

draft-ietf-doh-dns-over-https-01

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Pre-history (before WG)

- Crowded Bar BOF at IETF 97 in Seoul
- Discussion happened on the “dnsoverhttp” list
- draft-hoffman-dns-over-https-00 published in May
- -01 published in June based on active input from a handful of HTTP folks and a few DNS folks
- Dispatched at IETF 99 in Prague

Recent history

- **WG was formed** and draft-hoffman-dns-over-https adopted as draft-ietf-doh-dns-over-https-00
- -01 published Oct 30
 - capture editorial issues
 - add placeholders to the Security Considerations for things from the WG charter
- **6 Month sprint – Submit specification** for performing DNS queries over HTTPS to [..]IESG [..] as PS

Current Issue Summary

- HTTP/2 Interaction: #3, #11, #12
- HTTP Cache Interaction: #13, #14, #15
- Possibly Editorial: #7, #9, #16, #18

Two Issues Worth Face to Face Time

Issue #11 - Require \geq HTTP/2 ?

Section 7 currently requires 7540 or successors

PRO

1. Need to satisfy out of order responses; HTTP/1 parallelism is not adequate
2. Priority and Multiplexing may be necessary for large responses
3. OK to require Best Practices for new features as a carrot
4. Header overhead mitigation of HTTP/2 may be necessary

CON

1. Enforcement is impractical (javascript, MITM, etc..) and fragile
2. Rely on only semantics of HTTP to get its full benefit. (i.e. layering)
3. Requiring Best Practices is an anchor around the neck of DoH

Options: Requirement, Silence, or Endorse with Explanation

Issues #13, #14, #15 - Re: HTTP Caching

- Issue #13 - HTTP freshness lifetime SHOULD be shortest TTL of the response set.
 - * Recommend MUST NOT be more than the shortest TTL of the response set. (reflected in Editor's Copy)
- Issue #14 - Caching model - do we need a specific one? What are the implications for wasted layers in the DNS Cache -> HTTP Cache -> DNS Cache scenario?
- Issue #15 - The draft discourages HTTP revalidation. Is this position worthwhile given the relative costs and typical DNS implementations.