



DOH! DNS over HTTPS



Raimonds Liepiņš,
Technical Expert



About Lin Clark

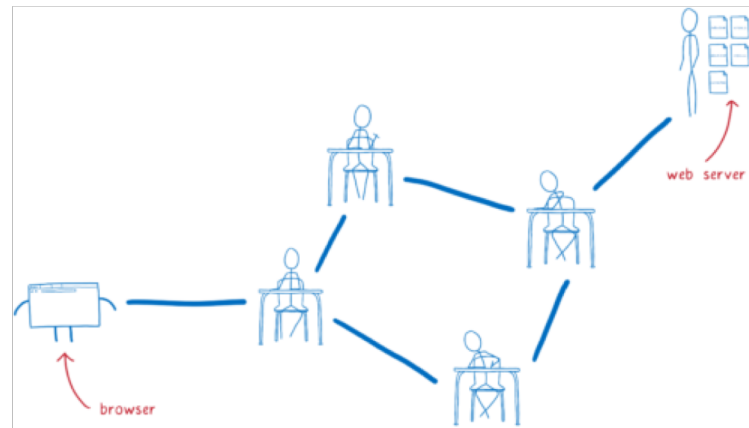
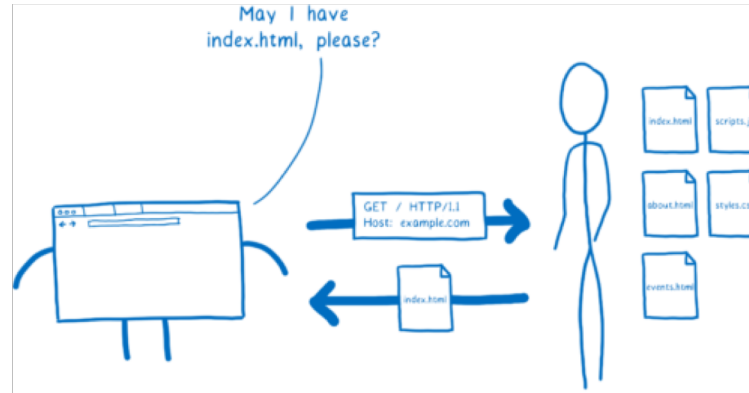
Lin is an engineer on the Mozilla Developer Relations team. She tinkers with JavaScript, WebAssembly, Rust, and Servo, and also draws code cartoons.

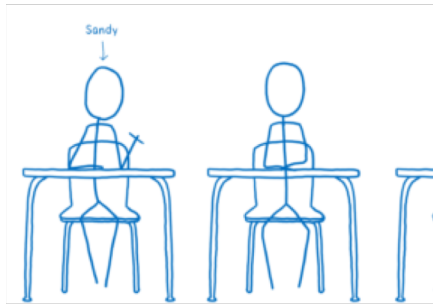
 code-cartoons.com

 [@linclark](https://twitter.com/linclark)

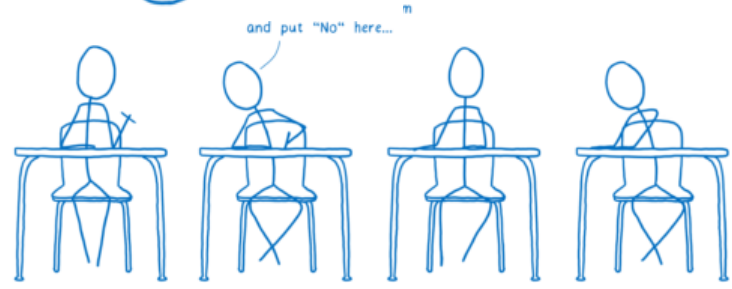
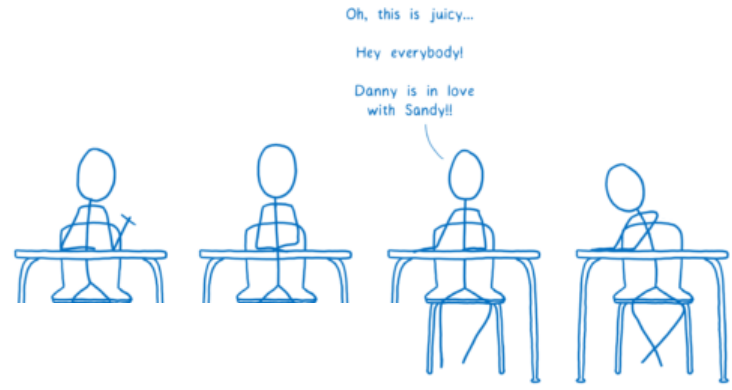


