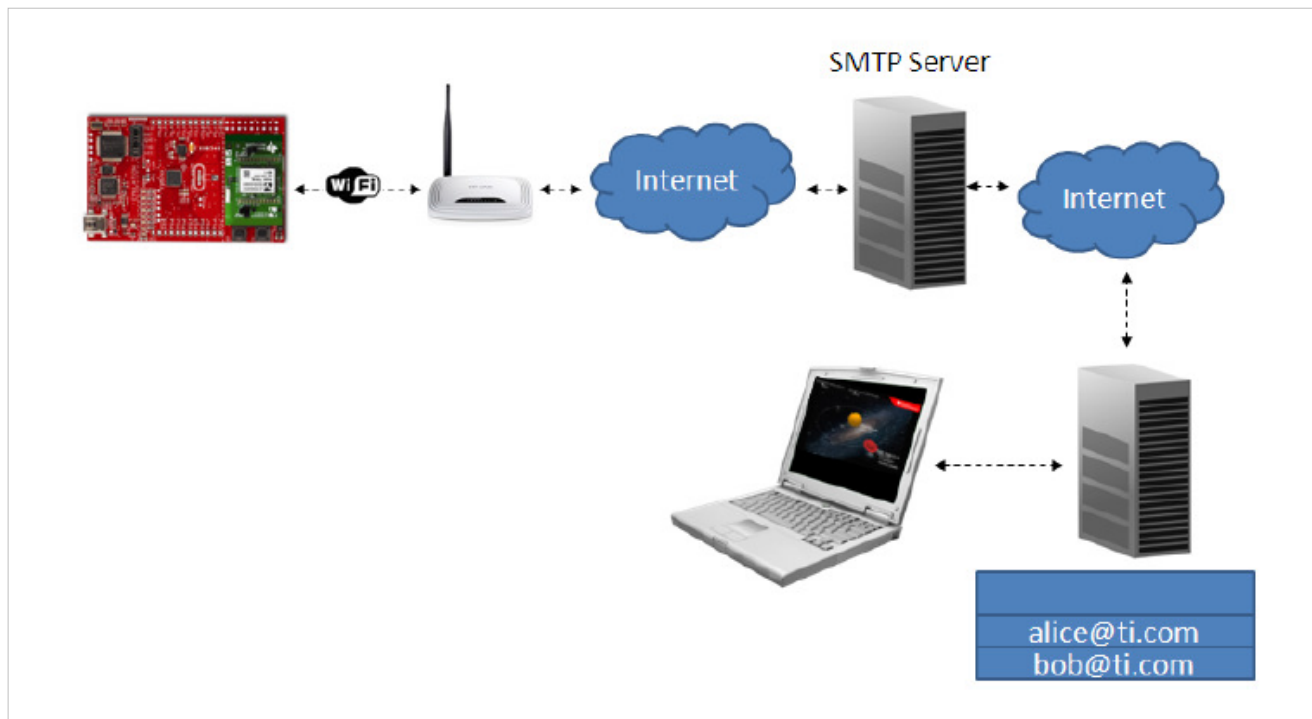


# CC31xx Email Demo Application

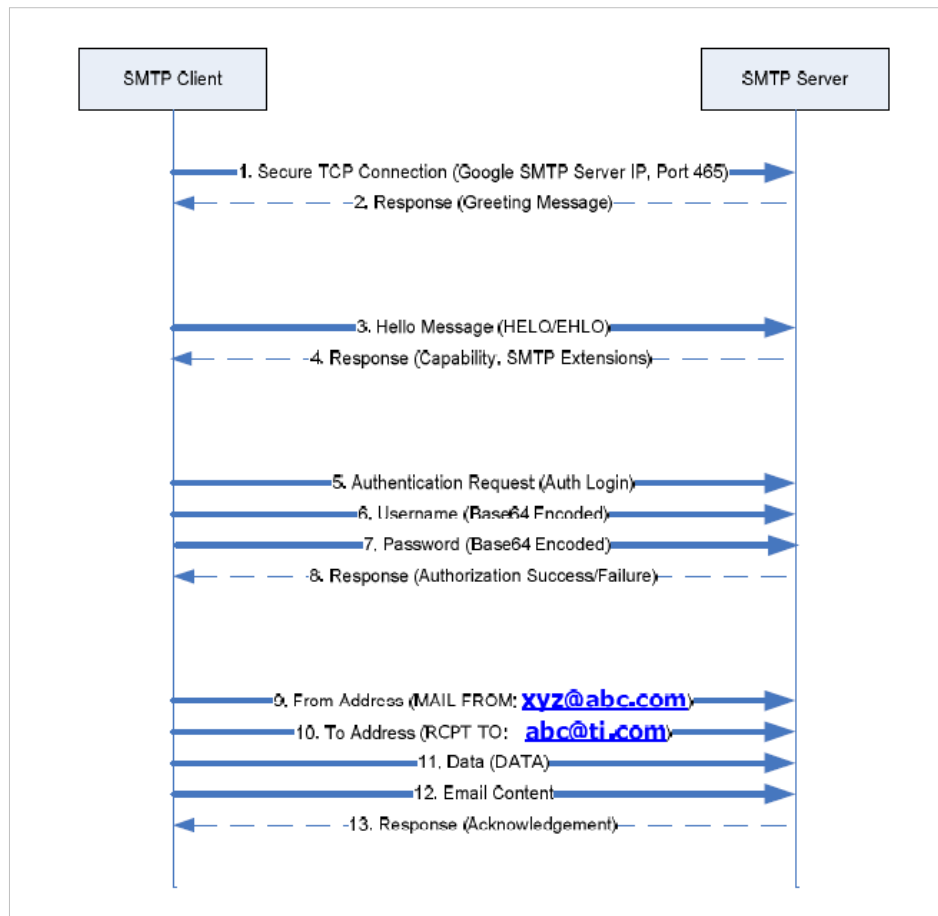
## Overview and application details

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

**a2F1c2hmmdmdmdmhGt1a2thckBnhfjdhdjjsksbWFpbC5jb20**

- 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

### **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**

1. Open 'config.h' and change 'SSID\_NAME', 'SEC\_TYPE', 'PASSKEY' and 'SEC\_TYPE' as per your access-point properties - CC3100 will try to establish connection w/ this AP when it's started.

Ensure the access-point has internet connectivity

1. Edit values for 'DESTINATION\_EMAIL', 'EMAIL\_SUBJECT' and 'EMAIL\_MESSAGE' for setting up the AP email properties
2. 'USER' and 'PASS' has source-email properties - Change these value if email has to be sent from a different email-address
3. Compile and run the application

### **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.
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# Article Sources and Contributors

**CC31xx Email Demo Application** *Source:* <http://ap-fpdsp-swapps.dal.design.ti.com/index.php?oldid=188578> *Contributors:* A0131814, Giansway

# Image Sources, Licenses and Contributors

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