

# Centralised DNS over HTTPS (DoH) Implementation Issues and Risks

## DNS over HTTPS (DoH) Considerations for Operator Networks

draft-livingood-doh-implementation-risks-issues

- DOH Working Group
- IETF 104
- March 2019

draft-reid-doh-operator

# draft-livingood-doh-implementation-risks- issues

- One key point is consolidation/centralisation issues
  - Stability, security, and privacy
  - Impact on DNS software diversity & related risks
- Does the IETF want to discuss this?
  - If so, where? Is it in-charter for the DoH WG?

# draft-livingood-doh-implementation-risks- issues

- The other key points are the operational issues arising from DoH:
  - Effects on security threat visibility, parental controls, content controls, split DNS, enterprise data leaks, nation-level legal mandates, captive portals
  - Performance, scaling, and troubleshooting issues
- Does the IETF want to discuss this?
  - If so, where? Is it in-charter for the DoH WG?



# draft-reid-doh-operator

- Intent is simply to document the problems/issues in operator networks once DoH is widely used
  - It's **NOT** about DNS blocking
- Does the IETF want to help define a problem statement, document use cases, etc?
  - If so, where? Is it in-charter for the DoH WG?

# Privacy Aspects

- Key privacy issue in the drafts is common to both documents
  - DoH queries going to third-party DoH resolvers with unknown/unclear privacy policies
- Does the IETF want to discuss this?
  - If so, where? It's in-charter for the DoH WG.

# Open Questions for WG

- Are the issues listed in the two drafts valid/reasonable and in scope for the WG?
- Does the WG want to work on them?
  - If yes, further work or major surgery may be needed
  - If no, what, if anything, needs to be done to make the I-D WG compatible?
- Should some topics go to another WG? Which one(s)?



# DoH WG Future

- Two drafts explore potential operational issues
- Maybe inappropriate for an ART area WG
  - Move WG to OPS area?
  - Recharter?
  - New WG?
  - Have an existing WG pick up the work?