

Evolutionary Genetics

LV 25600-01 | Lecture with exercises | 4KP

Good
Safety
Habits

Good
Safety
Habits

Rethink
Old
Habits

Break
Bad
Habits

Develop
Good
Habits



```
curl ipinfo.io
```

```
{
  "ip": "195.176.97.97",
  "hostname": "195-176-97-97.net4.ethz.ch",
  "city": "Zürich",
  "region": "Zurich",
  "country": "CH",
  "loc": "47.3667,8.5500",
  "org": "AS559 SWITCH",
  "postal": "8000",
  "timezone": "Europe/Zurich",
  "readme": "https://ipinfo.io/missingauth"
}%
```

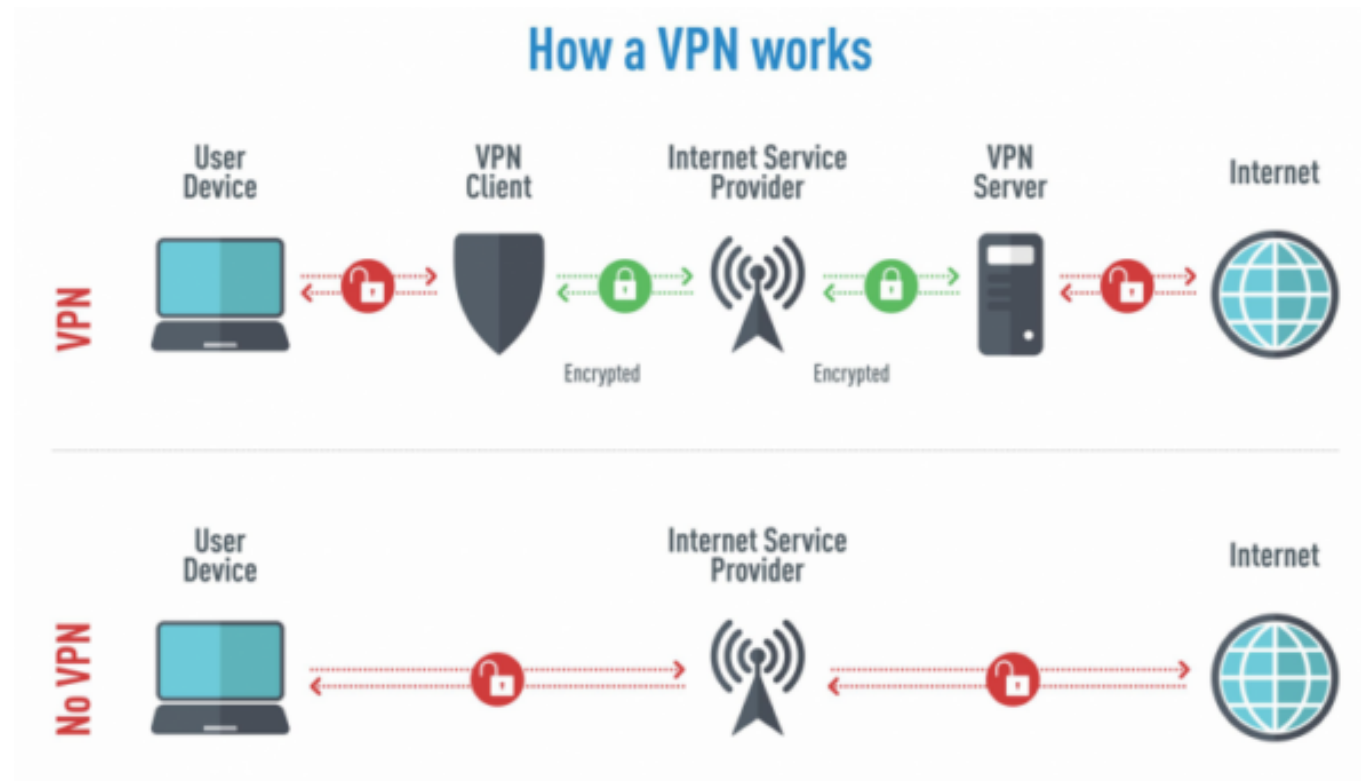


A VPN (Virtual Private Network) is a service that allows you to create a secure, encrypted connection between your device and an internet server. This connection shields your data from external monitoring or interception. VPNs are especially useful when using public or unsecured networks, as they provide a secure 'tunnel' for your internet traffic, protecting it from potential threats.

