



# XMPP

## XEP-0197: User Viewing

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This document defines an XMPP protocol extension for communicating information about the television shows, movies, or other videos that a user watches.

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## 1 Introduction

[Publish-Subscribe \(XEP-0060\)](#)<sup>1</sup> and [Personal Eventing Protocol \(XEP-0163\)](#)<sup>2</sup> can be used to publish a wide variety of "extended presence" information about users. This document specifies an extended presence payload format that communicates information about the television shows, movies, or other videos that a user watches. This information may be of interest to a user's contacts and can also be used in social networking applications (e.g., IPTV systems).

## 2 Protocol

### 2.1 Container Element and Child Elements

Information about video viewing is provided by the user (or automated integration with video systems) and is propagated on the network by the user's client. The information container for video viewing data is a <video/> element that is qualified by the 'urn:xmpp:viewing:0' namespace. The video information itself is provided as the XML character data of the following children of the <video/> element:

Element	Description	Example	Datatype
author	The author of the program	Robert Duncan	xs:string
cast	The cast members of the program	Trace Beaulieu, Frank Conniff, Joel Hodgson, Jim Mal- lon, Kevin Murphy, Michael J. Nelson, Mary Jo Pehl	xs:string
channel_name	The name of the channel showing the program	Sci-Fi Channel	xs:string
description	A description of the program	Terror From The Year 5000	xs:string
duration	The duration of the program (in seconds)	1800	xs:positiveInteger
end_time	The end time of the program	2006-08-29T03:30Z	xs:dateTime
episode	The episode number of the program	807	xs:string
program_name	The name of the program	Mystery Science The- ater 3000	xs:string

<sup>1</sup>XEP-0060: Publish-Subscribe <<https://xmpp.org/extensions/xep-0060.html>>.

<sup>2</sup>XEP-0163: Personal Eventing Protocol <<https://xmpp.org/extensions/xep-0163.html>>.

Element	Description	Example	Datatype
program_type	The type of the program	Comedy	xs:string
start_time	The start time of the program	2006-08-29T03:00Z	xs:dateTime
subprogram_type	The type of the sub-program (e.g., outtakes on an extended DVD)	Cast interview	xs:string
uri	A URI for the video or relevant service	<a href="http://www.mst3kinfo.com/">http://www.mst3kinfo.com/</a>	anyURI
user_comment	A user's free-form comments about the program	This is one of my favorite episodes! MST3K forever!	xs:string
user_rating	The user's personal rating of the program (on a scale of 1 to 10, with 10 being highest)	9	xs:string

All elements are OPTIONAL.

NOTE: The datatypes specified above are defined in [XML Schema Part 2](#)<sup>3</sup>.

## 2.2 Transport Mechanism

When a user starts watching a video, its client may publish that fact to a PEP node whose NodeID is "urn:xmpp:viewing:0" (see Protocol Namespaces regarding issuance of one or more permanent namespaces) or to a generic pubsub node. Because viewing information is not pure presence information and can change independently of the user's availability, it SHOULD NOT be provided as an extension to the <presence/> stanza type.

Listing 1: User Publishes Viewing Information

```
<iq type='set' from='stpeter@jabber.org/work' id='viewing1'>
  <pubsub xmlns='http://jabber.org/protocol/pubsub'>
    <publish node='urn:xmpp:viewing:0'>
      <item id='8eaa8ae16651455376dab4eae45772337e9ec372'>
        <video xmlns='urn:xmpp:viewing:0'>
          <name>Mystery Science Theater 3000</name>
          <episode>807</episode>
          <description>Terror From The Year 5000</description>
          <uri>http://www.mst3kinfo.com/</uri>
        </video>
      </item>
    </publish>
  </pubsub>
</iq>
```

<sup>3</sup>XML Schema Part 2: Datatypes <<http://www.w3.org/TR/xmlschema11-2/>>.

```

        </video>
      </item>
    </publish>
  </pubsub>
</iq>

```

The viewing information is then delivered to all subscribers:

