The floor is DNS
17 eclectic DNS hackers worked on

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

- Zone transfer over TLS
- dnsjava library XoT client
  • draft-hzpa-dprive-xfr-over-tls
- DoH proxy on fastcgi
- Preparing BIND9 for DoT & DoH
Stephane Bortzmeyer

DNS in specific network env.

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.

DNS64 translation when resolving in BIND9

Mark Andrews

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

IETF Hackathon – The floor is DNS
DNS provisioning

Interoperable DNS Cookies

Willem Toorop
Ondřej Surý
Witold Krecicki
Pieter Lexis

NSD
unbound
BIND
POWERDNS
draft-sury-toorop-dnsop-server-cookies

CC0 Public Domain from publicdomainpictures.net

IETF Hackathon - The floor is DNS
DNS provisioning

DNS TIMEOUT Resource Record
Allows RR to be garbage collected by the server

- DNS Service Discovery support
  first come first serve registration update policy

DNS provisioning

Mark Andrews
Tim Wattenberg

DNS TIMEOUT Resource Record
Allows RR to be garbage collected by the server

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  - first come first serve registration update policy
DNS provisioning

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.
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!
Wrap Up

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

First timers @ IETF/Hackathon:
- Ching-Heng Ku - Taiwan Network
- Du Kuan Lin - Information Center

Remote
- Pieter Lexis
- Han Zhang