DoH BCP

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DoH BCP – the rationale

• Is there consensus that:

  1. the DoH protocol creates technical challenges for operators / providers intending to deploy DoH (and DoT) resolvers?

  2. the IETF should consider developing a BCP which documents these concerns and provides appropriate guidance?
DoH BCP – potential topics

• How operator and enterprise networks can offer local DoH (and DoT) servers?
• How operator and enterprise DoH servers can be used across home, mobile and enterprise (BYOD) networks?
• Network & server performance, load testing, capacity & resilience planning
• Impact on existing infrastructure – load balancers, captive portals, NAT, proxies, CDNs, etc.
• Impact to CPE – connection set-up and DoH (and DoT) proxies and certificates
• Providing DoH and DoT servers in split DNS environments
• Interactions between applications and OS / Kernel DNS settings
• How DoH clients will handle policy negotiation with servers and manage conflicts
• Protection of application-specific DoH and DoT resolver configuration
• Authentication requirements for DOH and DoT resolvers
• Management of TLS sessions at DNS query rates – ticket duration, restarts, etc.
• Options to minimise TLS overheads for DoT and DoH traffic
DoH BCP – potential next steps

• Who’s willing to work within ADD to:
  1. Identify subset items that all sides need agree further work/guidelines?
  2. Check any overlap with DPRIVE, DNS Ops, DoH working groups?
  3. Draft up BCP content