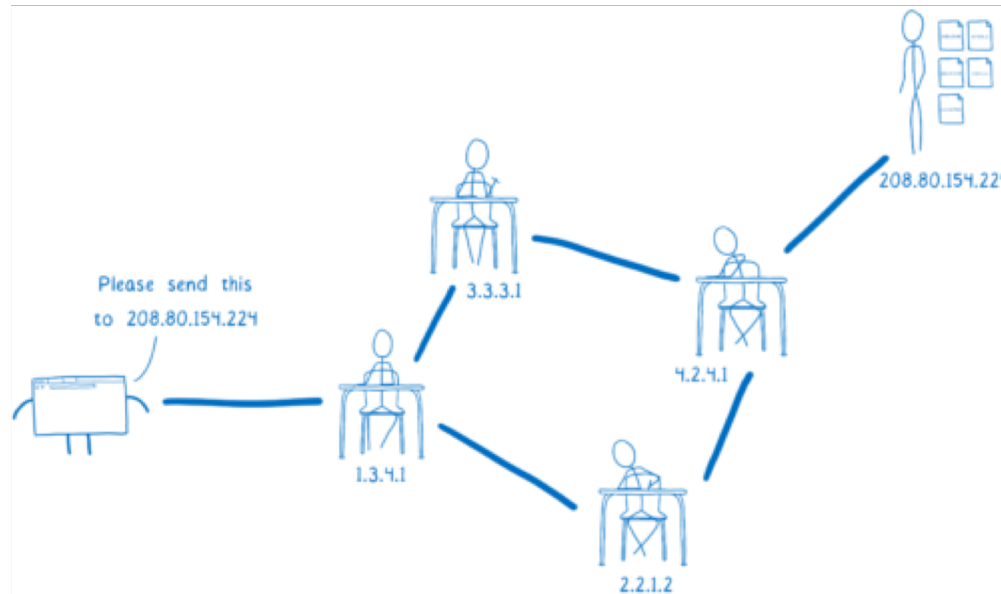
- How the Internet works
- Problems with the current model
- TRR and DOH to stop the exploitation of DNS





vs.

