Email

A Quick Guide

Introductory Level

Designed for iPad. Applicable to other devices.

Revised November 2016
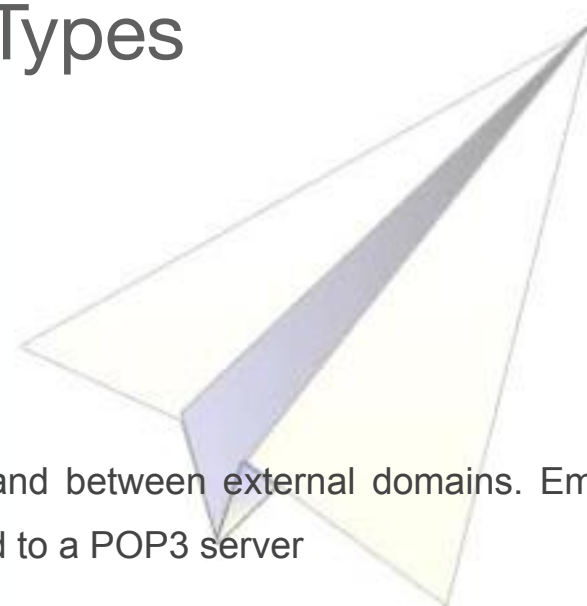
Email Server Types

✉ **SMTP** (Simple Mail Transfer Protocol)

✉ **POP3** (Post Office Protocol *version 3*)

✉ **IMAP** (Internet Mail Access Protocol)

SMTP

Manages the transfer of email messages within domains and between external domains. Emails destined for recipients within the same domain are forwarded to a POP3 server

POP3

Once the POP3 server receives email addressed to recipients on its own domain, it stores those emails under the account names of the intended recipients. Once each recipient downloads a copy of an email, it is normally deleted from the server and is not accessible from another computer

IMAP

Otherwise known as 'webmail' IMAP allows copies of emails to be retained on the server once downloaded. Thereby, emails can be accessed from any computer connected to the internet. Copies of sent emails and drafts are also retained. Also, it facilitates synchronisation across multiple devices. However, It does require more server space and is more expensive to maintain.

