# CHOOSING AN EMAIL SERVICE

## That One Privacy Guy's - Guide to Choosing the Best Email Service (for you)

Disclaimer: The below guide is my opinion, which I will try to provide as many examples for and as much evidence as possible to support. I reference my Email Comparison Chart throughout much of this post, not so much for shameless self promotion, but because I believe it to be a solid resource to determine if an Email service meets your criteria and to assist you in deciding which is best for you. Much of this guide is relevant and therefore repeated in the other guides I have on That One Privacy Site. If you just want an ELI5, read the **bolded** segments throughout the guide for the highlights. If you want to go down the rabbit hole on this topic, read on, and buckle up - this is going to be long.

### TABLE OF CONTENTS

- I. INTRODUCTION
- II. A WORD ABOUT TRUST
- III. A WORD ABOUT EMAIL AFFILIATES

#### IV. IF YOU'RE CONCERNED WITH PRIVACY

- · A. MORE ON TRUST
- B. MORE ON AFFILIATES
- · C. JURISDICTION
- D. LOGGING
- E. PAYMENTS AND COMMUNICATION
- F. EMAIL BY ITS NATURE IS NOT SECURE OR PRIVATE
- G. FREE AND OPEN SOURCE SOFTWARE
- H. ENCRYPTION AND OTHER FEATURES
- · I. WEBSITES AND YOUR PRIVACY

### V. IF YOU'RE CONCERNED WITH SECURITY

#### VI. CLEARING UP MISCONCEPTIONS

## I. INTRODUCTION:

The following is intended to be a detailed guide to answer the question, "How do I choose the best Email service (for me)?" The reason this is a hard thing to help people with, is that their needs and level of technical knowledge vary greatly – there is no one perfect Email service, they all have at least some flaws and some will just flat out be better for different people.

I very well might have forgotten to add a section I intended to, said something that needs clarification, or was just sleepy when I wrote parts of this guide, so I intend to update and expand it as needed.

I'm assuming that if you're reading this far, you have at least SOME knowledge as to the basics of what Email is, so I won't cover that here.

## II. A WORD ABOUT TRUST

No matter what reason you want an Email service, you want to know that the service you choose is trustworthy and is not compromising your communications. Even if you're only concerned with the casual sending of messages or other non-privacy uses, keep reading. I'll get more into this in the "Privacy" section, but it's important for everyone to be exposed to it at least a little.

A preface regarding privacy and trust, from a Reddit thread I made a while back. This applies to every company, but I would suggest especially so for Email services.

We live in a society where privacy is undervalued and under assault daily. Some people eventually notice this and discover that they do value their own. They set out on a pilgrimage of sorts to educate themselves and learn about tools to help them protect it (as I did when I started my project). Because we depend on each other for direction and others to write software and run services to help keep us secure – TRUST AND TRANSPARENCY – are paramount.

However, transparency comes before trust.

#### III. A WORD ABOUT EMAIL AFFILIATES

You may have started your search for an Email service by looking for "Email service reviews" in your search engine of choice, if you had, you would have gotten page upon page of what seem to be harmless review sites, top 10 or blog style reviews of different Email services. You may even be coming here for confirmation of what you were told on those sites. The sites making these recommendations are, in *almost every* case, paid by the services they review and recommend. They are beginning their business relationship with you, with what essentially amounts to **a lie**. The technical term for this kind of marketing is "native advertising" and it's abuse is a huge problem in the Email service industry. (Link specifically referring to VPN affiliates, but it is every bit as relevant in the realm of Email services).

I purposefully made a point to capture this kind of data on my Email Comparison Chart. There you can find information on services that have affiliate programs, the specific policies they have for them and whether or not the affiliates act ethically, essentially what the services tolerate from those representing them, when it comes to persuading YOU to buy into the information they put out.

Note that not all affiliates *have* to be bad actors and simply *having* an affiliate program is not necessarily grounds for mistrust of an Email service, but rather when those services allow their resellers to generate referrals by hook or by crook. If you see a service appear over and over again on the kinds of sites mentioned above, there is a good chance they are making money from, and are perfectly okay with these kinds of deceptive practices as a part of their business model. They often will claim that it's just the affiliate doing this, and that they can't control what others do. This is false. Affiliates, like anyone entering into a business relationship with someone, agree to certain terms put forth by the service hiring them. If a company doesn't **expect** and **enforce** certain standards from their affiliates (not spamming, not breaking copyright, disclosing who they are, etc), they are approving these methods, and are not worthy of your trust. If they are willing to lie to you before you even buy into their service, the stage is set for them to be dishonest with you when you interact with them on a normal basis as a customer.

