

# u3a Computing Group

Alan Hopwood, 2 February 2023

# Agenda



Welcome

Current News, Issues and Questions

Topic List Brainstorm

All about Email

AOB and Follow up

# Presentation

## All about Email

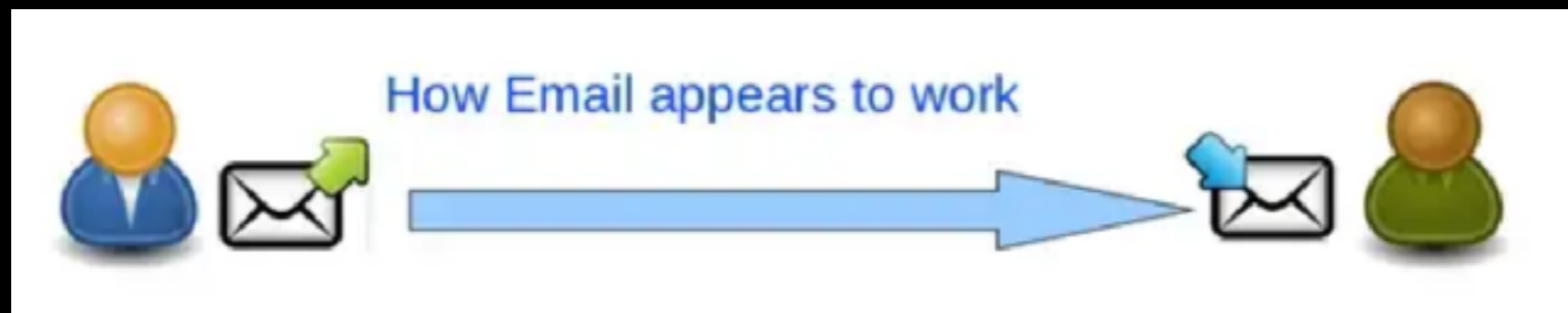
# Presentation Agenda

## All about Email

- How does email work
  - Overview
  - Email addresses
  - What the email “package” looks like (what is sent)
- Email Systems
  - Webmail
  - Client / Server Email
  - Email setup - IMAP vs POP
- Selecting your email App & Service
- Spotting a fake email

