DoHoT or Donion aka “DoHoT 2 Handle”

Performance of Anonymous DNS Queries

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Introduction

Anonymous Queries

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

Goal: change configurations and compare performance

- Identify parameters
- Create containers for protocols
- Measure latency

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

- Normal DNS (Do53)
- DNS-over-HTTPS (DoH)
- DNS-over-TLS (DoT)
- ~~DNS-over-Tor (DoTor)~~
- DoH-over-Tor (DoHoT)
- 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