Loop detection mechanisms for SIP B2BUAs

draft-kaplan-straw-b2bua-loop-detection-01

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The Problem(s)

• SIP Requests are getting looped, without end
  – In particular, dialog-forming INVITEs
  – Because the left side has a route to the right, while the right side has a route to the left

• PBXs and App Servers replace Via, Record-Route, Max-Forwards, and do other evil things
  – SBCs, on the other hand, do nothing wrong – as usual
Not The Solution

- Look for same To/From pair
- Look for same P-Asserted-ID from wrong side
- Look for same media info coming back
The Solution

• Stop resetting Max-Forwards!
  • Copy and decrement the value

• Also support RFC 5393 for Max-Breadth as a Proxy would
  • And if you’re a Proxy-B2BUA, then implement the RFC 3261/5393 Via-header check

• Is this perfect? NO! It will still loop a bunch of times before Max-Forwards reaches 0, but at least it will end eventually
What’s changed since the last time we discussed this boring topic?

• There’s a new AD selected, and one retired
• There’s a new Pope selected, and one retired
  – Coincidence? I think not!
What’s changed about the WG draft?

• New expiry date... ‘ascii rehydration’ at work!
• Section 5 of the draft has this now:

For B2BUAs that remove Record-Route headers, they MUST only perform the copying and checking rules above for out-of-dialog requests. The reason for this is other User Agents might send in-dialog requests using a very low Max-Forwards value, based on the number of Record-Route headers they received.
See you in Berlin!