ISIS Auto-Configuration
(draft-liu-isis-auto-conf-05)

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Reminder

- Last presentation at IETF91
  - Clarified this was not specifically for Homenet
  - Some people were in favor of advancing the draft
- 04/05 version submitted before this meeting
  - Some supportive feedback of advancing the work
  - Some constructive technical discussion
    - An elaborate review from Les Ginsberg
    - Valuable technical suggestion from Karsten Thomann

04 version revisions

- Revise the SysID generation to NOT prescriptive (only using MAC previously)
- Added a new Section 3.3.3 "SysID and Router-Fingerprint Generation Considerations"
  - Mainly regarding to small CPE boxes that lack of entropy to generate high quality random numbers at the initial stage
- Exclude the purge operation in SysID duplication resolution procedures
- Added a "Double-Duplication" resolution mechanism in 3.3.4
  - Due to the small CPE entropy problem, the Fingerprint might also collide as well as the SysID
  - When Double-Duplication happens, there should be enough entropy at that time

05 version revision

- To address a special case *(by Karsten Thomann)*:
  - a non-autoconf router connected to an autoconf domain
  - The non-autoconf router's SysID is duplicated with one of the autoconf routers
  - The autoconf router would detect the duplication by LS P war, but there would be No Router-Fingerprint TLV for tiebreak
- Solution:
  - The autoconf router MUST generate a new SysID and re-joint the network

Ongoing Discussion

- Sys-id duplication resolution between on-link neighbors
- "Startup mode"
  - Delaying advertising neighbors/reachability
  - Acquires the LSPDB and verifies SysID duplication
  - This is to minimize the occurrence of SysID changes
- Using Cryptographic Authentication TLV?
  - Credential configuration is needed
  - An option for users
- Abandon Dynamic Host Name TLV?

(Thanks Les Ginsberg for raising these discussion)

Next Steps

- Submit an 06 version to address recently discussion
- Call for adoption?

Thank you!

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