

Use Citation Key for Grouping Chat Messages

Context and Problem Statement

As we store chat messages not inside a BibTeX entry in `.bib` file, the chats file is represented as a map to BibTeX entry and a list of messages. We need to specify the key of this map. Turns out, it is not that easy.

Decision Drivers

- The key should exist for every BibTeX entry
- The key should be unique along other BibTeX entries in one library file
- It is assumed that the key does not change at run-time, between launches of JabRef, and should be cross-platform (most important)

Considered Options

- `BibEntry` Java object
- `BibEntry`'s `id`
- `BibEntry`'s citation key
- `BibEntry`'s `ShareId`

Decision Outcome

Chosen option: “`BibEntry`'s citation key”, because this is the only choice that complies to the third point in Decision Drivers.

Positive Consequences

- Easy to implement
- Cross-platform

Negative Consequences

- If the citation key is changed externally, then the chats file becomes out-of-sync
- Additional user interaction in order to make the citation key comply the first and second points of Decision Drivers

Pros and Cons of the Options

`BibEntry` Java object

Very bad, because it works only at run-time and is not stable.

`BibEntry`'s `id`

JabRef stores a unique identifier for each `BibEntry`. This identifier is created on each load of a library (and not stored permanently).

Very bad, for the same reasons as `BibEntry` Java object.

`BibEntry`'s citation key

- Good, because it is cross-platform, stable (meaning stays the same across launches of JabRef)
- Bad, because it is not guaranteed that citation key exists on `BibEntry`, and that it is unique across other BibTeX entries in the library

`BibEntry`'s `ShareId`

[ADR-0027](#) describes the procedure of synchronization of a Bib(La)TeX library with a server.

Thereby, also local and remote entries need to be kept consistent. The solution chosen there is that the **server** creates a UUID for each entry.

This approach cannot be used here, because there is no server running which we can ask for an UUID of an entry.

More Information

Refer to [issue #160](#) in JabRef main repository

[ADR-038](#) takes another option, because it re-generates the index at each start of JabRef.
