Address Selection problems that should be solved by RFC3484-bis
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Tomohiro Fujisaki, Arifumi Matsumoto
*NTT PF Labs.*
Ruri Hiromi
*Intec Net-core*
Kanayama Kenichi
*Intec System*
What rfc3484-bis should cover

- **Incorporate universally useful policy:**
  - ULA should have less priority than other IPv6 addresses and IPv4 addresses.

- **Follow-up to de-facto standard behavior:**
  - Teredo address should have lower priority.
  - We should not spoil DNS Round-Robin.

- **Follow-up to other IETF standard:**
  - Obsoleted site-local unicast address.
UF

ULA’s priority

- **Dst Host has**
  - 2001:db8::80 and 192.0.2.80

- **Src host has**
  - fd01::100(ULA) and 192.0.2.100

- **Now, src host chooses ULA for a originating session, which probably fails.**

- **Suggested behavior:**
  - If dst is also ULA, ULA should be chosen.
  - If not, IPv4 should be chosen.
Teredo’s priority

- As implemented in Windows,
  - Teredo should be the last resort.

- Suggested behavior:
  - When the dst is IPv6-only, and the src does not have any other IPv6 address.
  - When the dst is dual-stacked and src has Teredo only and not IPv4.
RFC 3484 dst. address selection rule 9 defined the longest matching address selection for IPv4 and IPv6.

- This spoils DNS based load balancing technique that is widely used at least in IPv4.
- For IPv6, hierarchical address assignment (was believed to) make rule 9 reasonable.

**Suggested behavior:**

- Dst. Rule 9 should not be applied to IPv4
- For IPv6 also, this feature is vital. So this rule should be disabled by default. Site-local tweak should be achieved by policy table distribution.
Next Step

- RFC3484 has several serious issues that should be addressed.

- Any other issue to be in this draft?

- Mature enough for 6man WG item?
  - RFC3484 is from ipv6 WG, so this is the right place?