Here Lies Extensible Messaging and Presence Protocol (XMPP) Session Establishment
draft-cridland-xmpp-session-00

Abstract

   The Extensible Messaging and Presence Protocol (XMPP) historically
   had a Session Establishment request defined in RFC 3921 which clients
   were required to perform at the beginning of a session. RFC 6121
   dropped this entirely. This specification reinstates it as an
   optional no-op to aid backwards compability, matching commonly
   deployed workarounds.

Status of This Memo

   This Internet-Draft is submitted in full conformance with the
   provisions of BCP 78 and BCP 79.

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1. Introduction

   Within this specification, we refer to "Old" clients and servers
   meaning those conforming to the [RFC3921] particularly with respect
   to its Section 3 (Session Establishment). We refer to "New" clients
   and servers meaning those conforming to the newer definition of
   Session Establishment within this document.

   While [RFC6121] removed Session Establishment entirely from XMPP,
   there exist deployed clients which expect the feature to be
   advertised, and will refuse to proceed if it is not. Similarly,
   where the feature is advertised, clients were advised to use it, as
   deployed Old servers may require it.

   This has led to a situation where although deprecated by RFC 6121,
   the status quo is unchanged.

   A number of servers advertise it with a discussed (but not
   standardized) <optional/> subelement to the feature, which clients
   can use as a hint that they may elide Session Establishment without
   penalty.

   This document formalizes this and acts as the tombstone for Session
   Establishment, deprecating it in a manner where one can see where it
   used to be.

2. The Session Establishment Tombstone

   This specification formalizes the <optional/> marker and explicitly
   defines the Session Establishment request itself as a no-op.

2.1. Feature Advertisement

   Session Establishment SHALL be advertised within the Stream Features
   element as an element of local name "session", qualified by the
   "urn:ietf:params:xml:ns:xmpp-session" XML namespace. This element
   MUST contain a child element within the same namespace with local
   name "optional"i, known as the "<optional/> marker. Clients SHALL
   ignore such advertisements.

   If a client sees an advertisement which does not contain the
   marker, however, this indicates an Old server, and it
   MUST perform Session Establishment as detailed in the next section.

   Also, note that Old Clients will also perform the protocol despite
   the existence of the marker.

2.2. Session Establishment Request

   A Old client connecting to a New server, or a New client against a
   Old server, issues a Session Establishment request. This consists of
   an IQ stanza od type "set" containing an empty child
   element qualified by the "urn:ietf:params:xml:ns:xmpp-session"
   namespace:

   Step 1: Client requests session with server:

   <iq to='example.com' type='set' id=sess_1'>
     <session xmlns='urn:ietf:params:xml:ns:xmpp-session'/>
   </iq>

   A New server MUST treat this as a no-op; that is, it MUST NOT perform
   any special processing which has any effect on the session. The only
   behaviour allowed and required by this specification is the empty
   result:

   Step 2: Server informs client of success:

   <iq from='example.com' type='result' id='sess_1'/>

   Note that this specification does not allow any error to be generated
   at this point in response to a syntactically valid request.

3. Security Considerations

   This document defines, in effect, a no-op, and therefore it is
   thought not to have any security impact.

4. IANA Considerations

   This document supercedes the original definition of the XML namespace
   defined in RFC 3921, therefore the IANA is requested to update the
   registry as follows:

4.1. XML Namespace Name for Session Data

   A URN sub-namespace for session-related data in the Extensible
   Messaging and Presence Protocol (XMPP) is defined as follows. (This
   namespace name aheres to the format defined in The IETF XML Registry
   [RFC3688].)

```
URI: urn:ietf:params:xml:ns:xmpp-session
Specification: This document
Description: Here lies the XML namespace name for session-related data
   in the Extensible Messaging and Presence Protocol (XMPP), as defined
   in "this document".
Registrant Contact: IETF, XMPP Working Group, <xmpp@ietf.org>
```

5. Acknowledgements

   The examples and some of the text were lifted from RFC 3921 by Peter
   Saint-Andre. The optional marker was proposed some time ago and was
   implemented by Curtis King and Waqas Hussein amongst others.

6. References

6.1. Normative References

   [RFC6121] Saint-Andre, P., "Extensible Messaging and Presence
              Protocol (XMPP): Instant Messaging and Presence", RFC
              6121, March 2011.

6.2. Informative References

   [RFC3921] Saint-Andre, P., Ed., "Extensible Messaging and Presence
              Protocol (XMPP): Instant Messaging and Presence", RFC
              3921, October 2004.

   [RFC3688] Mealling, M., "The IETF XML Registry", BCP 81, RFC 3688,
              January 2004.

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