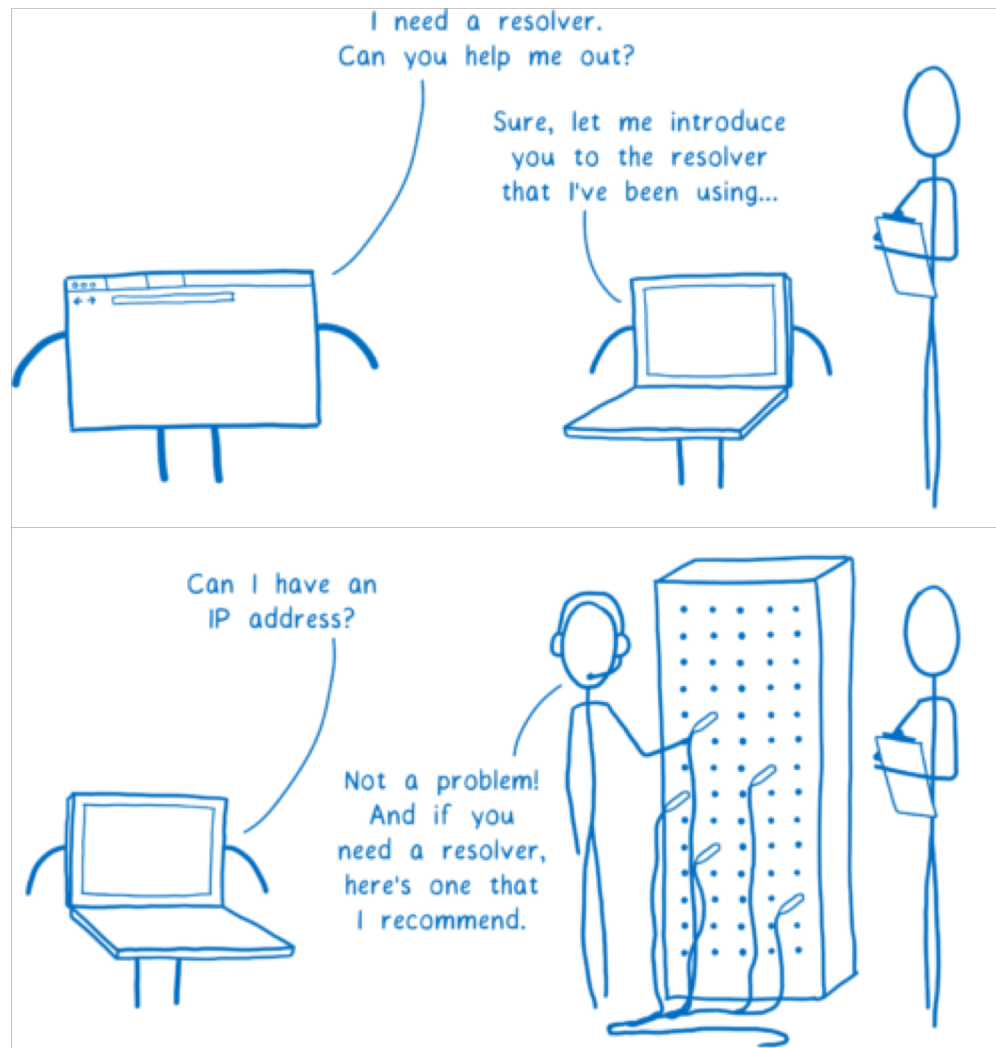




en.wikipedia.org = 208.80.154.224

subdomain second level domain top-level domain

en.wikipedia.org



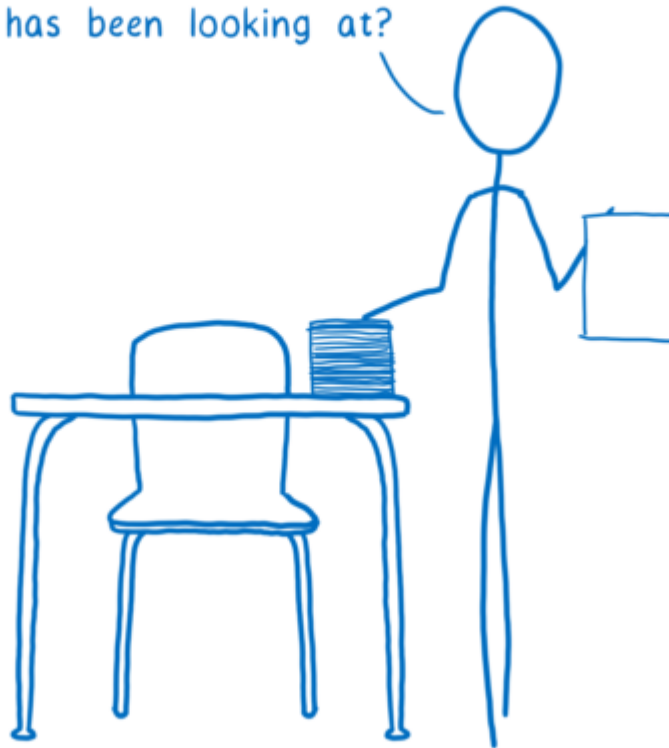


