

CRYPTOGRAPHY

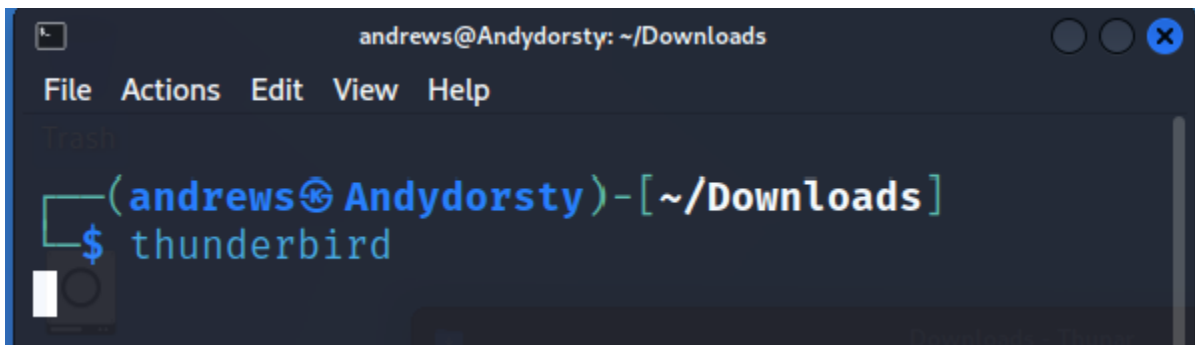
INSTALLING THUNDERBIRD

Thunderbird is an open-source software that is used to manage emails, chats, news feeds and newsgroups.

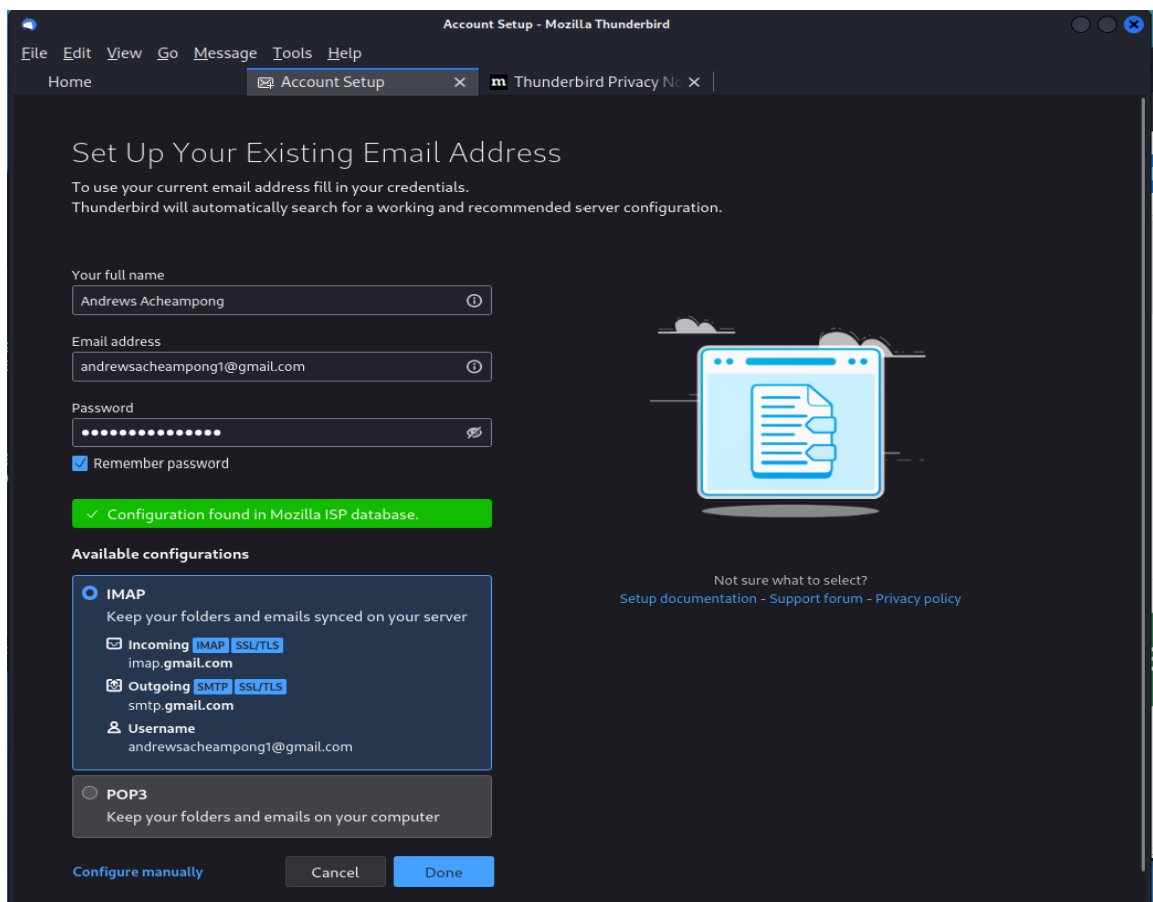
- Enter ***sudo apt-get install thunderbird*** to install thunderbird

