IPv6-only Terminology Definition

draft-palet-v6ops-ipv6-only

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Problem and Goal

• Folks getting confused about “IPv6-only”
• Clarify what we mean “IPv6-only”, so we are all in-sync

• How:
  – Stating that IPv4 is NOT being forwarded “natively”
  – State the “scope”, a specific network “part”
Example: IPv6-only network?

Cellular network

IPv6-only

PLAT
DNS64/NAT64

IPv6-only

IPv6-only

464XLAT Residential network

Corporate network IPv6-only

464XLAT
Example, in detail

IPv6-only WAN

Native Dual-Stack Transit/Peering

Dual-Stack Core

Cellular network

IPv6-only distribution

IPv6-only WAN

Transitional IPv6 router

464XLAT Residential network

464XLAT

DNS64/NAT64

PLAT

Corporate network
IPv6-only LAN

Native Dual-Stack Transit/Peering

Dual-Stack Core

Cellular network

IPv6-only distribution

IPv6-only WAN

Transitional IPv6 router

464XLAT Residential network

464XLAT
“IPv6-only” used exclusively in a given part(s) of a network, depending on if there is actual native forwarding of IPv4, so IPv4 is not configured, neither managed.

In other words:
“where is IPv6 native”
Terms Defined

- Dual-stack
- Native dual-stack
- IPv6-only network
- IPv6-only WAN/access
- IPv6-only LAN
- IPv6-only host/router
- Transitional IPv6 host/router
Next steps

• Questions ?

• Become a WG item ?

• Inputs ?