

DoHoT or Donion aka “DoHoT 2 Handle”

Performance of Anonymous DNS Queries

Jonathan, Tom, Tor, Alfred

Introduction

- ❖ Anonymous Queries
- ❖ Proxy between Client and Resolver
 - ❖ Oblivious DNS
 - ❖ Oblivious DNS-over-HTTPS (ODoH)
 - ❖ DNS-over-HTTPS-over-Tor (DoHoT)

Protocols

Default DoHoT: Client → Entry → Middle → Exit → DoH Resolver

Idea 1: Client → Nearby Entry → Nearby Exit → DoH/DoT Resolver

Idea 2: Client → Nearby Entry → Nearby Exit Resolver

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|------------------------|------------------------|
| ❖ Normal DNS (Do53) | ❖ DNS-over-Tor (DoTor) |
| ❖ DNS-over-HTTPS (DoH) | ❖ DoH-over-Tor (DoHoT) |
| ❖ DNS-over-TLS (DoT) | ❖ DoT-over-Tor (DoToT) |

Measurement

A single unique query via each protocol X times: `DNSHACKATHON- $\{random\}$.se`

TODO: Graph

Artifacts

<https://github.com/DNS-Hackathon/DoHot-or-Donion>

- ❖ Docker Containers for Protocols
- ❖ Performance Measurement Interface