

# Extending Tiki

Tiki, from a software engineering standpoint, is a monolithic application. We have strong opinions on the advantages of this approach to avoid development fragmentation and to ease refactoring. Please see: <http://pluginproblems.com/> and [Versions](#).

## Currently available extension mechanisms

Tiki has various mechanisms to allow extensions and customisations. In fact, more ways than most modular software.

If you are new to Tiki, **before you start down this list**, keep in mind that Tiki is extremely flexible. In most cases where you'd use a plugin or write code in another system, in Tiki you are expected to configure one of the [2000+ preferences](#), use an existing [Wiki plugin](#) or setup a [tracker](#).

### Themes; to cleanly change the look and feel

In Tiki, the visual theme affects only appearance, not functionality, so a theme can't introduce a security risk.

- [Marketplace for Tiki themes](#)
- Themes are composed of
  - custom.js
  - CSS
  - [Smarty Templates](#) (override of base templates, or your own additional templates)
  - And more recently preferences
- With a new theme installer: <https://sourceforge.net/p/tikiwiki/code/67603>

### Customization; quick and dirty changes to look and feel and behavior

Using the Look and feel administration panel, you can add snippets of code, which will be stored in the database, and survive upgrades:

- Custom HTML in the HTML header
- Custom JavaScript
- Custom CSS

Simpler than writing a theme if you have few things to customize.

### Profiles; bootstrapping Tiki configurations for some specific purpose

In Tiki terminology, a "profile" is a set of site configuration preferences and website item creation instructions that are applied as a group. They only add or edit content in the site's database. Some profiles are simple, like a contact form, and some are more complex.

- [Repositories of Tiki profiles](#)

### Packages; managing PHP software libraries within the Tiki admin panel

Also called the Composer Web Installer, and introduced in [Tiki18](#), this feature is for the installation and management of external software packages using Composer. Its main reason to exist is to facilitate installation of PHP lib dependencies that the Tiki community can't or prefers not to bundle. Ex.: incompatible licence, too big, too niche, etc. Please note that the code that uses these libraries remains managed in the main code base. To illustrate: The [mPDF](#) library is fetched as a Package, but all the other code is in Tiki.

- Packages helped deprecate [Mods](#), which were formerly used partly for this purpose. Mods had all the code for the functionality, whether it depended on an external library or not.
- Packages also helped to deprecate and remove Addons. If you are writing your own custom code that extends Tiki that you want to install as a [Package](#), you may want to look at [Packages that extend Tiki](#) which is available from Tiki 21.

### System configuration; using files to override preferences

Allows system administrators to set some preferences using ini files in the file system to override the preferences in the Tiki database.

## **Path structure; using files to add and override arbitrary code**

Arbitrary PHP code can override parts of Tiki by dropping it in the [Path structure](#), For instance Custom php file (as of Tiki18) `_custom/lib/setup/custom.php`

## **Wiki Plugins; adding "macros", stuff to display in wiki pages**

Wiki plugins are used to embed features and interactive data and functions in any wiki text area in the Tiki site, including in wiki pages, blogs, articles, forums, and so on. Importantly, although they are called "plugins", they are not third-party or aftermarket additions to Tiki - they are included with the Tiki installation.

- You can [Create a new wiki plugin](#), and hopefully contribute them back to Tiki.
- You can make a [Plugin Alias](#) to make new plugins based on previously existing plugins in your tiki site. Stored in the database, they survive upgrades.

## **Modules; adding "blocks", stuff you can display in a layout area**

Probably poorly named, in Tiki a module is a box of content that can be placed in layout areas (eg: topbar, left, right, bottom, etc) and also in text areas (eg: wiki pages). Other software tend to call them blocks, or boxes. All modules are included with the default Tiki installation.

- You can [create custom modules](#), which are stored in the database and survive upgrades.
- Creating a new module is easy. Please do contribute!

## **Webhooks**

[Webhooks](#)

## **DEPRECATED extensions mechanism**

- [Mods](#) used to provide themes and functionality
  - Most mods were not actively maintained so they became dead / useless code
  - Anything relevant was moved to core
- Arbitrary PHP code in language files. Replaced with [Path structure](#)

## **REMOVED Addons feature**

There was an Addons feature that existed from Tiki 14 to Tiki 19 which was subsequently removed in Tiki 20. If you are writing your own custom code that extends Tiki that you want to install as a [Package](#), you may want to look at [Packages that extend Tiki](#) which is available from Tiki 21.