* [Welcome to CodeIgniter](http://docs.google.com/welcome.html)
* [Installation Instructions](http://docs.google.com/installation/index.html)
  + [Downloading CodeIgniter](http://docs.google.com/installation/downloads.html)
  + [Installation Instructions](http://docs.google.com/installation/index.html)
  + [Upgrading From a Previous Version](http://docs.google.com/installation/upgrading.html)
  + [Troubleshooting](http://docs.google.com/installation/troubleshooting.html)
* [CodeIgniter Overview](http://docs.google.com/overview/index.html)
  + [Getting Started](http://docs.google.com/overview/getting_started.html)
  + [CodeIgniter at a Glance](http://docs.google.com/overview/at_a_glance.html)
  + [Supported Features](http://docs.google.com/overview/features.html)
  + [Application Flow Chart](http://docs.google.com/overview/appflow.html)
  + [Model-View-Controller](http://docs.google.com/overview/mvc.html)
  + [Architectural Goals](http://docs.google.com/overview/goals.html)
* [Tutorial](http://docs.google.com/tutorial/index.html)
  + [Static pages](http://docs.google.com/tutorial/static_pages.html)
  + [News section](http://docs.google.com/tutorial/news_section.html)
  + [Create news items](http://docs.google.com/tutorial/create_news_items.html)
  + [Conclusion](http://docs.google.com/tutorial/conclusion.html)
* [Contributing to CodeIgniter](http://docs.google.com/contributing/index.html)
  + [Writing CodeIgniter Documentation](http://docs.google.com/documentation/index.html)
  + [Developer’s Certificate of Origin 1.1](http://docs.google.com/DCO.html)
* [General Topics](http://docs.google.com/index.html)
  + [CodeIgniter URLs](http://docs.google.com/urls.html)
  + [Controllers](http://docs.google.com/controllers.html)
  + [Reserved Names](http://docs.google.com/reserved_names.html)
  + [Views](http://docs.google.com/views.html)
  + [Models](http://docs.google.com/models.html)
  + [Helpers](http://docs.google.com/helpers.html)
  + [Using CodeIgniter Libraries](http://docs.google.com/libraries.html)
  + [Creating Libraries](http://docs.google.com/creating_libraries.html)
  + [Using CodeIgniter Drivers](http://docs.google.com/drivers.html)
  + [Creating Drivers](http://docs.google.com/creating_drivers.html)
  + [Creating Core System Classes](http://docs.google.com/core_classes.html)
  + [Creating Ancillary Classes](http://docs.google.com/ancillary_classes.html)
  + [Hooks - Extending the Framework Core](#gjdgxs)
  + [Auto-loading Resources](http://docs.google.com/autoloader.html)
  + [Common Functions](http://docs.google.com/common_functions.html)
  + [Compatibility Functions](http://docs.google.com/compatibility_functions.html)
  + [URI Routing](http://docs.google.com/routing.html)
  + [Error Handling](http://docs.google.com/errors.html)
  + [Caching](http://docs.google.com/caching.html)
  + [Profiling Your Application](http://docs.google.com/profiling.html)
  + [Running via the CLI](http://docs.google.com/cli.html)
  + [Managing your Applications](http://docs.google.com/managing_apps.html)
  + [Handling Multiple Environments](http://docs.google.com/environments.html)
  + [Alternate PHP Syntax for View Files](http://docs.google.com/alternative_php.html)
  + [Security](http://docs.google.com/security.html)
  + [PHP Style Guide](http://docs.google.com/styleguide.html)
* [Libraries](http://docs.google.com/libraries/index.html)
  + [Benchmarking Class](http://docs.google.com/libraries/benchmark.html)
  + [Caching Driver](http://docs.google.com/libraries/caching.html)
  + [Calendaring Class](http://docs.google.com/libraries/calendar.html)
  + [Shopping Cart Class](http://docs.google.com/libraries/cart.html)
  + [Config Class](http://docs.google.com/libraries/config.html)
  + [Email Class](http://docs.google.com/libraries/email.html)
  + [Encrypt Class](http://docs.google.com/libraries/encrypt.html)
  + [Encryption Library](http://docs.google.com/libraries/encryption.html)
  + [File Uploading Class](http://docs.google.com/libraries/file_uploading.html)
  + [Form Validation](http://docs.google.com/libraries/form_validation.html)
  + [FTP Class](http://docs.google.com/libraries/ftp.html)
  + [Image Manipulation Class](http://docs.google.com/libraries/image_lib.html)
  + [Input Class](http://docs.google.com/libraries/input.html)
  + [Javascript Class](http://docs.google.com/libraries/javascript.html)
  + [Language Class](http://docs.google.com/libraries/language.html)
  + [Loader Class](http://docs.google.com/libraries/loader.html)
  + [Migrations Class](http://docs.google.com/libraries/migration.html)
  + [Output Class](http://docs.google.com/libraries/output.html)
  + [Pagination Class](http://docs.google.com/libraries/pagination.html)
  + [Template Parser Class](http://docs.google.com/libraries/parser.html)
  + [Security Class](http://docs.google.com/libraries/security.html)
