



XMPP

XEP-0507: Jingle Content Category

Timothée Jaussoin

<mailto:edhelas@movim.eu>

<xmpp:edhelas@movim.eu>

<https://edhelas.movim.eu>

2025-11-11

Version 0.1.0

Status	Type	Short Name
Experimental	Standards Track	NOT_YET_ASSIGNED

This specification defines an XMPP extension to negotiate the use of Session Description Protocol (SDP) media- level attribute 'content' as defined by RFC 4796 with Jingle RTP sessions

Legal

Copyright

This XMPP Extension Protocol is copyright © 1999 – 2024 by the [XMPP Standards Foundation](#) (XSF).

Permissions

Permission is hereby granted, free of charge, to any person obtaining a copy of this specification (the "Specification"), to make use of the Specification without restriction, including without limitation the rights to implement the Specification in a software program, deploy the Specification in a network service, and copy, modify, merge, publish, translate, distribute, sublicense, or sell copies of the Specification, and to permit persons to whom the Specification is furnished to do so, subject to the condition that the foregoing copyright notice and this permission notice shall be included in all copies or substantial portions of the Specification. Unless separate permission is granted, modified works that are redistributed shall not contain misleading information regarding the authors, title, number, or publisher of the Specification, and shall not claim endorsement of the modified works by the authors, any organization or project to which the authors belong, or the XMPP Standards Foundation.

Warranty

NOTE WELL: This Specification is provided on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE.

Liability

In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall the XMPP Standards Foundation or any author of this Specification be liable for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising from, out of, or in connection with the Specification or the implementation, deployment, or other use of the Specification (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if the XMPP Standards Foundation or such author has been advised of the possibility of such damages.

Conformance

This XMPP Extension Protocol has been contributed in full conformance with the XSF's Intellectual Property Rights Policy (a copy of which can be found at <https://xmpp.org/about/xsf/ipr-policy>) or obtained by writing to XMPP Standards Foundation, P.O. Box 787, Parker, CO 80134 USA).

Contents

1	Introduction	1
2	Protocol	1
3	Mapping to Session Description Protocol	1
4	Requirements	3
5	Security Considerations	3
6	IANA Considerations	3
7	XMPP Registrar Considerations	3
8	XML Schema	3

1 Introduction

The [Jingle RTP Sessions \(XEP-0167\)](#)¹ already defines a way to map SDP medias to Jingle RTP sessions. This mapping is also defined through several other XEPs. Jingle allows several medias to be negotiated through 'content' elements, each content is mapped to one specific SDP media. When negotiating a Jingle sessions some of its content can be similar in the sense that their medias cannot be distinguished just by examining their description lines (e.g., two video streams).

This document defines a new element 'category', based on the [RFC 4796](#)² SDP 'content' attribute, that allows applications to treat each of those contents differently.

2 Protocol

When an entity wishes to negotiate a new Jingle 'content' in a session it may want to categorize that content to help the other entities to understand how they should display it and adapt their interface in an appropriate manner.

For example, if a user wants to share simultaneously its webcam and screen with a contact the applications involved may want to automatically adapt their interface to display those different types of content accordingly, e.g., putting the screencast in full-screen and displaying the contact's webcam in the corner.

To categorize accordingly those different kinds of contents each entity SHOULD add one or several <category/> elements in the <description/> section qualified by the 'urn:xmpp:jingle:apps:category:0' having a 'name' attribute that MUST map to the [RFC 4796](#)³ SDP 'content' attribute.

Name	Description
slides	The media stream includes presentation slides
speaker	The media stream contains the image of the speaker
sl	The media stream contains sign language
main	The media stream is taken from the main source
alt	The media stream is taken from the alternative source

3 Mapping to Session Description Protocol

The SDP extract bellow.

¹XEP-0167: Jingle RTP Sessions <<https://xmpp.org/extensions/xep-0167.html>>.

²RFC 4796: The Session Description Protocol (SDP) Content Attribute <<http://tools.ietf.org/html/rfc4796>>.