👉 [VPN Uni Basel](#)

👉 [Proton VPN](#)

Bioinformatics - Digital Safety



A VPN also helps protect your privacy by **masking your real IP address** and making it harder for websites, advertisers or other entities to track your browsing behaviour. Whether you're working remotely, accessing geo-restricted content, or just want extra privacy, everyone can benefit from the added security and anonymity that a VPN provides.



There are several benefits to using a VPN, with security and privacy being the most important. When you're connected through a VPN, your online activities are encrypted, making it much harder for hackers, malicious actors or even your ISP to access or track the data you're exchanging. While a VPN can help protect against some forms of cyber threat, such as snooping or man-in-the-middle attacks, **it's not a complete defence against phishing, malware or viruses**. Additional security measures such as anti-virus software are still needed.

Webcam Privacy Covers

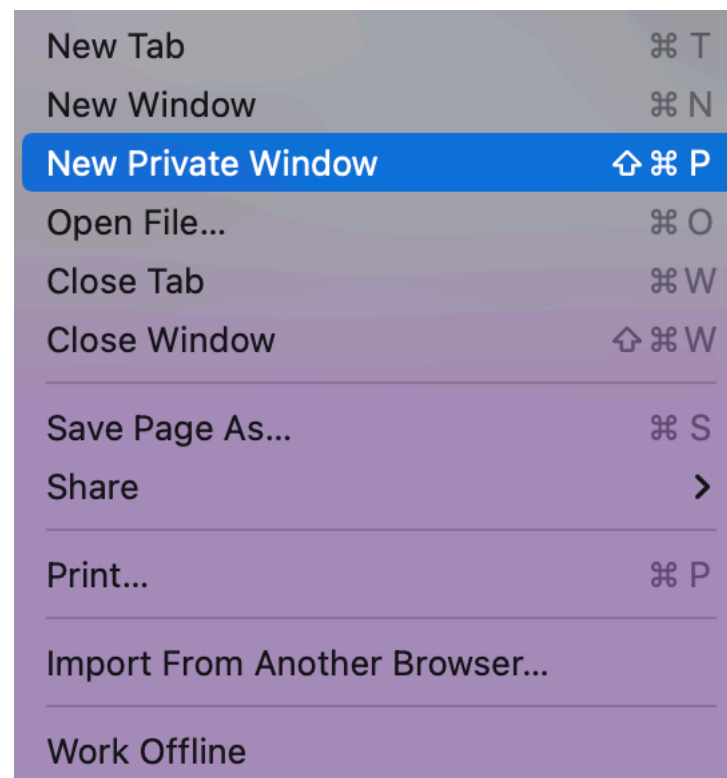


Webbrowser Safety



- Security settings
- Browser extensions
- VPN
- Incognito Mode

Change / Check Settings



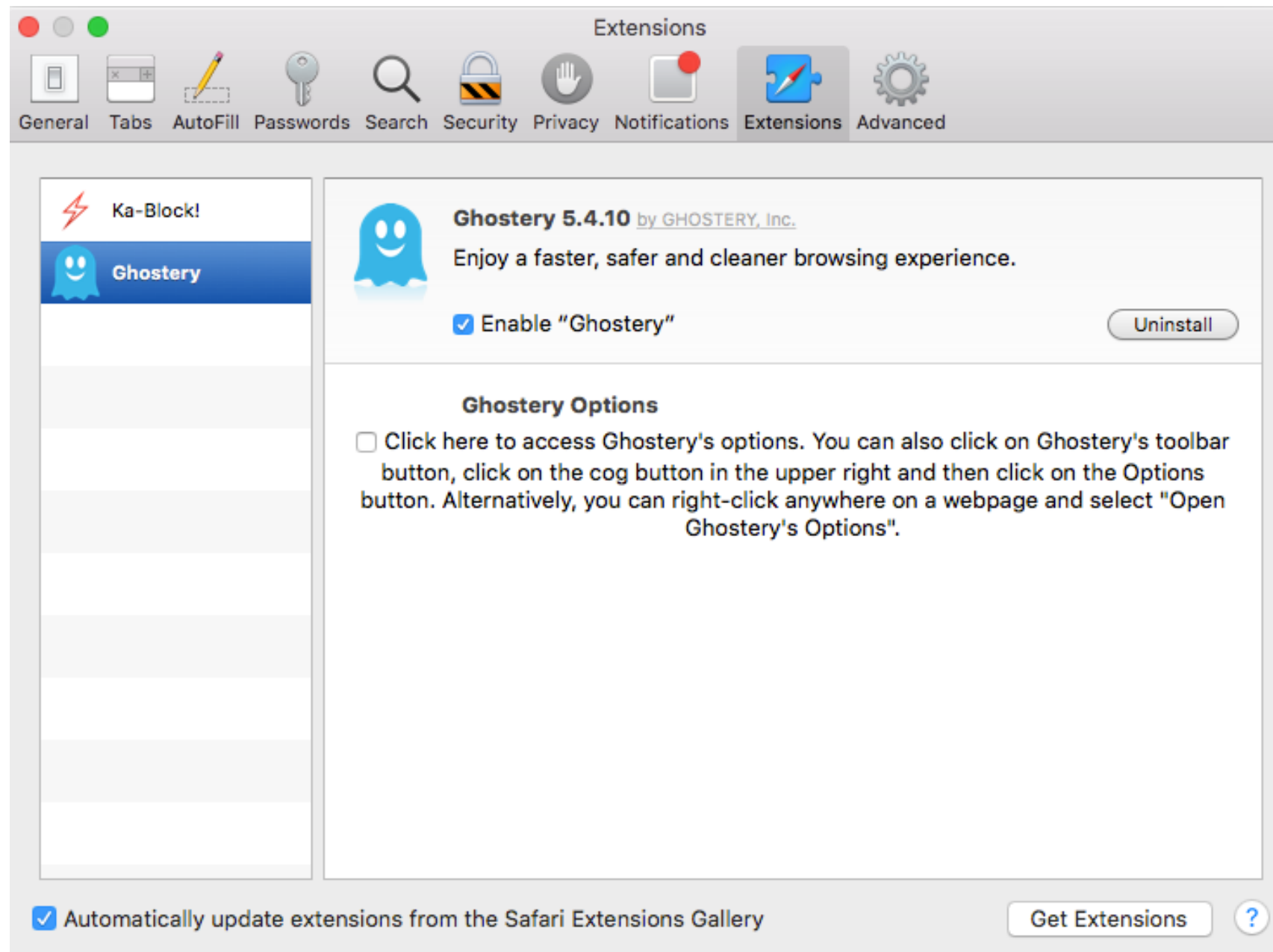
How to Enable **Private Browsing** on Any Web Browser



MATT KLEIN [@howtogeek](#)

UPDATED JUL 5, 2017, 11:35 AM EDT | 4 MIN READ

Consider Install Extensions



Privacy Browser

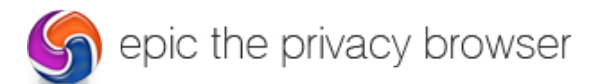
- Brave
- Epic Privacy Browser
- Comodo Dragon
- Tor



You are being tracked by:

Cookies
Evercookies
IP address
Flash cookies
HTML 5 storage
Fingerprinting
and much more ...

- ▶ Visiting the top 50 websites will install over 3,000 tracking files on your computer.
- ▶ Over 80% of websites use one or more tracking tools.
- ▶ The average number of tracking tools is six per website. Bigger websites can have up to 20 trackers.





