

# SIPREC

## Recording Metadata format (draft-ram-siprec-metadata- format-01)

IETF-80 SIPREC MEETING

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On behalf of the team

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# Agenda

- Update in Metadata format (draft-ram-siprec-metadata-format-01)
- Recording-Metadata XML Example
- URN UUID details
- Partial XML mechanism explanation
- Discuss Open items in Metadata format
- Glance at Closed items in Metadata format
- Next Steps

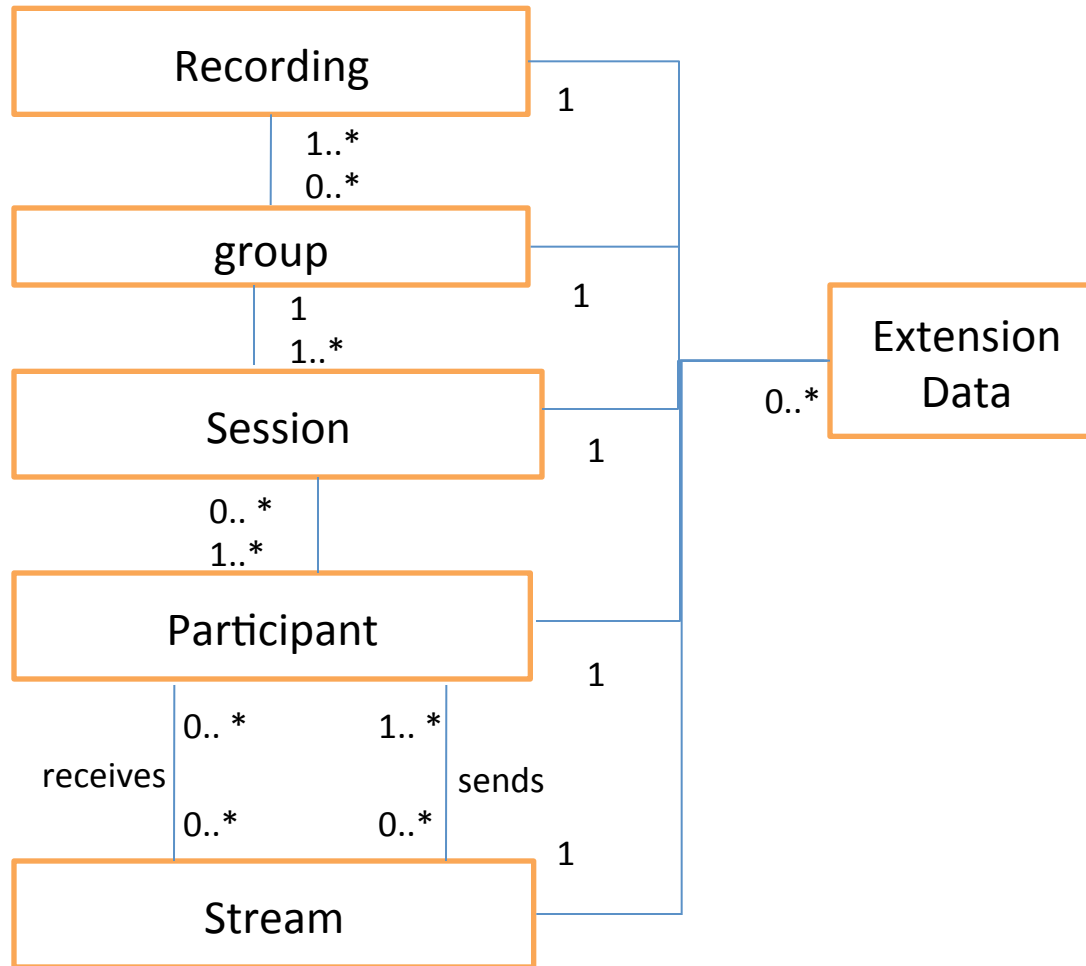
# Update in (-01) Metadata format

- Include recording-metadata element as a container element instead of recording element. This helps in avoiding duplicate data of recording elements during the partial XML update
- Removed container element like sessions, participants, streams from XML document as parent reference exists in each element

# Recording-Metadata Example

```
<recording-metadata xmlns='...:siprec'>  
  <recording id=""> </recording>  
  <group id="" recording=""></group>  
  <session id=""group=""></session>  
  <participant id=""session=""></participant>  
  <stream id=""session=""></stream>  
  <extensiondata id="" parent="">  
    </extensiondata>  
</recording-metadata>
```

# Metadata Format element view by SRS



# Update in (-01) Metadata format

- URN UUID (RFC 4122) mechanism is used as the unique id mechanism for relevant XML elements like recording, group, session, stream, participant, extensiondata
- Partial XML passing in RS is supported by having unique URN UUID for group, session, stream, participant, recording, extension data which are directly under recording-metadata (“root”) container/namespace.