## IV. IF YOU'RE CONCERNED WITH PRIVACY

#### · a. More on Trust

As a lawyer represents your legal interests, an Email service (among others) represents your privacy interests. If a lawyer does something to violate your trust or is not honest about some aspect of their representation that could affect you, you would discard them and you'd be right to do so. Likewise with an Email service. There are many out there that are not worth your time or money. Unlike a lawyer, an Email service can be put together and promoted by anyone with access to a computer, the key difference being that you would never even see their face.

If you are looking for an Email service for privacy purposes, you already believe you cannot trust certain parties. Those parties might be big corporations who offer tempting free services but collect and analyze your communications, or maybe even an oppressive government whose unlawful surveillance is encroaching on your rights. You are being put in a position where you must rely on someone other than yourself for protection and the last thing you need is one more party that you can't trust.

This decision is an important one, and not just any Email service is worthy of that trust. You're trusting them to know what they're doing – to be able to operate a competent service that will protect your privacy. You are trusting them to be responsive to new technical and geopolitical threats to their operation. You're trusting them to be honest with you in the way they do business so that when you are shopping and comparing, you are getting accurate information.

#### • b. More on Affiliates

In the main section at the beginning of this guide, I talked about affiliate practices, so I will only briefly mention it here. **If you choose a company with an affiliate program, choose one that expects and enforces good behavior from their reselling partners.** You can usually read their affiliate terms on their site. If they are not publicly visible, they should respond with this information when asked. If not, or if they play games with you, look elsewhere. More information on affiliate policies and behavior can be found on my Email Comparison Chart.

#### • c. Jurisdiction

In the last few years, certain revelations have been made manifest regarding the mass surveillance programs of various countries around the globe. These countries are known as the five, nine, and fourteen eyes. These countries not only spy on their own citizens where they can get away with it, but they spy on each others, and swap notes to bypass governmental restrictions on power. If a service, or the people who run a service, is based in one of these countries, it's not unreasonable to expect that they may be susceptible to unlawful searches and compromises made in the name of national security. That said, if your threat model includes protection from such actions, choosing a company incorporated outside of these jurisdictions probably would not be adequate to protect you – as such actors have vast resources, and if singled out, you would need to worry about more than your Email service (by relying on other tools such as PGP, S/MIME, paying very close attention to your opsec, etc). Where the servers you're communicating through and the people who operate / have control of them are located are more important than where a company is incorporated, to protect yourself from government overreach.

Other countries are not part of the spy collaboration mentioned above, but still have issues with government limitations on internet freedom and free speech. **Avoid countries with limited internet freedom**. The degree of internet freedom a country has can also be found under "jurisdiction" on my sheet.

## · d. Logging

When you send communications through an Email service, you are not sending your message directly to your recipient, but are routing it through the service itself (similar to how a postal service processes mail before sending it out). The Email service is a "man in the middle" who you are trusting with your communication data and metadata. Some Email companies choose to log this data. There are many reasons for doing so, some more legitimate than others. Some services record this to protect themselves legally in the case they are approached by authorities. Some companies keep minimal connection logs to aid them in maintaining servers. Some will even sell your data to third parties as part of their business model. If your concern is privacy, you most likely do not want your browsing habits and connection data being recorded. **Choose a service that specifically states that they do not keep logs, AND which types they do not keep. Make sure they do not keep ANY kind of log.** Many services claim to not keep logs, but are vague, and upon closer inspection actually do keep certain types, so be wary of such promises until you've confirmed it for yourself in their respective terms and privacy policies.

## • e. Payments and Communication

Assuming privacy is your priority, when you go to pay for your Email service, there are many methods available, but only a few worth consideration. Services that offer the ability to pay by Crypto Currency, cash, or misc gift cards are the best way to ensure that you are kept as anonymous as possible. if these services require more personal information than an email address, look the other direction – this is information they're recording about you that may be used at best to sell to third parties, at worst to later identify you.

Some services offer a PGP key for additional privacy. This is a nice thing to have if you want to be able to communicate with them using encryption.

### • f. Email, by its nature, is not secure or private!

Unfortunately, "Email" was not designed with privacy or security in mind. However, it is a reality of the world we live in for the foreseeable future, which means we have to rely on additional layers of protection through other kinds of software and encryption. Below I will talk about using free and open source software and encryption to shore up its weaknesses.

## • g. Free and Open Source Software

Free and open source software is one of the most important trends in technology today. By allowing others to review code and systems used in our software platforms, we can help ensure that the transparency needed for a trust-based service is present. These systems can be independently audited by anyone with the inclination, which means malicious systems are less common and easier to root out. Specifically look for a service which builds their platform on free (as in freedom) and open source platforms AND makes visible both the server and client side software, to audit and review. This is one way that we can help ensure that our communications are being responsibly handled. As I said previously, transparency comes before trust.

