XEP-0461: Message Replies

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Status	Type	Short Name
Experimental	Standards Track	reply

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

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Contents

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].

Listing 1: Client requests information about a chat partner's client

```
<iq type='get'
    to='romeo@montague.lit/orchard'
    from='juliet@capulet.lit/balcony'
    id='info1'>
  <query xmlns='http://jabber.org/protocol/disco#info'/>
</iq>
```

Listing 2: Partner's client advertises support for replies

```
<iq type='result'
    to='juliet@capulet.lit/balcony'
    from='romeo@montague.lit/orchard'
    id='info1'>
  <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

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[1]XEP-0393: Message Styling <https://xmpp.org/extensions/xep-0393.html>.

[2]XEP-0030: Service Discovery <https://xmpp.org/extensions/xep-0030.html>.

[3]XEP-0115: Entity Capabilities <https://xmpp.org/extensions/xep-0115.html>.

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

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

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

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

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 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) [5] 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) [6] <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].

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[4]XEP-0359: Unique and Stable Stanza IDs <https://xmpp.org/extensions/xep-0359.html>.

[5]XEP-0359: Unique and Stable Stanza IDs <https://xmpp.org/extensions/xep-0359.html>.

[6]XEP-0359: Unique and Stable Stanza IDs <https://xmpp.org/extensions/xep-0359.html>.

[7]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/>.

[8]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/>.