



# XMPP

## XEP-0377: Spam Reporting

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This document specifies a mechanism by which users can report spam and other abuse to a server operator or other spam service.

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## 1 Introduction

Many spam and abuse prevention techniques rely on users being able to report other users who are sending unwanted messages, or specific instances of abuse. [Blocking Command \(XEP-0191\)](#)<sup>1</sup> allows users to block spammers, but does not provide a mechanism for them to report a reason for the block to the server operator. This specification extends the blocking command to optionally provide an abuse report.

## 2 Discovering Support

Entities that support [Service Discovery \(XEP-0030\)](#)<sup>2</sup> and abuse reporting MUST respond to service discovery requests with a feature of 'urn:xmpp:reporting:0' and with a feature for each reason supported by the responding entity as described in the relevant specifications. Eg. a response from a server that supports reporting and understands the abuse and spam reasons defined later in this specification might look like the following:

Listing 1: Service discovery information response

```
<iq from='shakespeare.lit'
  id='ku6e51v3'
  to='kingclaudius@shakespeare.lit/castle'
  type='result'>
  <query xmlns='http://jabber.org/protocol/disco#info'>
    <feature var='urn:xmpp:reporting:0' />
    <feature var='urn:xmpp:reporting:reason:abuse:0' />
    <feature var='urn:xmpp:reporting:reason:spam:0' />
  </query>
</iq>
```

## 3 Payload

The payload for reporting abuse to the server takes the form of a <report/> qualified by the 'urn:xmpp:reporting:0' namespace (see [Namespace Versioning](#) regarding the possibility of incrementing the version number). Report payloads are reusable and MUST NOT be sent without first being wrapped in a stanza.

Listing 2: The most basic report payload

```
<report xmlns="urn:xmpp:reporting:0" />
```

---

<sup>1</sup>XEP-0191: Blocking Command <<https://xmpp.org/extensions/xep-0191.html>>.

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

Abuse reports MAY include a reason for the report and servers MUST tolerate unknown XML elements in a report without making assumptions about the semantic meaning of unknown elements.

This document defines the following reasons for a report:

**<spam/>** Used for reporting a JID that is sending unwanted messages.

**<abuse/>** Used for reporting general abuse.

Clients MUST include only one reason per report.

Reports MAY contain a user provided message explaining or providing context about the reason for the report. See also the [Internationalization Considerations](#) section of this document.

Listing 3: Report with optional reason and text

```
<report xmlns="urn:xmpp:reporting:0">
  <text xml:lang="en">
    Never came trouble to my house like this.
  </text>
  <spam/>
</report>
```

## 4 Use with the Blocking Command

To send a report, a report payload MAY be inserted into an `<item/>` node sent as part of a request to block a spammer as defined in [Blocking Command \(XEP-0191\)](#)<sup>3</sup>. For example:

Listing 4: Report sent with blocking command

```
<iq from='juliet@capulet.com/chamber' type='set' id='block1'>
  <block xmlns='urn:xmpp:blocking'>
    <item jid='romeo@montague.net'>
      <report xmlns="urn:xmpp:reporting:0">
        <abuse/>
      </report>
    </item>
  </block>
</iq>
```

Servers that receive a blocking command with a report MUST block the JID or return an error just as they would if no report were present. Servers then MAY take other actions based on the report, however, such actions are outside the scope of this document.

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<sup>3</sup>XEP-0191: Blocking Command <<https://xmpp.org/extensions/xep-0191.html>>.

## 5 Implementation Notes

Clients that support sending reports as part of the blocking command SHOULD expose interfaces to both block a JID without reporting it as abusive, and to block and report a JID.

## 6 Internationalization Considerations

If one or more `<text/>` elements are present they SHOULD include 'xml:lang' attributes specifying the natural language of the XML character data.

## 7 Security Considerations

This document introduces no additional security considerations above and beyond those defined in the documents on which it depends.

## 8 IANA Considerations

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

## 9 XMPP Registrar Considerations

### 9.1 Protocol Namespaces

This specification defines the following XML namespace:

- urn:xmpp:reporting: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/disco-features.html>, as described in Section 4 of [XMPP Registrar Function \(XEP-0053\)](#)<sup>6</sup>.

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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/>.

<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/>.

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

## 9.2 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.

## 9.3 Abuse Reporting Registry

The XMPP Registrar shall maintain a registry of abuse report reasons. All abuse report reason registrations shall be defined in separate specifications (not in this document). Application types defined within the XEP series MUST be registered with the XMPP Registrar, resulting in protocol URNs of the form "urn:xmpp:reporting:reason:name:X" (where "name" is the registered name of the reason and "X" is a non-negative integer).

In order to submit new values to this registry, the registrant shall define an XML fragment of the following form and either include it in the relevant XMPP Extension Protocol or send it to the email address <registrar@xmpp.org>:

```
<reason>
  <name>The name of the abuse report reason.</name>
  <urn>urn:xmpp:reporting:reason:{name}:{ver}</urn>
  <desc>A natural-language summary of the reason.</desc>
  <doc>
    The document in which the report reason is specified.
  </doc>
</reason>
```

## 9.4 Abuse Reporting Reasons

This specification defines the following abuse reporting reasons:

- urn:xmpp:reporting:reason:spam:0
- urn:xmpp:reporting:reason:abuse:0

Upon advancement of this specification from a status of Experimental to a status of Draft, the [XMPP Registrar](#)<sup>7</sup> shall add the following definition to the abuse reporting reasons registry, as described in this document:

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<sup>7</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/>>.

```
<reason>
  <name>Spam</name>
  <urn>urn:xmpp:reporting:reason:spam:0</urn>
  <desc>Used to report a JID that was sending spam messages.</desc>
  <doc>XEP-0377</doc>
</reason>
```

```
<reason>
  <name>Abuse</name>
  <urn>urn:xmpp:reporting:reason:abuse:0</urn>
  <desc>Used to report general abuse that is not covered by a more
    specific reason.</desc>
  <doc>XEP-0377</doc>
</reason>
```

## 10 XML Schema

An XML schema will be added before this specification moves to draft status.

## 11 Acknowledgements

Thanks to the participants of the XMPP Summit 20 in Austin, TX who discussed this XEP: specifically to Waqas Hussain, Kevin Smith, Lance Stout, and Matthew Wild. A special thanks to Daniel Wisniewski for giving the presentation that kicked off the anti-abuse work.