ENCRYPTING EMAIL USING THUNDERBIRD

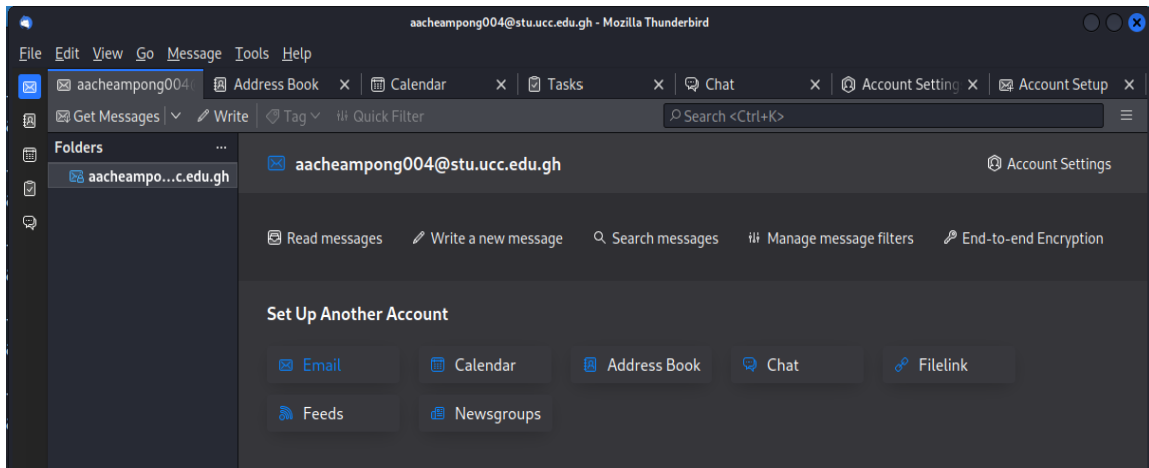
- Start the thunderbird software using the command below;



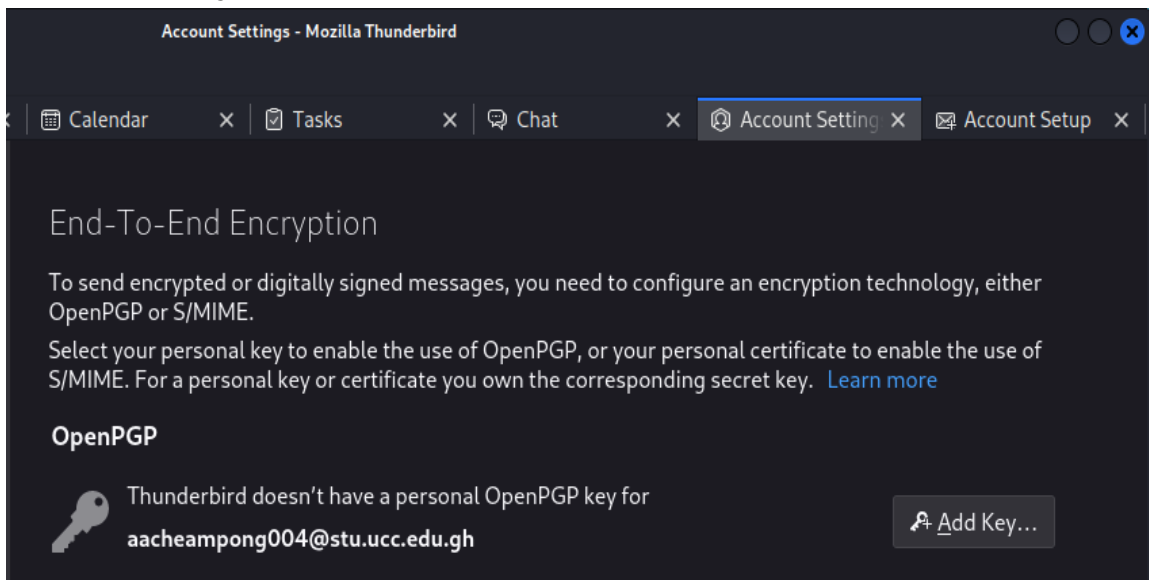
- Sign Up on Thunderbird.