  + [Session Library](http://docs.google.com/libraries/sessions.html)
  + [HTML Table Class](http://docs.google.com/libraries/table.html)
  + [Trackback Class](http://docs.google.com/libraries/trackback.html)
  + [Typography Class](http://docs.google.com/libraries/typography.html)
  + [Unit Testing Class](http://docs.google.com/libraries/unit_testing.html)
  + [URI Class](http://docs.google.com/libraries/uri.html)
  + [User Agent Class](http://docs.google.com/libraries/user_agent.html)
  + [XML-RPC and XML-RPC Server Classes](http://docs.google.com/libraries/xmlrpc.html)
  + [Zip Encoding Class](http://docs.google.com/libraries/zip.html)
* [Database Reference](http://docs.google.com/database/index.html)
  + [Quick Start: Usage Examples](http://docs.google.com/database/examples.html)
  + [Database Configuration](http://docs.google.com/database/configuration.html)
  + [Connecting to a Database](http://docs.google.com/database/connecting.html)
  + [Running Queries](http://docs.google.com/database/queries.html)
  + [Generating Query Results](http://docs.google.com/database/results.html)
  + [Query Helper Functions](http://docs.google.com/database/helpers.html)
  + [Query Builder Class](http://docs.google.com/database/query_builder.html)
  + [Transactions](http://docs.google.com/database/transactions.html)
  + [Getting MetaData](http://docs.google.com/database/metadata.html)
  + [Custom Function Calls](http://docs.google.com/database/call_function.html)
  + [Query Caching](http://docs.google.com/database/caching.html)
  + [Database Manipulation with Database Forge](http://docs.google.com/database/forge.html)
  + [Database Utilities Class](http://docs.google.com/database/utilities.html)
  + [Database Driver Reference](http://docs.google.com/database/db_driver_reference.html)
* [Helpers](http://docs.google.com/helpers/index.html)
  + [Array Helper](http://docs.google.com/helpers/array_helper.html)
  + [CAPTCHA Helper](http://docs.google.com/helpers/captcha_helper.html)
  + [Cookie Helper](http://docs.google.com/helpers/cookie_helper.html)
  + [Date Helper](http://docs.google.com/helpers/date_helper.html)
  + [Directory Helper](http://docs.google.com/helpers/directory_helper.html)
  + [Download Helper](http://docs.google.com/helpers/download_helper.html)
  + [Email Helper](http://docs.google.com/helpers/email_helper.html)
  + [File Helper](http://docs.google.com/helpers/file_helper.html)
  + [Form Helper](http://docs.google.com/helpers/form_helper.html)
  + [HTML Helper](http://docs.google.com/helpers/html_helper.html)
  + [Inflector Helper](http://docs.google.com/helpers/inflector_helper.html)
  + [Language Helper](http://docs.google.com/helpers/language_helper.html)
  + [Number Helper](http://docs.google.com/helpers/number_helper.html)
  + [Path Helper](http://docs.google.com/helpers/path_helper.html)
  + [Security Helper](http://docs.google.com/helpers/security_helper.html)
  + [Smiley Helper](http://docs.google.com/helpers/smiley_helper.html)
  + [String Helper](http://docs.google.com/helpers/string_helper.html)
  + [Text Helper](http://docs.google.com/helpers/text_helper.html)
  + [Typography Helper](http://docs.google.com/helpers/typography_helper.html)
  + [URL Helper](http://docs.google.com/helpers/url_helper.html)
  + [XML Helper](http://docs.google.com/helpers/xml_helper.html)

Toggle Table of Contents

[CodeIgniter](http://docs.google.com/index.html)

* [Welcome to CodeIgniter](http://docs.google.com/welcome.html)
* [Installation Instructions](http://docs.google.com/installation/index.html)
  + [Downloading CodeIgniter](http://docs.google.com/installation/downloads.html)
  + [Installation Instructions](http://docs.google.com/installation/index.html)
  + [Upgrading From a Previous Version](http://docs.google.com/installation/upgrading.html)
  + [Troubleshooting](http://docs.google.com/installation/troubleshooting.html)
* [CodeIgniter Overview](http://docs.google.com/overview/index.html)
  + [Getting Started](http://docs.google.com/overview/getting_started.html)
  + [CodeIgniter at a Glance](http://docs.google.com/overview/at_a_glance.html)
  + [Supported Features](http://docs.google.com/overview/features.html)
  + [Application Flow Chart](http://docs.google.com/overview/appflow.html)
  + [Model-View-Controller](http://docs.google.com/overview/mvc.html)
  + [Architectural Goals](http://docs.google.com/overview/goals.html)
* [Tutorial](http://docs.google.com/tutorial/index.html)
  + [Static pages](http://docs.google.com/tutorial/static_pages.html)
  + [News section](http://docs.google.com/tutorial/news_section.html)
  + [Create news items](http://docs.google.com/tutorial/create_news_items.html)
  + [Conclusion](http://docs.google.com/tutorial/conclusion.html)
* [Contributing to CodeIgniter](http://docs.google.com/contributing/index.html)