Cookie

Website/Name	^	Name	Path	Secure	Expires	Contents	Type	Browser
▼ 20min.ch (10) (2)								
.20min.ch		FPLC	/	NO	27.09.23, 05:48	<ENCRYPTED>	Cookie	Brave
.20min.ch		OptanonConsent	/	NO	03.10.23, 09:48	<ENCRYPTED>	Cookie	Brave
.20min.ch		_dc_gtm_UA-516...	/	NO	26.09.23, 09:49	<ENCRYPTED>	Cookie	Brave
.20min.ch		<u>_ga</u>	/	NO	03.10.23, 09:48	<ENCRYPTED>	Cookie	Brave
.20min.ch		_gcl_au	/	NO	03.10.23, 09:48	<ENCRYPTED>	Cookie	Brave
.20min.ch		_gid	/	NO	27.09.23, 09:48	<ENCRYPTED>	Cookie	Brave
.20min.ch		fpid	/	NO	03.10.23, 09:48	<ENCRYPTED>	Cookie	Brave
.20min.ch		FPID	/	NO	24.03.24, 08:49	<ENCRYPTED>	Cookie	Brave
.20min.ch		<u>_ga_85DW9RPHKP</u>	/	NO	03.10.23, 09:49	<ENCRYPTED>	Cookie	Brave
www.20min.ch		_dd_s	/	NO	26.09.23, 10:04	<ENCRYPTED>	Cookie	Brave

Scan date: 27.09.2023

cookie
database.org

<https://berthub.eu/articles/posts/tracker-beeper/>

<https://github.com/berthubert/googerteller>



JULIA EVANS
@b0rk

life of a DNS query



"The Domain Name System (DNS) is one of the most significant internet services in use, allowing us to see content, send emails and even access our social media. Without DNS we simply wouldn't be able to browse the internet. And DNS servers are the ones that help us resolve hostnames into IP (Internet Protocol) addresses and manage and process DNS requests from clients."

Internet Service Providers (ISPs) generally offer DNS services to their users, so when you don't set up DNS servers on your computer or router, your DNS queries will run on your ISP's DNS servers. **Using default ISP DNS servers can result in certain problems while browsing the internet: security, privacy and speed.**

Quad9

There are several free DNS providers with useful features. My favourite is **Quad9 DNS**, which has been active since 2016. Since then, it has earned a reputation as one of the best DNS providers thanks to the security and speed it offers users. Quad9 automatically blocks access to malicious and suspicious domains, providing an extra layer of security. It enhances protection by using threat intelligence from 19 different companies, including IBM's X-Force.

By using a public DNS server like Quad9, you benefit from enhanced protection against cyber threats, improved privacy, faster internet browsing, and the ability to bypass potential ISP limitations. It's a simple but effective way to safeguard your online activity while maintaining performance.

