A Group Text Chat Purpose for Conference and Service URIs in the Session
Initiation Protocol (SIP) Event Package for Conference State
draft-ivov-grouptextchat-purpose-01

Abstract

This document defines and registers a value of "grouptextchat"
("Group Text Chat") value for the URI <purpose> element of SIP’s
Conference Event Package [RFC4575].

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1. Introduction

The Conference Event Package [RFC4575] defines means for a SIP User Agent (UA) to obtain information about the state of the conference, the types of media that are being used, the number and state of current participants, additional sources of information such as a web page, availability of recordings and others.

Details describing auxiliary services available for a conference are included within a <service-uris> child element of the <conference-description> element. Such details are presented as a set of <entry> child elements each containing the URI allowing access the corresponding auxiliary service. In addition to the URI, entries can also contain a descriptive <display-text> element and are expected to also have a <purpose> element that specifies their nature as illustrated in the following example:

<conference-description>
  <subject>Agenda: This sprint’s goals</subject>
  <service-uris>
    <entry>
      <uri>http://sharepoint/salesgroup/</uri>
      <purpose>web-page</purpose>
    </entry>
  </service-uris>
</conference-description>

In addition to the "web-page" purpose mentioned above, [RFC4575] also defines several other possible values in a "URI purposes" sub-registry under the existing registry: http://www.iana.org/assignments/sip-parameters.

This specification adds the "grouptextchat" value in this "URI purposes" sub-registry. The new value allows conference mixers or
focus agents to advertise a multi-user chat location (i.e. a chat room) associated with the current conference.

The actual URI carried by the entry with the "grouptextchat" purpose can be of any type as long as the content that it points to would allow for instant text communication between participants of the conference. Suitable URI schemes include sip: and sips: [RFC3261] for SIP signalled Message Session Relay Protocol (MSRP) conferences, xmpp: [RFC5122] for XMPP Multi-User Chat (MUC), irc: for Internet Relay Chat, http: or https: for web-based chat, and others.

The following example shows one possible use case:

<conference-description>
  <subject>Agenda: This sprint’s goals</subject>
  <service-uris>
    <entry>
      <uri>xmpp:sprint@conference.example.com</uri>
      <purpose>grouptextchat</purpose>
    </entry>
  </service-uris>
</conference-description>

It is worth pointing out that, in addition to simply adding text messaging capabilities to an audio/video conference, group chats can also be used for defining roles, giving permissions, muting, kicking and banning participants, etc. A conference mixer or focus agent, can mimic these settings within the conference call, actually muting, kicking, or banning participants in the call as these actions occur in the chat room. Such an approach requires no additional specification and is purely an implementation decision for the conferencing software.

It is also worth mentioning that it is possible for the grouptextchat URI to match the URI of the conference. This would typically be the case in scenarios where the conference focus also provides a SIP signalled MSRP chat service at the same URI.

2. Security Considerations

Advertising group text chats over SIP could provide malicious entities with the following attack vector: if a malicious entity is capable of intercepting and modifying conference package event notifications, it could trick participants in to joining a third party chat room where the attacker could eavesdrop on the
conversation and potentially even impersonate some of the participants.

Similar attacks are already possible with the "participation"<conference-uris> defined in [RFC4575] which is why it recommends "a strong means for authentication and conference information protection" as well as "comprehensive authorization rules". Clients can integrity protect and encrypt notification messages using end-to-end mechanisms such as S/MIME or hop-by-hop mechanisms such as TLS. When none of the above are possible, clients will need to clearly display the address of the destination chat room (before and after it has been joined) so that users could notice possible discrepancies.

3. IANA Considerations

The IANA is requested to add a new predefined value "grouptextchat" in the "URI purposes" sub-registry of the http://www.iana.org/assignments/sip-parameters registry as follows:

Value: grouptextchat
Description: The URI can be used to join a multi-user chat directly associated with the conference
Document: [this document]

4. References

4.1. Normative References


4.2. Informative References


Appendix A. Acknowledgements
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