

DoH and DoT at Cambridge

Tony Finch

<dot@dotat.at>

<fanf2@cam.ac.uk>

DNS-OARC October 2018



Implementation – doh101

`https://github.com/fanf2/doh101`

- OpenResty
 - NGINX
 - LuaJIT
- DoT – NGINX TLS proxy
- DoH – Lua
- Ansible install scripts

Statistics

- 29,000 – 31,000 WiFi devices
- 3900 qps on recursive servers
- 15 concurrent DoT clients (s.d. 4)
- 7 qps DoT (s.d. 5 qps)
- 5 second TCP idle timeout
- 6.3 second mean DoT connection time (s.d. 4s)
- 1.5 queries per connection
 - very skewed distributions!