Is Session-ID for Debugging or for Features? (i.e., do we need a Session-ID for Session-ID?)

draft-kaplan-dispatch-session-id-03
Annex-A
Use-cases

• Many people want something to help correlate SIP messages/trans/dialogs for debugging/monitoring/logging
• But also for active referencing/matching at the SIP protocol layer
  – Refer-To, Join, Replaces cases
  – Parallel fork matching
  – Hair-pinned call matching
  – Etc.
Problem #1

• Given any arbitrary # of B2BUAs, if an out-of-dialog SIP request reaches a B2BUA, how do we know the request is really for *that* particular B2BUA?
  – Today, Call-ID/tags wouldn’t match – it’s an error
  – With Session-ID, it’s not an error, but maybe it *should* be
The Resource-List case

+-------+     +-------+     +-------+     +-------+      +-------+
|Alice|     | AS1 |     |B2BUA-3|     | AS2 |      | Bob |
+-------+     +-------+     +-------+     +-------+      +-------+

INVITE
|callid:1a |callid:1b |callid:1c |callid:1d |

---------->

sessid:1

----------->

re-INVITE
|callid:1b |

---------->

RL&lt;sessid:1&gt;

---------->

sessid:1

---------->

callid:1c |callid:1d |

---------->

sessid:1 |sessid:1 |

• Second INVITE has a Resource-List of first INVITE session, causing AS1 to re-INVITE

• What happens if the second INVITE hits AS2 first, instead?
The Hair-pinned/Loop Call Case

• Some people have proposed using Session-ID to detect a call loop
  – What if they were wrong, it’s just a legit spiral

• Some people have proposed using Session-ID to detect hair-pins, to undo media relaying
  – What if they’re wrong, the media really does need to follow the hair-pin path due to transcoding, or recording, or whatever
How would they fix such errors?

• If a deployment incorrectly uses Session-ID as described, what will be done?
  – Answer: the SBC will change the Session-ID value, so that the other boxes don’t see them as matching

• But then we lose the benefit of correlation for troubleshooting
  – Back to square-1
A straw-man proposal

• Separate debugging/troubleshooting from everything else
  – Make it a “Log-ID” or some such, with a new value similar but not identical to Session-ID
  – Let “Session-ID” try its best, but at least when it fails we have a Log-ID to troubleshoot it with 😊