

Port Control Protocol

draft-ietf-pcp-base-07

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Reminder: PCP Scope

- IPv6 simple firewall
- IPv4 simple firewall
- NPTv6 (NAT66)
- Dual-Stack Lite
 - B4 element (client and proxy), AFTR element
- NAT44
 - Home CPE, with publicly-routed IPv4 address
- NAT444

Summary of Changes (1)

- Packet layout changed
- “IE” renamed to “option”
- “PIN” OpCode renamed to “MAP”
- Simpler MAP4 and MAP6 OpCodes
 - Create mapping (to run a server)
- PEER4 and PEER6
 - query lifetime (optimize keepalives)
- IANA gave us port 44323

Summary of Changes (2)

- Separate THIRD_PARTY option
 - For creating mapping on behalf of another host
 - Clarifies intent versus mistake
 - For multiple subscriber addresses (e.g., DS-Lite, non-residential service)
 - Unnecessary with NAT444

Summary of Changes (3)

- Reminder to use same interface for
 - MAP refresh
 - PEER
- PCP server listens on internal interface
- Removed DMZ support (which we revisit today)

Summary of Changes (4)

- PEER queries don't change NAT behavior
 - That is, active traffic might (not) keep mapping alive
- MAP-created mapping are always deleted when lifetime expires
 - Active traffic won't keep mapping alive
 - Consensus on March 8 Interim meeting

To
discuss

Summary of Changes (5)

- Removed DMZ support (which we revisit today)
- Lifetime in PCP common header
 - For both error responses and success responses
 - Advantage: one place for client to look

Summary of Changes (6)

- Removed UNABLE_TO_DELETE_ALL error code
- Allowed unsolicited options to appear in response
- Created UNPROCESSED option
- Removed nested NAT
 - Will be separate individual document

Summary of Changes (7)

- Removed suggestion to ‘hold’ the same port for the other protocol (UDP / TCP)
 - Nothing needed it
- Rejected EVEN_PLUS_ONE for RTP+RTCP
 - Nobody defended the idea

Issues

Option Order (Tracker #41)

- Proposal: Remove option ordering requirement
- Justification: prevents defining a new option which 'must appear last'
 - E.g., Signature

DMZ Host (Tracker #44)

- Request: forward all traffic to a host
- Why:
 - tunnel endpoint configuration (IPv4 over IPv6)
 - Firewall, NAT66
- Shall we add support for DMZ host?