PCP Anycast

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Basic Concept

- If outbound TCP SYN addressed to a host "on the Internet" can create implicit mapping state, then why not use an out-bound PCP packet addressed to a pretend host "on the Internet" to create state?

- Six-page Internet Draft (2 pages of content)

  - http://www.ietf.org/id/draft-cheshire-pcp-anycast-01.txt

Observation

- Anycast often used for service discovery; often requires careful configuration

- In this case anycast specifically requires no configuration — we want outbound packets to take their natural path

Comparison with
draft-kiesel-pcp-ip-based-srv-disc-00

- draft-kiesel-pcp-ip-based-srv-disc
  is a separate discovery step,
  prior to issuing PCP mapping requests

- draft-cheshire-pcp-anycast
  is not a separate step, it's just an address
  to use for PCP mapping requests

Why not DHCP?

- TCP SYNs today make mappings without additional help from DHCP.

  - Why should PCP need special DHCP support?

- DHCP Server may be run by different dept.

  - Anything configured can be configured wrong

- 3GPP doesn't use DHCP

  - (Prior to Release 10?)

Discussion

- What about cases where the PCP client needs to create rules in multiple different egress/ingress firewalls?

- But… will any PCP client try to handle that?