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 mis-description, 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?