

Realtime

See also: [Push notifications](#)

New in [Tiki12: PluginTogether](#)

See dev notes at [TogetherJS](#)

Tiki has historically been mostly an asynchronous collaborative tool, except for [Live Support](#) and [Chat](#). Since [Tiki5](#), for real-time collaboration, Tiki offers an integration with [BigBlueButton](#) (Audio/Video/Screensharing/WhiteBoard/Chat).

This page is to discuss options to make several features realtime:

- Docs (ODF documents via [WebODF](#))
 - <https://github.com/kogmbh/Kotype> and https://github.com/kogmbh/Wodo.TextEditor_release
- Wiki
- Drawing ([SVG-edit](#))
- Spreadsheet ([jQuery.sheet](#))

Will be useful along with [BigBlueButton](#) collaborative sessions. Ideally for Tiki, it would be the same approach (ex.: library) for all four (and any future) features. And we could take this opportunity to revamp [Live Support](#) and [Chat](#) (which work OK but are not the most recent technology)

Options

BigBlueButton

One possibility is to go the [BigBlueButton](#) route.

Benefits:

- Already integrates with Tiki
- it would be via [Shared Notes](#) which is part of Mconf

Drawbacks:

- Add BigBlueButton as a requirement
- ~~Flash~~ (HTML5 interface has replaced Flash.)
- Likely less general interest than a JavaScript solution

Etherpad Lite

Another possibility is integrating with [Etherpad Lite](#)

Which uses NodeJS, more info at

- <http://www.nodecloud.org>
- <https://github.com/joyent/node/wiki/Node-Hosting>
- https://www.ohloh.net/p/node_js

Benefits:

- Already active project

Drawbacks:

- Adds Etherpad Lite as a requirement
- Overlap with some of Tiki's wiki functionality
- Will it be easy to port to Spreadsheet, Drawing and Docs?

A JavaScript library

Infinite & Jinfinite

- <https://github.com/sveith/jinfinite>

Benefits:

Drawbacks:

WebRTC

- [WebRTC](#)
 - <http://www.tokbox.com/blog/collaborative-editor/>

Potential libraries and approaches

- <https://marijnhaberbeke.nl/blog/collaborative-editing-cm.html>
- <http://blog.karlitschek.de/2013/10/welcome-owncloud-documents.html>
- <http://codiad.com/>
 - <http://www.fluidbyte.net/post/44301667947/codiad-now-has-collaborative-editing>
 - <https://github.com/Codiad/Codiad/tree/master/components/collaborative>
- http://en.wikipedia.org/wiki/Operational_transformation
- <http://opencoweb.org/>
- <http://hyperstruct.net/2007/2/24/xml-sync-islands-let-the-web-sharing-begin/>
- <http://sharejs.org/>
- <http://nowjs.com/>
- <https://github.com/Imaginea/matisse#readme>
- <http://code.google.com/p/google-mobwrite/>
 - <https://code.google.com/p/google-mobwrite/wiki/Theory>
 - <https://code.google.com/p/google-diff-match-patch/>
 - PHP implementation
- <https://github.com/MouMou/jquery-webrtc>
- http://groups.google.com/group/codemirror/browse_thread/thread/thread/b9cc198657fb758f
- **Synchroedit:** SynchroEdit is a browser-based simultaneous multiuser editor, a form of same-time, different-place groupware. It allows multiple users to edit a single web-based document at the same time, and it continuously synchronizes all changes so that users always have the same version. <http://www.synchroedit.com> (LGPL & MPL)
- <http://cooffice.ntu.edu.sg/cockeditor/>
- <http://kolab.org/blog/seigo/2015/12/28/collaborative-editing-manticore>
- <https://research.linagora.com/blog/?p=211>
- <https://github.com/hhxs5/php-sse>
- <https://ckeditor.com/blog/Lessons-learned-from-creating-a-rich-text-editor-with-real-time-collaboration/>

Projects similar to BigBlueButton

- [Dimdidm](#) (open source version abandoned)
- <http://code.google.com/p/openmeetings/> (moved to [Apache Foundation](#))
- <https://www.webhuddle.com/>
- <http://www.jabber.org/>

Why

- For realtime note taking (business, classroom,etc.)
- For realtime brainstorming (business, classroom,etc.)
- For realtime document revision (articles, minutes of meeting, protocols, etc.)
- your ideas?