# How does Email (appear to) work?

## All about Email



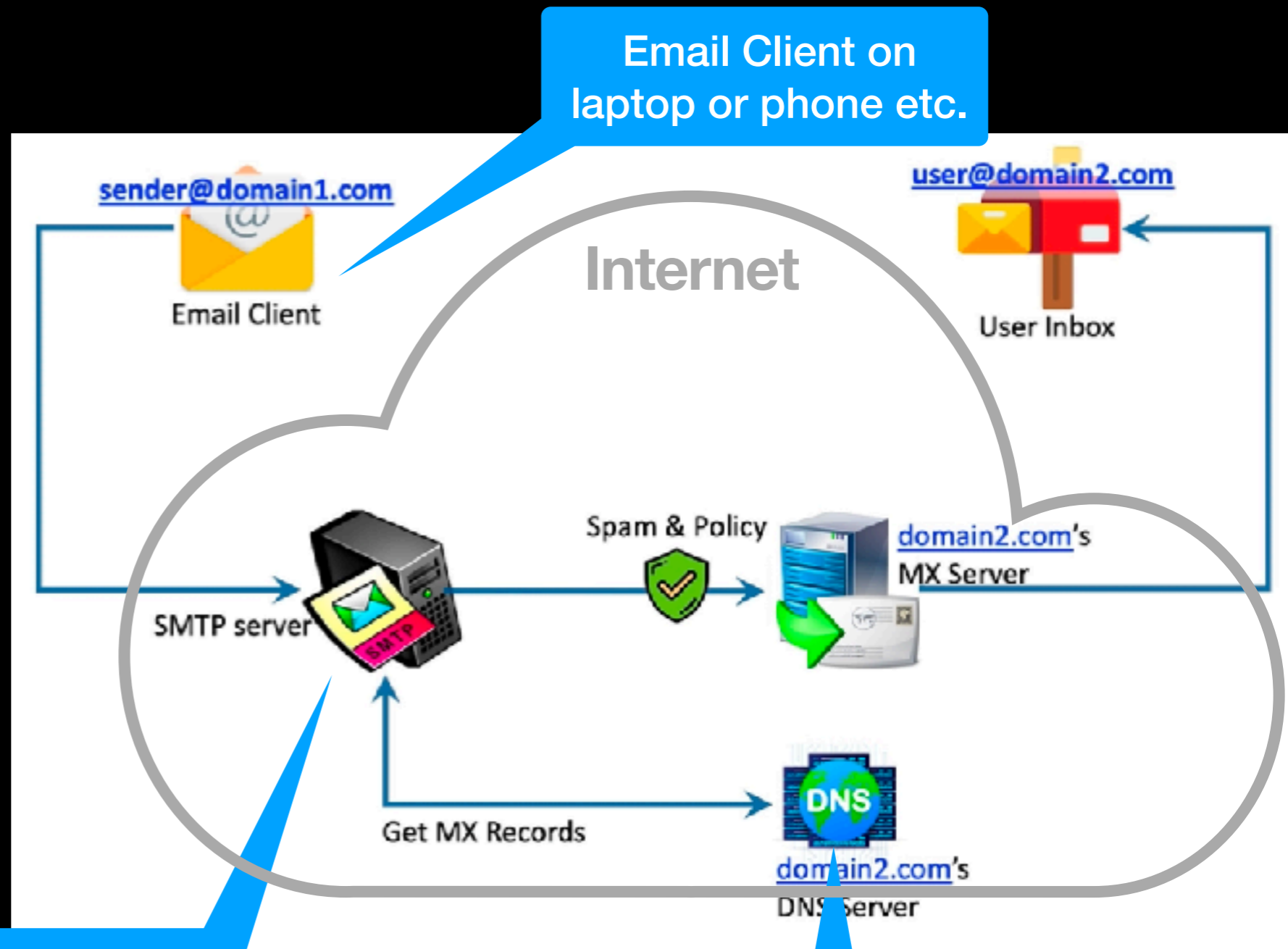
- Carol composes email using her email app on laptop, tablet, or phone.
- Or goes online to access email service web client.
- Adds Bob's email address, [bob@emailservice.com](mailto:bob@emailservice.com)
- Hits send
- Bob checks his email using his email app or online service.
- email appears in the inbox
- Bob reads his message.

# How does Email really work?

## All about Email

Sender uses 2 programmes to send email:

- Email Client assembles the email
- Email Server sorts out the internet routing to get email to correct destination



Email Client on laptop or phone etc.

Email Server on internet (Gmail, btinternet, hotmail, hosting etc.)

Domain Name System Server knows where addressee's mail server is

# The email address

## All about Email

- Typical internet address:

Address for network  
(domain)

- [www.dorchesteru3a.org.uk/computing.html](http://www.dorchesteru3a.org.uk/computing.html)

Page of website

Top level domain

- Typical email addresses

Email account name

Domain address

[arh@dorchesteru3a.org.uk](mailto:arh@dorchesteru3a.org.uk)

# What is actually sent?

## All about Email

- An email message consists of envelope, headers, body
- The Envelope is information used by email servers to perform the delivery. E.g. sender, recipients.
- The Header is information about the email the receiver sees. E.g. To, Cc, From, subject.
- The body is the message.