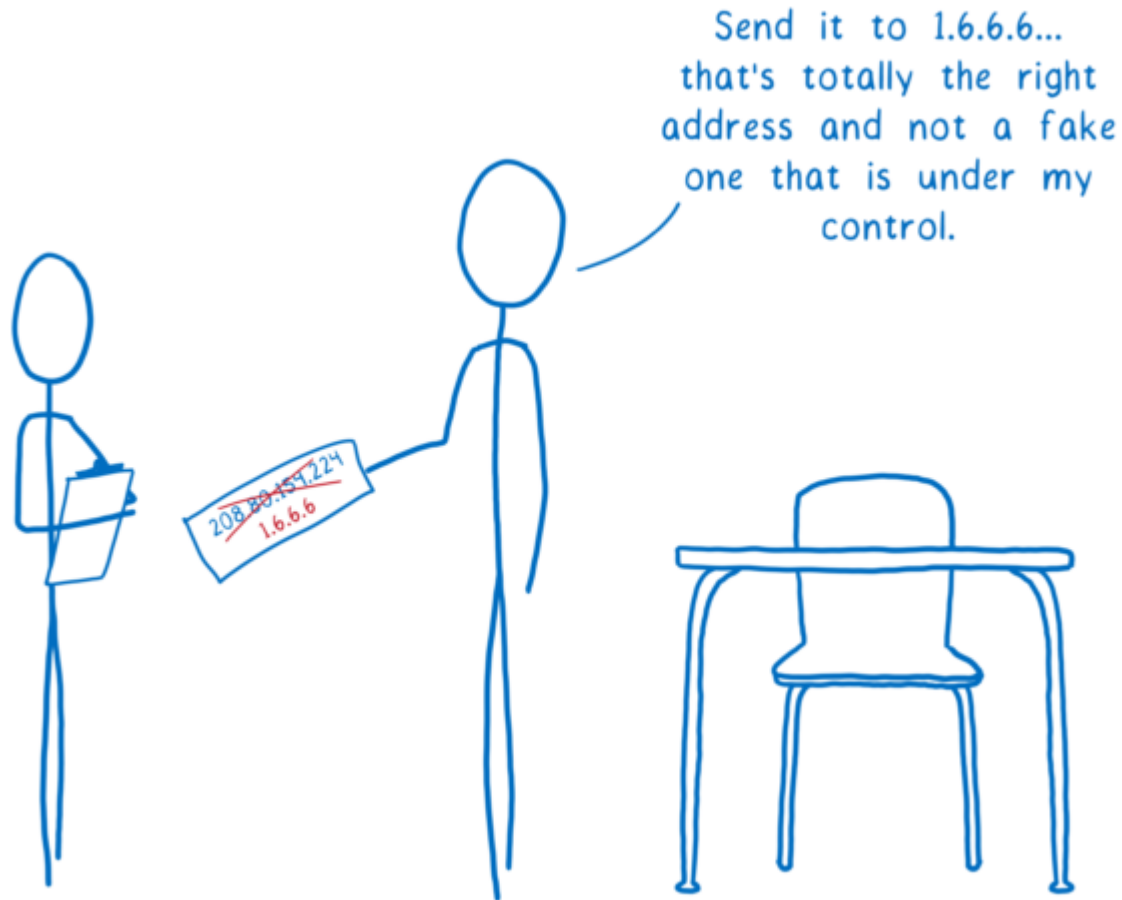
Privacy

Security

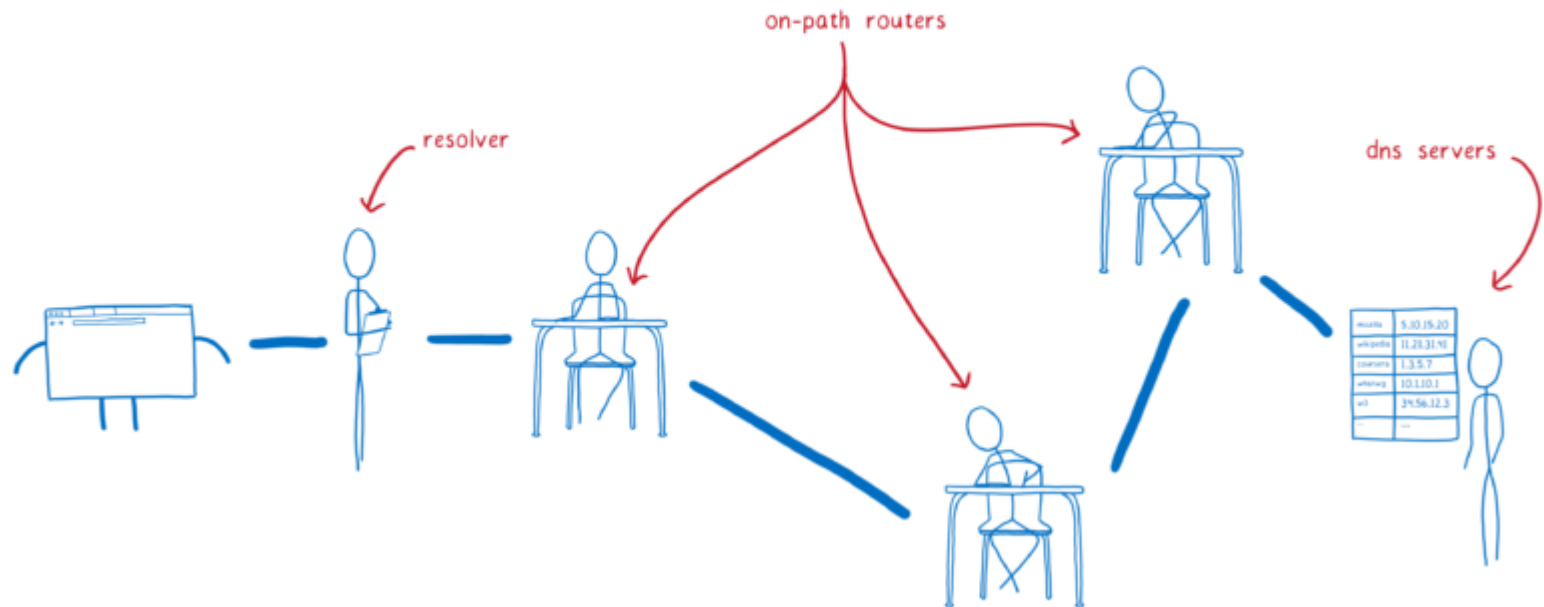


How much money are
you willing to spend
to see what Jane Doe
has been looking at?





