XEP-0429: Special Interests Group End to End Encryption

Paul Schaub
mailto:vanitasvitae@riseup.net
xmpp:vanitasvitae@jabberhead.tk

2020-01-28
Version 0.2.0

<table>
<thead>
<tr>
<th>Status</th>
<th>Type</th>
<th>Short Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed</td>
<td>Procedural</td>
<td>SIG-E2EE</td>
</tr>
</tbody>
</table>

This document proposes the formation of a Special Interest Group (SIG) within the XSF devoted to the development of end-to-end encryption within the context of XMPP.
Legal

Copyright

This XMPP Extension Protocol is copyright © 1999 – 2020 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 1
2. Scope and Role 1
3. Membership 1
4. Lifetime 1
5. Deliverables 2
1 Introduction

End-to-end encryption presents a vital tool for users to protect their communications against third parties. To ensure a good user experience it is important to agree on shared standards which are widely rolled out and adopted by implementations. There already exists a number of encryption protocols with different properties and scopes. It is necessary to coordinate the efforts of further improving those standards to identify and unify common problems and patterns.

2 Scope and Role

The role of the SIG shall be as follows:

- Produce, or coordinate the production and maintenance of relevant XMPP Extension Protocol (XEP) documents as described below under Deliverables.
- Represent the interests and requirements of the XMPP community during the development of end-to-end encryption protocols that are non-exclusive to XMPP. Note: Only elected members of the XSF may act as ambassadors.
- Provide recommendations for implementers.

The SIG-E2EE shall not itself approve XMPP extension protocols (XEPs), which tasks shall remain under the purview of the XMPP Council.

The scope of the SIG is limited to end-to-end encryption in contexts which are useful for instant messaging.

3 Membership

The SIG-E2EE shall be open to the public and shall not be limited to elected members of the XMPP Standards Foundation. Anyone who works with, or is interested in encryption protocols is invited to take part. Only elected members of the XSF however may act as ambassadors. Discussions shall be conducted in a dedicated openly accessible mailing list.

4 Lifetime

The SIG-E2EE shall be a standing SIG, and shall exist as long as the XMPP Council deems it useful.
5 Deliverables

The SIG-E2EE should maintain active existing end-to-end encryption specifications and keep them up to date. It should also coordinate the production of future end-to-end encryption specifications to keep up with the state of the art.