IETF Hackathon

IETF 118

4-5 November 2023

Prague

Hackathon Plan

Plan:

- Setup some anycast Unbound instances running 1.18.0 supporting draft-momoka-v6ops-ipv6-only-resolver-02
- Figure out whether "prefer-ip6: yes" should be set

What got done: 2a06:d1c7::

- There now is a public v6 only resolver at 2a06:d1c7:: (with somewhat reasonable rate limits) using a NAT64 pool of 8 addr/host
- We tested replaying some dual-stack zones, and noticed the implementation indeed needs prefer-ip6: yes to not use NAT64 for some DS hosts
- Looking forward to some evaluation traffic if somebody feels like it; Service will likely remain in place for some time
- We need to take a look at NAT64 port exhaustion for resolvers, as port-reuse is not easy with NAT64

Using 2a06:d1c7::

```
% dig @2a06:d1c7:: A tudelft.nl

; <<>> DiG 9.16.42 <<>> @2a06:d1c7:: A tudelft.nl
; (1 server found)
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 8731
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; QUESTION SECTION:
;tudelft.nl. IN A

;; ANSWER SECTION:
tudelft.nl. 600 IN A 130.161.128.82

;; Query time: 33 msec
;; SERVER: 2a06:d1c7::#53(2a06:d1c7::)
;; WHEN: Sun Nov 05 10:00:13 CET 2023
;; MSG SIZE  rcvd: 55
```