

JMAP Filenode - IETF121

Bron Gondwana <brong@fastmailteam.com>



filenode

- Similar to what Fastmail uses for File Storage
- Open questions:
 - Should we support Symlinks? (RFC4437)
 - Do we want an "includeParents" option to query or get?
 - capabilities - what knobs do we want to expose?
 - do we need a place to store client metadata per-node?
 - do we allow changing blobId for node, or is it fixed?
 - myRights, fullPath, etc - how do we handle derived facts for child nodes.
- Needs real world testing - ideally filesystem APIs on Mac/Windows/Mobile

DAV Properties (Fastmail file storage)

SAR:

- lastmodified_server
- lastmodified

urn:schemas-microsoft-com:

- Win32LastAccessTime
- Win32FileAttributes
- Win32LastModifiedTime
- Win32CreationTime

<http://apache.org/dav/props/>

- executable

{blank}

- executable

DAV:

- getlastmodified

<http://www.southrivertech.com/>

- srt_proptimestamp
- srt_creationtime
- srt_modifiedtime
- getlastmodified

DIA:

- clientModifiedDate

WH:

- clientModifiedDate

<https://synctech.com.au>

- SMBR_BACKUP_DATE
- SMBR_RECORD_COUNT
- SMBR_BACKUP_TYPE
- SMBR_BACKUP_SET_ID

Plus lots from <http://example.com/neon/litmus/>

Win32FileAttributes (Value, Count)

00000000	53342	00000032	2	00002021	49
00000001	65	00000080	5234	00002022	25
00000002	78	00000120	17	00002026	14
00000004	1	00000121	9	00002027	1
00000006	14	00000122	5	00002030	129
00000010	19696	00000220	237	00002121	11
00000011	42	00000420	7775	00004000	4
00000012	32	00000421	1	00004010	1
00000014	790	00000426	1	00020020	2
00000016	2	00002000	11	00080010	159
00000020	183807	00002002	4	00080030	83
00000021	1034	00002006	82	00080420	2
00000022	1053	00002010	443	00100010	161
00000026	127	00002011	1	00100011	1
00000030	1211	00002014	2	00100020	10
00000031	1	00002020	5471	00200010	16

Other interesting fields

Mostly it's all timestamps!

SAR:lastmodified_server - is used for sync; stored by client to know if server has also changed since last sync. *Can tell by blobId if changed.*

synctech properties, e.g.:

- SMBR_BACKUP_SET_ID: {uuid}
- SMBR_BACKUP_TYPE: [calls | sms]
- SMBR_BACKUP_DATE: 1727997648248 (*unixtime in milliseconds*)
- SMBR_RECORD_COUNT: 475

```
-arw x 2024-03-26 03:54:19 calls-20240326165256.xml (64338)
-arw x 2024-04-17 07:01:54 calls-20240417190146.xml (79524)
[...]
```

and

```
-arw x 2024-03-26 03:54:26 sms-20240326165256.xml (8795907)
-arw x 2024-04-17 07:02:12 sms-20240417190146.xml (8791121)
[...]
```

Could encode all that data in filename and timestamps

Call For Adoption

Not ready to ship this until we've done some more clients, but

- does this look reasonable?
- since I'm author, will ask Jim to manage adoption!