

Enterprise IPv6 Deployment Guidelines

draft-ietf-v6ops-enterprise-incremental-ipv6-01

K. Chittimaneni, Google Inc.

T. Chown, University of Southampton

L. Howard, Time Warner Cable

V. Kuarsingh, Rogers Communications

Y. Pouffary, Hewlett Packard

E. Vyncke, Cisco Systems

MTU Size Recommendation

- Add some comment about setting MTU to 1280 to avoid tunnel pMTUd black holes?
 - There may be MTU issues due to pMTUd and the enterprise may choose to set the MTU lower
 - Lower MTU (1280) on non-managed network segments, default on managed segments

Enterprise's Interest to Deploy Native IPv6?

- Several commenters disagreed with Section 1, "It is thus in the enterprise's interests to deploy native IPv6 itself."
- Is there consensus for or against this statement?

Dual stack where you can, tunnel where you must

- Is there consensus on this?
- Native dual stack is better than any transition technology,
 - transition technologies are only temporary solutions until native dual stack can be deployed.
 - Therefore, if native dual stack cannot be deployed, tunneling may be appropriate.
- IPv6-only is still the end goal.

Prefix Size for Site

- Several commenters disagreed with:
- "Each location, no matter how small, should get at least a /48"
- There is documented consensus on /48 (rfc5375, rfc6177). Do we agree with those recommendations?
- Can add language saying, "adjust as needed"
 - /48 required for multihoming
- "Site"? "Location"?

PI vs PA Space Considerations

- Small firm: single-homed, PA space
- Large enterprise: multi-homed, PI space, BGP
- Medium size
 - Will your ISP originate PI space?
 - Will your ISP route another ISP's PA space?
 - Do you multihome?
 - Are you willing to renumber if you change ISPs?

NPT66

- One commenter suggested getting PA space from two providers and use NPT66.
- Additional text
 - NPT66 is “Experimental”
 - Not needed for multihoming
 - Not needed for security: use firewall

Still to Be Written

- The Guest Network.
- Content Delivery Networks.
- One commenter suggested: You may want to be more specific by quantitatively describing the impact on VRRPv3 traffic.
- SeND considerations.

DISCUSSION