This specification defines an XMPP protocol extension for communicating information about the chatrooms a user visits.
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1 Introduction

Publish-Subscribe (XEP-0060) \(^1\) and Personal Eventing Protocol (XEP-0163) \(^2\) 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 chatrooms a user visits. This information may be of interest to a user’s contacts and can also be used in social networking applications.

2 Protocol

2.1 Container Element and Child Elements

Information about chatrooms is provided by the user (or automated integration with Jabber, IRC, or other systems) and is propagated on the network by the user’s client. The information container for chatting data is a <room/> element that is qualified by the ‘urn:xmpp:chatting:0’ namespace (see Namespace Versioning regarding the possibility of incrementing the version number). The chatting information itself is provided as the XML character data of the following children of the <room/> element:

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Example</th>
<th>Datatype</th>
<th>Inclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>The name of the chatroom</td>
<td>Jabber Development</td>
<td>xs:string</td>
<td>OPTIONAL</td>
</tr>
<tr>
<td>topic</td>
<td>The current topic of discussion in the room</td>
<td>BOSH meeting</td>
<td>xs:string</td>
<td>OPTIONAL</td>
</tr>
</tbody>
</table>

### Protocol

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Example</th>
<th>Datatype</th>
<th>Inclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>uri</td>
<td>A URI for the room (this SHOULD be an XMPP URI or IRI in accordance with RFC 5122: Internationalized Resource Identifiers (IRIs) and Uniform Resource Identifiers (URIs) for the Extensible Messaging and Presence Protocol (XMPP) <a href="http://tools.ietf.org/html/rfc5122">http://tools.ietf.org/html/rfc5122</a>. but MAY use some other URI scheme, such as the irc: scheme)</td>
<td><a href="xmpp:jdev@conference.jabber.org">xmpp:jdev@conference.jabber.org</a></td>
<td>xs:anyURI</td>
<td>REQUIRED</td>
</tr>
</tbody>
</table>

NOTE: The datatypes specified above are defined in XML Schema Part 2.

### 2.2 Transport Mechanism

When a user joins a room, its client MAY publish that fact to a PEP node whose NodeID is "urn:xmpp:chatting:0" (see Namespace Versioning regarding the possibility of incrementing the version number) or to a generic pubsub node. Because chatroom 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 Chatting Information**

```xml
<iq type='set' from='stpeter@jabber.org/work' id='chatting1'>
  <pubsub xmlns='http://jabber.org/protocol/pubsub'>
    <publish node='urn:xmpp:chatting:0'>
      <item id='1b395148292c0b0ab3a83bb2c22909bf83d2a80b'>
        <room xmlns='urn:xmpp:chatting:0'>
          ...
        </room>
      </item>
    </publish>
  </pubsub>
</iq>
```

The chatting information is then delivered to all subscribers:

**Listing 2:** Chatting Information is Delivered to All Subscribers

```xml
<message from='stpeter@jabber.org' to='maineboy@jabber.org'>
  <event xmlns='http://jabber.org/protocol/pubsub#event'>
    <items node='urn:xmpp:chatting:0'>
      <item id='1b395148292c0b0ab3a83bb2c22909bf83d2a80b'>
        <room xmlns='urn:xmpp:chatting:0'>
          <name>Jabber Development</name>
          <uri>xmpp:jdev@conference.jabber.org</uri>
        </room>
      </item>
    </items>
  </event>
</message>
```

When the user exits the room, the user’s client SHOULD send an empty `<room/>` element with the same ItemID:

**Listing 3:** User Publishes Exit Information

```xml
<iq type='set' from='stpeter@jabber.org/work' id='chatting2'>
  <pubsub xmlns='http://jabber.org/protocol/pubsub'>
    <publish node='urn:xmpp:chatting:0'>
      <item id='1b395148292c0b0ab3a83bb2c22909bf83d2a80b'>
        <room xmlns='urn:xmpp:chatting:0'/> 
      </item>
    </publish>
  </pubsub>
</iq>
```

**Listing 4:** Exit Information is Delivered to All Subscribers

```xml
<message from='stpeter@jabber.org' to='maineboy@jabber.org'>
  <event xmlns='http://jabber.org/protocol/pubsub#event'>
    <items node='urn:xmpp:chatting:0'>
      <item id='1b395148292c0b0ab3a83bb2c22909bf83d2a80b'>
        <room xmlns='urn:xmpp:chatting:0'/> 
      </item>
    </items>
  </event>
</message>
```
3 Security Considerations

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

4 IANA Considerations

This document requires no interaction with the Internet Assigned Numbers Authority (IANA) \(^4\).

5 XMPP Registrar Considerations

5.1 Protocol Namespaces

This specification defines the following XML namespace:

- urn:xmpp:chatting:0

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

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.

\(^4\) 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>.

\(^5\) 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/>.

6 XML Schema

```xml
<?xml version='1.0' encoding='UTF-8'?>
<xs:schema
    xmlns:xs='http://www.w3.org/2001/XMLSchema'
    targetNamespace='urn:xmpp:chatting:0'
    xmlns='urn:xmpp:chatting:0'
    elementFormDefault='qualified'>

  <xs:element name='room'>
    <xs:complexType>
      <xs:sequence minOccurs='0'>
        <xs:element name='name' type='xs:string' minOccurs='0'/>
        <xs:element name='topic' type='xs:string' minOccurs='0'/>
        <xs:element name='uri' type='xs:anyURI'/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>

</xs:schema>
```