# The Difference Between WebMail, IMAP Mail, and POP Mail

When setting up a new eMail account there is the question as to type; "Web-Mail", "POP", or "IMAP".

I will describe each type and list the pros and cons of each type.

**WEBMAIL**

Webmail is not really on your computer at all. It is on the mail server and works in conjunction with your web browser. It is similar to a web page. One might say the mail lives in the cloud… out there somewhere.

**Advantages:**

- Is very simple to use.

- No mail program and no set-up is required.

- May be accessed from any computer anywhere.

- The screen looks the same on every computer and acts as if it is installed on your system. You can manage your mail from anywhere, with any internet browser.

- It is a very easy system to use and ideal for those with limited, or no technical ability.

**Disadvantages:**

- The user is limited to features the web-mail site offers.

- Cannot be accessed if there is no Internet connection.

- Cannot be used off-line.

- If the mail server fails, you lose any messages or archives that have not been moved and stored to your local computer.

- Speed is limited by the speed of the users Internet connection.

**IMAP**

**Advantages:**

- The User uses his or her favorite mail program, of which there are many, some of the more popular being Thunderbird, Evolution, Outlook, Outlook Express, and Claws.

- Your personal mail program works with whatever features you have set up and the program supports. You might have a calendar, appointments and reminders, for example.

- The user can access the mail from any computer anywhere and still see the same mail, however the local features will depend on what mail program is being used on each computer.

- The mail resides on the server, all files remain on the server (same as web-mail). If your computer crashes, your mail is safe.

- While you cannot send or receive mail while off-line (no Internet service) you can work off-line to compose mail to be sent when the Internet connection is restored.

- Speed is not limited by your Internet connection speed, except during the actual sending or receiving of mail. Composing mail is on the computer being used, not the web server.

**Disadvantages:**

- If the Internet connection is unavailable, one cannot even see or read any mail at all.

- Since all mail stays on the server, if something happens to the server, you lose all of your archives and saved mail unless you have backed them up on your local computer. This is possible but very rarely done.

- If you use filters to identify SPAM and other unwanted mail, this can lead to conflicts and problems if you use more than one computer. If one computer says, for example, "this is SPAM, put it in the **Junk** folder" and another computer/mail program identifies the same message as SPAM and says to move the file to a **SPAM** folder, these conflicts (different folder names) can an have unintended consequences and cause problems.

IMAP is almost identical to Web-Mail but the difference is you run your own local mail program instead of the web-browser.

**POP**

Pop mail is a system where all mail is managed on your local computer. When you get your mail, it is transferred (downloaded) to your computer. The server is just where you get your mail, and how outgoing mail is sent. Your mail does not stay, or reside, on the server.

**Advantages:**

- Your local mail program and all features are customized by the user. The user has total control.

- Since the mail is on your local computer, if the server fails, you do not lose any mail.

- Since everything is on the local computer the user is able to work off-line and do everything except send and receive the actual mail, until the Internet connection is restored.

**Disadvantages:**

- The user must supply his or her own mail program.

- Mail is not shared between different computers so what is read on one computer, is not available on a different computer.

- If the users computer dies, or otherwise becomes inoperable, the user will lose all mail stored on that computer.

**Conclusions:**

### Which is best?

Keep in mind that one has to have a mail account in the first place, and that is not covered here.

There is no right or wrong answer, the decision is based on what works best for you. I would guess that the Web-Mail method is the most widely used.

**Web-Mail** requires nothing of the users, it just works when one goes to the web log on screen.

**IMAP** is the next most used method for email but it does require some set-up and requires a local mail program on the users computer. IMAP allows one to use their favorite mail program but leaves the mail and files on the server so they are available using web-mail from other computers.

**POP** is the least popular method. It is best if used on only one computer and all mail is stored on that computer. While POP does allow total control, in other ways it is limited to a single computer. POP mail is rather old-fashion and is not used much in this day where almost everybody access mail from several different computers (work computer, 2$^{nd}$ computer, laptop computer, tablet…) NOTE: depending on the configuration of the mail program, when downloaded it may, or may not, remove the mail from the server so other mail can still be managed with web-mail (configurable).  POP 'remembers' what mail has been downloaded but there is still a copy left on the server unless configured to remove it., but this can get confusing with managing the mail.

