

# 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	sessid:1	sessid:1	sessid:1	
INVITE	re-INVITE			
callid:2a	callid:1b			
----->	----->			
sessid:2	sessid:1	re-INVITE		
RL<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 😊