

DNS Hackathon 2025 Report

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RIPE 90 :: May 2025 :: Lisbon, PT

Actively seeking opportunities; Available immediately; Ready to contribute :: mail@denesh.uk

gratitude :: hosts



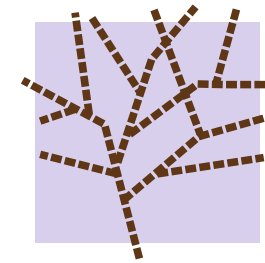
**RIPE
NCC**

RIPE NETWORK
COORDINATION
CENTRE

Vesna
Manojlovic



Johanna
Eriksson



DNS-OARC

Denesh
Bhabuta

gratitude :: host helpers



Jerry
Lundström

Mattias
Ahnberg

gratitude :: programme committee



Arife
Vural-Butcher

Lars-Johan
Liman

Samaneh
Tajalizadehkhoob

gratitude :: collaborative group



ideation



• Anycast Sharing
Cache
(Authoritative Resolvers)

• Efficient (Anycast)
Rate limiting & outlier
Detection (Anycast)

(Poke All)

- Get DANE on Ladybird
- libCurl, gimme your Certs
- Parse DANE/TLSA
- UI shift
- Curl, have my certs?

DoT or Not Tor-shuff

github.com/arcnbrs/dotdot
Oblivious DNS 2r
ODoH Client to resolver

client -> resolver -> odns

client entry middle exit DoH
client proxy -> resolver RF
Client UDP/D DoH onion

Threat model?

get BETTER

IDEA!!!

https://github.com/arcnbrs/dotdot

Delaying mostly

WRAP vs EXTEND?

Canned DNS

Systematic broken responses

Cache preservation
Keep caches hot

- Resolver A learns example.com
- Spreads the response to B and C
- Who put it in cache?

PROJECT DELEG

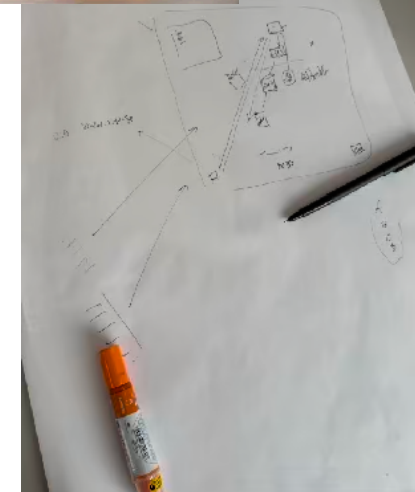
"MAKE THE DNS
BROKEN AGAIN" :-)

CHANGE THE DNS DELEGATION (2 DRAFTS)

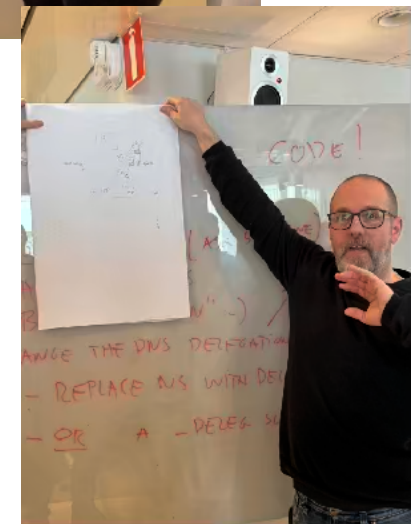
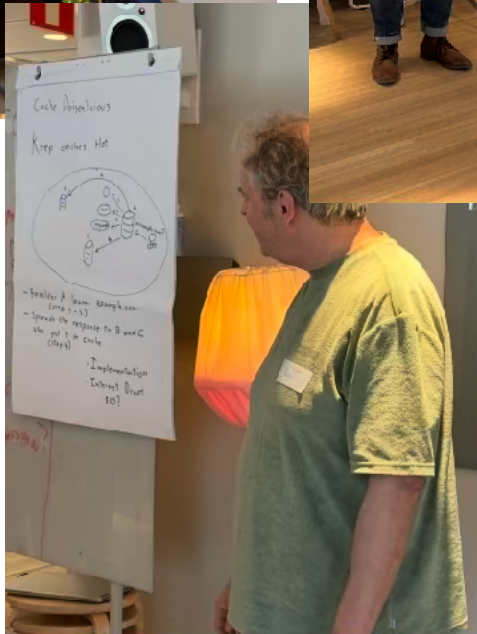
- REPLACE DNS WITH DELEG?

- OR A - DELEG SUBSTITUTION?

MORE FEATURES



persuasion



association



Babies



Baby was delivered

- NSD authoritative server integrated with Stork

Future

- Integrate Knot DNS & DSC

Canned DNS



Created a nameserver with Canned
DNS responses

Written in Go

Used Miek Gieben's DNS library

Since: used as authoritative server

DoHoT or Donion



DNS-over-HTTPS-over-Tor

Latency problem over Tor

Measured different approaches



IoT devices are idiots

Major issues in DNS for IoT

Insights and DNS recommendations



Lookup Hostname Best-practice

DNS delivers more than just addresses

Make `getaddrinfo()` better or use a
workaround

Poisonlicious



Proof of concept for an efficient DNS resolver in Unbound

- authoritative response sharing between co-operating resolvers

Drafted IETF RFC

[I-D.bortzmeyer-dnsop-poisonlicious](#)



Visualising what a resolver is doing
when looking up a domain name

More interactive than a whiteboard,
perhaps more pedagogical

commendation



Most complete project

Canned DNS

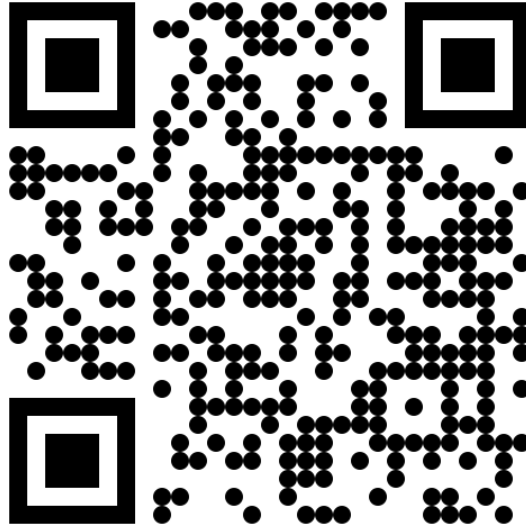
Funniest project name

idIOT

Project with self appointed trouble-maker

Babies

cooperation... collaboration



<https://github.com/DNS-Hackathon>