XEP-0387: XMPP Compliance Suites 2018

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Obsolete	Standards Track	CS2018

This document defines XMPP protocol compliance levels.

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Contents

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. 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 Levels

2.1 Core Compliance Suite

Feature	Core Server	Core Client	Advanced Server	Advanced Client	Providers
Core features	☐	☐	☐	☐	RFC 6120 RFC 6120: Extensible Messaging and Presence Protocol (XMPP): Core <http://tools.ietf.org/html/rfc61 RFC 7622 RFC 7622: Extensible Messaging and Presence Protocol (XMPP): Address Format <http://tools.ietf.org/html/rfc76

[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>.

Feature	Core Server	Core Client	Advanced Server	Advanced Client	Providers
TLS	☐	☐	☐	☐	RFC 7590 RFC 7590: Use of Transport Layer Security (TLS) in the Extensible Messaging and Presence Protocol (XMPP) <http://tools.ietf.org/html/rfc75 SRV records for XMPP over TLS (XEP-0368) XEP-0368: SRV records for XMPP over TLS <https://xmpp.org/extensions/x 0368.html>.Server support means having the ability to accept direct TLS connections.
Feature discovery	☐	☐	☐	☐	Service Discovery (XEP-0030) XEP-0030: Service Discovery <https://xmpp.org/extensions/x 0030.html>.

Feature	Core Server	Core Client	Advanced Server	Advanced Client	Providers
Feature broadcasts	☐	☐	☐	☐	Entity Capabilities (XEP-0115) XEP-0115: Entity Capabilities <https://xmpp.org/extensions/x 0115.html>.
Server Extensibility	☐	N/A	☐	N/A	Jabber Component Protocol (XEP-0114) XEP-0114: Jabber Component Protocol <https://xmpp.org/extensions/x 0114.html>.

Feature	Core Server	Core Client	Advanced Server	Advanced Client	Providers
Event publishing	☐	☐	☐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.	☐	Personal Eventing Protocol (XEP-0163) XEP-0163: Personal Eventing Protocol <https://xmpp.org/extensions/x 0163.html>.

2.2 Web Compliance Suite

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

Feature	Core Server	Core Client	Advanced Server	Advanced Client	Providers
Web Connection Mechanisms	☐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.	☐Only one of the recommended providers must be implemented for compliance.	☐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.	☐Only one of the recommended providers must be implemented for compliance.	RFC 7395 RFC 7395: An Extensible Messaging and Presence Protocol (XMPP) Subprotocol for WebSocket <http://tools.ietf.org/html/rfc XMPP Over BOSH (XEP-0206) XEP-0206: XMPP Over BOSH <https://xmpp.org/extensions 0206.html>. (See also: BOSH (XEP-0124) XEP-0124: Bidirectional-streams Over Synchronous HTTP <https://xmpp.org/extensions 0124.html>.)

2.3 IM Compliance Suite

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

Feature	Core Server	Core Client	Advanced Server	Advanced Client	Providers
Core features	☐	☐	☐	☐	RFC 6121 RFC 6121: Extensible Messaging and Presence Protocol (XMPP): Instant Messaging and Presence <http://tools.ietf.org/html/

Feature	Core Server	Core Client	Advanced Server	Advanced Client	Providers
User Avatars	N/A	Not required for command line or terminal based interfaces.While 'User Avatars' is more modern, 'vCard-Based Avatars' is more widely deployed. Although it is suggested that to maximise interoperability with existing software a client fully supports both it is sufficient to claim	N/A	Not required for command line or terminal based interfaces.While 'User Avatars' is more modern, 'vCard-Based Avatars' is more widely deployed. Although it is suggested that to maximise interoperability with existing software a client fully supports both it is sufficient to claim	User Avatar (XEP-0084) XEP-0084: User Avatar <https://xmpp.org/extensio 0084.html>.vCard-Based Avatars (XEP-0153) XEP-0153: vCard-Based Avatars <https://xmpp.org/extensio 0153.html>.

