

IPv6 Reflection Utility

draft-ietf-6man-icmpv6-reflection

IPv6 Reflection Utility

- A diagnostic tool like PING and PROBE
 - The probing node sends a request to a probed node
 - The probed node sends response to a probing node
- The response includes the request, as it arrived at the probed node
- This shows the probing node how the network modified the request on route from itself to the probed node

Do Packets Change In Flight?

- Router, NATs and other middle boxes all change packets in flight

Previous Last Call

- An alternative solution was proposed
 - The probing node sends a UDP packet that triggers an ICMP error message (e.g., Destination Unreachable)
 - The Original Datagram field in the ICMP error message contains the triggering packet
- The alternative solution satisfies the requirements of this draft
- Requires no new code

Alternative Solution Was Nearly Adopted

- However, NAT boxes modify the original datagram field in ICMP error messages [RFC 3022]
 - This defeats the purpose of the utility
- So, we revert to the original solution
- Original solution is currently in WG last call

RFC 8335 Considerations

- This document used to UPDATE RFC 8335
- An RFC-8335-bis document in WG Last Call in the INTAREA WG
 - Working together to make sure changes are comprehensive
- To avoid confusion, this document will reference RFC-8335-bis
 - It will not reference RFC 8335
 - It will not UPDATE any document

Next Steps

- Complete the second WG Last Call