

# SIPREC

## An Architecture for Media Recording using the SIP

IETF INTERIM MEETING

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on behalf of the team

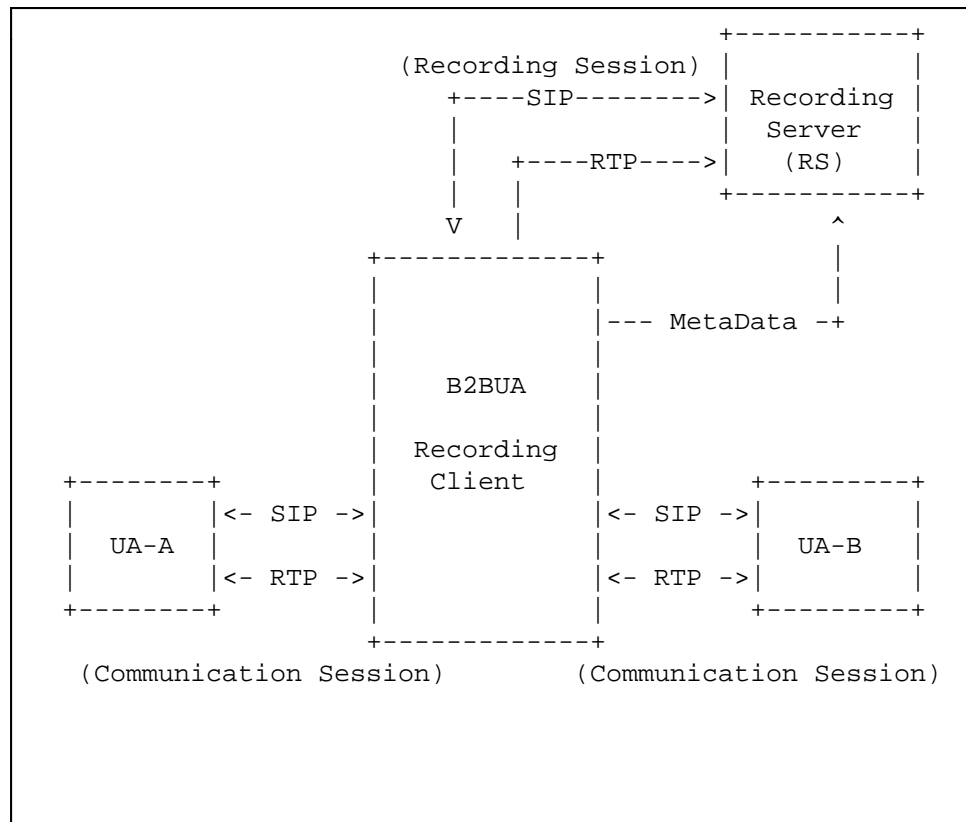
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# Agenda

- Location of Session Recording Client
- Establishment the Recording Session
- Additional Flows
- Open Issues
- Next Steps

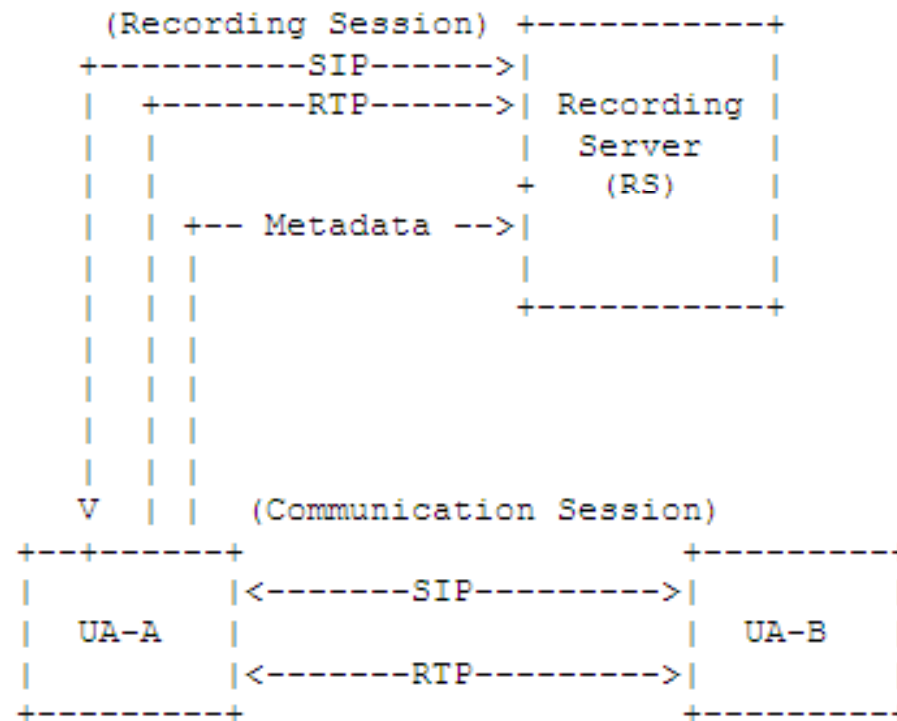
# B2BUA as SRC

- A SIP B2BUA which has access to the media that is to be recorded may act as a Session Recording Client.
- Open items
  - Does SRC always reports metadata?
  - Mandatory metadata in INVITE headers