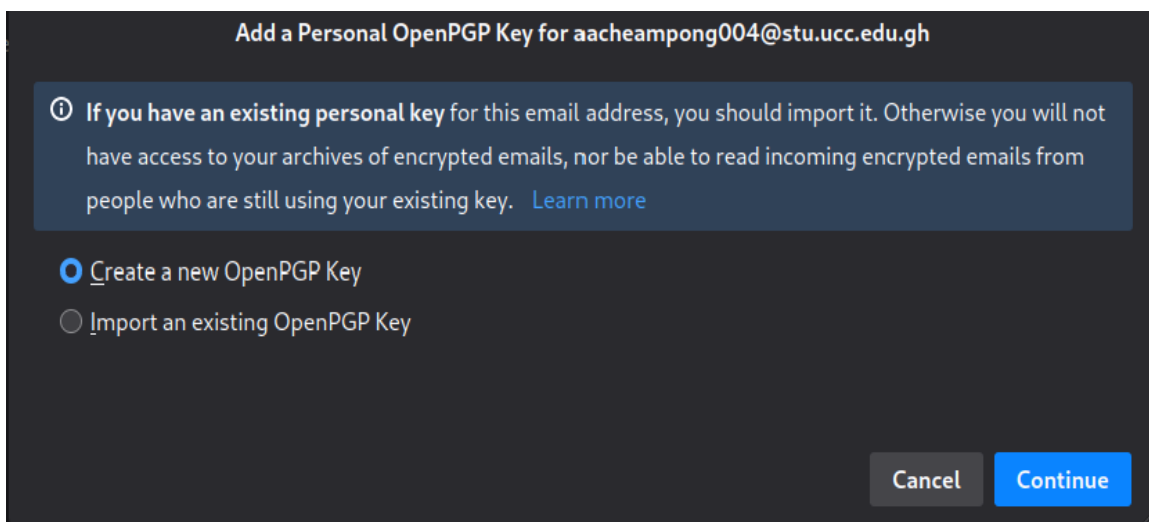
- Click on **End-to-End Encryption**



- Click on **Add Key**



- Select **Create a new OpenPGP key**



- Select time for key expiration and choose the preferred Key Type

Add a Personal OpenPGP Key for aacheampong004@stu.ucc.edu.gh

Generate OpenPGP Key

Identity Andrews Acheampong <aacheampong004@stu.ucc.edu.gh> - aacheampong004@stu.ucc.ed... ▾

Key expiry
Define the expiration time of your newly generated key. You can later control the date to extend it if necessary.

☒ Key expires in 1 ▴ ▾ years ▾

☐ Key does not expire

Advanced settings
Control the advanced settings of your OpenPGP Key.

Key type: RSA ▾

Key size: 4096 ▾

Go back Cancel Generate key

- Click on Generate Key and then confirm to create a public and secret key for the email.

