Port Control Protocol (PCP)
Proxy Function

draft-bpw-pcp-proxy

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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?**

H1

PCP Client

H2

PCP Client

CPE

PCP Client

SP Network

PCP Server

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**

H1

PCP Client

H2

PCP Client

CPE

PCP Proxy

SP Network
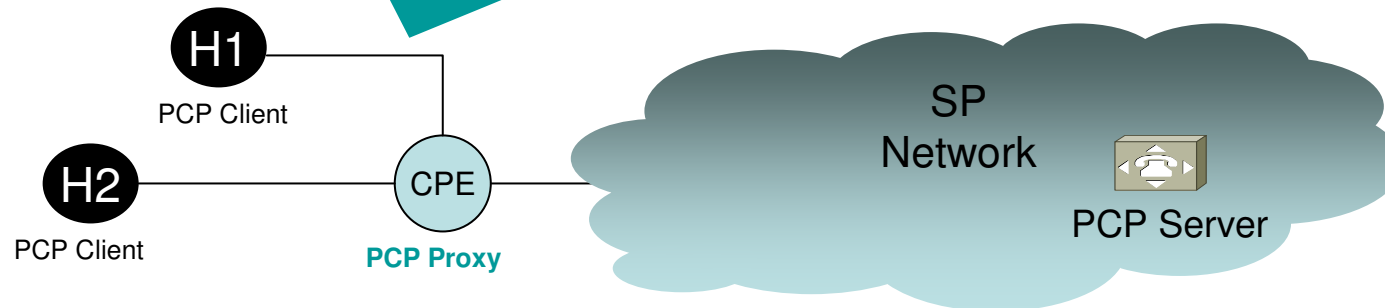
PCP Server

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