IPv6-Mostly Networks Deployment and Operations Considerations

Draft-ietf-v6ops-6mops

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Recap

- IPv6-Mostly:
  - Coexistence of IPv6-only, dual-stack and IPv4-only hosts
  - Usually utilize RFC8925 (DHCPv4 Option 108)
- IPv6-Mostly deployment guidelines
  - What, how, why
  - What could possibly go wrong

Document Status

- The document has been stable for ~12 months
- IETF WiFi became IPv6-Mostly
- Feedback from the IETF NOC incorporated
    - Thank you Warren and Joe!

Diff since last v6ops presentation (Nov 2024)

What's Changed?

- Mostly editorial changes, to improve readability
- NAT44/NAT64 pools consideration added
  - Client's address might be used for access control
  - NAT64 needs share the pool with NAT44
  - NAT64 needs to be 'sticky'
- Atomic fragments (allowed by RFC6145, deprecated by RFC7915)
- IPv4 UDP packets with zero checksum
- Using the WKP (64:ff9b::/96) for reaching non-global IPv4
  - See draft-kumkova-v6ops-nat64-wkp-1918

Next Steps

- Address Eliot Lear's comments
  - Clarify that most "typical issues" do exist in a dual-stack
  - Turning off IPv4 makes them much more visible
- Do you know anyone who deployed IPv6-Mostly?
- Ready for the WGLC?