Who

- Marc Laporte
- Régis Barondeau
- you?

When

No set date, but as soon as possible. [2013-08](#) looked into WebRTC, still moving a bit too much for me - one of those "wait a few months and try again"

Features to be made realtime

Realtime Collaborative Wiki

This is to plan the addition of multiple concurrent editors to the [wiki](#).

Realtime Collaborative Drawing

Same thing for the [Draw](#) feature, which is with [SVG-edit](#)

- <http://code.google.com/p/svg-edit/issues/detail?id=947>
- <http://thenextweb.com/2009/06/05/experience-worlds-google-wave-svg-editor-gadget/>
- <http://www.webdistortion.com/2011/01/22/best-online-collaborative-drawing-tools/>
- <http://noosfero.org/Development/ActionItem2240>

Realtime Collaborative Spreadsheet

This is to plan the addition of multiple concurrent editors to the [spreadsheet](#), which is powered by ([jQuery.sheet](#))

Realtime Collaborative Docs

Tiki bundles [WebODF](#) as Tiki Docs.

"pilot project to add real-time collaborative editing to WebODF":

<http://webodf.org/blog/2012-04-05.html>

Related links

- CRDT: https://youtu.be/Exr0iY_D-vw
- <https://github.com/y-js/yjs>
 - <https://syncedstore.org/docs/vue>
- [React: Event-driven, non-blocking I/O with PHP](#)
- [Ratchet: WebSockets for PHP](#)
- <https://docs.yjs.dev/ecosystem/connection-provider/y-websocket>
- [Screencast](#)
- http://en.wikipedia.org/wiki/Category:Web_conferencing
- http://en.wikipedia.org/wiki/Comparison_of_web_conferencing_software
- http://en.wikipedia.org/wiki/Collaborative_real-time_editor#Browser-based
- http://en.wikipedia.org/wiki/Collaborative_real-time_editor#Other_real-time_collaborative_editing_soft

ware

- <http://webodf.org/blog/2012-04-05.html>
- <https://github.com/substack/dnode>
- <http://lucumr.pocoo.org/2012/8/5/stateless-and-proud/>
- <https://code.google.com/p/jquery-graceful-websocket/>
- <https://code.google.com/p/diagram-editor-for-google-plus/>
- <https://github.com/igniterealtime/Pade/issues/73>
- <http://nikic.github.com/2012/12/22/Cooperative-multitasking-using-coroutines-in-PHP.html>
- <http://www.slideshare.net/spoutserver/realtime-communication-techniques-with-php>
- <http://www.firepad.io/>
- <http://blog.rizzoma.com/2012/11/20/node-js-and-coffeescript-for-online-collaborative-editing/>
- <http://we-love-php.blogspot.de/2012/10/how-to-implement-chat-server-php-server-sent-events.html.html>
- <http://en.wikipedia.org/wiki/Gobby>
- <http://www.emacswiki.org/emacs/CollaborativeEditing>
- http://doc.owncloud.org/server/7.0/user_manual/documents.html
- <http://operational-transformation.github.io/>
- <http://infinote.org/>
 - <https://github.com/sveith/jinfinote>
- http://www.leggetter.co.uk/real-time-web-technologies-guide/#_ratchet
- <https://we.riseup.net/cgdev/collaborative-editor>
- <https://anarc.at/blog/2018-06-26-collaborative-editors-history/>

OpenHub badges

Not Open source

- Connected to [CKEditor5](https://ckeditor.com/collaborative-editing/letters/): <https://ckeditor.com/collaborative-editing/letters/>

Alias

- [Live](#)
- [Realtime Collaborative Wiki](#)
- [Realtime Collaborative Drawing](#)
- [Realtime Collaborative Spreadsheet](#)
- [Realtime Collaborative Docs](#)
- [RTC](#)
- [Realtime Collaboration](#)