SIPREC Protocol

draft-portman-siprec-protocol

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Authors: L. Portman, H. Lum

Status

- Currently -01 draft
- Very early draft need your input
- Main topics
 - RS session establishment
 - Delivering metadata

Recording session – SRC as B2BUA

UA	A	SRC	UA B	SRS
١	(1)CS INVITE	1		I
		'		1
		(2) CS INVITE	>	l
			(3)OK	
١		<		1
١	(4)OK			1
 	<	(5)RS INVITE	 (CallId + Participant 	
 			(6)	OK with SDP
	(7)CS RTP	Ī	1	Î
١		> =========	- 1	1
	<======	= <====== (8)RS RTP	l	
				* I
	(9)CS BYE	İ		
		(10)CS BYE		
		(11)RS BYE		

Recording Session – SRC as Endpoint

```
UA A
              UA B
                             SRS
(SRC)
|(1)CS INVITE
 ---->|
     (2)OK
|<----|
|(3)RS INVITE (CallId + Participants) with SDP
               (4) OK with SDP
1(5)CS RTP
 =========>|
 (6)RS RTP
(7)CS BYE
|-----
1(8)RS BYE
```

Recording Session – SRC as conference focus

```
UA A
               Focus
                                UA B
                                               SRS
                (SRC)
      (already in a conference)
 |<========>|<======>|
 | (1) REFER sip:Conf-ID Refer-To:SRS
  ---->|
 | (2) 202 Accepted
  |<----|
   (3) NOTIFY (Trying) |
  <-----
 (4)200 OK
                 | (5) INVITE Contact: Conf-ID; is focus
                                        (6)200 OK |
                 |<-----|
                 (7) RTP (mixed or unmixed)
      (8) NOTIFY (OK)
  <-----|
 1(9)200 OK
  |---->|
```

SRC as conference focus

Issues

- How does the focus know to establish an RS towards the SRS? Through URI parameters or through discovery mechanism?
- Why not REFER to SRS to send INVITE to SRC?
- Is this mechanism out of scope?

Delivering metadata

- 2 types of metadata
 - Attributes of recorded media will be in SDP of the RS
 - The rest format to be defined in metadata draft

How to deliver the rest of metadata?

- Some metadata can be delivered as part of the RS establishment (INVITE/reINVITE)
- Some metadata can be delivered as a stream of events
 - What mechanism?
 - INFO package
 - Event package

Proposed SIP Extensions

- Identify SIP session as RS
 - Follows draft-johnston-siprec-rec-cc
 - Introduce src and srs media feature tags
- SDP Handling
 - Identify each media stream with label (a=label:1)
 - The label is a cross reference for recorded media in metadata
- Metadata content
 - New Content-Type: application/rs-metadata
 - New Content-Disposition: recording-session

Sample INVITE

```
INVITE sip:97753210@10.240.3.10:5060 SIP/2.0
From: <sip:2000@10.226.240.3>;tag=35e195d2-947d-4585-946f-098392474
To: sip:Recorder@10.240.3.10
Call-ID: d253c800-b0d1ea39-4a7dd-3f0e20a@10.226.240.3
CSeq: 101 INVITE
Max-Forwards: 70
Contact: <sip:2000@10.226.240.3:5060;transport=tcp>;src
Via: SIP/2.0/TCP 10.226.240.3:5060;branch=z9hG4bKdf6b622b648d9
Content-Type: multipart/mixed;boundary=foobar
Content-Length: [length]
--foobar
Content-Type: application/sdp
o=SRS 0 0 IN IP4 10.226.240.3
c=IN IP4 10.226.240.3
t = 0 0
m=audio 12241 RTP/AVP 0 4 8
a=sendonly
a=label:1
--foobar
Content-Type: application/rs-metadata
Content-Disposition: recording-session
[metadata content]
```

Open Questions

- Recording pause and resume
 - How to distinguish from CS mute/unmute?
- Offer-less INVITE

Discussion