Reporting of Happy Eyeballs Failures

<draft-palet-ietf-v6ops-he-reporting-00>

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HE: ”the bad”

- Happy Eyeballs provides a way for improving user-visible IPv6 vs IPv4 delay
- SO … hides the possible IPv6 connectivity issues to the operator
  - Users don’t “see” troubles, so don’t complain

- GOAL: HE extension to provide reporting
  - Using existing and common protocols

Simplicity

- Syslog (RFC5424) over UDP (RFC5426)
  - Default port (514)
  - IPv6-only
- Syslog collector:
  - Network-Specific-Prefix (NSP)
  - 192.88.99.1 (“older” 6to4 anycast)
    - NSP::192.88.99.1
      - Other collectors (if needed) can use NSP+192.88.99.0/24

Syslog collector discovery

- 96 bits, same “trick” as RFC7050 for the NSP
  - Discovery of the IPv6 Prefix Used for IPv6 Address Synthesis (DNS/NAT64)
- Remaining 32 bits, 192.88.99.0 (RFC7526)
  - No conflict with 6to4, not in use
  - No conflict with anything else

HE behaviour

- On failure detection HE MUST:
  - Use syslog to report:
    - Timeout parameters
    - Failed destination address
    - Source prefix

Open Questions

1. Report using only IPv6?
   - Simpler
   - But reporting will not happen if IPv6 is broken (from the customer LAN to the Operator)
   - If we want dual stack-reporting, send two messages (one with IPv6, one with IPv4, which can be correlated, if one is missing that protocol is broken)? Other suggestions?

2. Privacy issues?

3. IANA request for reserving 192.88.99.0/24

4. Integrate this into “draft-ietf-v6ops-rfc6555bis” ?

Next steps

- Questions ?
- Become a WG item ?
- Inputs ?