## • h. Encryption and other Features

Around 1440 AD, the Printing Press was invented. It created a method for the common person to quickly disperse information, technologically reinforcing the natural right to freely speak and share information. More recently the internet allows billions to freely and openly share ideas and advance humanity. This reaffirmed the common person's rights in such a way that was difficult for governments or organizations to stifle. Similarly, until the invention of firearms, only those physically capable could defend themselves from those that wished to encroach on their rights, thus this technological advancement reinforced the individual's right to self defense. This brings us to Computerized Encryption. As with the other technological advancements mentioned above, Encryption provides a simple-to-use method that the average user can take advantage of to reinforce their right to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures.

There are many different kinds of Email encryption protocols that companies use to secure your message both while in transit and at rest on their services – some more secure than others. Certain protocols are proprietary and it is impossible to tell if it currently or sometime in the future may be compromised. Others are free and open source, and as such are freely available for security experts to audit and improve. The free availability of the source code helps to ensure that vulnerabilities are patched quickly and that individuals so inclined can see exactly how their software is working. **Choose an Email service that uses SSL encryption when sending and receiving messages. Avoid using other protocols unless you have a very good reason; specifically avoid proprietary solutions** as they are not suited for privacy.

Wherever possible, use encryption! (specifically OpenPGP or GnuPG) This is honestly another topic entirely which really needs its own guide, but there are lots of good resources for how to get started generating a key pair and learning more about its uses.

### · i. Websites and your Privacy

When you start to search for services and are browsing on their websites, there are some additional items you may want to consider. Speaking of trust and privacy – some companies will use tracking cookies to determine how to best serve you ads, which other sites you've been to, and some will even phone home with specific personal information. Best case, this is an abuse of power by companies stretching the limits of their ideas on how to gather this info, worst case, it can be used to intentionally violate your privacy and tie your device back to the site and activity performed on it. **Choose a company that respects your privacy enough to use few if any persistent or external tracking cookies**. If they are already violating your privacy the moment you visit their site, you have no assurance that they will take your privacy seriously after hiring them to represent your interests. Available for years, https allows websites to entirely encrypt all data sent and received with the user, effectively blocking out those that might try spying on such web traffic. **Choose a service that encrypts their website with an SSL Certificate**. Additionally, CloudFlare, Incapsula, and similar services have recently become popular with websites for their DDoS protection and dynamic bandwidth scaling. However, these services act as an additional man in the middle between your Email service's website and you. In the wrong hands, the information they collect and have access to about your Email service's website, and your interaction with it, could be compromised. **Avoid Email services that use CloudFlare, Incapsula, and other such services**.

#### V. IF YOU'RE CONCERNED WITH SECURITY

Many of the points made above are relevant to security as well as privacy, and I will point some out below.

Jurisdiction, specifically Enemies of the Internet are important to be aware of, to ensure an environment where laws are enforced and physical security that we take for granted in some parts of the world are applicable to the servers we communicate with. This also helps indicate that our service and the servers we connect to are located in places that respect internet freedom. This information can be found on the Comparison Chart and confirmed on Reporters Without Borders' Website.

SSL encryption should be used by your service for transit of your communications and some form of FOSS encryption should be used (OpenPGP, etc) when at rest on your service's servers. I prefer using my own client side encryption to secure my messages, in which case it is stored encrypted by default. Note that no encryption protocol is bulletproof and that YOU are your own weakest link with regards to security. There are myriad ways for your communications to be compromised outside of your encryption keys. Use caution and common sense.

#### VI. CLEARING UP MISCONCEPTIONS

Warrant Canaries – Some Email services maintain a document called a "Warrant Canary". This is a document put out and updated by them certifying that they have not been contacted by government agencies or coerced to compromise their user's data. In theory, if such an event occurred forcing them to compromise their principles, they would stop updating the canary, which in turn would indicate to users that their data is no longer private. Note that not all companies use effective warrant canaries. There is some debate as to the effectiveness of a warrant canary between experts to begin with – as force can be used by governments to coerce companies into maintaining them, thus nullifying their effectiveness. They are *usually* nothing more than marketing theater. If a company WAS operating a good canary, it would be almost impossible to tell. A warrant canary is almost a better feature to care about once you've found a trustworthy, capable service, rather than looking for a company that has one when shopping around.

I hope that this guide has been useful. Feel free to ask me if you have any questions – as usual you can contact me on using the contact info on the "contact" page of the site.

Written by That One Privacy Guy

If you like the project and find my work useful, please consider donating - your generous contributions help pay for the hosting, tools, and time I need to do my research and keep the data fresh.