Update to RFC 3484 Default Address Selection for IPv6 (and related drafts)

draft-ietf-6man-rfc3484-revise-02

Key address selection drafts

- RFC3484 Default Address Selection update
 - draft-ietf-6man-rfc3484-revise-02
 - Focus of this discussion slot
 - Currently a 'diff' to RFC3484
 - Couple of issues to discuss then WGLC?
- Distributing Address Selection Policy using DHCPv6
 - draft-ietf-6man-addr-select-opt-00
 - Defines method to distribute selection policy on a per-host basis in a managed environment
 - Close to WGLC?

Related Drafts

- Solution Approaches for Address Selection Problem
 - draft-ietf-6man-addr-select-03
 - Should focus now on publishing the main two drafts
- Considerations for IPv6 Address Selection Policy Changes
 - draft-ietf-6man-addr-select-considerations-02
 - DT 'thinking' no need to publish if main two drafts progress to RFC
- Considerations of Address Selection Policy Conflicts
 - Draft-arifumi-6man-addr-select-conflict-02
 - Conclusion was to avoid policy merging wherever possible
- Note also some of the AddrSel DT issues were captured in
 - draft-ietf-v6ops-multihoming-without-nat66-00

RFC3484-bis Status

- Several points discussed in IETF79 were compiled in -02
 - A new rule to tighten relationship between source address selection and the selected next-hop.
 - Some editorial fixes, such as site-local prefix misdescription, gathering inputs from a lot of people.
- A lot of discussion occurred on the ML related to RFC3484-bis.
 - Trying to compile them in the next revision
 - At least two issues to resolve
 - Expect a -03 very soon after IETF80

Remaining issue#1: Privacy Extension

- As discussed in ML, privacy extension needs to be more manageable. Several ways are proposed:
 - Per prefix control:
 - draft-gont-6man-managing-privacy-extensions-00
 - A problem here is policy conflict of users and admins
 - Per destination prefix control:
 - e.g. use privacy extension only when connecting to external sites.
 - RFC3484 policy table should be the right place to implement this kind of control.
 - These two can co-exist so long as the priority is defined.

Remaining issue#2: ULA

- Lots of discussion about how to constrain the usage/effects of ULAs
- -02 draft suggests to assign ULA (fc00::/7) its own label in the default policy table.
 - i.e. ULA to ULA connection is preferred and ULA is not chosen when the destination is Global IPv6 or IPv4 as far as any other address is available.
- Regarding a proposal of putting a smaller scope for ULA, and revising RFC 4193
 - It brings almost the same effect as above.
 - It's a matter of "simplicity versus configurability"

Next step

- If there is a strong opinion for issue #1 and #2, we'll revise it for WGLC
- If not, WGLC should begin now.

- Regarding policy table distribution item,
 - draft-ietf-6man-addr-select-opt
 - Issue #1 and #2 will bring some changes to this
 - WGLC should begin together for both drafts?