XEP-0411: Bookmarks Conversion

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This specification describes a method to migrate to PEP based bookmarks without loosing compatibility with client that still use Private XML.

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1 Introduction

Bookmark Storage (XEP-0048) [1] has a long time ago moved from Private XML Storage (XEP-0049) [2] as a storage backend to using Personal Eventing Protocol (XEP-0163) [3] instead. However lots of implementations are still using Private XML which creates a bit of a chicken and egg problem since clients who want to use the more efficient PEP method would either have to support both and synchronize them properly or render themselves incompatible with other clients. An easy way out of that conundrum is to have the server do the conversion for us.
This XEP defines a method to convert between the different storage backends of XEP-0048 and is not influenced by the existence of PEP Native Bookmarks (XEP-0402) [4]. Bookmarks 2 defines its own conversion mechanism but the adoption of Bookmarks 2 - at the time of writing this XEP - is questionable.

2 Discovery

The conversion is transparent to the publishing entity. However an entity might want to discover if a service will be performing the conversion and soley rely on PEP to access bookmarks without segregating clients that only support Private XML.
The service MUST include a Service Discovery (XEP-0030) [5] feature of "urn:xmpp:bookmarks-conversion:0" on the account.

Listing 1: Client sends service discovery request to own account

```
<iq from='romeo@montague.tld/garden'
    id='01'
    type='get'
    to='remeo@montague.tld'>
  <query xmlns='http://jabber.org/protocol/disco#info'/>
</iq>
```

Listing 2: Server includes feature namespace in response

```
<iq from='romeo@montague.tld'
    id='01'
    type='result'
    to='romeo@montague.tld/garden'>
  <query  xmlns='http://jabber.org/protocol/disco#info'>
    <feature var='urn:xmpp:bookmarks-conversion:0'/>
  </query>
```

[1] XEP-0048: Bookmark Storage <https://xmpp.org/extensions/xep-0048.html>.
[2] XEP-0049: Private XML Storage <https://xmpp.org/extensions/xep-0049.html>.
[3] XEP-0163: Personal Eventing Protocol <https://xmpp.org/extensions/xep-0163.html>.
[4] XEP-0402: PEP Native Bookmarks <https://xmpp.org/extensions/xep-0402.html>.
[5] XEP-0030: Service Discovery <https://xmpp.org/extensions/xep-0030.html>.

```
</iq>
```

3 Conversion

Modern clients are expected to use PEP (**XEP-0163**) as interface to upload and retrieve their bookmarks and not explicitly request bookmarks from private XML anymore. Thus a service MUST support conversion from PEP to Private XML and vice versa. Whether PEP and Private XML are fed from the same data source or if they get copied over when ever one of them gets written is out of scope of this document.
When a legacy client modifies bookmarks over Private XML the service MUST send out notification messages to all subscribers of the 'storage:bookmarks' node.

4 Implementation Notes

For server implementations where the data is just copied over the server should make sure that the data gets copied from Private XML to PEP before the user logs in for the first time. Otherwise it won't generate a PEP notification and clients that only rely on PEP will not be aware of any preexisting bookmarks.

5 Security Considerations

PEP nodes can have an access model other than 'whitelist'. When copying data over from Private XML Storage to PEP the service MUST make that the user is the only one who has access to that node. This can happen by either changing the access model accordingly or not doing the conversion.

6 IANA Considerations

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

7 XMPP Registrar Considerations

This specification defines the following XML namespace:

- urn:xmpp:bookmarks-conversion:0

8 XML Schema

tbd

9 Acknowledgements

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