

End-to-End SIP Session-ID at IETF88

draft-ietf-insipid-session-id-02

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Why an E2E Session-ID?

- Identify issues in the network (e.g. debugging, etc.)
- Track sessions as they move (e.g., transfer)
- Enable monitoring or recording of sessions (with proper end-to-end identification)
- Associate sessions that are related (e.g., participants in a multipoint conference or part of a targeted single or multi-party session to be recorded)

Known Open Issues from Berlin

- Agreed to everything Paul K. pointed out on the recent posting
 - Missed posted deadline, will submit today (ish)
- Still haven't reached consensus to address the Disaggregated Media flow we discussed in Orlando
 - (hint: it's a conference)
- And the “biggie”... work out the backwards compatibility issues
 - In a separate preso (next)

Next Steps

- Meet in Toronto about this ID
- ... eventually meet in Hawai'i...

Background Message Flows

Basic Session-ID Construction with 2 UUIDs

Session-ID

---	Alice	B2BUA	Bob	Carol
{A}	-----INVITE----->			
{A}		-----INVITE----->		
{B,A}		<---200 OK-----		
{B,A}	<---200 OK-----			
{A,B}	-----ACK----->			
{A,B}		-----ACK----->		
	<=====RTP=====>			

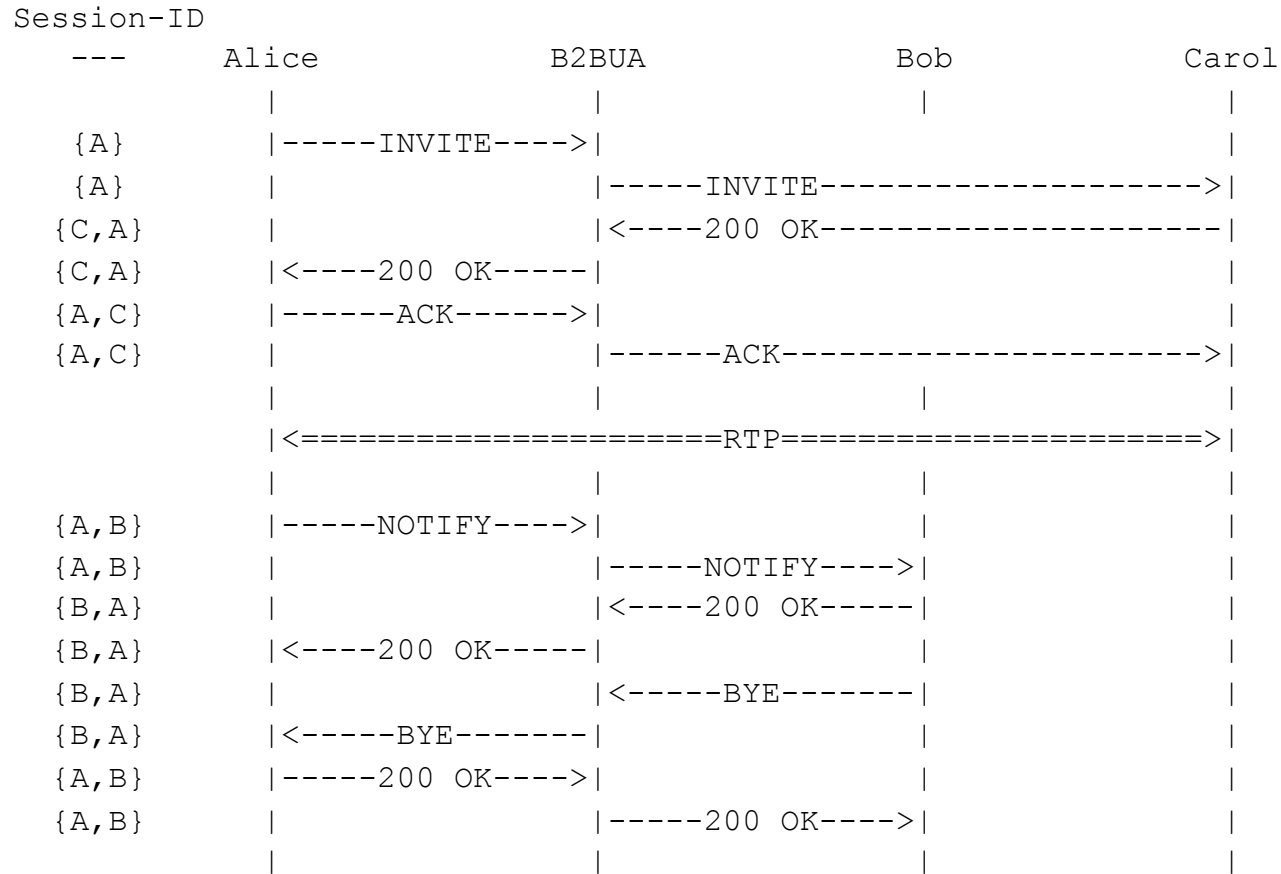
Basic Call Transfer using REFER (1/2)

```

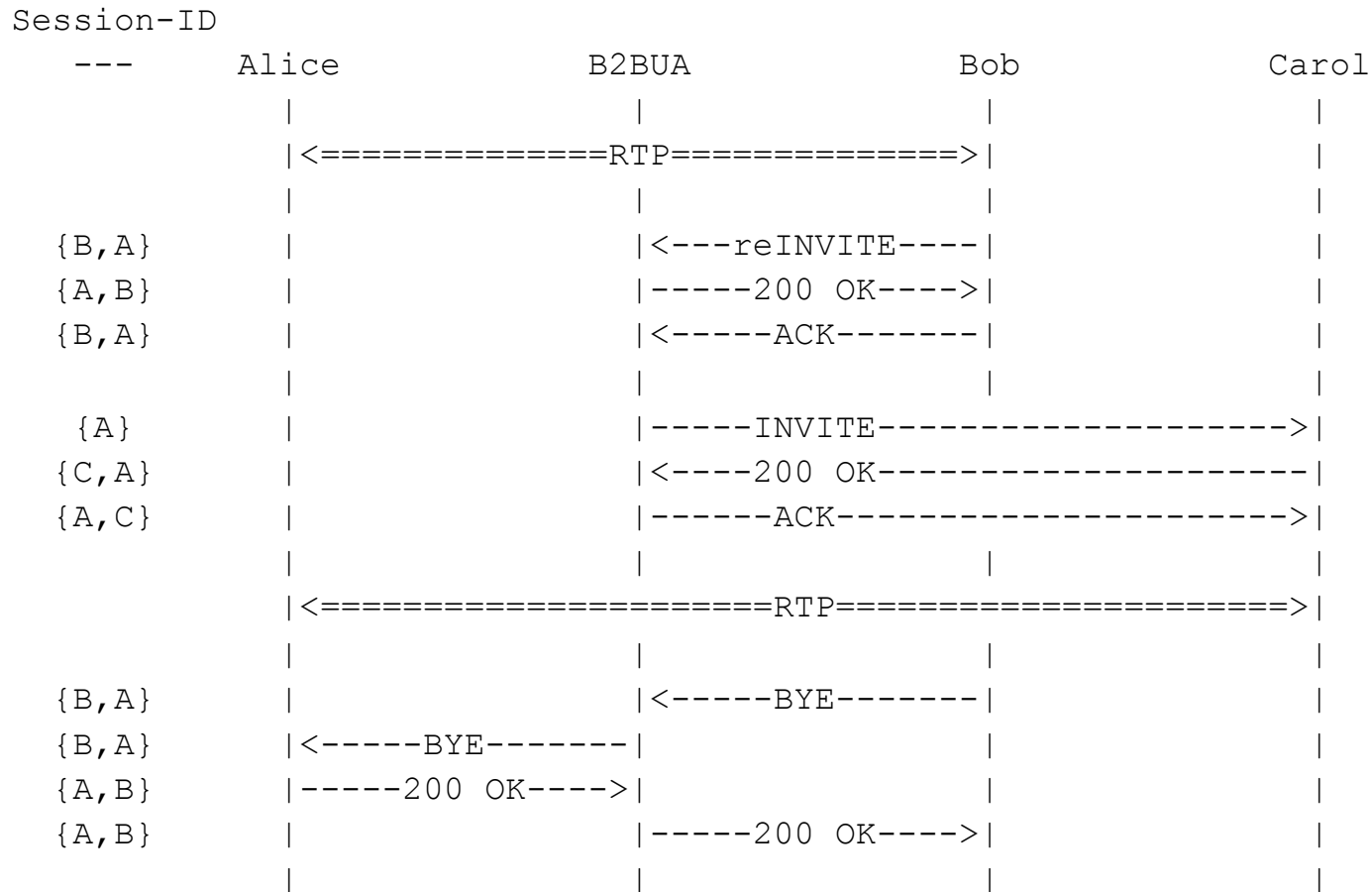
Session-ID
---      Alice                B2BUA                Bob                Carol
      |                        |                        |                        |
      |<=====RTP=====>|                        |                        |
{B,A}  |                        |<---reINVITE---|                        |
{B,A}  |<---reINVITE---|                        |                        |
{A,B}  |-----200 OK---->|                        |                        |
{A,B}  |                        |-----200 OK---->|                        |
{B,A}  |                        |<-----ACK-----|                        |
{B,A}  |<-----ACK-----|                        |                        |
      |                        |                        |                        |
{B,A}  |                        |<-----REFER-----|                        |
{B,A}  |<-----REFER-----|                        |                        |
{A,B}  |-----200 OK---->|                        |                        |
{A,B}  |                        |-----200 OK---->|                        |
{B,A}  |                        |<-----ACK-----|                        |
{B,A}  |<-----ACK-----|                        |                        |
{A,B}  |-----NOTIFY---->|                        |                        |
{A,B}  |                        |-----NOTIFY---->|                        |
{B,A}  |                        |<-----200 OK-----|                        |
{B,A}  |<-----200 OK-----|                        |                        |

