The floor

is DNS

HACKATHON

<IETF 105 / Montreal>

17 eclectic DNS hackers worked on

- DNS privacy
- DNS support for specific network environments
- DNS provisioning
- Miscellaneous

DNS privacy

Pallavi Aras & Han Zhang

- Zone transfer over TLS
- dnsjava library XoT client
  - draft-hzpa-dprive-xfr-over-tls

Petr Špaček

- DoH proxy on fastcgi

Witold Krecicki

- Preparing BIND9 for DoT & DoH

DNS in specific network env.

Stephane Bortzmeyer

Identifier/Locator Network Protocol (ILNP)

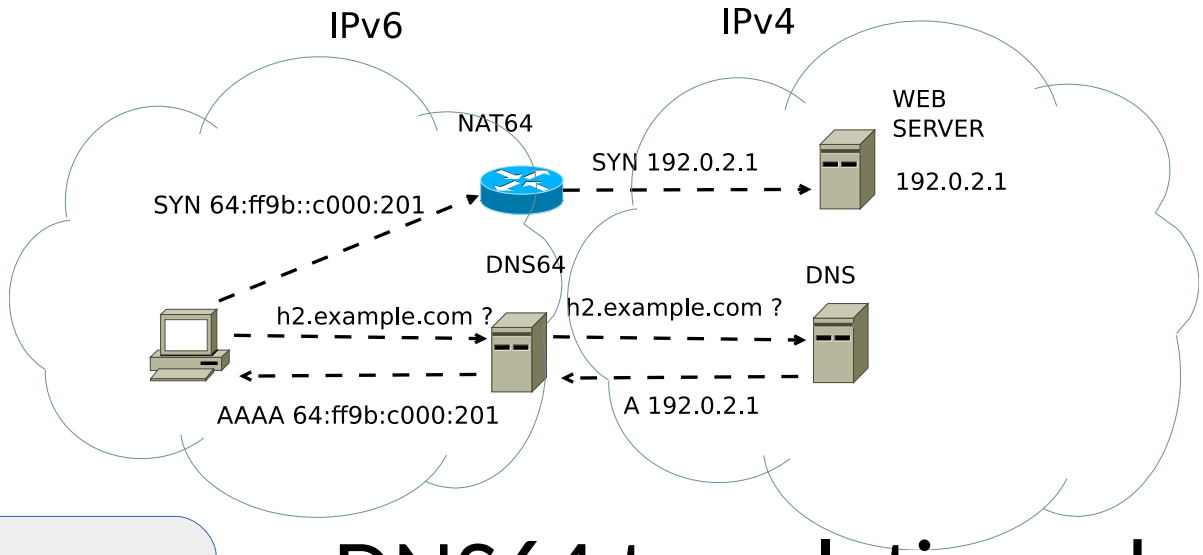
- Working in knot resolver
- Wip in Unbound

```
% dig +tries=1 @::1 -p 9053 AAAA ilnp-aa-test-c.bhatti.me.uk.
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 60198
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 6
;; QUESTION SECTION:
;ilnp-aa-test-c.bhatti.me.uk. IN   AAAA

;; ANSWER SECTION:
ilnp-aa-test-c.bhatti.me.uk. 10    IN AAAA   2001:8b0:d3:1111::c

;; ADDITIONAL SECTION:
ilnp-aa-test-c.bhatti.me.uk. 10    IN L64 10 2001:8b0:d3:cc11
ilnp-aa-test-c.bhatti.me.uk. 10    IN L64 20 2001:8b0:d3:cc22
ilnp-aa-test-c.bhatti.me.uk. 10    IN NID 10 0:0:c:1
ilnp-aa-test-c.bhatti.me.uk. 10    IN NID 20 0:0:c:2
ilnp-aa-test-c.bhatti.me.uk. 10    IN NID 30 0:0:c:3
```

DNS in specific network env.



Mark Andrews

DNS64 translation when resolvering in BIND9

https://gitlab.isc.org/isc-projects/bind9/merge_requests/2166

DNS provisioning

Willem Toorop
Ondřej Surý
Witold Krecicki
Pieter Lexis

Interoperable DNS Cookies

NSD unbound BIND 9 POWERDNS

draft-sury-toorop-dnsop-server-cookies

DNS provisioning

Mark Andrews
Tim Wattenberg

DNS TIMEOUT Resource Record

Allows RR to be garbage collected by the server

- DNS Service Discovery support
  first come first serve registration update policy
- https://gitlab.isc.org/isc-projects/bind9/merge_requests/2066
- https://gitlab.isc.org/isc-projects/bind9/merge_requests/728

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DNS provisioning

Ralph Dolmans

Service location and parameter specification via the DNS

- draft-nygren-httpbis-httpssvc

From aname draft:

> Redirecting website lookups to an alternate domain name via SRV or URI resource records would be an effective solution from the DNS point of view, but to date, browser vendors have not accepted this approach.

unbound

Miscellaneous

Evan Hunt

YAML output from `dig` & `delv`

- Started out with JSON (RFC8427) for `dig` and `delv`
- Paul Hoffman (author of RFC8427) said that YAML is fine!
- Already in use in Paul's RSSAC proof of concept root server measurement framework for latency & availability!
- https://gitlab.isc.org/isc-projects/bind9/merge_requests/2168

Wrap Up

Team members:

Pallavi Aras
Petr Špaček
Witold Krecicki
Stephane Bortzmeyer
Mark Andrews
Willem Toorop
Ondřej Surý
Tim Wattenberg
Evan Hunt
Paul Hoffman

Ralph Dolmans
Benno Overeinder
Francis Dupont

First timers @ IETF/Hackathon:

Ching-Heng Ku - Taiwan Network
Du Kuan Lin Information Center

Remote

Pieter Lexis
Han Zhang