XEP-0010: Whiteboarding SIG

Niklas Gustavsson
mailto:niklas@protocol7.com
xmpp:nikgus@jabber.org

Status	Type	Short Name
Obsolete	SIG Formation	N/A

A proposal to form a SIG to develop a protocol for whiteboarding over Jabber.

Legal

Copyright

This XMPP Extension Protocol is copyright © 1999 – 2024 by the XMPP Standards Foundation (XSF).

Permissions

Permission is hereby granted, free of charge, to any person obtaining a copy of this specification (the "Specification"), to make use of the Specification without restriction, including without limitation the rights to implement the Specification in a software program, deploy the Specification in a network service, and copy, modify, merge, publish, translate, distribute, sublicense, or sell copies of the Specification, and to permit persons to whom the Specification is furnished to do so, subject to the condition that the foregoing copyright notice and this permission notice shall be included in all copies or substantial portions of the Specification. Unless separate permission is granted, modified works that are redistributed shall not contain misleading information regarding the authors, title, number, or publisher of the Specification, and shall not claim endorsement of the modified works by the authors, any organization or project to which the authors belong, or the XMPP Standards Foundation.

Warranty

NOTE WELL: This Specification is provided on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE.

Liability

In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall the XMPP Standards Foundation or any author of this Specification be liable for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising from, out of, or in connection with the Specification or the implementation, deployment, or other use of the Specification (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if the XMPP Standards Foundation or such author has been advised of the possibility of such damages.

Conformance

This XMPP Extension Protocol has been contributed in full conformance with the XSF's Intellectual Property Rights Policy (a copy of which can be found at <`https://xmpp.org/about/xsf/ipr-policy`> or obtained by writing to XMPP Standards Foundation, P.O. Box 787, Parker, CO 80134 USA).

Contents

1 Introduction

Jabber is often thought of simply as a system for instant messaging, albeit an open one. However, Jabber technology can be used, and is being used, in applications quite different from simple IM. One of these applications is whiteboarding. In collaborative work, the ability to draw (for example, to design sketches, UML schemas, house architectures, and organizational plans) is essential, as exemplified by the success of real-world whiteboarding applications such as Microsoft NetMeeting. Whiteboarding can also be used for entertainment purposes such as games and quizzes. Because of the value of whiteboarding as an important real-time collaboration tool, other IM services are beginning to offer these capabilities. For these and other reasons, I believe that a good protocol for whiteboarding in Jabber would be of great value.

There exists today a protocol draft for sending streaming XPM over Jabber. XPM is a bitmap format, which makes it well-suited for certain applications (e.g., smaller drawings and sketches). However, significant changes in an XPM image will require sending large amounts of XML data (even with the compression described in the protocol draft). Also, for example, XPM does not scale without loss of resolution, nor does it support metadata. In addition, the current draft specifies the data format only, not the way the data will be sent or handled by Jabber servers and clients.

Therefore, the Whiteboard SIG should develop a standard way of handling whiteboards in Jabber and a format for data transfer. This might be based on vector graphics, bitmap data, or a combination of these two. In addition, the protocol should work in the context of both regular messaging and conferencing. The protocol for whiteboarding during conferencing might depend on the new protocol proposal to come from the Conferencing SIG.

2 Deliverables

The Whiteboarding SIG should produce the following deliverables (these deliverables will be presented to the Jabber Council):

2.1 Requirements

A set of requirements that the proposed protocol should fulfill.

2.2 Analysis of existing work

There are today at least four different attempts [1] [2] [3] to create a whiteboarding protocol in Jabber. The Whiteboarding SIG should evaluate them all and see which features of each are

---

[1]"Distributed SVG documents" (formerly at http://www.jabber.org/?oid=1025)

[2]SVG over Jabber (http://www.protocol7.com/jabber/whiteboard_proposal.txt)

[3]Jabberzilla Whiteboard (http://jabberzilla.mozdev.org/)

worth keeping.

2.3 Graphics data format

One or more data formats for the graphics data, presented both as a description and as a DTD or XML schema.

2.4 Jabber protocol

The actual protocol for how the graphics data is sent over Jabber. This will also include an analysis of any associated functionality that must be performed by Jabber servers and clients.