Note the overlap

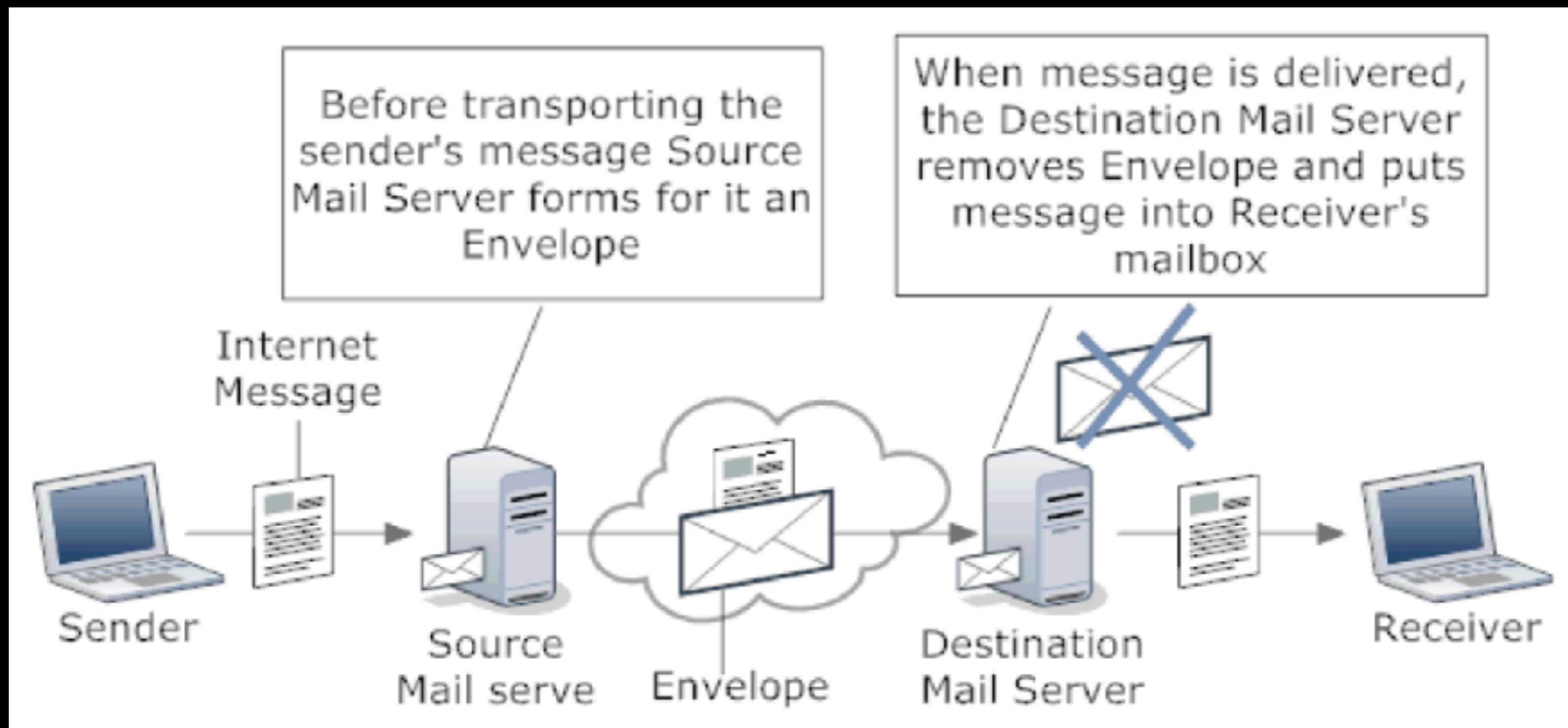




# What is actually sent?

## All about Email

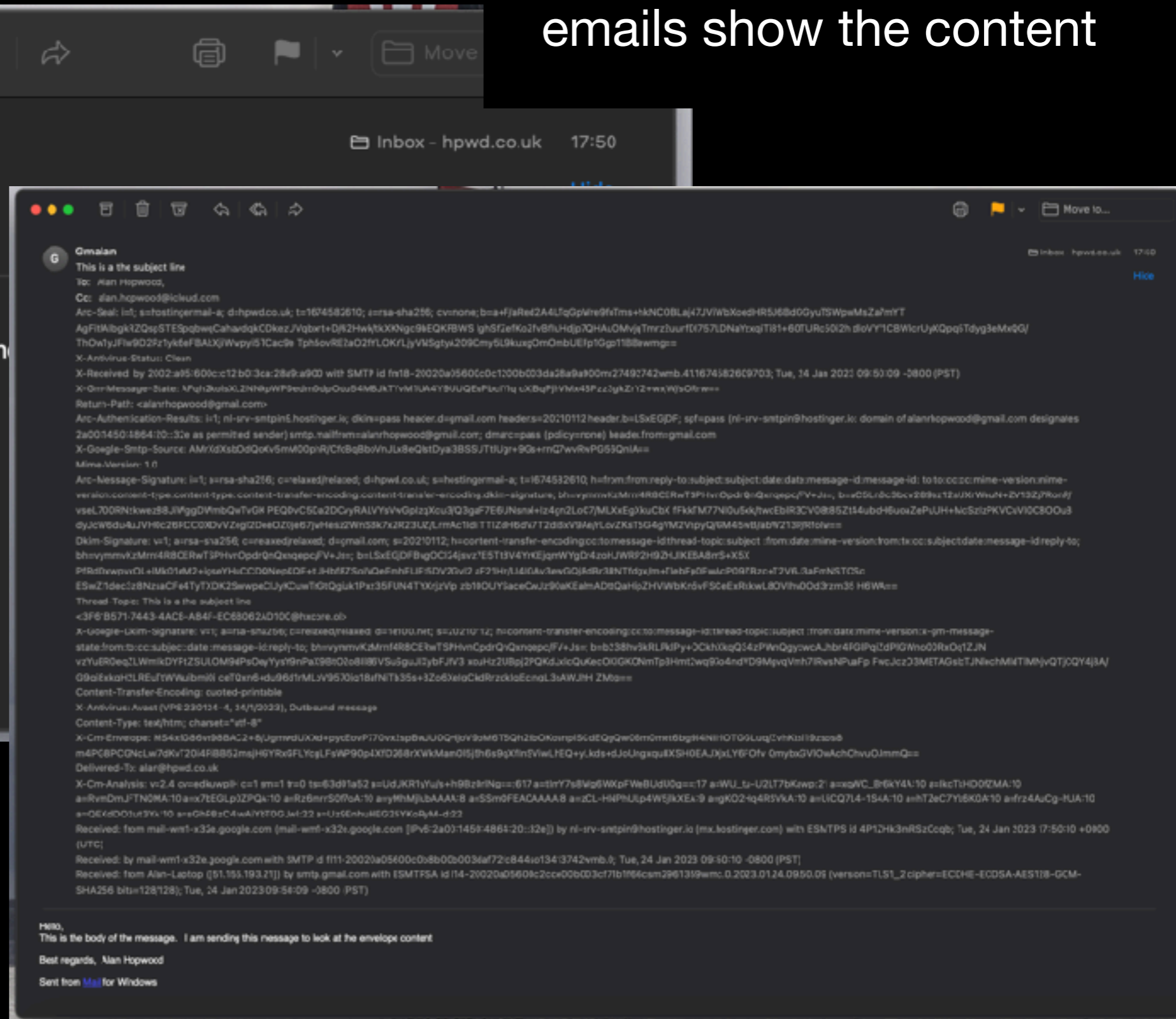
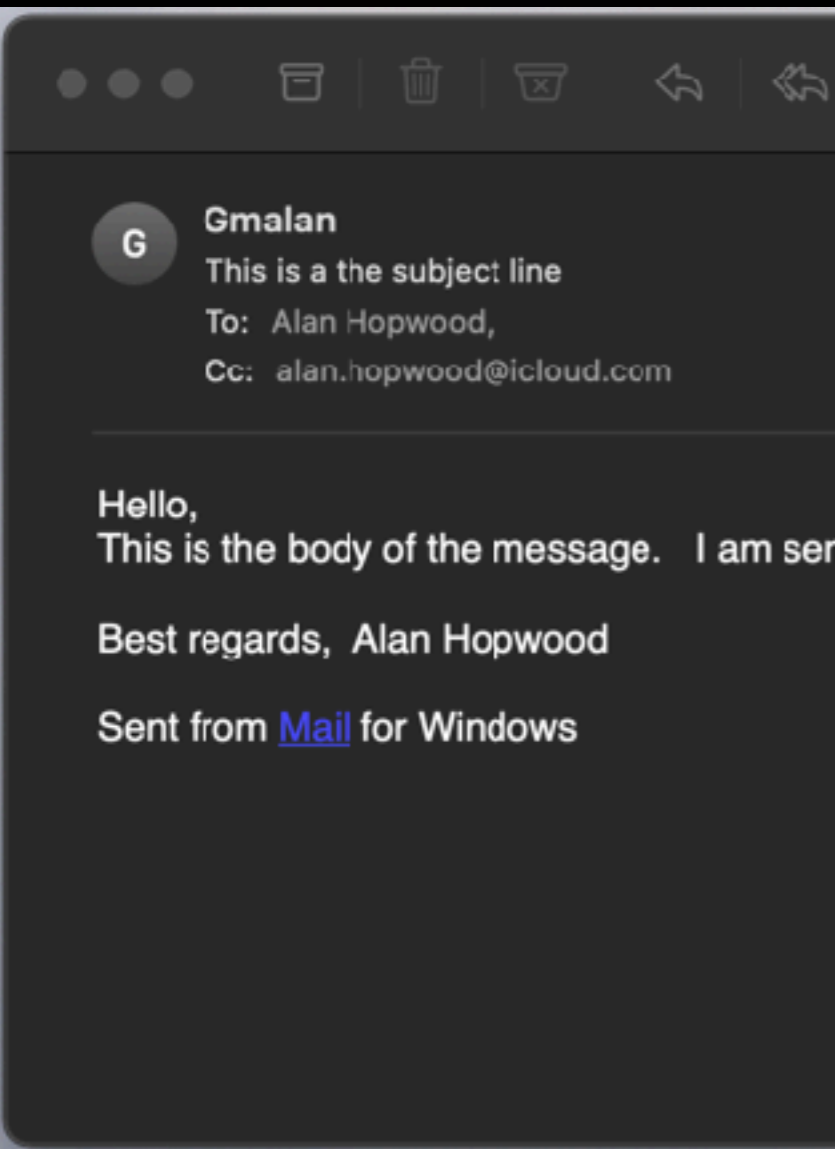
- The mail server wraps the content in an envelope
- The envelope has the information to get the email to its destination
- It also has routing information added on route



