

SUBJECT: Input on DoH

FROM: "Penris, SJ (Bas)" <[REDACTED]>

TO: "[REDACTED]" <[REDACTED]>

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L.S.,

We've been following the gradual rollout of DoH and we are absolutely stumped that Mozilla has jumped and think it's an absolutely terrible idea.

- The addition of all the HTTP headers and information to DNS queries and having them sit with just providers is a giant privacy issue because it enables continuous tracking of end users. More than that our local laws do not apply to these US tech giants. If I fly to Teheran the US authorities can eavesdrop on me if I use DoH for example, which is impossible with unencrypted DNS or DNSoverTLS.
- We agree that DNS needs to be encrypted, but we want the current standard to be encrypted and in no way should a browser ever make a choice for a user about this. Your argument will be wrong because you currently give your users a choice, i.e. you ask them if it's okay.
- I don't think I have to explain to you that users do not understand the question you ask them, when they're unable to make a proper and informed choice. This also doesn't excuse the fact that in a world where DoH will just be turned on without this question being asked, as this is the way things work and that is a depressing reality.
- We provide corporate VPN services with split DNS to many thousands of users, which will be greatly impacted by this.
- DNS resolving is ***not*** a task of the browser but of the operating system.
- Your TRR programme is far too restrictive and blocks smaller DNS providers from participating in a market you require insight into all information requests done on DoH which in many jurisdictions like The Netherlands is illegal. This is anti-competitive and shuts down innovation that normally comes from small new entrants who solidifies the market for the giants without the opportunity to ever open it up again.
- Lastly, you argue that we, corporate network admins, have the possibility to control access using DNS over HTTPS as per <https://support.mozilla.org/en-US/kb/configuring-networks-disable-dns-over-https>, but I don't see a good mechanism as it is a client application configuration setting and not an actual policy that forces browsers in the same way that we're used to. It's not transparent and the wrong way to address this. As there is no DoH in the US, what is stopping all major providers from just implementing this so they can keep hijacking queries? This means that your entire reasoning is fallacious.

I will now answer the questions from the PDF:

Privacy and Security

- 1. No user information should ever be retained or stored**
- 2. Again: There is no reason for DNS servers which aren't mine to store any user data**
- 3. Your TRR program has a wrong design to begin with, so no, there are no considerations until your program.**
- 4. These requirements are broken by design and therefore the question is invalid**

Online Safety

- 1. It's not a workable requirement. In our situation for example, we have no legal obligation to block pornography or known sites that spread malware. As we're a giant institution for secondary education we do block a certain minimum. Your proposal will decrease security and increase threats to our network**
- 2. Not relevant in our situation, we don't have any issues as it's working as designed and it's not a country faces to begin with**
- 3. Decrypting all traffic at the firewall level and inspecting it, which we do not want to do**
- 4. You can never ensure this as for example the US could easily pass a law that would require non-encrypted operation like this and no one would know**

are the US President and his AG Bill Barr, who considers the office of the president to be Omnipotent. Any regard for basic democratic and judicial principles.

2. There is no exploitation of DNS here.
3. There should not be a push for DoH period.
4. **No, as DoH will expose more of the user's information to certain parties than a simple and traditional query**
5. **Corporate VPNs with split DNS but again, I don't want a browser in control of resolving, that is the definition and end of discussion.**

Honestly, if you want to protect people that live under certain regimes, offer them free or heavily discounted services but this does not solve any problems, it will just create dozens more for IT admins. Google's hesitated to do it out in Chrome, which is clearly due to them currently being investigated in multiple territories in anticipation of a major red flag to Mozilla. All efforts on DoH should be dropped ***immediately*** and attention should be on DoTLS.

Met vriendelijke groet,

Bas Penris

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