

CII/CIR

Async Collaboration

Context

GitBook is designed for teams such that several authors can write and collaborate on the same piece of content simultaneously.

Working simultaneously can be defined in two ways, and organisations may use one or both:

- Authors write in their own individual "draft" of the document, where they control the changes and the lifecycle of the draft.
- Authors writing simultaneously on the same draft.

Most users today associate with the second definition. That is, when you're working on a draft and someone else is working on a similar change, all changes are made in the same place.

GitBook has innovated on this idea to introduce an asynchronous collaboration system that does not rely on people being in the same place.

Being asynchronous means that changes are gradual and incremental, you can go back in time, you can see each change point-by-point, and you can discuss changes as they're happening.

You can also gradually introduce these changes into the main content draft, as they're all atomic changesets.

As each operation is atomic and well-defined, we can build permissions around it.

Conflicts can be resolved if two people make conflicting changes. Either automatically, or via manual conflict resolution.

We must implement this whilst still making it easy for the user to work simultaneously on the same draft. For an individual user, having to go through a "heavier" change request flow is not necessary and could be jarring.

State of Competitors

Objectives

- Introduce the concept of a "change request", encompassing the changes a user wishes to make on a draft.
 - Users should be able to discuss and iterate on a change request before it becomes part of the linear history
- Build a versioning system that works with textual documents (including images, content blocks, etc.) and can handle the simplest cases automatically
- Build a linear history that can be referenced (who did what and when), that can be reverted, compare 2 versions of the document.
- A permission system flexible enough to allow modern orgs to regulate access to the documents
- Allow users to work on a draft of new content with modifying the output of the "live version".

Implementation Details

Success Indicators