Port Control Protocol (PCP) Proxy Function

draft-bpw-pcp-proxy
IETF 83-Paris, March 2012

M. Boucadair, R. Penno, D. Wing and F. Dupont
Problem

1. How to discover the PCP Server?
2. What if there is a FW enabled in the CPE?
3. What if a NAT is enabled in the CPE?
Solution

1. Enable a PCP Proxy in the CPE
2. The PCP Proxy is used as PCP Server
3. The PCP Proxy interacts with a FW and/or NAT if present
4. The PCP Proxy relays PCP messages
PCP Proxy Functions: Examples

• Relays PCP messages between a PCP Client and the ultimate PCP Server
• Check THIRD_PARTY Option
• Create corresponding firewall entries and/or NAT mappings when required
• Update the PCP Request/Response with the information maintained in the NAT
• Epoch Handling
• Adjust Lifetime
Open Questions

• Multiple servers
• Epoch handling
  – Maintain a local Epoch or
  – blind copy of the one returned by the PCP Server
• Local caching, e.g.,
  – Mappings
  – Errors received from the PCP Server
• What to do for unsupported OpCode/Options
  – Ignore or
  – Blind relay
• Other points are discussed in the draft
Next Step

- Make progress the specification of the PCP Proxy