

Composer is a Software Dependency Manager for PHP, which is heavily used by [Tiki](#).

## Composer

- Official website: <https://getcomposer.org/>
- Package repositories:
  - Main: <https://packagist.org/>
  - Secondary: <https://asset-packagist.org> (after [considering other options](#))
- Tiki uses Composer to manage [150+ library dependencies in PHP and JavaScript](#), which are bundled as part of the regular Tiki install.
  - Some Tiki dependencies also have their own dependencies. The whole list is tracked at [composer.lock](#)
- Superfluous code is removed via [CleanVendors](#)
- Starting in [Tiki18](#), there is a web-based tool to install [Packages](#), which permits to manage even more libraries. This is to provide easy access to dependencies that are not shipped as part of the standard Tiki installation.
- [cweagans/composer-patches](#) is used to patch dependencies. This is usually used until a patch is incorporated in a released version of a library
  - The patches should be versioned as binary files, to avoid problems with line breaks
  - Please see <https://gitlab.com/tikiwiki/tiki/-/tree/master/installer/composer-patches>
- The Tiki community runs its own instance of [Satis](#), a Simple static Composer repository generator. Source: [satis.json](#), web: <http://composer.tiki.org>
- Picking and maintaining dependencies is a critical skill because [https://www.reddit.com/r/programming/comments/1z09jq/why\\_your\\_software\\_project\\_will\\_slowly\\_die\\_without/](https://www.reddit.com/r/programming/comments/1z09jq/why_your_software_project_will_slowly_die_without/)
- Here are guidelines for what should be available via [Tiki Packages vs built-in](#) to Tiki directly, as we are careful to manage complexity and avoid the worst of dependency hell, as explained at <https://pluginproblems.com>
- Developers coordinate here: <https://dev.tiki.org/Composer>

## History

- Tiki started in 2002, and there was no such tool to manage dependencies
- The [first release of Composer was in 2012](#).
- In 2013, [Tiki started using Composer and progressively porting dependencies](#) (instead using SVN externals)
- From 2014 to 2017: dependencies are progressively migrated to Composer
- In 2017, [Composer usage in Tiki was revamped](#) and a web-based Composer tool was added -> [Packages](#)
- In 2018, we [added support for asset-packagist.org](#) for when dependencies are not on Packagist.org but only NPM or Bower.
- In 2018, a simple way to install packages via FTP: <https://packages.tiki.org/>
- In 2021, we moved to [Composer v2](#), in time for [Tiki23](#) so it will be nice and robust for [Tiki24LTS](#)
- In 2021, it was announced that [Composer 2.2 is LTS](#)

## Troubleshooting Composer

Please visit <https://dev.tiki.org/Composer> if you are getting an error about Composer or about a package managed with Composer.

## Stats