Route Information Options in Redirect Messages

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Draft History

• First posted on 6man list 1/9/2017
• Comments on the list resulted in draft update
• Draft update posted 1/31/2017
• More comments received – pending second update
Common Redirection Scenario (RFC4861)
Route Information Options (RFC4191)

• Included in Router Advertisement (RA) messages
• Informs recipient of routes that are reachable via the router that sent the RA message
• RFC4191 identifies 3 types of hosts (Type A, B, C):
  – Type A and B both ignore RIOs
  – Type C processes RIOs in RA messages
• This document introduces a new Type “D” host
  • same behavior as Type "C", but also process RIOs in Redirect messages.
RIO Redirection Scenario

- Source sends packet toward destination via Router
- Router forwards packet to Target, and also sends Redirect to Source
- Redirect contains:
  - Target Address set to target addr
  - **Destination Address set to "::"**
  - TLLAO with target link-layer
  - RIO w/prefix 2001:db8:1:2::/64
Use Cases and Next Steps

• Enterprise mobile devices (e.g., cell phones, tablets, etc.)
• Aeronautical communications (e.g., airplanes, air traffic control, etc.)
• Unmanned Air System (UAS) networks (vehicle to vehicle)
• Home networks with multiple subnets [HOMENET]
• Next steps:
  • Prepare draft update based on list comments since 1/31/2017
  • 6man WG item?