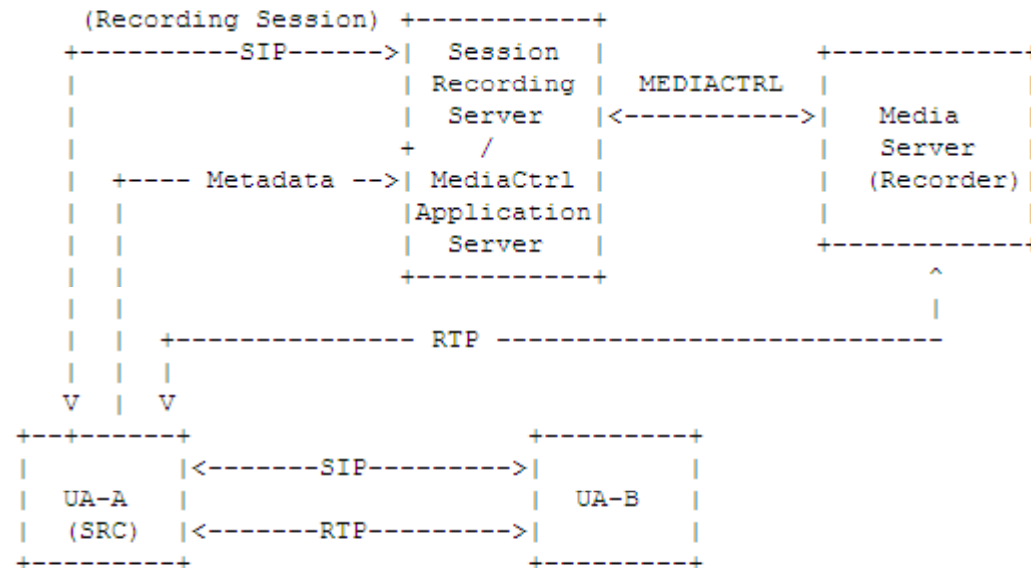
# Endpoint acts as SRC

- A SIP Endpoint / User Agent may act as a Recording Client in which case the endpoint sends the Replicated Media to the Recording Server
- Open items
  - Media codec negotiation (Issue #4)
  - Dynamic codec negotiation (issue #21)



# Mediactrl (RFC5567)

- Use case: AS controls MS for conferencing/recording
- SRS can be implemented by using MEDIACTRL (MS as recorder)
- B2BUA SRC can be implemented by using MEDIACTRL (MS as conference server)
- Same for Conference Focus
- Open items:
  - Applicability of MEDIACTRL as Recording Session Protocol between SRC and SRS



(Communication Session)

# Establishment the Recording Session

- SRC Initiated Recording
  - RC initiates the recording session by sending an INVITE request to the SRS.
  - Useful where recording decision is made by the RC.
- SRS Initiated Recording
  - RS initiates the recording session by sending an INVITE request to the SRC.
  - Useful where recording decision is made by the SRS.
- Open issue: persistent recording flows (issue #6)
  - Which CS identifier will be used for Persistent RS?

# Media Recording Metadata

- Content
  - Dialog identifiers for the Communication Session
  - Identities of users taking part in the Communication Session
  - Dialog state of the Communication Session
  - Session state relating to the Communication Session(i.e. sendonly, inactive, sendrecv).
- Mechanisms for delivery:
  - Event package (outside RS SIP session)
  - INFO package (inside RS SIP session)
  - INVITE Headers (issue #17)
  - Webservice
- Open Items
  - Communication Session identifier
  - Mandatory data elements

# Multi-party Conference Recording

- B2BUA SRC (conference server)
  - Mixed media stream for all participants
  - Single Media stream per participant
  - Single Metadata reporting
  - Hidden SRS as one of the participants
- Endpoint SRC
  - Mixed media stream for all other participants
  - Multiple SRCs (per participant)
  - Multiple Metadata Reports
  - Multiple recording notifications
- B2BUA SRC (in front of Endpoint)
  - Similar to Endpoint SRC



# Additional Flows

- **Pause/Resume Recording Session**
  - Changing the SDP direction attribute to "inactive" and resume the recording by changing the direction back to "sendonly" or "recvonly"
- **Media Stream Mixing**
  - SDP must describe all separate streams
- **Notifications to the Recorded User Agents (issue #2)**
  - Session Recording Client must provide notifications on the Communication session.
- **Preventing the recording of a SIP session**
  - UA must be able to indicate that recording is not allowed.
  - Some sessions **MUST** be recorded.

# Next Steps

- Adopt as working group item

# Discussion