Feature	Core Server	Core Client	Advanced Server	Advanced Client	Providers
vcard-temp	☐	☐ Not required for command line or terminal based interfaces.	☐	☐ Not required for command line or terminal based interfaces.	vcard-temp (XEP-0054) XEP-0054: vcard-temp <https://xmpp.org/extensio 0054.html>.
Outbound Message Synchronization	☐	☐	☐	☐	Message Carbons (XEP-0280) XEP-0280: Message Carbons <https://xmpp.org/extensio 0280.html>.
User Blocking	☐	☐	☐	☐	Blocking Command (XEP-0191) XEP-0191: Blocking Command <https://xmpp.org/extensio 0191.html>.

Feature	Core Server	Core Client	Advanced Server	Advanced Client	Providers
Group Chat	☐ 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.	☐ Support for the Entity Use Cases and Occupant Use Cases is REQUIRED; support for the remaining use cases is RECOMMENDED.	☐ 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.	☐ Support for the Entity Use Cases and Occupant Use Cases is REQUIRED; support for the remaining use cases is RECOMMENDED.	Multi-User Chat (XEP-0045) XEP-0045: Multi-User Chat <https://xmpp.org/extensi 0045.html>.Implementation should take note that future versions of these compliance suites may rely on Mediated Information eXchange (MIX) (XEP-0369) XEP-0369: Mediated Information eXchange (MIX) <https://xmpp.org/extensi 0369.html>. instead., Direct MUC

Feature	Core Server	Core Client	Advanced Server	Advanced Client	Providers
Bookmarks	☐	☐	☐ 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.	☐	Bookmark Storage (XEP-0048) XEP-0048: Bookmark Storage <https://xmpp.org/extensio 0048.html>.

Feature	Core Server	Core Client	Advanced Server	Advanced Client	Providers
Persistent Storage of Private Data via PubSub	☐	☐	☐ 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.	☐	Best Practices for Persistent Storage of Private Data via Publish-Subscribe (XEP-0223) XEP-0223: Best Practices for Persistent Storage of Private Data via Publish-Subscribe <https://xmpp.org/extensio 0223.html>.

Feature	Core Server	Core Client	Advanced Server	Advanced Client	Providers
Private XML Storage	☐	☐	☐ 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.	☐	Private XML Storage (XEP-0049) XEP-0049: Private XML Storage <https://xmpp.org/extensio 0049.html>.

Feature	Core Server	Core Client	Advanced Server	Advanced Client	Providers
Session Resumption	☐	☐	☐	☐	Stream Management (XEP-0198) XEP-0198: Stream Management <https://xmpp.org/extensio 0198.html>.
Stanza Acknowledgements	☐	☐	☐	☐	Stream Management (XEP-0198) XEP-0198: Stream Management <https://xmpp.org/extensio 0198.html>.

Feature	Core Server	Core Client	Advanced Server	Advanced Client	Providers
History Storage / Retrieval	☐	☐	☐	☐	Message Archive Management (XEP-0313) XEP-0313: Message Archive Management <https://xmpp.org/extensio 0313.html>.
Chat States	N/A	☐	N/A	☐	Chat State Notifications (XEP-0085) XEP-0085: Chat State Notifications <https://xmpp.org/extensio 0085.html>.

2.4 Mobile Compliance Suite

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

Feature	Core Server	Core Client	Advanced Server	Advanced Client	Providers
Session Resumption	☐	☐	☐	☐	Stream Management (XEP-0198) XEP-0198: Stream Management <https://xmpp.org/extensions/0198.html>.
Stanza Acknowledgements	☐	☐	☐	☐	Stream Management (XEP-0198) XEP-0198: Stream Management <https://xmpp.org/extensions/0198.html>.
Client State Indiciation	☐	☐	☐	☐	Client State Indication (XEP-0352) XEP-0352: Client State Indication <https://xmpp.org/extensions/0352.html>.

Feature	Core Server	Core Client	Advanced Server	Advanced Client	Providers
Third Party Push Notifications	☐	☐	☐ 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.	☐	Push Notifications (XEP-0357) XEP-0357: Push Notifications <https://xmpp.org/extensions/xep-0357.html>.

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.

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

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[2] The 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/>.

[3] The 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/>.