```

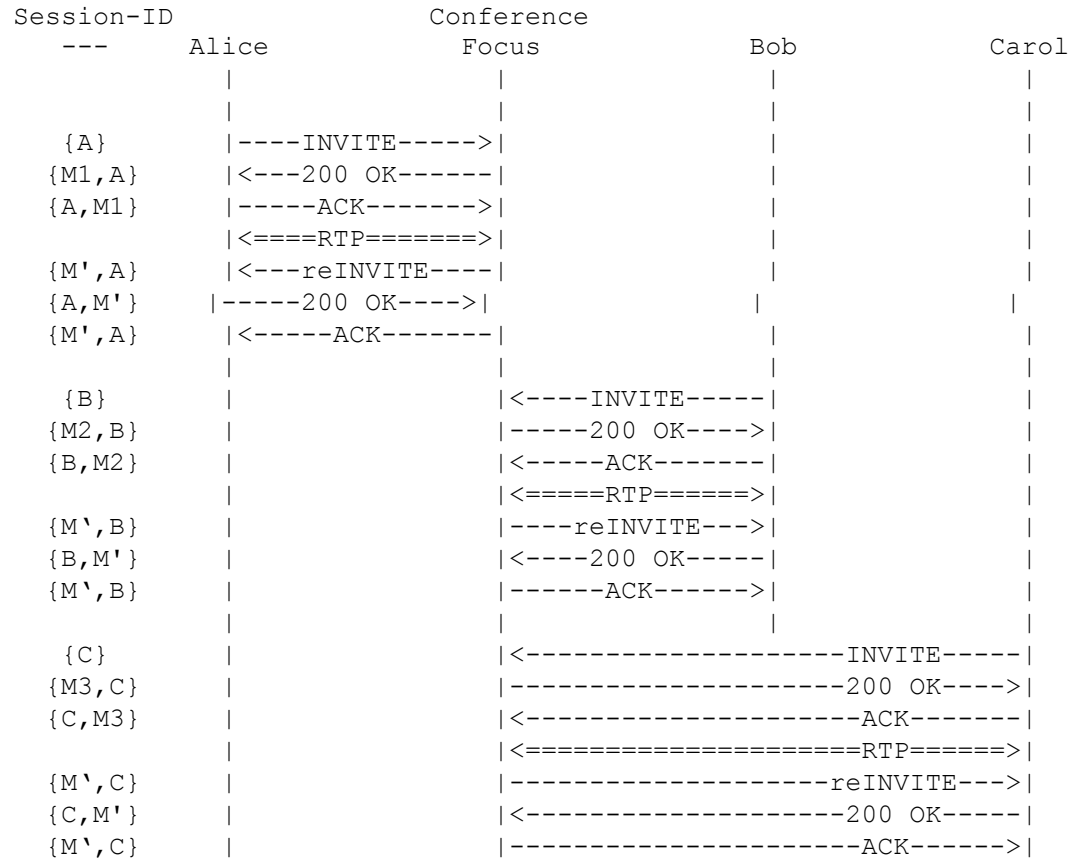
Basic Call Transfer using REFER (2/2)