 Also understand that one does not need to have all the eggs in one basket… for example, if I do not leave my POP mail program running when away, I can use Web-mail from any computer anywhere and the mail will remain until such time as I return home and start using POP mail from my master computer again, then mail downloads to my local computer.

IMAP and Web-Mail differ only in the sense IMAP uses your mail program while web-mail uses your browser. With web-mail the user does not even need a local mail program at all.

In summation, if the user is going to be accessing mail from several computers (like work and home) then the Web-Mail is best suited.

If the user wants full control, use his or her own mail program, but is happy to leave the actual mail on the server, and operates from several computers, and also uses web-mail on some computers, than IMAP is best suited for this user.

If the user is a power user and wants full control of everything including storage of the mail files, uses custom filters, and works from one primary computer for mail, then POP may be the best choice.

One final note: Mail servers are generally very safe and stable, there is a much greater chance of failure of your computer than the Internet Server. Mail stored on-line is generally safer. On-line servers are regularly backed up, and while home computers should be backed up, few users ever do so.

One final note: Mail stored on-line *in theory* could be hacked more easily than if the mail file is on your computer and out of reach to the hackers, however that being said, on-line systems are normally very safe, and the mail is generally encrypted. Just remember that in theory, anything stored on the

Internet can be gotten to by someone, from anywhere in the world, anyone who can get past the security. Your home computer can be disconnected from the Internet (Air-Gap), or turned off, and nobody on the Internet can reach it. A home computer is very difficult to access from the outside world but under some conditions, it is 'possible'

**Mail Programs**

There are many mail programs but I will mention my favorite. I mention Thunderbird from Mozilla, the same people who give us the Firefox Web Browser. Thunderbird may be downloaded from <[https://www.thunderbird.net/en-US/](https://www.thunderbird.net/en-US/)>. As a side note. Firefox (similar to MS-Explorer, Chrome, Chromium, and others) is available for almost all operating systems and works and looks the same on all. I also highly recommend Firefox as your browser. Firefox is FREE, as are all browsers.

I recommend Thunderbird for several reasons; first and foremost, it is FREE. No catches, it is free and is available for almost any operating system, including Linux and Raspberry Pi computers, as well as Microsoft Windows and Apple systems. Thunderbird is very similar to the Microsoft Outlook program and supports mail, normal address book function, plus a Calendar with a To-Do list, Appointments and reminders. If you, like me, use several different computers and different operating systems, you can run Thunderbird Mail on all of them. One note: Firefox for the Raspberry Pi is 'Firefox-esr'. Available from the terminal screen, with the command line; '**sudo apt install firefox-esr**' No quotes and of course you must know the password (*) sudo, for which you will be prompted.

Thunderbird is quite easy to install and  configure. You tell it what mode you wish (POP or IMAP), give it your email address and password, and it will configure itself for that system. If you are installing on several computers, I recommend IMAP for all of the reasons mentioned on earlier pages. Do know that if you use the Calendar for reminders and such, it is only active on the computer where you created the calendar event, and only while the mail program is actually running. I also recommend a Linux program named "Evolution" for the Linux operating system. It is very similar to Microsoft Outlook, as is Thunderbird. Evolution and Thunderbird are hard to tell apart since they are so nearly identical. Evolution is Linux only but Thunderbird is available for nearly all operating systems.

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**Terms**:

**Server** – the computer where the actual mail account is located. This is on the Internet and operated by a company or organization. It 'serves' your mail and sends and receives the mail on the Internet. The server communicates with other servers to transfer mail.

**Local Computer**  (Client) – This is your computer, tablet or any device you use to access the Internet. The local computer is used to send and receive mail via the server. Your local mail program works ONLY with the server. If the server is down, you have no mail access at all.

**(\*) Sudo – (Linux only)** Sudo gives the user temporary root powers to bypass the security to install a program (or do something else requiring root privileges). The password is generally the user's own password, assuming the user is part of the sudo group. This only applies to the Linux operating system and almost all users are part of the sudo group. Groups, of which there are many, are assigned by the system administrator when the user is added to the system.