

Store Chats Alongside Database

Context and Problem Statement

Chats with AI should be stored somewhere. But where and how?

Considered Options

- Inside `.bib` file
- In local user folder
- Alongside `.bib` file

Decision Drivers

- Should work when shared with OneDrive, Dropbox or similar asynchronous services
- Should work on network drives
- Should be “easy” for users to follow
- Should be the same in a shared and non-shared setting (e.g., if Dropbox is used or not should make a difference)

Decision Outcome

Chosen option: “In local user folder”, because it’s very hard to work with a shared library, if two users will work simultaneously on one library, then AI chats file will be absolutely arbitrary and unmergable.

Pros and Cons of the Options

Inside `.bib` file

- Good, because we already have a machinery for managing the fields and other information of BIB entries
- Good, because chats are stored inside one file, and if the `.bib` file is moved, the chat history is preserved
- Bad, because there may be lots of chats and messages and `.bib` file become too cluttered and too big which slows down the processing of `.bib` file
- Bad, because if user shares a `.bib` file, they will also share chat messages, but chats are not ideal, so user may not want to share them

In local user folder

One can use `%APPDATA%`, where JabRef stores the Lucene index and other information. See `org.jabref.gui.desktop.os.NativeDesktop#getFulltextIndexBaseDirectory` for use in JabRef and <https://github.com/harawata/appdirs> for general information.

Concrete example for backup folder: `C:\Users\${username}\AppData\Local\org.jabref\jabref\backups`.

Example filename: `4a070cf3--Chocolate.bib--2024-03-25--14.20.12.bak`.

- Good, because `.bib` file is kept clean
- Good, because chat messages are saved locally
- Neutral, because may be a little harder to implement
- Bad, because chat messages cannot be easily shared
- Bad, because when path of a `.bib` file is changed, the chats are lost

Alongside `.bib` file

- Good, because simple implementation
 - Good, because, the user can send the chats file alongside the `.bib` file if they want to share the chats. If users do not want to share the messages, then they can omit the chats file
 - Good, because `.bib` files is kept clean
 - Bad, because user may not expect that a new file will be created alongside their `.bib` (or other LaTeX-related) files
 - Bad, because, it may be not convenient to share both files (`.bib` file and chats file) in order to share chat history.
 - Bad, because if `.bib` files are edited externally (meaning, not inside the JabRef), then chats file will not be updated correspondingly
 - Bad, because if user moves `.bib` file, they should move the chats file too
 - Bad, because if two persons work in parallel using a OneDrive share, the file is overwritten or a conflict file is generated. ([Dropbox “conflicted copy”](#))
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