

ICMPv6 Update

draft-ietf-ipngwg-icmp-v3-06.txt

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Background

- RFC2463 published as DS in Dec1998
- WG submitted an update to IESG to recycle DS (draft-ietf-ipngwg-icmp-v3-02.txt)
- Rev 03 & 04 addressed AD comments
- Rev 05 & 06 addressed WG LC comments
- Rev 06 reviewed by IESG on Jan 20th 2005
- 3 DISCUSS positions currently

DISCUSS from Alex Zinin

- Comment:
 - Implementations **MUST** allow sending of destination unreachable messages to be disabled, preferably on a per-interface basis
- Resolution:
 - After discussions with Alex, we propose to add the following text as a **SHOULD**.
- Proposed Text:

“For security reasons, it is recommended that implementations **SHOULD** allow sending of ICMP destination unreachable messages to be disabled, preferably on a per-interface basis.”

DISCUSS from Allison Mankin

- Comment:
 - The document includes a ref to RFC 2780 but never mentions it. In the IANA considerations, it needs to state that it obsoletes 2780's IANA instructions on ICMPv6. The RFC Editor needs to be told that this RFC updates 2780, as well as obsoleting the previous ICMPv6 spec. I think the new IANA Considerations are great. We should make sure the loose ends are tied.
- Resolution:
 - Update the draft with the following text
“This document obsoletes RFC 2463 [RFC2463] and updates RFC 2780 [RFC-2780].”
 - Ask Margaret to add a note to the RFC editor about this in the AD writeup.

DISCUSS from Allison Mankin

- Comment:
 - IPSec processing considerations about ICMP are enough different in the bis ESP and AH specs that I think this document should update to require these (just approved).
- Proposal:
 - Remove security related processing details for ICMPv6 packets (refer to 2401bis in an informative way ☺)
 - Remove the MAY requirement about the configuration knob to accept or reject the unauthenticated ICMPv6 packets.
 - Need to come up with the updated text !

DISCUSS from GEN-ART (1/4)

- 2.2 Message Source Address Determination
 - Current Text
 - (b) If the message is a response to a message sent to a multicast or anycast group in which the node is a member, the Source Address of the reply **MUST** be a unicast address belonging to the interface on which the multicast or anycast packet was received.
 - (c) If the message is a response to a message sent to an address that does not belong to the node, the Source Address **SHOULD** be that unicast address belonging to the node that will be most helpful in diagnosing the error. For example, if the message is a response to a packet forwarding action that cannot complete successfully, the Source Address **SHOULD** be a unicast address belonging to the interface on which the packet forwarding failed.
 - (d) Otherwise, the node's routing table must be examined to determine which interface will be used to transmit the message to its destination, and a unicast address belonging to that interface **MUST** be used as the Source Address of the message.

DISCUSS From GEN-ART (2/4)

- Issues with section 2.2 (b), (c) and (d)
 - Has it ever been implemented
 - Chances of a scope mismatch in source and destination address
 - Complicated and not so useful
 - Any others ?

DISCUSS from GEN-ART (3/4)

- Elwyn suggested replacing (b), (c) and (d) with the following (b)

(b) If the message is a response to a message sent to any other address, such as

- a multicast group address,
- an anycast address implemented by the node, or
- a unicast address which does not belong to the node

the Source Address of the ICMPv6 packet MUST be a unicast address belonging to the node. The address SHOULD be chosen according to the rules which would be used to select the source address for any other packet originated by the node, given the destination address of the packet, but MAY be selected in an alternative way if this would lead to a more informative choice of address which is reachable from the destination of the ICMPv6 packet.

DISCUSS From GEN-ART (4/4)

- A bunch of other editorial comments
 - Reorganizing some text
 - Some clarifications

Next Steps..

- Will submit the updated rev soon after the IETF meeting.
- Comments/Questions ??