

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: `DNSHACKATHON- $\{random\}$.se`

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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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- ❖ DNS-over-HTTPS (DoH)
- ❖ DNS-over-TLS (DoT)

- ❖ DNS-over-Tor (DoTor)
- ❖ DoH-over-Tor (DoHoT)
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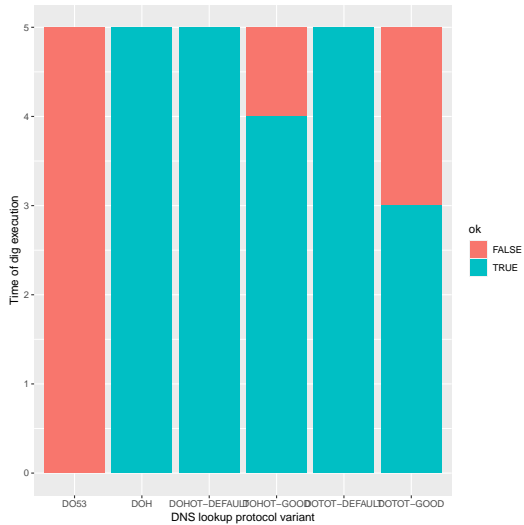
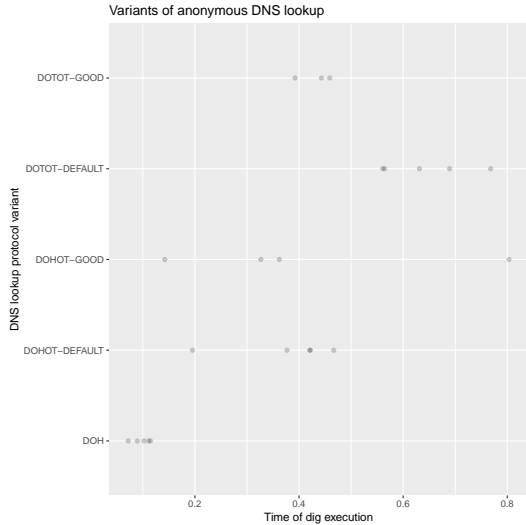
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Measurement



Artifacts

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

- ❖ Docker Containers for Protocols
- ❖ Performance Measurement Interface