



XMPP

XEP-0431: Full Text Search in MAM

Dave Cridland

<mailto:dave@hellopando.com>

<xmpp:dwd@dave.cridland.net>

2020-01-29

Version 0.2.0

Status	Type	Short Name
Experimental	Standards Track	fulltextmam

This specification proposes a field in the MAM form for full text searching.

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	Overview	1
2.1	Discovering Support	1
2.2	Searching	1
3	Protocol Elements	1
3.1	Querying	1
3.2	Results	1
4	Schema	2
5	Security Considerations	2
6	IANA Considerations	2
7	XMPP Registrar Considerations	2
8	Acknowledgements	2

1 Introduction

[Message Archive Management \(XEP-0313\)](#)¹ has an extensible form. This specification extends the extensible form with an extension which extends MAM to perform full text searching. A number of existing implementations of this extension exist - extending their existing extensions to conform to the extension in this specification now it exists is intended to be trivial.

2 Overview

2.1 Discovering Support

Support for this protocol is advertised by the Service Discovery protocol defined in [Service Discovery \(XEP-0030\)](#)² using a feature of urn:xmpp:fulltext:0.

2.2 Searching

Searching using full text is performed by the client supplying an additional text key, which if non-empty is used as input to a full text search of some form. The precise meaning of this field is left entirely implementation-defined at this time. Future revisions of this specification might impose additional constraints.

3 Protocol Elements

3.1 Querying

A text input field of {urn:xmpp:fulltext:0}fulltext is hereby defined for the 'urn:xmpp:mam:2' FORM_TYPE, as conforming to the syntax defined in [Field Standardization for Data Forms \(XEP-0068\)](#)³

3.2 Results

The precise matching of the supplied text string is left implementation-defined. Servers MAY use any full-text search mechanism. While this might mean that certain characters are deemed "special", clients are RECOMMENDED not to attempt any support for these, as they are unlikely to be portable between implementations. While many implementations of this protocol might conform in a purely syntactic sense, it is to be noted that the intent is that

¹XEP-0313: Message Archive Management <<https://xmpp.org/extensions/xep-0313.html>>.

²XEP-0030: Service Discovery <<https://xmpp.org/extensions/xep-0030.html>>.

³XEP-0068: Field Data Standardization for Data Forms <<https://xmpp.org/extensions/xep-0068.html>>.

a reasonable full-text search is performed based on the input - servers SHOULD therefore honour this intent despite the lack of a formal strict definition.

4 Schema

Not sure this is needed at all.

5 Security Considerations

None?

6 IANA Considerations

This XEP requires no interaction with the [Internet Assigned Numbers Authority \(IANA\)](#) ⁴.

7 XMPP Registrar Considerations

Registration of the field pointing to this document.

8 Acknowledgements

Guus der Kinderen nudged me into doing this. Matthew Wild and Kev Smith argued reasonably that nobody should have to buy beer.

⁴The 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/>.