

# How Email Works

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## Email Protocols

- SMTP (Simple Mail Transfer Protocols) => Used to send emails.
- POP3 (Post Office Protocol 3) or IMAP (Internet Message Access Protocol) => Used to receive emails.
- This takes place in **Application Layer**.
- This connection is **TCP/IP** connection because we don't want to lose our emails.

## Flowchart

- Sender => mail went to SMTP server => Receiver's server => Receiver.
- **NOTE:** We can try to use **nslookup** command if you are on unix based operating system. Run this command to check IP Address of a **gmail.com** server,

```
$ nslookup --type=mx gmail.com
```

or

```
$ nslookup gmail.com
```

- The POP3 service runs on port **110**.

## Flowchart of client connecting to POP server

- Client => Authorize => POP Server
- Client <= Transact <= POP Server

## IMAP (Internet Message Access Protocol)

- This is known as Internet Message Access Protocol.
- This allows us to receive emails on the same address but view them on different devices.
- It allows you to view emails on multiple devices.