Listing 2: Viewing Information is Delivered to All Subscribers

```

<message from='stpeter@jabber.org' to='maineboy@jabber.org'>
  <event xmlns='http://jabber.org/protocol/pubsub#event'>
    <items node='urn:xmpp:viewing:0'>
      <item id='8eaa8ae16651455376dab4eae45772337e9ec372'>
        <video xmlns='urn:xmpp:viewing:0'>
          <name>Mystery Science Theater 3000</name>
          <episode>807</episode>
          <description>Terror From The Year 5000</description>
          <uri>http://www.mst3kinfo.com/</uri>
        </video>
      </item>
    </items>
  </event>
</message>

```

When the user stops watching the video, the user's client SHOULD send an empty <video/> element with the same ItemID:

Listing 3: User Publishes Stop Information

```

<iq type='set' from='stpeter@jabber.org/work' id='viewing2'>
  <pubsub xmlns='http://jabber.org/protocol/pubsub'>
    <publish node='urn:xmpp:viewing:0'>
      <item id='8eaa8ae16651455376dab4eae45772337e9ec372'>
        <video xmlns='urn:xmpp:viewing:0' />
      </item>
    </publish>
  </pubsub>
</iq>

```

Listing 4: Stop Information is Delivered to All Subscribers

```

<message from='stpeter@jabber.org' to='maineboy@jabber.org'>
  <event xmlns='http://jabber.org/protocol/pubsub#event'>
    <items node='urn:xmpp:viewing:0'>
      <item id='8eaa8ae16651455376dab4eae45772337e9ec372'>
        <video xmlns='urn:xmpp:viewing:0' />
      </item>
    </items>

```

```
</event>  
</message>
```

### 3 Security Considerations

The videos that a user watches may be sensitive. A client MUST provide a way for a user to configure which videos or types of videos will not be published (e.g., via user preferences).

### 4 IANA Considerations

This document requires no interaction with the [Internet Assigned Numbers Authority \(IANA\)](#)<sup>4</sup>.

## 5 XMPP Registrar Considerations

### 5.1 Protocol Namespaces

This specification defines the following XML namespace:

- urn:xmpp:viewing:0

Upon advancement of this specification from a status of Experimental to a status of Draft, the [XMPP Registrar](#)<sup>5</sup> shall add the foregoing namespace to the registry located at [<https://xmpp.org/registrar/namespaces.html>](https://xmpp.org/registrar/namespaces.html), as described in Section 4 of [XMPP Registrar Function \(XEP-0053\)](#)<sup>6</sup>.

### 5.2 Namespace Versioning

If the protocol defined in this specification undergoes a revision that is not fully backwards-compatible with an older version, the XMPP Registrar shall increment the protocol version number found at the end of the XML namespaces defined herein, as described in Section 4 of XEP-0053.

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<sup>4</sup>The 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/>](http://www.iana.org/).

<sup>5</sup>The 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/>](https://xmpp.org/registrar/).

<sup>6</sup>XEP-0053: XMPP Registrar Function [<https://xmpp.org/extensions/xep-0053.html>](https://xmpp.org/extensions/xep-0053.html).

## 6 XML Schema

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

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

  <xs:element name='room'>
    <xs:complexType>
      <xs:sequence minOccurs='0'>
        <xs:element name='author' type='xs:string' minOccurs='0'/>
        <xs:element name='cast' type='xs:string' minOccurs='0'/>
        <xs:element name='channel_name' type='xs:string' minOccurs='0'
          />
        <xs:element name='description' type='xs:string' minOccurs='0'
          >
        <xs:element name='duration' type='xs:positiveInteger'
          minOccurs='0'/>
        <xs:element name='end_time' type='xs:dateTime' minOccurs='0'/>
        <xs:element name='episode' type='xs:string' minOccurs='0'/>
        <xs:element name='program_name' type='xs:string' minOccurs='0'
          />
        <xs:element name='program_type' type='xs:string' minOccurs='0'
          />
        <xs:element name='start_time' type='xs:dateTime' minOccurs='0'
          />
        <xs:element name='subprogram_type' type='xs:string' minOccurs='0'
          />
        <xs:element name='uri' type='xs:anyURI' minOccurs='0'/>
        <xs:element name='user_comment' type='xs:string' minOccurs='0'
          />
        <xs:element name='user_rating' type='xs:string' minOccurs='0'
          >
      </xs:sequence>
    </xs:complexType>
  </xs:element>

</xs:schema>
```