

Improving the Robustness of Stateless Address Autoconfiguration (SLAAC) to Flash Renumbering Events

(draft-ietf-6man-slaac-renum)

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Introduction

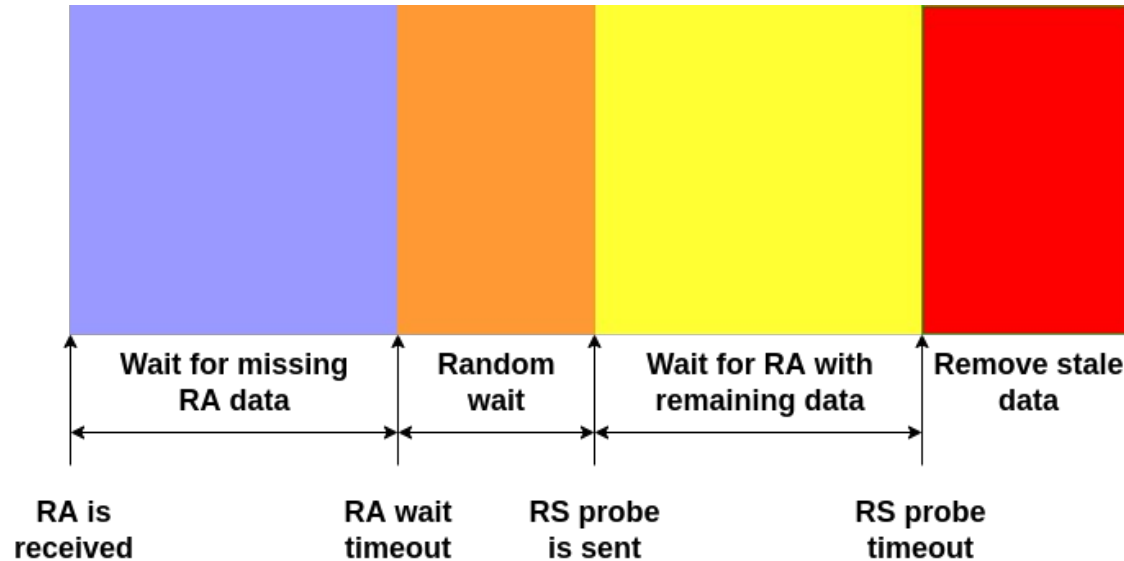
- RFC 8978: Problem statement for SLAAC flash renumbering
- RFC 9096: CE Router recommendations (Updates RFC7084)
- draft-ietf-6man-slaac-renum: **Protocol improvements**

Progress on draft-ietf-6man-slaac-renum

- Remaining feature to incorporate:
 - Heuristics to deprecate stale information
 - Presented/discussed at IETF 114

Concept

- Probe the local router when missing data is detected in received RA



Algorithm

EVENT: Router Advertisement is received

TIME= time()

For each piece of SLAAC configuration information advertised by this router in the received RA:

INFO_LAST= TIME

IF LTA_MODE==FALSE && TIME > (LTA_LAST+LTA_CYCLE)

IF this RA is missing any previously-advertised information:

LTA_MODE=TRUE

LTA_LAST=TIME

Algorithm

IF LTA_MODE==TRUE:

TIME=time()

IF TIME > (LTA_LAST + LTA_CYCLE)

Disassociate any options for which INFO_LAST < LTA_LAST

LTA_MODE= FALSE; RS_COUNT= 0

ELSE IF TIME > (LTA_LAST + RA_WIN + RS_RNDTIME) && TIME >
(RS_LAST + RS_TIMEOUT) && RS_COUNT < RS_COUNT_MAX:

IF for all options INFO_LAST >= LTA_LAST

LTA_MODE= FALSE; RS_COUNT= 0

ELSE

SendRS()

RS_LAST=TIME; RS_COUNT++

Moving forward

- WGLC?