# Header information

## All about Email

- As seen in the inbox, emails show the content



- The header contains a lot of information not normally seen.

# What is actually sent?

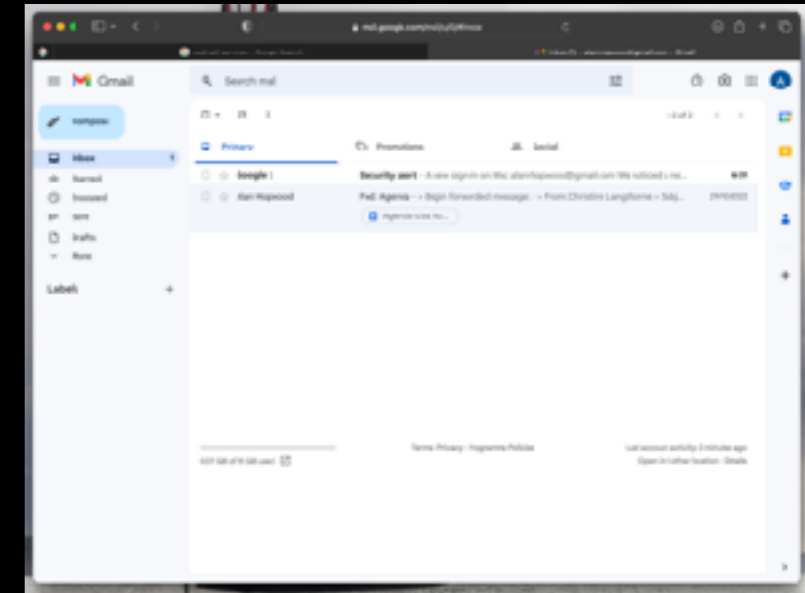
## All about Email

- Having both envelope and header allows:
  - Multiple To and Cc, but not Bcc addressees shown to recipient
  - One email creates multiple Envelopes each delivering the message to one receiving email server.
- But the issue remains - Email Scams:
  - Any computer connected to the internet can act as email server and initiate an email transfer.
  - It is very easy to write fake address in the “mail from” command in the email envelope
  - It is very easy to write fake address in the From: email header
  - Both envelope sender together with email header sender can be faked
  - The sender's email address in email header From: can be different from the envelope's mail from