³RFC 4796: The Session Description Protocol (SDP) Content Attribute <<http://tools.ietf.org/html/rfc4796>>.

```

v=0
o=Stuart 292742730 29277831 IN IP4 138.143.71.89
s=Showing of my skills
c=IN IP4 138.143.71.2
t=0 0
m=video 52886 RTP/AVP 31
a=rtpmap:31 H261/9000
a=content:slides,alt
m=video 53334 RTP/AVP 31
a=rtpmap:31 H261/9000
a=content:speaker
m=video 54132 RTP/AVP 31
a=rtpmap:31 H261/9000
a=content:sl

```

Should then map to:

Listing 1: Server return the list of bookmarks

```

<iq from='stuart@studio.org/main'
  id='rg6s5134'
  to='noodle@home.tld/living'
  type='set'>
  <jingle xmlns='urn:xmpp:jingle:1'
    action='session-initiate'
    initiator='stuart@studio.org/main'
    sid='a73sjjvkl37jfea'>
    <content creator="initiator" name='video0'>
      <transport xmlns="urn:xmpp:jingle:transports:ice-udp:1"/>
      <description xmlns="urn:xmpp:jingle:apps:rtp:1" media="video">
        <category xmlns='urn:xmpp:jingle:apps:category:0' name='slides'
          />
        <category xmlns='urn:xmpp:jingle:apps:category:0' name='alt' />
        <payload-type id="31" name="H261" clockrate="9000"/>
      </description>
    </content>
    <content creator="initiator" name='video1'>
      <transport xmlns="urn:xmpp:jingle:transports:ice-udp:1"/>
      <description xmlns="urn:xmpp:jingle:apps:rtp:1" media="video">
        <category xmlns='urn:xmpp:jingle:apps:category:0' name='
          speaker' />
        <payload-type id="31" name="H261" clockrate="9000"/>
      </description>
    </content>
    <content creator="initiator" name='video2'>
      <transport xmlns="urn:xmpp:jingle:transports:ice-udp:1"/>
      <description xmlns="urn:xmpp:jingle:apps:rtp:1" media="video">
        <category xmlns='urn:xmpp:jingle:apps:category:0' name='sl' />
        <payload-type id="31" name="H261" clockrate="9000"/>
      </description>
    </content>
  </jingle>
</iq>

```

```
    </description>
  </content>
</jingle>
</iq>
```

4 Requirements

The motivations for this document are to:

- Allow entities to map [RFC 4796](#)⁴ to Jingle when initiating or answering a session
- Allow applications to categorize Jingle contents medias and adapt their interface accordingly

5 Security Considerations

Related to the XEPs using this document.

6 IANA Considerations

This document requires no interaction with the [Internet Assigned Numbers Authority \(IANA\)](#)⁵.

7 XMPP Registrar Considerations

The [XMPP Registrar](#)⁶ is requested to issue an initial namespace of "urn:xmpp:jingle:apps:category:0".

8 XML Schema

⁴RFC 4796: The Session Description Protocol (SDP) Content Attribute <<http://tools.ietf.org/html/rfc4796>>.

⁵The Internet Assigned Numbers Authority (IANA) is the central coordinator for the assignment of unique parameter values for Internet protocols, such as port numbers and URI schemes. For further information, see <<http://www.iana.org/>>.

⁶The XMPP Registrar maintains a list of reserved protocol namespaces as well as registries of parameters used in the context of XMPP extension protocols approved by the XMPP Standards Foundation. For further information, see <<https://xmpp.org/registrar/>>.

```
<?xml version='1.0' encoding='UTF-8'?>

<xs:schema
  xmlns:xs='http://www.w3.org/2001/XMLSchema'
  targetNamespace='urn:xmpp:jingle:apps:category:0'
  xmlns='urn:xmpp:jingle:apps:category:0'
  elementFormDefault='qualified'>

  <xs:element name='category'>
    <xs:complexType>
      <xs:attribute name='name'>
        <xs:restriction base='xs:NCName'>
          <xs:enumeration value='slides' />
          <xs:enumeration value='speaker' />
          <xs:enumeration value='sl' />
          <xs:enumeration value='main' />
          <xs:enumeration value='alt' />
        </xs:restriction>
      </xs:attribute>
    </xs:complexType>
  </xs:element>
</xs:schema>
```