quic-proxy loops

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C -> P1 -> P2 -> P1 -> P3 -> T
C → P1 → P2 → P1 → P3 → T
CID4  CID3  CID2  CID1  CID0
C -> P1 -> P2 -> P1 -> P3 -> T
CID4    CID3/CID1   CID2   CID1   CID0
Same VIP

C -> P1 -> P2 -> P1 -> P3 -> T
CID4 CID3/CID1 CID2 CID1 CID0
Non-remedies

- Encryption/authentication: no proposal does (or can) impose requirements on the target
- Proxy control of the target-facing CCID
- TTL Decrementing could mitigate, but not really solve
Remedies

● Require one socket per CONNECT request (like CONNECT-UDP)
● Give the proxy control over virtual client connection IDs (or both client connection IDs!) - implies some entropy requirements
● Eliminate virtual client connection IDs – (minor?) linkability loss
● Require load-balanced proxies to use a unique Server Preferred Address
● Others?