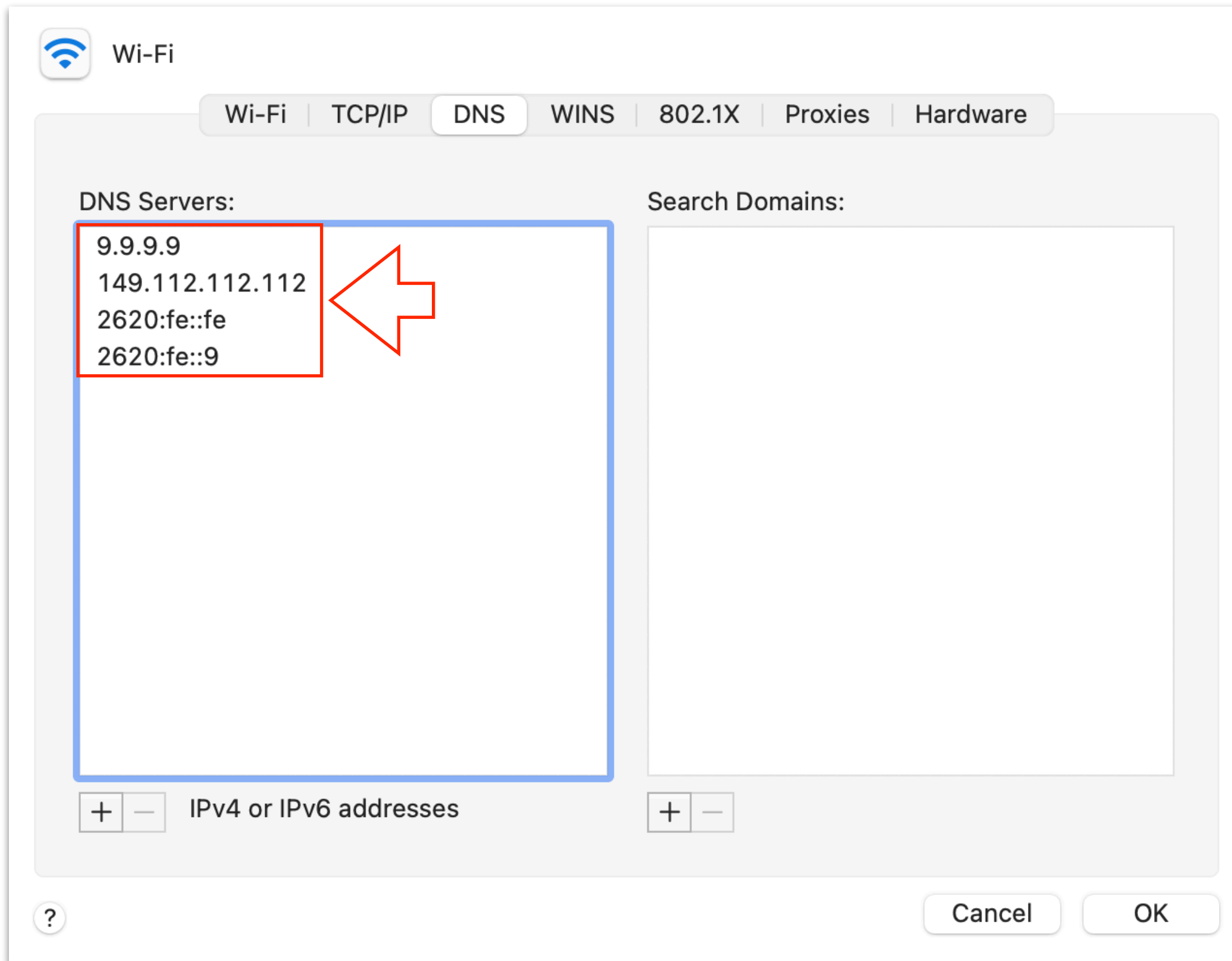
Enhanced Security - Quad9 offers DNS filtering that automatically blocks access to known malicious websites. These include domains associated with phishing, malware, ransomware, and other cyber threats. The service uses threat intelligence from multiple cybersecurity sources (including IBM's X-Force) to identify these domains and prevent your device from connecting to them, reducing the risk of infection or data breaches.

Improved Privacy - Unlike many Internet Service Providers (ISPs) that track and log DNS queries, some public DNS servers, including Quad9, offer privacy protections by not retaining user-identifiable data. This means your browsing habits and DNS requests are not logged or sold to third parties, helping you maintain greater anonymity online.

Reliability and Performance - Public DNS services like Quad9 are typically faster and more reliable than the DNS servers provided by many ISPs. With a global network of DNS servers, public DNS providers can offer quicker query responses and reduce the chance of service outages. This leads to a faster and more consistent browsing experience.

Bypass ISP Restrictions - Some ISPs may block access to certain websites or throttle DNS performance. Using a public DNS server can bypass such restrictions and provide uncensored access to the web. It also ensures that you aren't limited by your ISP's DNS performance, giving you more control over your internet connection.

Global Threat Intelligence - Quad9 leverages security intelligence from a consortium of sources (19 security companies), giving it a broader perspective on emerging threats than a typical ISP's DNS service. This helps keep the DNS service up to date with the latest threat information, ensuring you're protected against newly discovered malicious domains.





Document **metadata** is data stored inside a document that provides information about the authorship, editing time, and even the computer on which the document was created.



Metadata is essential for most data formats. You can't render a JPEG, send an email, or visit a web site without metadata. Metadata could be used for surveillance purposes, but it also has many common everyday purposes. **Metadata is not scary.**

- Avoid sharing original documents.
- Control or remove personal information.
- Consider striping metadata from documents.

Too tedious?

At least you should remove the **signature**
and the **logo** from the original document(s).