# Webmail (vs. Client email)

## All about Email

- The simplest form of email system is webmail
- the email service is provided on the internet
- Access the service using a web browser
- Gmail, Hotmail, AOL and most other mail services can be used as a webmail service.



### Advantages

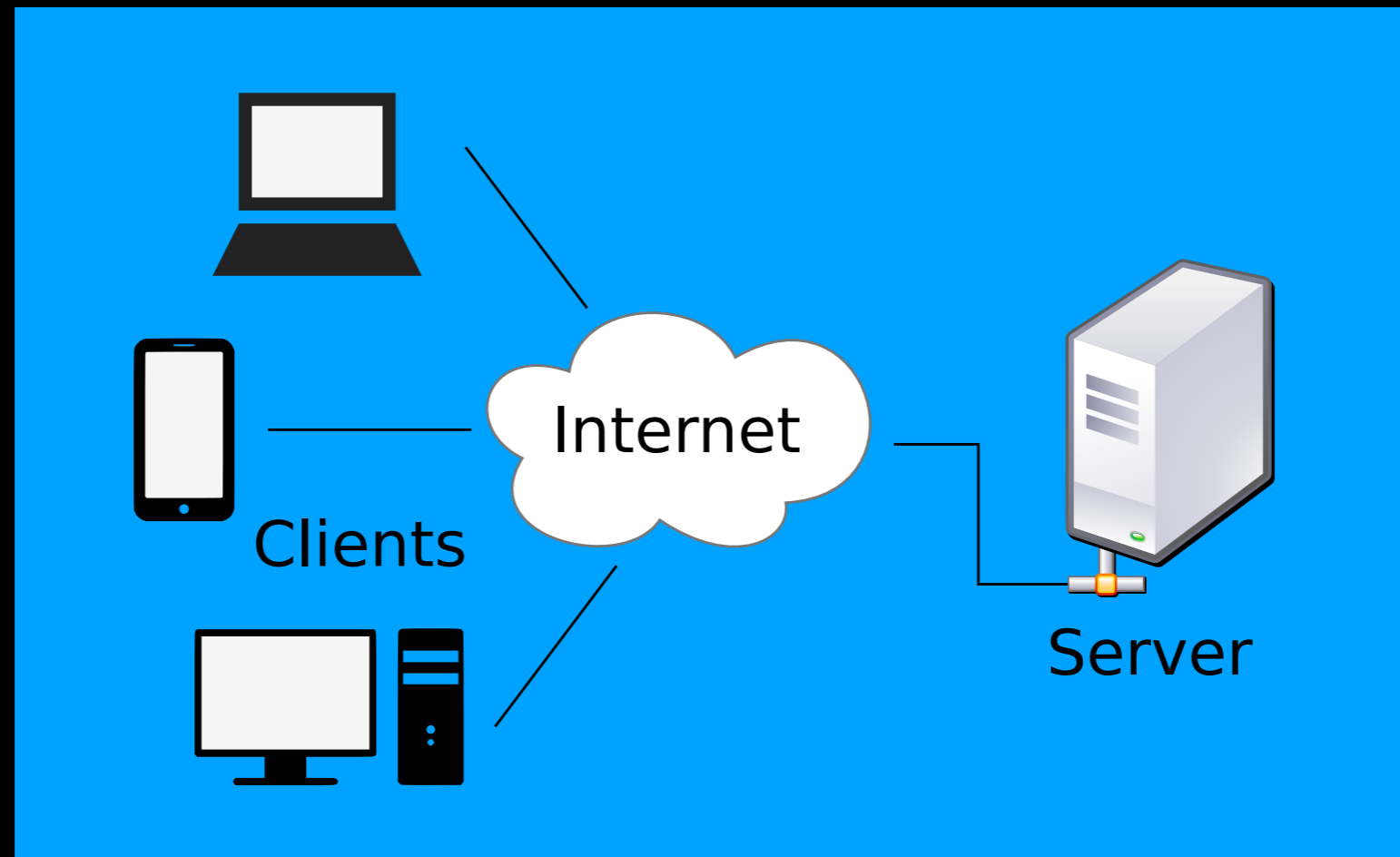
- Use any device with internet access to access email
- Doesn't use storage on your device.

