XEP-0431: Full Text Search in MAM

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

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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.

\(^4\)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 \(<http://www.iana.org/>\).