

# Components

## What Are Components?

A component is in fact a separate application. You can think of a component as something that has its own functionality, its own database tables and its own presentation. So if you install a component, you add an application to your website. Examples of components are a forum, a newsletter, a community system, a photo gallery, etc. You could think of all of these as being a separate application. Everyone of these would make perfectly sense as a stand-alone system. A component will be shown in the main part of your website and only one component will be shown. A menu is then in fact nothing more then a switch between different components.

## Structure

Components can be structured in a couple ways. Technically all that is **needed** for a component to work is the following:

```
{your hub install}
  /components
    /com_{your component}
      {your component}.php
```

Note that the PHP file **must** be named the same as your component. So, if you had a blog component, the setup would look as follows:

```
{your hub install}
  /components
    /com_blog
      blog.php
```

A more typical Joomla! component structure is presented below. Here, it follows a stricter convention of keeping the models, views, and controller separate.

```
{your hub install}
  /components
    /com_{your component}
      /helpers
      /models
      /views
```

```
index.html
controller.php
router.php
{your component}.php
```

### Examples

#### A basic component (no MVC)

*To be written*

#### A basic component (MVC)

Model-view-controller is a design pattern for software development. Typically, the model is data in a database. There may be multiple views of the model. The controller sets up the work flow for interacting with the views.

A excellent tutorial: [Joomla component with a model-view-controller design](#)

It includes simple, clear examples that you can download.

#### A component with tabs representing views

This example shows how to build a very basic component with tabbed sub-navigation. Each tab links to a different method and associated view in the controller.

The following component uses a very basic separation of logic from views. It does not follow the Joomla! 1.5 preferred MVC structure for components. The following component does *not* include administration code — It is a front-end component only.

- Download: [com\\_example.zip](#) (11 KB, uploaded by )

#### Note

This is not a complete installer package. Do **not** use Joomla's administrative installer. To install, simply extract the file into your hub's components directory.

#### A component with tabs representing plugin views

*To be written*