

CC3100 SLS Email Demo Application

Overview and application details

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This sample applications 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 v1.0.0** 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

a2F1c2hmmdmdmdmhGt1a2thckBnhfjdjjsksbWFpbC5jb20

- 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

Prerequisite: Internet connectivity is required to work w/ this sample application

- Open **config.h** and change values for **USER** and **PASS** for setting up the source email.

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
- User will be prompted to configure the AP parameters for establishing a Wi-Fi connection
- Enter **01** to connect to the configured AP

This is the AP that was configured 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

```

*****
CC31xx Email App
1.2.0
*****
Device is configured in default state
Device started as STATION

Please input the SSID you wish to connect to:
TP-LINK-152
Encryption Types:
1: Open
2: WEP
3: WPA
Please enter the corresponding number for the encryption type:
1

COMMAND MENU
=====
01 to connect
03,<to>,<subject>
04,<message>
05 to send message

01
Connecting to AP TP-LINK-152...
Connected to AP TP-LINK-152. IP Acquired
03,cc3100.apps@gmail.com,Hello World!!
OK
04,Hi...!
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.
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Article Sources and Contributors

CC3100 SLS Email Demo Application *Source:* <http://processors.wiki.ti.com/index.php?oldid=227226> *Contributors:* A0131814, A0132173, A0221015, Codycooke, Malokyle, Raghshenoy, SarahP

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