

# ND Prefix

## Robustness Improvements

draft-vv-6man-nd-prefix-robustness-02

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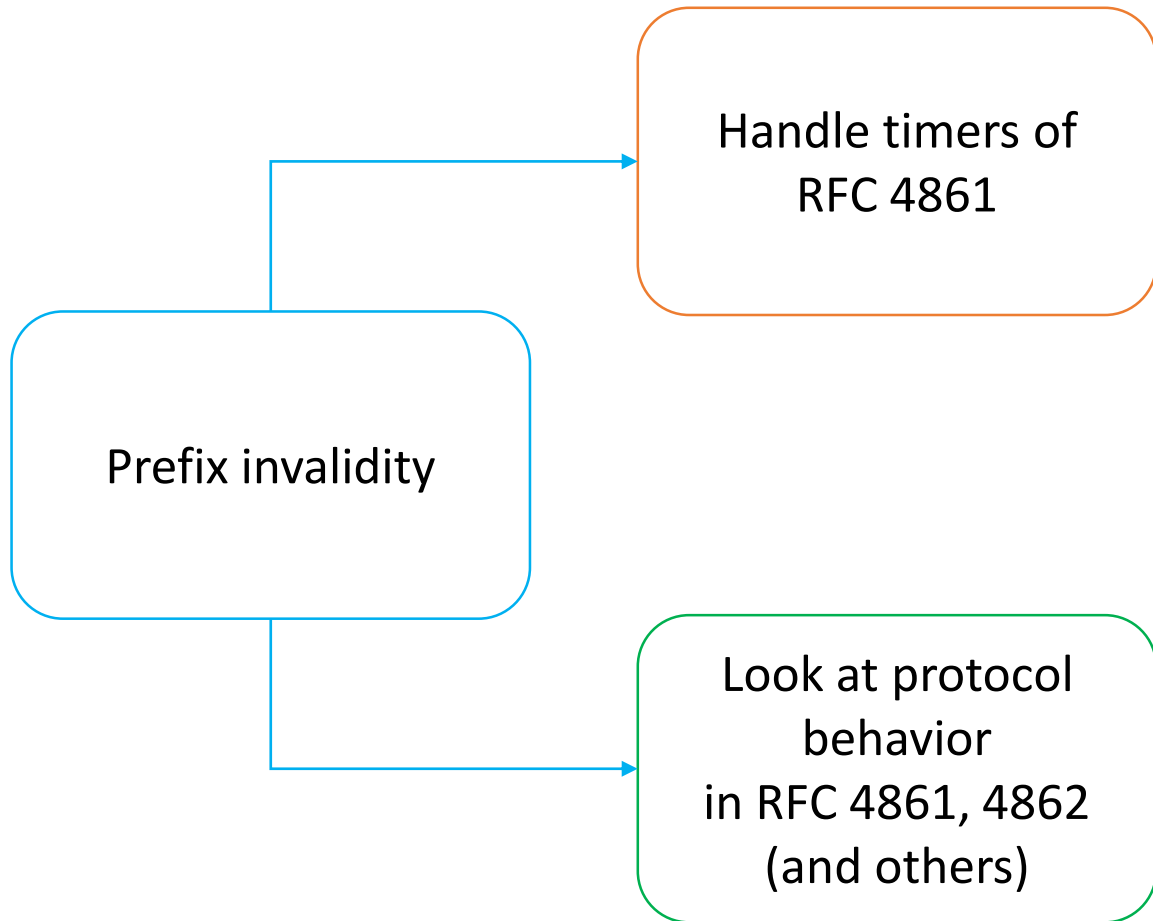
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# Background & Status

- Study initiated in the context of first-hop analysis
  - Looking at cases of IPv6 instability in real networks
- Eventually, attention shifted to Neighbor Discovery and the cases that may lead to network prefixes invalidity
- Specific focus is on the multi-homing, multi-prefix scenario
  - Other cases are also analyzed for the sake of completeness
- Version -02 submitted on March 5<sup>th</sup>
- Main changes with respect to version -01:
  - Reviewed section 3 – Problem scenarios
  - Reviewed section 5 – Solutions
  - Added section 5.8 to link the proposed solutions to the extensions discussed in section 6
  - Done some editorial adjustments and corrections.
- Feedback, comments, criticism... much appreciated.

# Coping with Prefix Invalidation - Options



- SLAAC Parameter Tweaking
  - Modify Valid Lifetime of PIOs (e.g. reduce the time a host maintains stale information)
  - Modify Preferred Lifetime of PIOs (e.g. reduce the time for a host to prefer another prefix).
- Introduce small modifications or extensions to protocols
  - Add / modify rules in ND, SLAAC
  - Proposals shown in the next slide

# Solutions Dependency and Proposal for Extensions

