IPv6 Site Renumbering Gap Analysis

draft-ietf-6renum-gap-analysis-04

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Nov 2012
Draft status

* Updated twice since last meeting for WGLC launched at end September
* Received some valuable comments and updated the draft accordingly
* Ready for IESG
Main revisions 1

- Add a brief clarification of the session survivability issue during renumbering.
  - Session survivability is a fundamental issue that cannot be solved within renumbering context only, however,
  - we consider the smooth prefix transition mechanism provided by RFC4192 is sufficient for avoiding session break in IPv6 site renumbering, since in most of the cases we can set the prefix transition period long enough to cover the ongoing sessions.
Main revisions 2

* Re-wrote section 6.3
  - Section 6.3 was previously talking about the update of the entries relevant to IP address (e.g. ACL) during renumbering.
  - As discussed in the ml, the word “filter" was considered too narrow to cover the concept of entries
  - So the title was changed as “Parameterized IP-specific Configuration”
Parameterized IP-specific Configuration

1) Self-contained configuration in individual device

- Ideally, IP addresses defined as a value, and can be called in other places such as CLI or local configurations
- Current devices seldom support this kind of feature. (Multiple loopback interfaces could be defined and called in some devices, but the usage is very limited)
- Parameterized self-contained configuration is considered as a gap for current devices
2) Unified Configuration Management among devices

- **Configuration aggregation gap:** configurations including address are usually spread in various devices. It is hard to find all of them.

- **Configuration update automation gap:** current devices usually use vendor-private protocols to update configurations. No formalized configuration management system to leverage.
Open Questions in
draft-ietf-6renum-static-problem

1. Is minor residual loss of ongoing transport sessions during renumbering operationally acceptable?
2. Can automatic network element renumbering can be performed without interrupting user sessions?
3. Do any software licensing systems require manual intervention?

Might need a link in the gap draft
Comments?

Thank you

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