



XMPP

XEP-0306: Extensible Status Conditions for Multi-User Chat

Peter Saint-Andre
<mailto:stpeter@stpeter.im>
<xmpp:stpeter@jabber.org>
<https://stpeter.im/>

2016-06-07
Version 0.2.1

Status	Type	Short Name
Deferred	Standards Track	N/A

This document defines an extensible format for status conditions in Multi-User Chat, similar to the error format used in the core of XMPP.

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	Format	1
3	Mapping of Existing Codes	2
4	Security Considerations	3
5	IANA Considerations	3
6	XMPP Registrar Considerations	3
6.1	Protocol Namespaces	3
6.2	Protocol Versioning	3
6.3	MUC Status Codes Registry	3
7	XML Schema	4
8	Acknowledgements	5

1 Introduction

Traditionally, [Multi-User Chat \(XEP-0045\)](#)¹ has used numerical status codes similar to those used in HTTP and SMTP. Numerical codes were deprecated in the core of XMPP by [RFC 3920](#)² and are no longer even defined in the core schemas provided in [RFC 6120](#)³ (see also [Error Condition Mappings \(XEP-0086\)](#)⁴). In an effort to modernize the Multi-User Chat (MUC) protocol, this document defines an extensible format for status conditions in MUC.

2 Format

XML elements describing status conditions defined by this specification SHALL be qualified by the 'urn:xmpp:muc:conditions:1' namespace.

The structure is as follows:

```
<status xmlns='http://jabber.org/protocol/muc#user'>
  <DEFINED-CONDITION>
    [<text xml:lang='langcode'>OPTIONAL descriptive text</text>]
    [OPTIONAL application-specific condition element]
  </DEFINED-CONDITION>
  [<DEFINED-CONDITION/>]
  [OPTIONAL application-specific condition element or elements]
</status>
```

That is, any <status/> element qualified by the existing <http://jabber.org/protocol/muc#user> namespace (from XEP-0045) MAY contain one or more condition elements defined in this document (each of which MAY contain a human-readable <text/> element and MAY contain an application-specific condition element) and MAY contain one or more application-specific condition elements.

An example follows.

Listing 1: Service Sends New Occupant's Presence to New Occupant

```
<presence
  from='coven@chat.shakespeare.lit/thirdwitch'
  id='n13mt3l'
  to='hag66@shakespeare.lit/pda'>
  <x xmlns='http://jabber.org/protocol/muc#user'>
    <item affiliation='member' role='participant'>
      <status code='100'>
        <realjid-public xmlns='urn:xmpp:muc:conditions:1' />
      </status>
    </item>
  </x>
</presence>
```

¹XEP-0045: Multi-User Chat <<https://xmpp.org/extensions/xep-0045.html>>.

²RFC 3920: Extensible Messaging and Presence Protocol (XMPP): Core <<http://tools.ietf.org/html/rfc3920>>.

³RFC 6120: Extensible Messaging and Presence Protocol (XMPP): Core <<http://tools.ietf.org/html/rfc6120>>.

⁴XEP-0086: Error Condition Mappings <<https://xmpp.org/extensions/xep-0086.html>>.

```

</status>
<status code='110'>
  <self-presence xmlns='urn:xmpp:muc:conditions:1' />
</status>
</x>
</presence>

```

3 Mapping of Existing Codes

The following table maps the existing numerical status codes (registered with the [XMPP Registrar](https://xmpp.org/registrars/mucstatus.html)⁵ at <<https://xmpp.org/registrars/mucstatus.html>>) to XML elements.

Code	Element
100	<realjid-public/>
101	<affiliation-changed/>
102	<unavailable-shown/>
103	<unavailable-not-shown/>
104	<configuration-changed/>
110	<self-presence/>
170	<logging-enabled/>
171	<logging-disabled/>
172	<non-anonymous/>
173	<semi-anonymous/>
174	<fully-anonymous/>
201	<room-created/>
210	<nick-assigned/>
301	<banned/>
303	<new-nick/>
307	<kicked/>
321	<removed-affiliation/>
322	<removed-membership/>
332	<removed-shutdown/>

⁵The 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/registrars/>>.

4 Security Considerations

The security considerations of XEP-0045 apply.

5 IANA Considerations

This document requires no interaction with the [Internet Assigned Numbers Authority \(IANA\)](#)⁶.

6 XMPP Registrar Considerations

6.1 Protocol Namespaces

This specification defines the following XML namespace:

- `urn:xmpp:muc:conditions:1`

Upon advancement of this specification from a status of Experimental to a status of Draft, the [XMPP Registrar](#)⁷ 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 \(XEP-0053\)](#)⁸.

6.2 Protocol 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.

6.3 MUC Status Codes Registry

The XMPP Registrar is requested to add the elements defined in this specification to the existing registry for MUC status codes at [<https://xmpp.org/registrar/mucstatus.html>](https://xmpp.org/registrar/mucstatus.html).

⁶The 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/>.

⁷The 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/>.

⁸XEP-0053: XMPP Registrar Function [<https://xmpp.org/extensions/xep-0053.html>](https://xmpp.org/extensions/xep-0053.html).

7 XML Schema

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

<xs:schema
  xmlns:xs='http://www.w3.org/2001/XMLSchema'
  targetNamespace='urn:xmpp:muc:conditions:1'
  xmlns='urn:xmpp:muc:conditions:1'
  elementFormDefault='qualified'>

  <xs:element name='affiliation-changed' type='MucStatusType' />
  <xs:element name='banned' type='MucStatusType' />
  <xs:element name='configuration-changed' type='MucStatusType' />
  <xs:element name='fully-anonymous' type='MucStatusType' />
  <xs:element name='kicked' type='MucStatusType' />
  <xs:element name='logging-disabled' type='MucStatusType' />
  <xs:element name='logging-enabled' type='MucStatusType' />
  <xs:element name='new-nick' type='MucStatusType' />
  <xs:element name='nick-assigned' type='MucStatusType' />
  <xs:element name='non-anonymous' type='MucStatusType' />
  <xs:element name='realjid-public' type='MucStatusType' />
  <xs:element name='removed-affiliation' type='MucStatusType' />
  <xs:element name='removed-membership' type='MucStatusType' />
  <xs:element name='removed-shutdown' type='MucStatusType' />
  <xs:element name='room-created' type='MucStatusType' />
  <xs:element name='self-presence' type='MucStatusType' />
  <xs:element name='semi-anonymous' type='MucStatusType' />
  <xs:element name='unavailable-not-shown' type='MucStatusType' />
  <xs:element name='unavailable-shown' type='MucStatusType' />

  <xs:complexType name='MucStatusType'>
    <xs:sequence>
      <xs:element ref='text' />
      <xs:any namespace='##other' minOccurs='0' maxOccurs='unbounded'
        processContents='lax' />
    </xs:sequence>
  </xs:complexType>
</xs:schema>

<xs:element name='text'>
  <xs:complexType>
    <xs:simpleContent>
      <xs:extension base='xs:string'>
        <xs:attribute ref='xml:lang' use='optional' />
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>
</xs:element>
```

8 Acknowledgements

Thanks to Dave Cridland and Ralph Meijer for their feedback.