Basic Call Transfer using reINVITE



Single Focus Conferencing



Single Focus Conferencing using WebEx

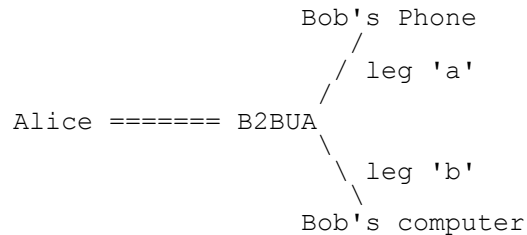
Session-ID	Alice	Conference	Bob	Carol
---		Focus		
		< ** HTTPS ***** >		
		Transaction		
{M}		< ----- INVITE ----- >		
{A,M}		----- 200 OK ----- >		
{M,A}		< ----- ACK ----- >		
		< ===== RTP ===== >		
		< ** HTTPS ***** >		
		Transaction		
{M}		----- INVITE ----- >		
{B,M}		< ----- 200 OK ----- >		
{M,B}		----- ACK ----- >		
		< ===== RTP ===== >		
		< ***** HTTPS ***** >		
		Transaction		
{M}		----- INVITE ----- >		
{C,M}		< ----- 200 OK ----- >		
{M,C}		----- ACK ----- >		
		< ===== RTP ===== >		

Basic 3PCC for two UAs

```
Session-ID
---      Alice                B2BUA                Bob                Carol
      |                        |                        |
      |                        |                        |
{X}      |<-----INVITE-----|                        |
{A,X}    |-----200 OK----->|                        |
{A}      |                        |-----INVITE----->|
{B,A}    |                        |<----200 OK-----|
{B,A}    |<-----ACK-----|                        |
{A,B}    |                        |-----ACK----->|
      |<=====RTP=====>|
```

Session-ID and Disaggregated Media

- From a Session-ID point of view, I believe if you are wanting the service Brett is describing, then it'll look something like this *logically*



Where it is the case that the B2BUA merges the two responses from Bob's 2 UAs into a single one response, unless there are conflicts; then Brett's right, some choices will need to be made, including dropping one signaling leg.

A Session-ID can (right now) only have two parts, and I believe from Alice's point of view, she ought to see a consistent other UUID making up the full Session-ID.

However,

- from the B2BUA to Bob's phone, the Session-ID should be (M,Bp)

and

- from the B2BUA to Bob's computer, the Session-ID should be (M,Bc)

Just as the B2BUA merges the SDPs together (and at least changes header-values), it also maintains a single Session-ID towards Alice.

Now, how does the B2BUA pick which of Bob's UAs to send towards Alice... do we want to make that uniform? Can we make that uniform?

Answers: probably can't - unless we treat this call as a conference

caveat: someone clever might come up with a way, but for every scenario of Bob's UAs...