Sync&Share—Ripe for Standardization?



SWITCH

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Standard Admonition on Standards

HOW STANDARDS PROLIFERATE: (SEE: A/C CHARGERS, CHARACTER ENCODINGS, INSTANT MESSAGING, ETC.)



https://xkcd.com/927/



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14 Competing Standards?

- Dropbox
- Google Drive
- Microsoft OneDrive
- ownCloud
- Box
- WebDAV
- BitTorrent Sync
- Git
- ... (I could continue)



14 Standards => 15 Standards

- Doesn't help anyone other than keep people busy ("Many fine lunches and dinners" at SDO meetings)
 SDO = "Standards Development Organization", e.g. IETF, W3C, ISO, ECMA, ETSI...
- Except if your 15th thing is WAY better than everything else – in which case, good luck!



14 Standards => 14 Standards

- What if we elevate one of the *de-facto* standards to a *de-jure* one?
- This may seem pointless except as marketing tool ("open")
- Seems like waste of time, but could bring benefits
 - If change control is moved to a standards organization
 and that organization does a "better" job managing the protocol
 - If it lowers the bar for new entrants
 - Eventually it may start taking over the other 13...
- Whether this can happen depends on
 - Quality of the base standard
 - Which SDO takes care of this
 - Whether prior standard "owner" is willing to give up change control



14 Standards => 13 or less

- That's the desired case, right?
- Why would multiple players agree on a common standard?
 - -Altruism ("not bloody likely")
 - To improve their competitive position (often with respect to a dominant player)
 - To reduce/amortize development effort (in areas where they don't want to differentiate themselves)



Possible areas for standardization

- Terminology
 - -somewhat useful, especially as basis for other aspects
- Synchronization protocol
 - Attempted at IETF—unclear whether this is "ripe" yet: Vendors still trying to differentiate themselves by improving this.
 - Apply/extend existing protocols such as WebDAV (or Git or rsync)
 => don't forget to "upstream" extensions ^(c)
- Sharing protocol
 - -Inseparable from synchronization protocol?

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Possible Venues (SDOs)

- "BYO" (build your own) consortium
 - -Can be good for *focused* standards development
 - -Needs to get over critical mass
- OASIS, OGF, OpenStack... ????
- IETF
 - -Has produced long-term viable protocols (TCP/IP, HTTP, WebDAV...)
 - -Many NRENs have been active there and know how it works
 - -Better at lower layers—sufficient synergies?
 - -Can be slow (because high standards and "rough consensus")



Who benefits (directly)?

- The user (choice of clients independent of who she shares files with; fewer clients -> less battery drain)
- Existing market players (standard/"open" as PR win)
- New market players, by lowering barriers to entry (network effects!)
- Evolution, by creating a stable layer above (and below) innovation can take place



Go forth and standardize!

- Questions?
- Opinions?

