IPv6-Mostly Networks Deployment and Operations Considerations

draft-ietf-v6ops-6mops

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Quick Recap

- IPv6-Mostly deployment guidelines
  - What, how, why
  - What could possibly go wrong

Key Changes since Adoption (diff can be found here)

IPv6-Only Endpoints Definitions

- Capable of communicating only with a limited set of endpoints, all of which are available over IPv6.
- Capable of utilizing only IPv6 sockets, utilizing NAT64 for accessing IPv4 resources.
- Implementing CLAT to provide native IPv4 connectivity for the legacy applications.

Benefits —> Solution Analysis

Benefits compared to dual-stack

Benefits compared to IPv6-only

IPv6-Mostly vs dual-stack

- Pros
- Cons

IPv6-Mostly vs IPv6-only

- Pros
- Cons

IPv6-Mostly vs Dual-Stack

Pros:

- Replaced "simplified operations" with "Controlled and incremental phase-out of IPv4"
- Simplified troubleshooting

Cons:

Addition of NAT64? However…

- NAT44 is likely to be there already
- No need to scale up

Other changes

- Onlink Communication and Service Discovery
  - Not possible between IPv6-only and IPv4-only hosts
  - Might be prohibited anyway
- Fallback/Rollback:
- For conferences recommending new fallback SSID every time
- Privacy considerations:
- This document does not introduce any **new** privacy considerations

Next Steps

- More comments, please!
- No WGLC yet: let's wait for the IPv6-mostly IETF network.