The Email Server

POP3 and SMTP

Sending the email

For example, my friend who has an email account at **example.com** sends me an email (from computer **A**). The outgoing mail from her account is handled firstly by the **SMTP** server on her domain (**example.com**) which will direct the message to the destination domain, in this case **bigpond.com**. Next the **SMTP** server at **mail.bigpond.com** will check that the recipient's account (my) exists, and if it does, will store the email message under my account name.
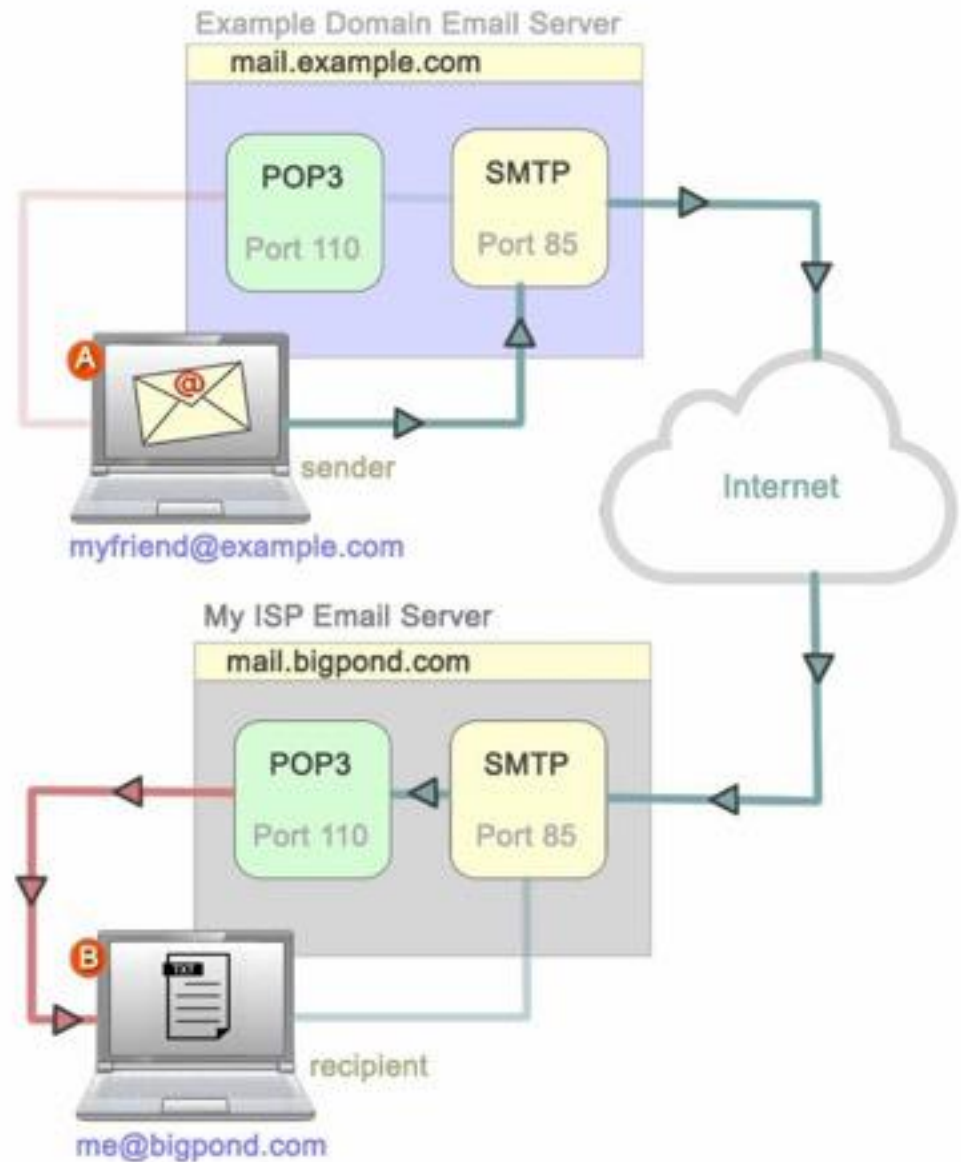
Receiving the email

When I open my email client, such as **Apple Mail**, **Outlook Express** or **Mozilla Thunderbird**, it checks for incoming mail via the **POP3** mail server at **mail.bigpond.com**. Whilst connected to the internet, any new emails will automatically be downloaded to the inbox of my email client software (at computer **B**).

Replying to the email

If I reply to my friend's email, it is sent back via **outgoing mail** from my email program to the **SMTP** server at **mail.bigpond.com**. It is then directed to the email server at **example.com** and waits to be downloaded from the **POP3** server (**mail.example.com**) to my friend's computer (at computer **A**).

Server and Client

In the diagram opposite, **POP3** servers can be substituted for **IMAP** servers (usually Port 143). We will look at **IMAP** a little on the next page.
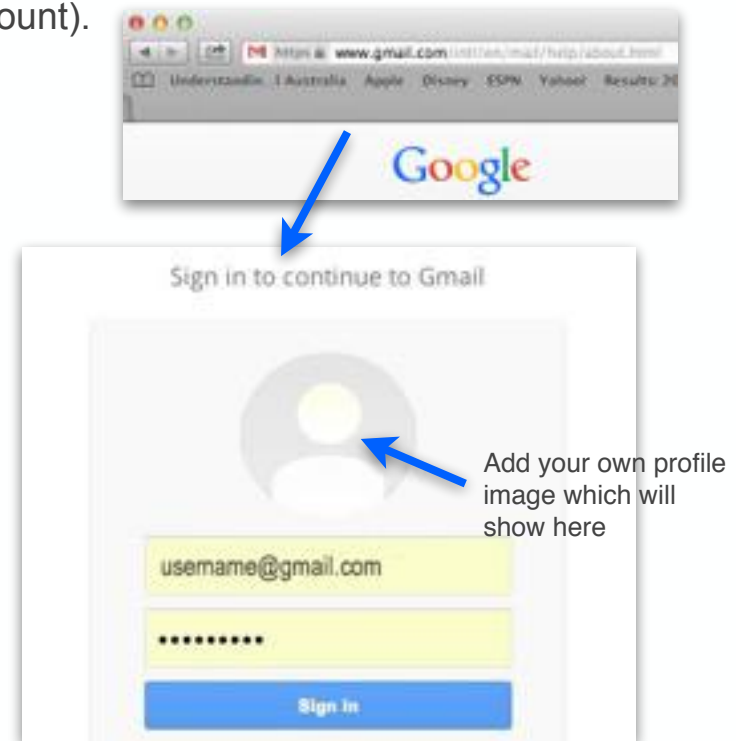