# URN UUID usage in each element

- URN UUID (RFC 4122) mechanism is used as the unique id mechanism for relevant XML elements like recording, group, session, stream, participant, extensiondata
- All UUID will be used in partial update of XML
- UUID is unique in case multiple SRC to single SRS. No feedback from SRS required
- Group UUID is also used to abstract the exact grouping mechanism

# Participant URN UUID XML example

```
<participant  
  id="urn:uuid:b2b7c112-5982-469d-9007-6ddb  
  ecca64d3"      session="urn:uuid:  
  855a5ded-8420-456d-a70f-6da1eeaeb425">  
  <aor>sip:partha@siprec.com</aor>  
  <name xml:lang="it">Partha</name>  
  <send> <id>urn:uuid:8b53f3de-  
  da39-4846-93c7-ee5e5f8f6f0b</id> </send>  
  <recv> <id>urn:uuid:  
  50000c9b-9191-40a4-8231-5bcbca5e2b17</  
  id></recv>
```



# URN UUID extension

- The usage of URN UUID can be extended later to other kinds of URNs if that becomes necessary

# Partial XML Update mechanism

- Partial XML passing in RS is supported by having unique URN UUID for group, session, stream, participant, recording, extension data which are directly under recording-metadata (“root”) container/namespace. All UUID will be used in partial update of XML
- Each metadata block will be able to passed partially within the same RS

# Partial XML Alternative approaches analyzed

- Partial XML data using RFC 5261 - An Extensible Markup Language (XML) Patch Operations - Too complex for Recording
- Rest based architecture for passing XML. – Best for Non-realtime protocol like HTTP but in case of SIP, duplicate information required both in SIP and XML

# Partial XML Update

```
<recording-metadata  
  xmlns='urn:ietf:params:xml:ns:siprec'  
  <dataMode>partial</dataMode>  
  <stream id="urn:uuid:  
50000c9b-9191-40a4-8231-5bcbca5e2b17">  
    <stop-time>2010-12-16T23:41:07Z</stop-  
time>  
    <label>96</label>  
  </stream>  
</recording-metadata>
```

# Update in (-01) Metadata format

- Updated elements in XML document as per draft-ram-siprec-metadata-04 elements & associations
- Changed appdata element name as extensiondata
- Added Partial Update example & SIP usage XML+SDP example for readability
- Portion of security considerations section is added.

# Recording Element Example

```
<?xml version="1.0" encoding="UTF-8"?>  
  <recording-metadata  
    xmlns='urn:ietf:params:xml:ns:siprec'  
      <recording id="urn:uuid:  
7979087f-959c-4b84-bb22-07da66733b47">  
        <requestor>SRC</requestor>  
        <type>selective</type>  
      </recording>  
    </recording-metadata>
```

# Group & Session Element Example

```
<group id="urn:uuid:efe3930b-2a31-4e6a-  
a6ab-203fd7078302" recording="urn:uuid:  
7979087f-959c-4b84-bb22-07da66733b47">  
<initiator>sip:romeo@example.com</initiator>  
</group>  
<session id="urn:uuid:855a5ded-8420-456d-  
a70f-6da1eeae425"  
group="urn:uuid:efe3930b-2a31-4e6a-  
a6ab-203fd7078302" />  
</session>
```

# Extension Data Element Example

```
<extensiondata xmlns='http://example.com/  
sessionapp'  
id="urn:uuid:a54d6aa5-d40d-43f9-88c5-  
b4633d873bdd" parent="urn:uuid:  
855a5ded-8420-456d-a70f-6da1eeae425">  
  <structure>FOO!</structure>  
  <whatever>bar</whatever>  
</extensiondata>
```

- ❖ Parent UUID belongs any one of metadata block element recording, group, session, participant, stream



# Open Issue – Id generation scope

- The current approach of partial data is based on metadata block like stream, participant which helps is reducing the number of URN UUID maintained in SRC and SRS
- Another approach for Partial Update is to have URN UUID for individual elements like aor, name. This can bloat up the XML structure with a lot of URN UUIDs.
- Which approach is the best way for SIPREC?

# Open Issue – Codec Parameters in Stream element

- Whether Codec parameters in RS SDP has to be duplicated in Stream XML or Stream XML linkage with RS SDP using label attribute will be suffice? Till now, Identified attributes are
  - Media Type (audio/video/...)
  - Direction attribute
  - Content type (RFC 4796)
  - RTP MUX (RFC 5576)

# Open Issue – Multiplexing different participants' streams on the same port

- In case RTP MUX, Multiple participants will have single stream on the same port. How these stream has to be represented in the format?
  - Multiple Participant element refers single stream
  - RFC 5576 – ssrc attribute with cname param
  - Some other?

# Closed Issue – SIP usage table & example

- SIP usage table & Example are provided in Sec 7 & 8 for the readability. These section will be removed when the draft is getting accepted as WG item (John e-mail on 3/10 with title “Comments on draft-portman-siprec-protocol-03”)

# Closed Issue – Initiator attribute removal in group element

- Remove Initiator attribute in group element – (Partha e-mail on 3/12 with title “Review Request for draft-ram-siprec-metadata-format-01”)
- AI: -02 draft has to remove Initiator attribute

# Closed Issue – Minor text changes

- ExtensionData element XML schema shows “session” instead of “parent”
- Sec 4.2.2 has to add “participant” and the text has to look like: "recording-metadata element has recording, group, session, participant, stream elements" (John e-mail on 3/13 with title “Comments on draft-portman-siprec-protocol-03”)
- AI: -02 draft has to update the text

# Next steps

- Add Milestone in SIPREC or merge with SIPREC solution?
- In case of adding milestone, Request to Adopt as WG item
- Close all the open items
- Update next revision based on the comments
- Request for further review in the mailer