XEP-0412: XMPP Compliance Suites 2019

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xmpp:georg@yax.im

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Version 1.0.1

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<th>Status</th>
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<td>Standards Track</td>
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This document defines XMPP protocol compliance levels.
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Contents

1 Introduction 1

2 Compliance Categories 1
   2.1 Core Compliance Suite ........................................... 1
   2.2 Web Compliance Suite ............................................. 5
   2.3 IM Compliance Suite ............................................... 7
   2.4 Mobile Compliance Suite ..................................... 16

3 Implementation Notes 18

4 Security Considerations 18

5 IANA Considerations 19

6 XMPP Registrar Considerations 19

7 Acknowledgements 19
1 Introduction

The XMPP Standards Foundation (XSF)\(^1\) defines protocol suites for the purpose of compliance testing and software certification. This document specifies compliance levels for XMPP clients and servers; it is hoped that this document will advance the state of the art, and provide guidance and eventual certification to XMPP client and server authors.

This document defines Categories based on typical use cases (Core, Web, IM, Mobile) and Levels (Core, Advanced) based on functionality in the respective category. Unless explicitly noted, support for the listed specifications is REQUIRED for compliance purposes. A feature is considered supported if all comma separated feature providers listed in the "Providers" column are implemented (unless otherwise noted).

2 Compliance Categories

2.1 Core Compliance Suite

---

\(^1\)The XMPP Standards Foundation (XSF) is an independent, non-profit membership organization that develops open extensions to the IETF’s Extensible Messaging and Presence Protocol (XMPP). For further information, see <https://xmpp.org/about/xmpp-standards-foundation>.\
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<tr>
<th>Feature</th>
<th>Core Server</th>
<th>Core Client</th>
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<td>RFC 7622</td>
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is not listed due to the unclear interoperability impact of using PRECIS and Stringprep in the same ecosystem.
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<thead>
<tr>
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<tr>
<td>Event publishing</td>
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<td>While 'Personal Eventing Protocol' does not require all the features of 'Publish-Subscribe' to be available on the users’ JIDs, and nor does this suite, it is desirable for this to be the case and it is expected that this will a requirement of future Compliance Suites.</td>
</tr>
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</table>
2.2 Web Compliance Suite

To be considered XMPP web compliant, all features from the core compliance category must be met, as well as all features in this suite.
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<td>plugin. If claiming compliance using such</td>
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<td>modules/-plugins MUST be detailed.</td>
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<td>(See also: BOSH (XEP-0124): BOSH Streams</td>
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2.3 IM Compliance Suite

To be considered XMPP IM compliant, all features from the core compliance category must be met, as well as all features in this suite.

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- Not required for command line or terminal based interfaces.

**User Avatar to vCard-Based Avatars**
- **XEP-0398**
  - User Avatar to vCard-Based Avatars
  - [XEP-0398](https://xmpp.org/extensions/xep-0398.html)

**vCard-Based Avatars**
- **XEP-0153**
  - vCard-Based Avatars
  - [XEP-0153](https://xmpp.org/extensions/xep-0153.html)
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<td>can be enabled via an external component or an internal server module/plugin. If claiming compliance using such an addition, the necessary components/modules/plugins MUST be detailed.</td>
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<td>Message Archive Management (XEP-0313)</td>
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<td>MUC Self-Ping (Schrödinger’s Chat) (XEP-0410)</td>
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<td>Persistent Storage of Private Data via PubSub</td>
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Support can be enabled via an external component or an internal server module/plugin. If claiming compliance using such an addition, the necessary components/modules/plugins MUST be detailed.

<table>
<thead>
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<th>Feature</th>
<th>Core Server</th>
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<th>Advanced Providers Server</th>
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can be enabled via an external component or an internal server module/plug-in. If claiming compliance using such an addition, the necessary components/modules/plug-ins MUST be detailed.

XEP-0049: Private XML Storage

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<td>XEP-0313:</td>
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<td>Message</td>
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<td>Archive</td>
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<td>Management</td>
</tr>
</tbody>
</table>
2.4 Mobile Compliance Suite

To be considered XMPP mobile compliant, all features from the core compliance category must be met, as well as all features in this suite.
<table>
<thead>
<tr>
<th>Feature</th>
<th>Core Server</th>
<th>Core Client</th>
<th>Advanced Server</th>
<th>Advanced Client</th>
<th>Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session Resumption</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Stream Management (XEP-0198) XEP-0198: Stream Management</td>
</tr>
<tr>
<td>Stanza Acknowledgements</td>
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<td></td>
<td>Stream Management (XEP-0198) XEP-0198: Stream Management</td>
</tr>
<tr>
<td>Client State Indication</td>
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<td></td>
<td></td>
<td>Client State Indication (XEP-0352) XEP-0352: Client State Indication</td>
</tr>
</tbody>
</table>
### 3 Implementation Notes

Some of the protocol specifications referenced herein have their own dependencies; developers need to consult the relevant specifications for further information.

### 4 Security Considerations

This document introduces no additional security considerations above and beyond those defined in the documents on which it depends.

---

#### Feature Core Core Advanced Advanced Providers

<table>
<thead>
<tr>
<th>Feature</th>
<th>Server</th>
<th>Client</th>
<th>Server</th>
<th>Client</th>
<th>Push Notifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third Party Push Notifications</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>Support can be enabled via an external component or an internal server module/plugin. If claiming compliance using such an addition, the necessary components/-modules/-plugins MUST be detailed.</td>
</tr>
</tbody>
</table>

5 IANA Considerations

This document requires no interaction with the Internet Assigned Numbers Authority (IANA) ².

6 XMPP Registrar Considerations

This document requires no interaction with the XMPP Registrar ³.

7 Acknowledgements

The author would like to thank Guus der Kinderen, Dele Olajide, Marc Laporte, Dave Cridland, Daniel Gultsch, Florian Schmaus, Tobias Markmann, and Jonas Schäfer for their suggestions.

²The Internet Assigned Numbers Authority (IANA) is the central coordinator for the assignment of unique parameter values for Internet protocols, such as port numbers and URI schemes. For further information, see <http://www.iana.org/>.

³The XMPP Registrar maintains a list of reserved protocol namespaces as well as registries of parameters used in the context of XMPP extension protocols approved by the XMPP Standards Foundation. For further information, see <https://xmpp.org/registrar/>.