Example Domain Email Server
mail.example.com

POP3 — Port 110
SMTP — Port 85

myfriend@example.com — sender

Internet

My ISP Email Server
mail.bigpond.com

POP3 — Port 110
SMTP — Port 85

me@bigpond.com — recipient

Email - Webmail

Webmail - IMAP

When using a webmail service you are actually logging onto the email service at the host (an **email server** on the internet). In the case of **Gmail** for example, you may browse to **gmail.com** by typing the address (URL) into the address bar of the browser (eg **Safari** or **Internet Explorer**). A **login** window such as that illustrated would appear. You can log in using your **username** and **password** (assuming you have already created an account).

Once successfully logged in, you will then be able to view all of the folders for your particular email account such as **Inbox**, **Sent Mail** and **Drafts** etc. This is a little different from accessing the account using an email client (such as **Outlook**, **Mail** or **Thunderbird**).

When you set up an email client on your desktop computer, tablet or smartphone, the program will need to be configured to log in automatically with the same login details you would use to log into the webmail version of the service *(see next page)*

Add your own profile image which will show here

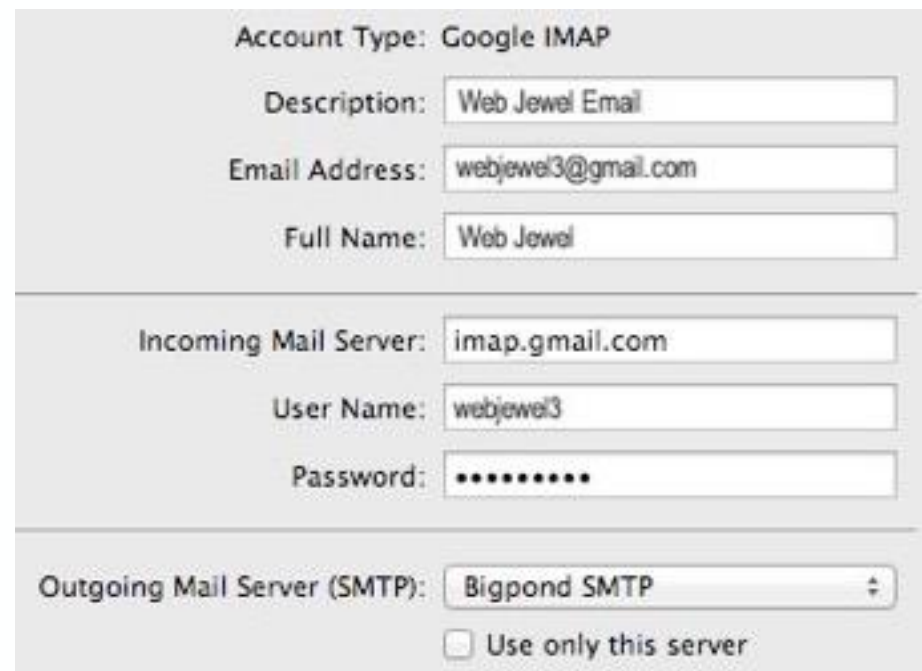A typical webmail sign in screen - Gmail

Email - Settings

Basic Account Settings

With a basic understanding of how email works, we have a better idea of how to configure the required settings when running an email client for the first time. By 'client' I mean 'client-side software' (such as **Apple Mail** or **MS Outlook)** as opposed to 'server-side software' (such as the POP3 or IMAP server software). The example shown here is from **Apple Mail** (in any other mail client such as **Outlook** or **Thunderbird** the basics will be much the same).