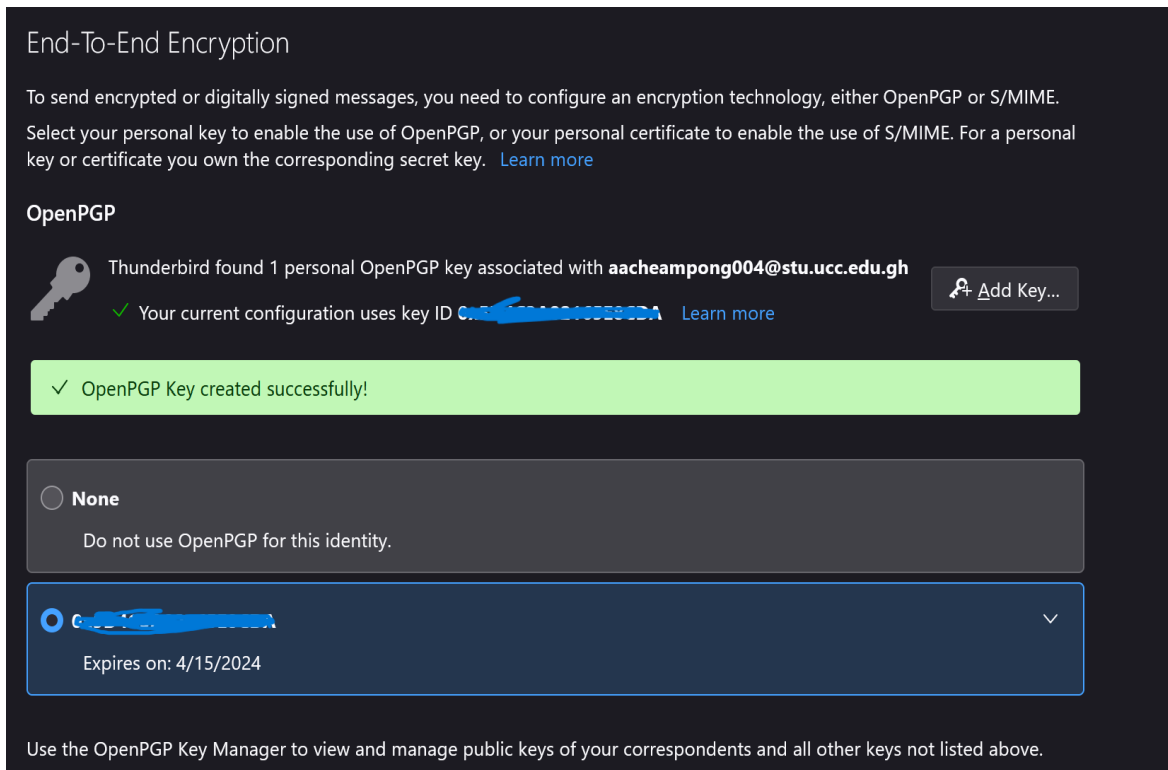
Add a Personal OpenPGP Key for aacheampong004@stu.ucc.edu.gh

i Key generation may take up to several minutes to complete. Do not exit the application while key generation is in progress. Actively browsing or performing disk-intensive operations during key generation will replenish the 'randomness pool' and speed-up the process. You will be alerted when key generation is completed.

Generate public and secret key for Andrews Acheampong "aacheampong004@stu.ucc.edu.gh"?

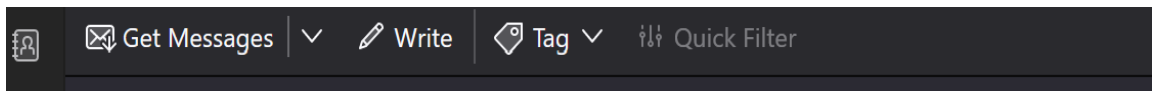
Cancel Confirm

- The Encryption Key is generated.