### Disadvantages

- Must be online to see email.
- Need to sign on every time
- Downloading attachments is a separate action.
- Must use the email service's Contacts and Calendar systems to get integration

# (Webmail vs.) Client email

## All about Email



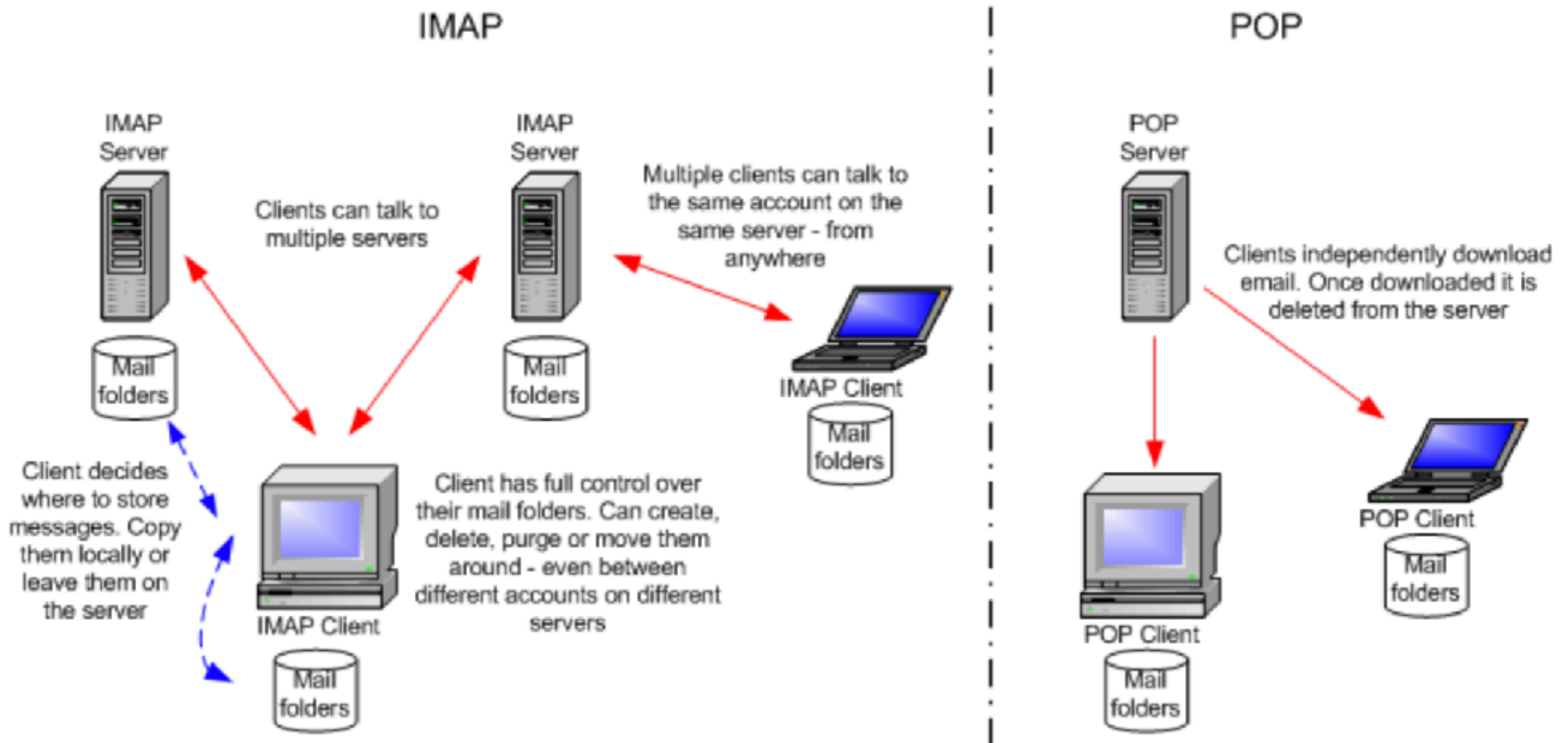
- Email client allows you to access and manage your email
- Email server transfers email through the internet to receiving server.
- Receives email for client to download when connected
- Where the email is stored depends on configuration