Now let's have a look at the **incoming** and **outgoing** email settings, which are the main purpose of this tutorial. Remember that an **SMTP** mail server is responsible for sending email messages to where they are destined to go, whilst **POP** and **IMAP** servers store and manage emails on the recipients' side of things (ie client-side).

So having signed up for a **Gmail** account, I want to configure my email client (**Apple Mail** in this case) to send and receive emails using the new email account.
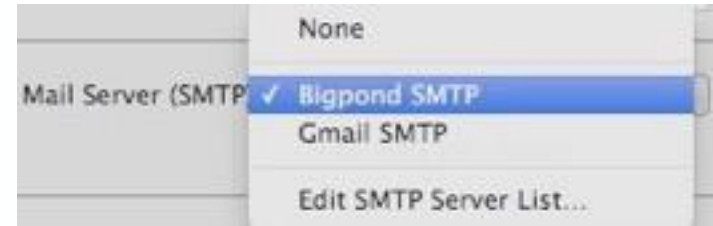
Account Type:	Google IMAP
Description:	Web Jewel Email
Email Address:	webjewel3@gmail.com
Full Name:	Web Jewel
Incoming Mail Server:	imap.gmail.com
User Name:	webjewel3
Password:	•••••••••
Outgoing Mail Server (SMTP):	Bigpond SMTP
	☐ Use only this server

Gmail IMAP and SMTP server settings

Email - Settings

Incoming and Outgoing Mail

As we have seen before, we need to use email servers to send and receive email, therefore we need to enter the details for the incoming and outgoing mail servers, including our **account username** and **password**, where appropriate in our email client program or mobile app. In the case of a Telstra Bigpond account, the server for both **incoming** and **outgoing** mail will be **mail.bigpond.com**. This will handle both the **POP3** (incoming) mail and **SMTP** (outgoing) mail. In the example illustrated, I have a Telstra Bigpond account (largely unused) as well as a Gmail account. For outgoing mail, either the Bigpond or Gmail server can be used. I am not restricted to relying upon one **SMTP** server for outgoing mail. In the case of Gmail, the **Incoming Mail Server** is **imap.gmail.com** and the **Outgoing Mail Server** is **smtp.gmail.com.** I can change these settings at anytime if required (if for example I change to another ISP or email service provider)

Mail -> Preferences -> Accounts

Add or Delete an SMTP Server

Gmail IMAP and POP

POP3 and IMAP

POP or **Post Office Protocol** is the older technology which to a large extent is being replaced by **IMAP**. However, both can and do co-exist. Google Mail or **Gmail** uses both, and you have the option to run both at the same time.

Email - Resources

Useful Resources

There are many email clients available for both desktop computers and mobile devices on all of the major platforms (**Apple**, **Windows** and **Linux**). Most are free. Wikipedia lists over 30 email clients (not all for standalone desktop usage). Some such as Novell GroupWise are for network hosting. The world of mobile devices such as the **iPad**, **Android** and **Windows** tablets offer some revamped versions of the usual email clients, plus a whole lot of new ones. Many apps for mobile devices are now utilising the **Emoji** pictorial language for electronic communications. That means lots of smiley faces and other emoticons

This wraps up a short tutorial on email from a slightly different perspective. There is no point in going into the makeup of email messages and other email basics, all of which can be read elsewhere in the **user guides** for specific email software. A good general resource for studying the basics is:

http://www.gcflearnfree.org/email101

Also, for **Apple Mail**, the Apple Support website has excellent resources:

http://www.apple.com/au/support/mac-apps/mail/

Summary

- POP3 - Incoming mail server for receiving email

- IMAP - 'Webmail' service such as Gmail, Hotmail or Yahoo! Mail

- SMTP - Outgoing mail server for sending email

- Email client such as MS Outlook, Apple Mail or Thunderbird

- Email account settings can be configured both on the client side and server side

- Gmail allows one to either enable or disable POP or IMAP

- POP accounts can be configured to retain copies of deleted emails on the server

- When changing service providers it is important to enter the correct information under

account settings for both incoming and outgoing mail on all desktop and mobile computers