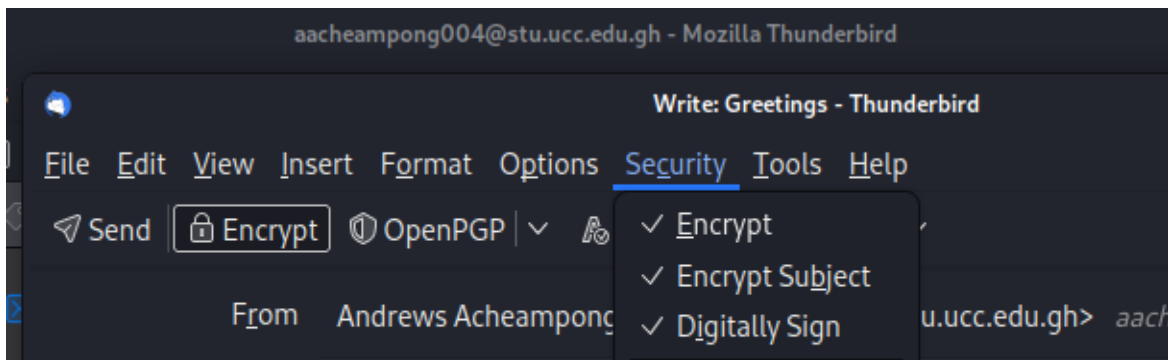


TO SEND AN EMAIL TO A RECIPIENT

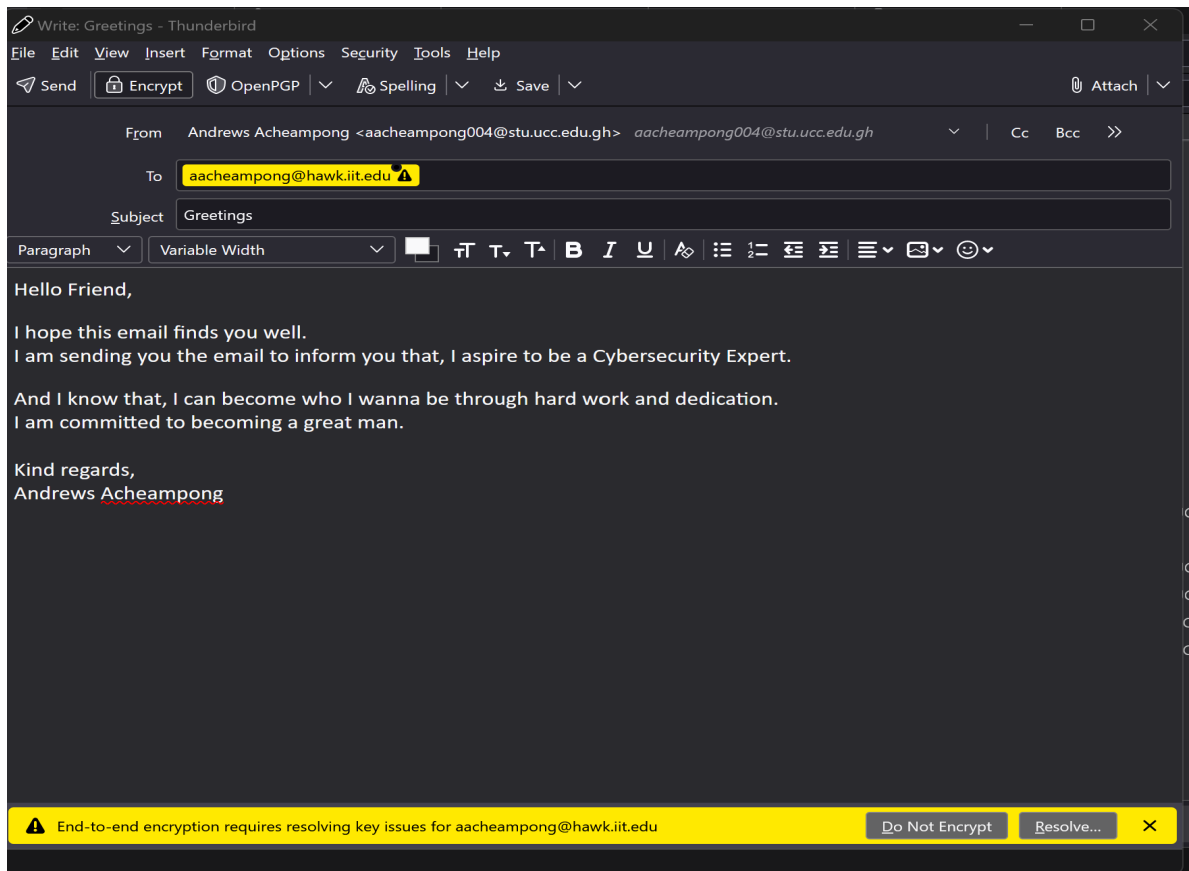
- Click on Write.