# IMAP Vs. POP3

## All about Email

### IMAP allows:

- Multiple clients with synchronised mailboxes
- Multiple servers
- Choice of storage locations



# IMAP Vs. POP3

## All about Email

### IMAP (Internet Message Access Protocol)

- IMAP stores the message on a server and synchronises the message across multiple devices - e.g. laptop and phone.
- Have to pay attention to storage limit of mail service.

### POP (Post Office Protocol)

- POP3 downloads the email from a server to a single computer, then deletes the email from the server.
- Cannot have 2 devices both receive mail using POP3
- mail uses less server disk space because it downloads emails and attachments then deletes them from the email server.

# Selecting Email Systems



# Email client features

## All about Email

These are the sorts of features you might look at before selecting your email client app:

- Replace email address in “To” and “From” field by name from your contacts
- Conversations threaded by subject.
- Integration of multiple email accounts
- Folders and smart folders
- Inbox filters
- Searching
- Backup and archive

# Choosing an Email System

## All about Email

### 1. Decide Webmail or client-server

- Why would you use Webmail?

### 2. Select your client application

- Lots of free apps.
- Consider why the service is free. Google wants your information; Microsoft want you to use their desktop products; Apple want you to buy iPhones and iPads

### 3. Select your Email service

- Large number of services - quite a few free.
- Consider - storage, compatibility with preferred client, security if you have sensitive information.

# Email Clients

## All about Email

Application	Why	Use for
Windows Mail	Simple and Free	<b>Windows</b>
Thunderbird	Free, highly configurable. lots of add-ons. Not prettiest.	Windows, Mac
Outlook	part of Windows 365, sophisticated & robust	Windows
Outlook (mobile app)	Good balance between simplicity and features	Android, iPhone, iPad
Kiwi for Gmail	Integration with Gmail	Windows
Mail by Apple	Basic but good. Integration with Apple systems	<b>Mac, iPhone, iPad</b>
Gmail	Integration with other Google Apps	<b>Android</b> , iPhone, iPad

# Email services

## All about Email

Service	Free version	Why use?
ProtonMail	500MB storage	Security & privacy - has good apps for most devices
Gmail	15GB storage.	strong functionality, integration with Google tools
Outlook	15GB storage.	strong functionality, less configurable. integration with Microsoft tools
Yahoo Mail	?	Strong

# Spotting a fake email

or scam text messages, phone calls or social media posts

## All about Email

1. The message is sent from a public email domain
  - No legitimate organisation will send emails from an address that ends '@gmail.com'.
  - If the domain name (the bit after the @ symbol) matches the apparent sender of the email, the message is probably legitimate.
2. Inconsistencies in Email Addresses, Links & Domain Names
3. The domain name is misspelt. E.g. bill@micosfost.com

# Spotting a fake email

## All about Email

4. The email is poorly written

- You can often tell if an email is a scam if it contains poor spelling and grammar.

5. The email includes suspicious attachments or links

- *View your Energy bill here: [INV-94709](#)*
- *Press “Button” to access account*

6. The message creates a sense of urgency

- *You must move your money to a safe account now to avoid scammers making withdrawals.*

7. *Too Good to Be True emails*

- *That offer of getting £50,000 to use your bank account might just be a scam.*

**Thank You**