# Case Study Overleaf

## This document puts into context the choice of the two versions of Overleaf analyzed in the case study.

## Versions analyzed

#### August 5th, 2021, 09:25 AM

This version represents the latest version of Overleaf's microservices architecture in the form of a multi-repo. This means that up until this point, the architecture's codebase was distributed across several code bases listed below.

* <https://github.com/overleaf/chat>
* <https://github.com/overleaf/clsi>
* <https://github.com/overleaf/contacts>
* <https://github.com/overleaf/docstore>
* <https://github.com/overleaf/document-updater>
* <https://github.com/overleaf/filestore>
* <https://github.com/overleaf/writelatex-git-bridge>
* <https://github.com/overleaf/notifications>
* <https://github.com/overleaf/real-time>
* <https://github.com/overleaf/spelling>
* <https://github.com/overleaf/track-changes>
* <https://github.com/overleaf/access-token-encryptor>
* <https://github.com/overleaf/logger-module>
* <https://github.com/overleaf/metrics-module>
* <https://github.com/overleaf/o-error>
* <https://github.com/overleaf/object-persistor>
* <https://github.com/overleaf/redis-wrapper>
* <https://github.com/overleaf/settings-module>
* <https://github.com/overleaf/web>

Later that day, on August 5, 2021, the code base switched to a mono-repo. This means that all repositories have been merged into the following repository: <https://github.com/overleaf/overleaf>. However, Overleaf remained a microservices architecture because all the services are still isolated. Since then, the distinction between microservices is represented by separate folders instead of separate GitHub repositories. The transition sequence is detailed below and reported in this issue of GitHub: <https://github.com/overleaf/overleaf/issues/923>.

* Aug. 5th, 2021, 09:25 AM:
  + Last commit on the multi-repo version (<https://github.com/overleaf/overleaf/commit/6357d5a5f2d2bacd14fbff0dd06e9fbcb94f2b1c>).
* Aug. 5th, 2021, 09:32 AM:
  + Beginning of the transition from the multi-repo to the mono-repo.
  + First commit of the transition process (<https://github.com/overleaf/overleaf/commit/9d4b767ddae05133d79aa7f0606218ad764622bc>).
* Aug. 5th, 2021, 09:32 AM - Aug. 5th, 2021 03:48 PM:
  + Creation of /services/chat from <https://github.com/overleaf/chat> (last update on Aug. 6th, 2021)
  + Creation of /services/clsi from <https://github.com/overleaf/clsi> (last update on Jul. 27th, 2021)
  + Creation of /services/contacts from <https://github.com/overleaf/contacts> (last update on Aug. 6th, 2021)
  + Creation of /services/docstore from <https://github.com/overleaf/docstore> (last update on Aug. 4th, 2021)
  + Creation of /services/document-updater from <https://github.com/overleaf/document-updater> (last update on Aug. 6th, 2021)
  + Creation of /services/filestore from <https://github.com/overleaf/filestore> (last update on Jul. 15th, 2021)
  + Creation of /services/git-bridge from <https://github.com/overleaf/writelatex-git-bridge> (last update on Aug. 6th, 2021)
  + Creation of /services/notifications from <https://github.com/overleaf/notifications> (last update on Aug. 6th, 2021)
  + Creation of /services/real-time from <https://github.com/overleaf/real-time> (last update on Aug. 6th, 2021)
  + Creation of /services/spelling from <https://github.com/overleaf/spelling> (last update on Aug. 6th, 2021)
  + Creation of /services/track-changes from <https://github.com/overleaf/track-changes> (last update on Jul. 16th, 2021)
  + Creation of /server-ce[[1]](#footnote-1)
  + Creation of /libraries/access-tokens-encryptor from <https://github.com/overleaf/access-token-encryptor> (last update on Aug. 6th, 2021)
  + Creation of /libraries/logger from <https://github.com/overleaf/logger-module> (last update on Jul. 28th, 2021)
  + Creation of /libraries/metrics from <https://github.com/overleaf/metrics-module> (last update on Aug. 6th, 2021)
  + Creation of /libraries/o-error from <https://github.com/overleaf/o-error> (last update on Aug. 6th, 2021)
  + Creation of /libraries/object-persistor from <https://github.com/overleaf/object-persistor> (last update on Aug. 6th, 2021)
  + Creation of /libraries/redis-wrapper from <https://github.com/overleaf/redis-wrapper> (last update on Aug. 6th, 2021)
  + Creation of /libraries/settings from <https://github.com/overleaf/settings-module> (last update on Aug. 6th, 2021)
  + Creation of /services/web from <https://github.com/overleaf/web> (last update on Aug. 6th, 2021)
  + NOTES: the following repositories have been previously migrated:
    - <https://github.com/overleaf/tags> merged to <https://github.com/overleaf/web> on July 2nd, 2020
    - <https://github.com/overleaf/translations> merged to <https://github.com/overleaf/web> on September 3rd, 2020
    - <https://github.com/overleaf/read-only> merged to <https://github.com/overleaf/web> before August 13th, 2020
    - <https://github.com/overleaf/launchpad-web-module> merged to <https://github.com/overleaf/web> before May 7th, 2019
* Aug. 5th, 2021, 03:48 PM:
  + Last commit of the transition process (<https://github.com/overleaf/overleaf/commit/94117ea836ccf1d1a8d46fa79febc604fd8444a2>).
  + End of the transition from the multi-repo to the mono-repo.
* Aug. 6th, 2021, 09:18 AM:
  + Announcement of the mono-repo version (<https://github.com/overleaf/overleaf/issues/923>).

#### November 4th, 2024, 10:05 AM

This version represents the most recent version we considered when evaluating our approach. The analyzed codebase is the one in the repository after the following commit: <https://github.com/overleaf/overleaf/tree/d4fa37b75df96f86149d406d045f5895844bea95>.

1. Unable to trace the provenance of the folder. [↑](#footnote-ref-1)