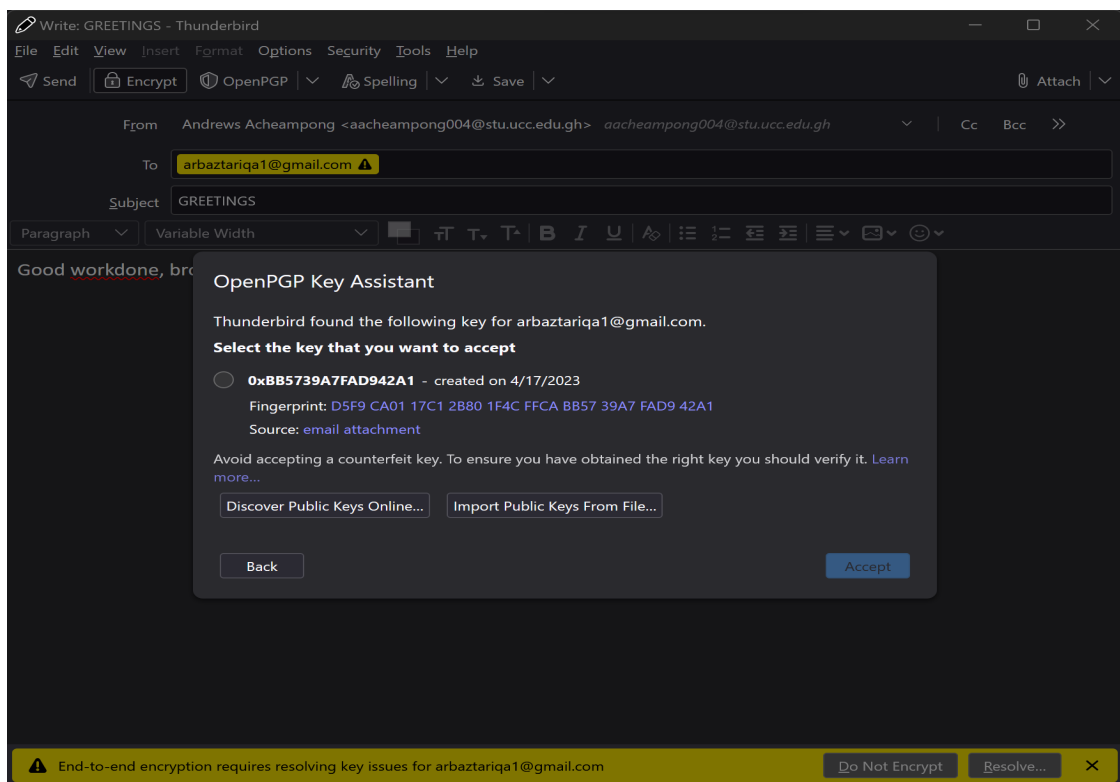
- Encrypt the message.



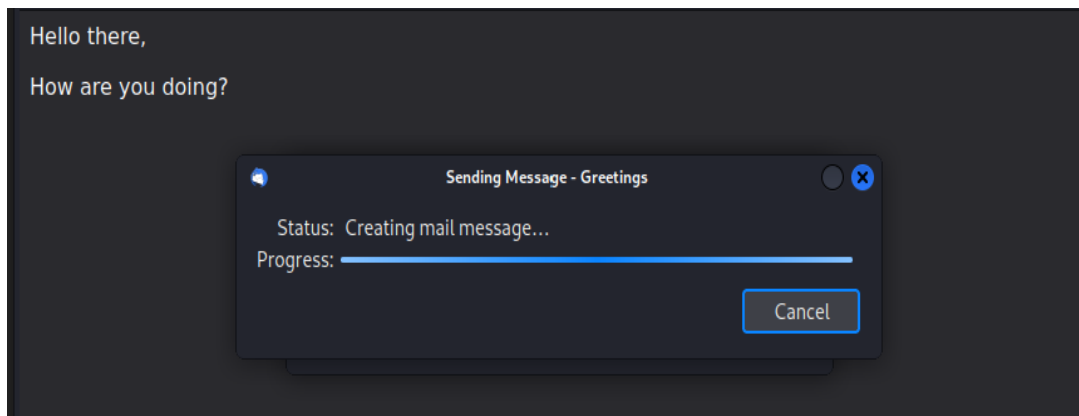
- Enter the Recipient's address, Subject and Body of the email.



- Click on Resolve at the bottom of the Text area above to add the public key of the recipient, i.e. encrypting the email from unauthorized access.



- **Send the drafted email.**



- **Proof of Recipient email receipt and encrypted message.**

