Port Control Protocol (PCP) Failure Scenarios

draft-boucadair-pcp-failure

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Goals

- Understand the reliability of the protocol

- Assess the behavior of involved PCP functional elements during failure events

Scope

- This I-D discusses PCP failure scenarios
  - PCP Client and application crash
  - PCP Server failures
    - Discussion on PCP Server redundancy mode: (1) State Redundancy is enabled, (2) Cold-Standby without State Redundancy and (3) Anycast Redundancy Mode
  - Change of the IP address of the CPE interface
    - e.g., how an IPv4 host behind a DS-Lite CPE is aware that a new IPv6 address is used by the B4?
  - Host failure
  - Change of Internal IP address (third party case)
- Some failure modes may lead to stale mappings and therefore consume the per-use quota
  - Access to the service may be impacted

Status & Next Step

- The document was updated to integrate the comments received in Orlando

  - Now indicates whether an action is required to solve the analyzed failure issue or not

- Proved to be useful in recent discussions

  - Failures exacerbated by Nonce checks

- Adopt as a WG item?