

Numbering IPv6 Router Interfaces – keep the /64

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Benefits of The Status Quo

- Some features depend on uniformity
 - RFC 2462 (Duplicate Address Detection)
- Host detection more difficult
 - Arguable
- The remaining 64 bits is a big enough address space for every sub-network in the world so no need to vary by customer or interface type

Problems with the Status Quo

- Behavior of some point-to-point interface implementations
- Neighbor Discovery DoS Attack
 - Arguably a vendor problem, vendors need to fix. Interim solutions may be necessary, but that does not preclude working towards the Right Thing. See Igor's allocation vs. configuration plan.

Problems with the Status Quo

- Consumes more address space than really needed...
 - Waste not, want not
 - But IPv6 addresses more plentiful than engineer/tech brain cells, optimize for people not machines
 - Whatever you do, don't allocate (as opposed to interface subnet mask) on anything other than a nybble boundary. CIDR and VLSM are good for computers but bad for people.

Discussion

Sorry I stole your slide, Ron...

