

# SIPREC

## Recording Metadata format (draft-ram-siprec-metadata-format-00)

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On behalf of the team

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# Agenda

- Introduction to Metadata format (draft-ram-siprec-metadata-format-00)
- SIPREC XML Schema discussion
- Discuss Open items in Metadata format
- Next Steps

# Introduction to Metadata format

- draft-ram-siprec-metadata-format-00 defines XML document with new namespace (recording) for exchanging metadata between SRC and SRS.
- XML document is based on Metadata model draft (draft-ram-siprec-metadata)
- XML document provides the ways to describe CS Group, CS, Participant, stream metadata.

# Metadata format considerations

- All XML list elements are grouped under single container XML element for better readability (E.g.: session element is grouped under sessions element)
- Stream element links to SDP using SDP label attribute
- Individual “id” of each element is represented as an attribute of element
- Delivery mechanism of Metadata is outside the scope of this document

# recording Element

- recording is the top most element in recording namespace.
- recording element MUST exist in all recording XML document.
- recording element contains group (CSG), type of recording (persistent/selective), requestor (SRC/SRS), id, appdata (Any XML extension)

# group Element

- group element is used to represent CS group
- group contains sessions element to represent multiple sessions
- group contains appdata specific to group
- Initiator element in group represent the originator for this group. This data relates to caller of the normal dialog.
- Group id generation is an open issue

# session Element

- session element is used to represent CS
- session contains participants, streams whereas participants, streams are container for participant, stream
- Session includes timestamp to represent when the session is started. This help to identify start-time and end-time of the session.
- Session has its own appdata and id elements

## participant Element

- participant element is used to represent participant of an CS
- aor element in participant element represent the identity of the participant
- Send element indicates the stream which are send by this participant. The label value of stream is used to relate stream and participant
- Optional element “recv” represents the list of streams received by participant.



# stream Element

- stream element is used to represent media stream
- Label attribute indicates m-line in SDP related to this stream. This attribute is designed in a way that SDP attributes are fully re-used for SIPREC.
- streamMode element indicates whether the stream is mixed or un-mixed.
- Appdata element for stream extensions

# appdata Element

- appdata element is used to extend the element in this XML document
- xs:any is used for the extension.
  - Open issue: Any other specific XML mechanism has to be used.

# Container Elements

- Sessions, Participants, Streams elements are created as container element to hold the list of respective element
- Container elements are created for readability

## Open Issue – Id generation in XML element

- Id generation for each element in XML document. Whether it is done by SRC or SRS or combination of both?
  - SRC performs based on CS SIP signaling data but achieving uniqueness is tough here
  - SRS dynamically creating key for new XML document and SRC has to keep track for further transaction. The solution complexities will go up in maintaining these extra key. Not possible for group (CSG)
  - Generate the key by SRC and create partial data by SRS for uniqueness alone

## Open Issue – Individual Id generation

- How to create session id ?
  - session id MAY call-id of CS or equivalent id .  
Whether SRS addition requires?
- How to create participant id ?
  - Identity of CS May be reused but unreliable in case of Anonymous identity
- How to create stream id
  - Label attribute is used to uniquely identify stream.  
The issue may raise as Label scope within the document and transaction

# Open Issue – Individual Id generation

- How to create recording id ?
  - recording id MAY re-use Recording session dialog-id. “id” attribute has to accommodate the values from SRC and SRS.
- How to create Group id ?
  - Group id may be created by SRC based on the grouping mechanism and SRS adds extra data to make uniqueness

## Open Issue – Partial Metadata in XML

- During lot of services like call Hold/resume, there is only few update in metadata but current passing complete XML document is not flexible to send the partial update information alone.
- Whether partial update has to be considered?
- Partial update for deletion information complicates the solution. How to make generic? Any known solved XML format exist?

## Open Issue – Partial Metadata in XML

- Whether XML namespace extension has to be created for each element in case partial data has to be passed even though recording element exists in all recording XML element?



# Next steps

- Understand whether XML with SDP link approach looks appropriate for SIPREC?
- Request for review of draft-ram-siprec-metadata-format-00 in the mailer
- Close the open item
- Adding more examples for clarity
- Publish -01 revision before IETF-80