Internet Engineering Task Force (IETF)
Request for Comments: 6993
Category: Informational
ISSN: 2070-1721

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July 2013

Instant Messaging and Presence Purpose for the Call-Info Header Field in the Session Initiation Protocol (SIP)

Abstract

This document defines and registers a value of "impp" ("instant messaging and presence protocol") for the "purpose" header field parameter of the Call-Info header field in the Session Initiation Protocol (SIP).

Status of This Memo

This document is not an Internet Standards Track specification; it is published for informational purposes.

This document is a product of the Internet Engineering Task Force (IETF). It represents the consensus of the IETF community. It has received public review and has been approved for publication by the Internet Engineering Steering Group (IESG). Not all documents approved by the IESG are a candidate for any level of Internet Standard; see Section 2 of RFC 5741.

Information about the current status of this document, any errata, and how to provide feedback on it may be obtained at http://www.rfc-editor.org/info/rfc6993.

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1. Introduction

Some real-time communication endpoints support the combined use of the Session Initiation Protocol (SIP) [RFC3261] and the Extensible Messaging and Presence Protocol (XMPP) [RFC6120]. To improve interoperability among such "CUSAX" endpoints [CUSAX], it can be helpful to advertise each endpoint's SIP address over XMPP and each endpoint's XMPP address over SIP, thus providing hints about the communication capabilities of the endpoints. The former feature is enabled by an XMPP extension protocol called Reachability Addresses [XEP-0152]. As to the latter feature, discussion in the SIP community led to the conclusion that it would be best to use the Call-Info header field [RFC3261] with a value of "impp" ("instant messaging and presence protocol") for the "purpose" header field parameter. An example follows.

Call-Info: <xmpp:juliet@example.com> ;purpose=impp

Although CUSAX endpoints constitute the primary use case for the "impp" purpose, a Uniform Resource Identifier (URI) [RFC3986] for an instant messaging and presence protocol other than XMPP could be included in the Call-Info header field.

2. Security Considerations

Advertising an endpoint's XMPP address over SIP could inform malicious entities about an alternative attack vector. Because the "purpose" header field parameter could be spoofed, the receiving endpoint ought to check the value against an authoritative source such as a user directory. Clients can integrity protect and encrypt this header field using end-to-end mechanisms such as S/MIME or hop-by-hop mechanisms such as Transport Layer Security (TLS).

This specification provides a new way to correlate otherwise possibly unconnected identifiers. Because such correlations can be privacy sensitive, user agents ought to provide a means for users to control whether or not these values are sent.

3. IANA Considerations

This document defines and registers a new predefined value "impp" for the "purpose" header field parameter of the Call-Info header field. The IANA has completed this action by adding this RFC as a reference to the line for the header field "Call-Info" and parameter name "purpose" in the "Header Field Parameters and Parameter Values" section of the "Session Initiation Protocol (SIP) Parameters" registry as follows:

Header Field: Call-Info
Parameter Name: purpose
Predefined Values: Yes
Reference: [RFC3261][RFC5367][RFC6910][RFC6993]

4. References

4.1. Normative References

[RFC3261] Rosenberg, J., Schulzrinne, H., Camarillo, G., Johnston, A., Peterson, J., Sparks, R., Handley, M., and E. Schooler, "SIP: Session Initiation Protocol", RFC 3261, June 2002.

[RFC3986] Berners-Lee, T., Fielding, R., and L. Masinter, "Uniform Resource Identifier (URI): Generic Syntax", STD 66, RFC 3986, January 2005.

[RFC6120] Saint-Andre, P., "Extensible Messaging and Presence Protocol (XMPP): Core", RFC 6120, March 2011.

4.2. Informative References

[CUSAX] Ivov, E., Saint-Andre, P., and E. Marocco, "CUSAX: Combined Use of the Session Initiation Protocol (SIP) and the Extensible Messaging and Presence Protocol (XMPP)", Work in Progress, June 2013.

[XEP-0152] Saint-Andre, P. and J. Hildebrand, "Reachability Addresses", XSF XEP 0152, February 2013.

5. Acknowledgements

Thanks to Gonzalo Camarillo, Keith Drage, Saul Ibarra, Emil Ivov, Cullen Jennings, Olle Johanssen, Paul Kyzivat, Gonzalo Salgueiro, Dean Willis, and Dale Worley for their input. Elwyn Davies, Salvatore Loreto, Glen Zorn, and Mehmet Ersue completed reviews on behalf of the General Area Review Team, Applications Area Directorate, Security Directorate, and Operations and Management Directorate, respectively. Stephen Farrell and Pete Resnick provided substantive feedback during IESG review. Thanks to Yana Stamcheva for her helpful comments and for shepherding the document.

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