PCP Server Discovery Based on Well-Known Address

IETF-86 Orlando

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Problem Statement

- Before any PCP messages are exchanged, how does a PCP Client discover the address of the PCP Server?

- Follow up: How can PCP be deployed?

Current Proposed Methods and Issues

- Default router
  - Good but PCP Server might be more than one hop away or not necessarily the default router on the LAN.
- DHCP Option
  - Requires updates to DHCP Server, some DHCP clients and, in the case of broadband deployments, CPE to pass option to client.
  - Some networks do not use DHCP
- DNS
  - Requires updates to DNS Server and DNS clients determining the domain name of where PCP Server is located.

Proposed solution

- Anycast address
  - Almost no dependency on network configuration or operator
  - Works out of the box
  - Application and PCP Client friendly
  - Built-in Redundancy

Finer Points

- Multiple PCP Servers, Symmetric Routing
- Multiple PCP Servers, Asymetric Routing
  - New ANNOUCE option proposed