



# 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 Background

This document extends the blocking command instead of providing a separate reporting IQ because we hypothesize that this will slightly lower the levels of false reports received by service operators. We have observed a common pattern on the internet where a user becomes mad at or disagrees with another user and begins harassing them by replying to or reporting their every comment even if it is not itself spam or abusive. However, this sort of behavior cannot continue if the harasser can no longer read the messages of the person they are stalking. Giving them a choice between their abusive behavior and being able to read their targets can possibly force them to break the cycle and only create valid reports.

## 3 Discovering Support

Entities that support [Service Discovery \(XEP-0030\)](#)<sup>2</sup> and abuse reporting using the blocking command as defined in this spec MUST respond to service discovery requests with a feature of 'urn:xmpp:reporting:1'. Support for this namespace also indicates support for the abuse reporting reasons defined in this document. For example, 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='example.net'
  id='ku6e51v3'
  to='kingclaudius@example.net/castle'
  type='result'>
  <query xmlns='http://jabber.org/protocol/disco#info'>
    <feature var='urn:xmpp:reporting:1' />...
  </query>
</iq>
```

---

<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>>.

## 4 Payload

The payload for reporting abuse to the server takes the form of a <report/> qualified by the 'urn:xmpp:reporting:1' namespace (see [Namespace Versioning](#) regarding the possibility of incrementing the version number).

Listing 2: The most basic report payload

```
<report xmlns="urn:xmpp:reporting:1" reason="urn:xmpp:reporting:spam"/>
```

Abuse reports MUST include a reason for the report in the "reason" attribute. This document defines the following reasons for a report:

**urn:xmpp:reporting:spam** Used for reporting a JID that is sending unwanted messages.

**urn:xmpp:reporting:abuse** Used for reporting general abuse.

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

## 5 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@example.com/chamber' type='set' id='block1'>
  <block xmlns='urn:xmpp:blocking'>
    <item jid='romeo@example.net'>
      <report xmlns="urn:xmpp:reporting:1" reason="urn:xmpp:reporting:abuse"/>
    </item>
  </block>
</iq>
```

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

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.

If the server supports [Message Archive Management \(XEP-0313\)](#)<sup>4</sup> the report MAY also include the stanza-id of specific messages being reported. This is done by including copies of each <stanza-id/> element that the user wishes to report as a child of the <report/> element. The stanza indicated by the provided stanza-id SHOULD be by the same JID being reported and blocked.

Listing 5: Report sent with stanza IDs

```
<iq from='juliet@example.com/chamber' type='set' id='block1'>
  <block xmlns='urn:xmpp:blocking'>
    <item jid='romeo@example.net'>
      <report xmlns="urn:xmpp:reporting:1" reason="
        urn:xmpp:reporting:spam">
        <stanza-id xmlns='urn:xmpp:sid:0' by='romeo@example.net' id='
          28482-98726-73623' />
        <stanza-id xmlns='urn:xmpp:sid:0' by='romeo@example.net' id='
          38383-38018-18385' />
        <text xml:lang="en">
          Never came trouble to my house like this.
        </text>
      </report>
    </item>
  </block>
</iq>
```

## 6 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 abuse, and to block and report a JID.

The blocking command may be used to block multiple JIDs at the same time. When blocking multiple JIDs any abuse report only applies to a single JID. If the client allows selecting multiple JIDs in an abuse reporting dialog they SHOULD also allow choosing a separate reason, text, and messages for each JID. They MAY choose to only allow reporting a single JID at a time as well when the "block and report" dialog is accessed, and multiple JIDs when the "block" dialog is accessed.

<sup>4</sup>XEP-0313: Message Archive Management <<https://xmpp.org/extensions/xep-0313.html>>.

## 7 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.

## 8 Security Considerations

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

## 9 IANA Considerations

This document requires no interaction with the [Internet Assigned Numbers Authority \(IANA\)](#)<sup>5</sup>.

## 10 XMPP Registrar Considerations

### 10.1 Protocol Namespaces

This specification defines the following XML namespace:

- urn:xmpp:reporting:1

Upon advancement of this specification from a status of Experimental to a status of Draft, the [XMPP Registrar](#)<sup>6</sup> shall add the foregoing namespace to the registry located at [<https://xmpp.org/registrar/disco-features.html>](https://xmpp.org/registrar/disco-features.html), as described in Section 4 of [XMPP Registrar Function \(XEP-0053\)](#)<sup>7</sup>.

### 10.2 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

---

<sup>5</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/>](http://www.iana.org/).

<sup>6</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/>](https://xmpp.org/registrar/).

<sup>7</sup>XEP-0053: XMPP Registrar Function [<https://xmpp.org/extensions/xep-0053.html>](https://xmpp.org/extensions/xep-0053.html).

XEP-0053.

### 10.3 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 representing the reason.

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 human-readable name of the abuse report reason.</name>
  <feature>URN representing the reason.</feature>
  <desc>A natural-language summary of the reason.</desc>
  <doc>
    The document in which the report reason is specified.
  </doc>
</reason>
```

### 10.4 Abuse Reporting Reasons

This specification defines the following abuse reporting reasons:

- urn:xmpp:reporting:spam
- urn:xmpp:reporting:abuse

Upon advancement of this specification from a status of Experimental to a status of Draft, the [XMPP Registrar](#)<sup>8</sup> shall add the following definition to the abuse reporting reasons registry, as described in this document:

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

---

<sup>8</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>abuse</name>
  <feature>urn:xmpp:reporting:abuse</feature>
  <desc>Used to report general abuse that is not covered by a more
    specific reason.</desc>
  <doc>XEP-0377</doc>
</reason>

```

## 11 XML Schema

```

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

<xs:schema
  xmlns:xs='http://www.w3.org/2001/XMLSchema'
  xmlns:sid='urn:xmpp:sid:0'
  xmlns='urn:xmpp:reporting:1'
  targetNamespace='urn:xmpp:reporting:1'
  elementFormDefault='qualified'>

  <xs:annotation>
    <xs:documentation>
      The protocol documented by this schema is defined in
      XEP-0377: https://xmpp.org/extensions/xep-0377.html
    </xs:documentation>
  </xs:annotation>

  <xs:import namespace='http://www.w3.org/XML/1998/namespace'
    schemaLocation='https://www.w3.org/2009/01/xml.xsd' />
  <xs:import namespace='urn:xmpp:sid:0'
    schemaLocation='xep-0359.xsd' />

  <xs:element name='container'>
    <xs:complexType>
      <xs:sequence>
        <xs:element ref='report' minOccurs='0' maxOccurs='unbounded' />
      </xs:sequence>
    </xs:complexType>
  </xs:element>

  <xs:element name='report'>
    <xs:complexType>
      <xs:sequence>
        <xs:element ref='sid:stanza-id' minOccurs='0' maxOccurs='unbounded' />
        <xs:element ref='text' minOccurs='0' maxOccurs='unbounded' />
      </xs:sequence>
      <xs:attribute name='reason' type='xs:string' use='required' />
    </xs:complexType>
  </xs:element>

```

```
    </xs:complexType>
  </xs:element>

  <xs:element name='spam' type='empty' />

  <xs:element name='abuse' type='empty' />

  <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>

  <xs:simpleType name='empty'>
    <xs:restriction base='xs:string'>
      <xs:enumeration value='' />
    </xs:restriction>
  </xs:simpleType>

</xs:schema>
```

## 12 Acknowledgements

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