IPv6 Scoped Address Architecture

<draft-ietf-ipngwg-scoping-arch-04.txt>

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Summary of changes (1/4)

- Clarified the scope type of some special cases
  - :: does not belong to any scope
  - IPv4-embedded addresses have the global scope
  - an application may assign special semantics in its local use
    - e.g. assign "any" scope to ::
    - e.g. assign "site-local" to ::ffff:10.x.y.z
- Clarification on the semantics of zone IDs
  - a zone ID (in the base definition) now contains the scope type
  - (note that in the 03 draft the semantics was only in textual representation)

Summary of changes (2/4)

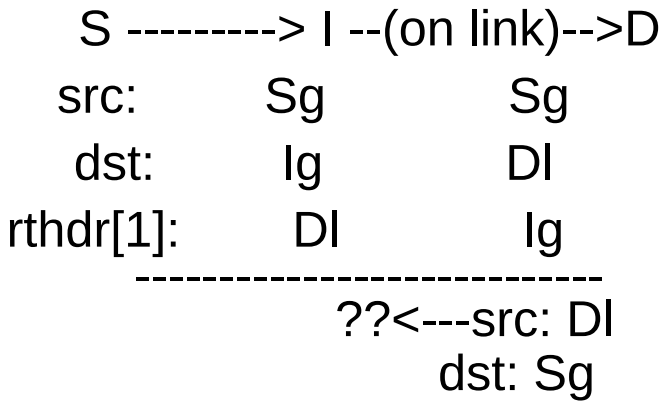
- Revised the textual representation (<address>%<zone_id>)
  - clarified the case of special addresses
    - the format should not be used for:
    - (1) global addresses
    - (2) the loopback address (::1)
    - undefined in the draft, but an app can use it for local purposes:
    - (3) the unspecified address (::)
  - <zone_id> does not have to contain the scope type
    - <address> part should specify the type
    - e.g. fe80::1%2 and fec0::1%2 can coexist
    - the parser is responsible for converting <zone_id> into a full "type + ID" value
    - the notation like fe80::1%2.5 was removed

Summary of changes (3/4)

- Revised the mobility section
  - described some problematic scenarios when using site-locals (specific to mobile IPv6)
  - RECOMMENDED global home/care-of addresses whenever possible
    - mentioned bidirectional tunneling as a possible exception

Summary of changes (4/4)

- Revised the "forwarding" section
  - (forwarding source routed packets)
  - wording improvements
  - add another check rule
    - if the scope of the next address is smaller than the scope of the previous destination address, the node MUST discard the packet.
    - the new rule will provide better reachability of "return" packets.



What next?

- The authors believe the draft is ready for w.g. last call (for PS)
  - The current version has solved all outstanding issues
    - based on consensus on the wg list discussion.
  - There is an ongoing discussion about the applicability of site-local (SL) addresses, but
    - the architecture itself is not specific to SLs
    - SLs will remain anyway