POTENTIAL THREATS



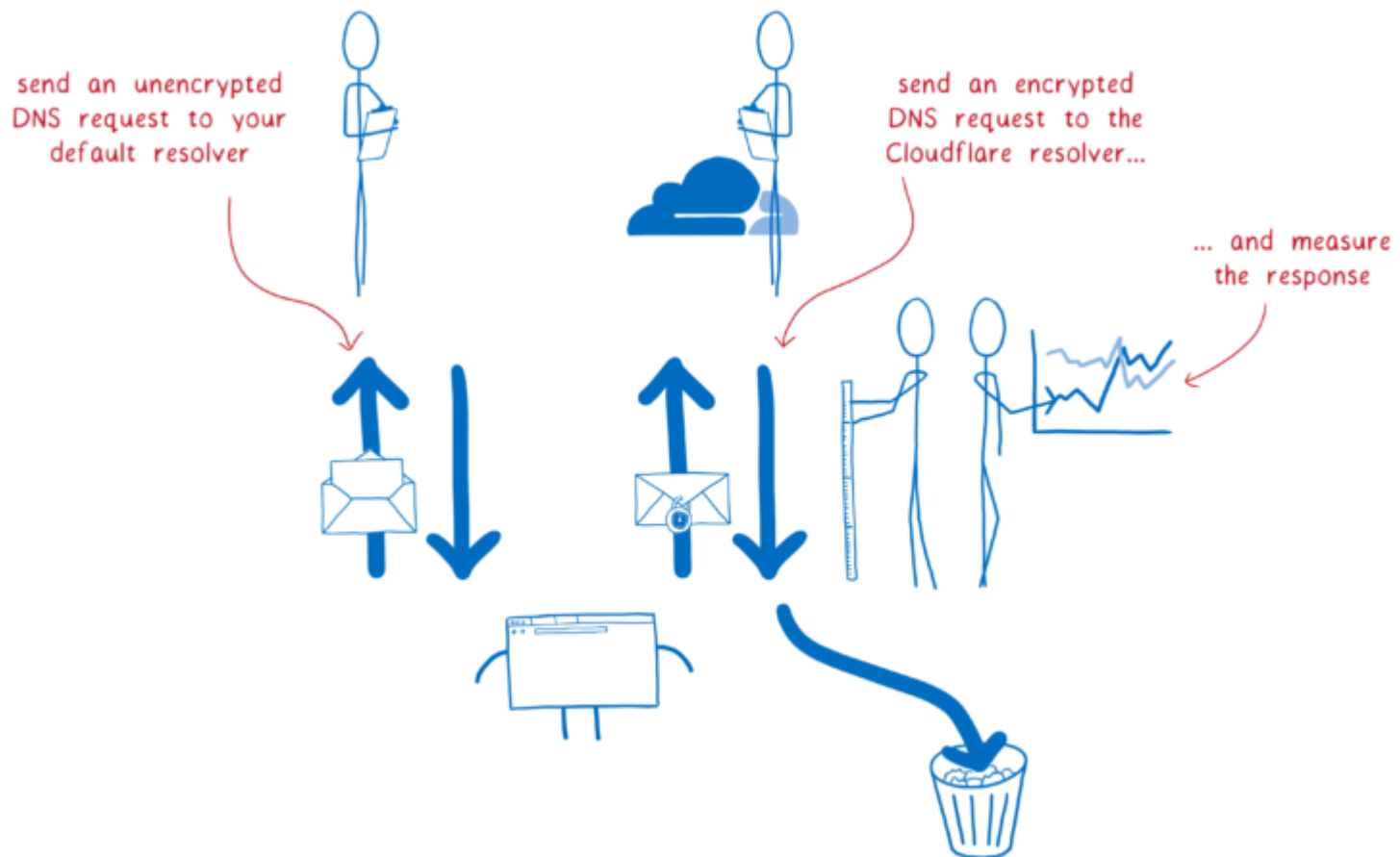


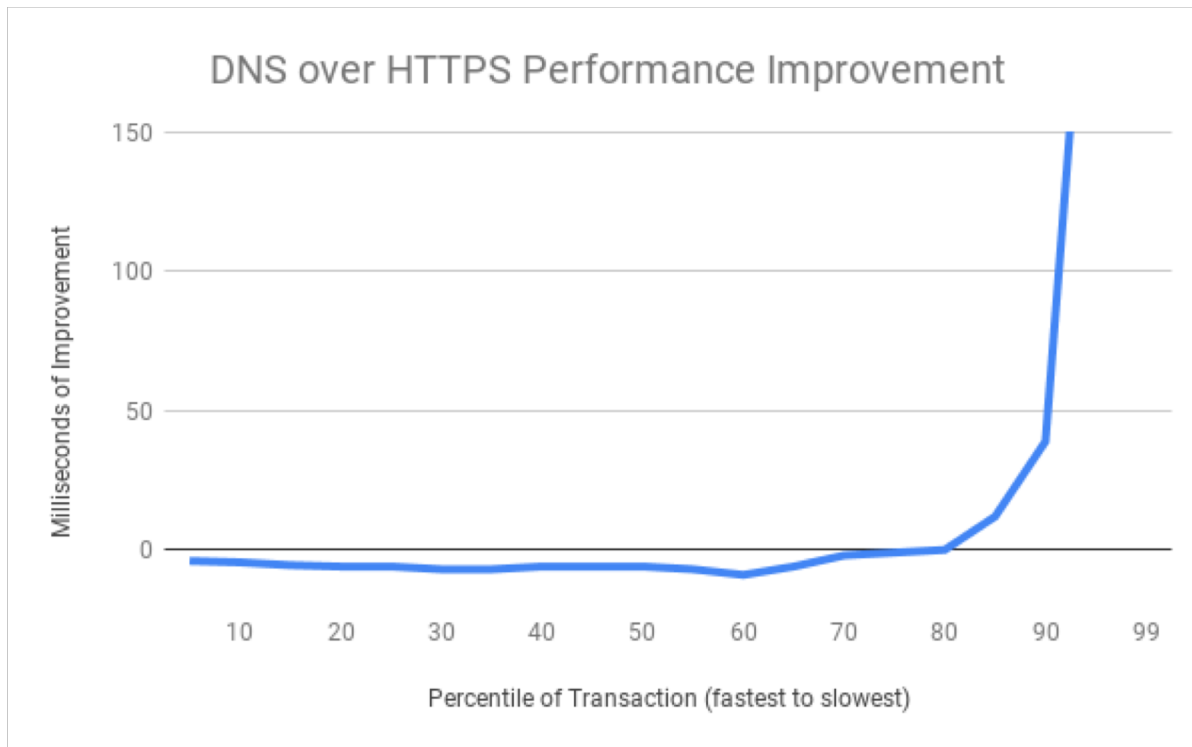
Trusted Recursive Resolver





DNS over HTTPS







about:config

← → ↻ 🏠 Nightly about:config

Search: 🔍 network.trr

Preference Name	Value	Status	Type
network.trr.allow-rfc1918	false	default	boolean
network.trr.blacklist-duration	259200	default	integer
network.trr.bootstrapAddress		default	string
network.trr.confirmationNS	example.com	default	string
network.trr.credentials		default	string
network.trr.early-AAAA	false	default	boolean
network.trr.mode	2	modified	integer
network.trr.request-timeout	3000	default	integer
network.trr.uri	https://dns.cloudflare.com/well-known/dns	modified	string
network.trr.useGET	false	default	boolean
network.trr.wait-for-portal	true	default	boolean



Why should I be
excited?



Any issues with
this?



What about attackers
exploiting DNS
encryption?



References

- <https://dnsprivacy.org/wiki/>
- <https://tools.ietf.org/html/draft-hoffman-resolver-associated-doh-01>
- <https://blog.nightly.mozilla.org/2018/08/28/firefox-nightly-secure-dns-experimental-results/>
- <https://hacks.mozilla.org/2018/05/a-cartoon-intro-to-dns-over-https/>



Q&A

