This document defines a way to indicate that a message is a reply to a previous message.
Legal

Copyright

This XMPP Extension Protocol is copyright © 1999 – 2020 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 Discovering support 1

3 Use Cases 1
   3.1 Compatibility Fallback 2

4 Business Rules 3
   4.1 Using the correct ID 3

5 IANA Considerations 3

6 XMPP Registrar Considerations 3
1 Introduction

When commenting on a previous message, it is sometimes desired to clarify which message the comment refers to. Currently, Message Styling (XEP-0393) \(^1\) quotes are commonly used for that purpose. However, this format does not allow receiving clients to properly identify the referenced message or to adjust the user interface accordingly. This specification defines a way to indicate that a message is a reply to a previous message. It does not intend to provide means to create sub-threads for a message.

2 Discovering support

If a client implements message replies, it MUST specify the 'urn:xmpp:reply:0' feature in its service discovery information features as specified in Service Discovery (XEP-0030) \(^2\) and the Entity Capabilities profile specified in Entity Capabilities (XEP-0115) \(^3\).

<table>
<thead>
<tr>
<th>Listing 1: Client requests information about a chat partner's client</th>
</tr>
</thead>
</table>
| `<iq type='get' to='romeo@montague.lit/orchard' from='juliet@capulet.lit/balcony'>
  <query xmlns='http://jabber.org/protocol/disco#info'/>
</iq>` |

<table>
<thead>
<tr>
<th>Listing 2: Partner's client advertises support for replies</th>
</tr>
</thead>
</table>
| `<iq type='result' to='juliet@capulet.lit/balcony' from='romeo@montague.lit/orchard'>
  <query xmlns='http://jabber.org/protocol/disco#info'>
  ... <feature var='urn:xmpp:reply:0'/>
  ...
</query>
</iq>` |

3 Use Cases

To indicate that a message is a reply, a <reply> element in the urn:xmpp:reply:0 namespace is placed in the message stanza. The <reply> element SHOULD have a 'to' attribute containing

the full jid of the author of the referenced message and MUST have an 'id' attribute containing the id of the referenced message. In a 1:1 chat context, a bare jid MAY be used instead of a full jid.

Listing 3: Max replies to Anna’s message

```xml
<message to='max@example.com' from='anna@example.com/tablet' id='message-id1' type='chat'>
  <body>We should bake a cake</body>
</message>

<message to='anna@example.com' id='message-id2' type='chat'>
  <body>Great idea!</body>
</message>

<reply to='anna@example.com/tablet' id='message-id1' xmlns='urn:xmpp:reply:0'>
</reply>
```

3.1 Compatibility Fallback

To provide a fallback for non-supporting clients, the sending client MAY include fallback text in the body and indicate it via Compatibility Fallback. Note that the following example is formatted for readability and that the indentation, leading and trailing new lines of the example body element should not be taken into account.

Listing 4: Anna replies to a message and includes a fallback

```xml
<message to='anna@example.com' id='message-id3' type='chat'>
  <body>
    > Anna wrote:
    > We should bake a cake
    > Great idea!
  </body>
</message>

<reply to='anna@example.com/laptop' id='message-id1' xmlns='urn:xmpp:reply:0'>
  <fallback xmlns='urn:xmpp:feature-fallback:0' for='urn:xmpp:reply:0'>
    <body start="0" end="38"/>
  </fallback>
</reply>
```

The receiving client SHOULD NOT display the compatibility fallback if it renders the referenced message alongside the reply in some way. However, if the receiving client does not display the referenced message, for example because it doesn’t know the referenced id, it MAY display the compatibility fallback instead.
4 Business Rules

Answers MUST NOT be assumed to relate to any other messages than the referenced one.

4.1 Using the correct ID

For messages of type 'groupchat', the stanza's 'id' attribute MUST NOT be used for replies. Instead, in group chat situations, the ID assigned to the stanza by the group chat itself must be used. This is discovered in a <stanza-id> element with a 'by' attribute that matches the bare JID of the group chat, as defined in Unique and Stable Stanza IDs (XEP-0359) 4. This implies that group chat messages without a Unique and Stable Stanza IDs (XEP-0359) stanza-id cannot be replied to. For other message types the sender should use the 'id' from a Unique and Stable Stanza IDs (XEP-0359) <origin-id> if present, or the value of the 'id' attribute on the <message> otherwise.

5 IANA Considerations

This document requires no interaction with the Internet Assigned Numbers Authority (IANA) 7.

6 XMPP Registrar Considerations

This document requires no interaction with XMPP Registrar 8.

---

7The 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/>.
8The 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/>.