  + [Writing CodeIgniter Documentation](http://docs.google.com/documentation/index.html)
  + [Developer’s Certificate of Origin 1.1](http://docs.google.com/DCO.html)
* [General Topics](http://docs.google.com/index.html)
  + [CodeIgniter URLs](http://docs.google.com/urls.html)
  + [Controllers](http://docs.google.com/controllers.html)
  + [Reserved Names](http://docs.google.com/reserved_names.html)
  + [Views](http://docs.google.com/views.html)
  + [Models](http://docs.google.com/models.html)
  + [Helpers](http://docs.google.com/helpers.html)
  + [Using CodeIgniter Libraries](http://docs.google.com/libraries.html)
  + [Creating Libraries](http://docs.google.com/creating_libraries.html)
  + [Using CodeIgniter Drivers](http://docs.google.com/drivers.html)
  + [Creating Drivers](http://docs.google.com/creating_drivers.html)
  + [Creating Core System Classes](http://docs.google.com/core_classes.html)
  + [Creating Ancillary Classes](http://docs.google.com/ancillary_classes.html)
  + [Hooks - Extending the Framework Core](#gjdgxs)
  + [Auto-loading Resources](http://docs.google.com/autoloader.html)
  + [Common Functions](http://docs.google.com/common_functions.html)
  + [Compatibility Functions](http://docs.google.com/compatibility_functions.html)
  + [URI Routing](http://docs.google.com/routing.html)
  + [Error Handling](http://docs.google.com/errors.html)
  + [Caching](http://docs.google.com/caching.html)
  + [Profiling Your Application](http://docs.google.com/profiling.html)
  + [Running via the CLI](http://docs.google.com/cli.html)
  + [Managing your Applications](http://docs.google.com/managing_apps.html)
  + [Handling Multiple Environments](http://docs.google.com/environments.html)
  + [Alternate PHP Syntax for View Files](http://docs.google.com/alternative_php.html)
  + [Security](http://docs.google.com/security.html)
  + [PHP Style Guide](http://docs.google.com/styleguide.html)
* [Libraries](http://docs.google.com/libraries/index.html)
  + [Benchmarking Class](http://docs.google.com/libraries/benchmark.html)
  + [Caching Driver](http://docs.google.com/libraries/caching.html)
  + [Calendaring Class](http://docs.google.com/libraries/calendar.html)
  + [Shopping Cart Class](http://docs.google.com/libraries/cart.html)
  + [Config Class](http://docs.google.com/libraries/config.html)
  + [Email Class](http://docs.google.com/libraries/email.html)
  + [Encrypt Class](http://docs.google.com/libraries/encrypt.html)
  + [Encryption Library](http://docs.google.com/libraries/encryption.html)
  + [File Uploading Class](http://docs.google.com/libraries/file_uploading.html)
  + [Form Validation](http://docs.google.com/libraries/form_validation.html)
  + [FTP Class](http://docs.google.com/libraries/ftp.html)
  + [Image Manipulation Class](http://docs.google.com/libraries/image_lib.html)
  + [Input Class](http://docs.google.com/libraries/input.html)
  + [Javascript Class](http://docs.google.com/libraries/javascript.html)
  + [Language Class](http://docs.google.com/libraries/language.html)
  + [Loader Class](http://docs.google.com/libraries/loader.html)
  + [Migrations Class](http://docs.google.com/libraries/migration.html)
  + [Output Class](http://docs.google.com/libraries/output.html)
  + [Pagination Class](http://docs.google.com/libraries/pagination.html)
  + [Template Parser Class](http://docs.google.com/libraries/parser.html)
  + [Security Class](http://docs.google.com/libraries/security.html)
  + [Session Library](http://docs.google.com/libraries/sessions.html)
  + [HTML Table Class](http://docs.google.com/libraries/table.html)
  + [Trackback Class](http://docs.google.com/libraries/trackback.html)
  + [Typography Class](http://docs.google.com/libraries/typography.html)
  + [Unit Testing Class](http://docs.google.com/libraries/unit_testing.html)
  + [URI Class](http://docs.google.com/libraries/uri.html)
  + [User Agent Class](http://docs.google.com/libraries/user_agent.html)
  + [XML-RPC and XML-RPC Server Classes](http://docs.google.com/libraries/xmlrpc.html)
  + [Zip Encoding Class](http://docs.google.com/libraries/zip.html)
* [Database Reference](http://docs.google.com/database/index.html)
  + [Quick Start: Usage Examples](http://docs.google.com/database/examples.html)
  + [Database Configuration](http://docs.google.com/database/configuration.html)
  + [Connecting to a Database](http://docs.google.com/database/connecting.html)
  + [Running Queries](http://docs.google.com/database/queries.html)
  + [Generating Query Results](http://docs.google.com/database/results.html)
  + [Query Helper Functions](http://docs.google.com/database/helpers.html)
  + [Query Builder Class](http://docs.google.com/database/query_builder.html)
  + [Transactions](http://docs.google.com/database/transactions.html)
  + [Getting MetaData](http://docs.google.com/database/metadata.html)
  + [Custom Function Calls](http://docs.google.com/database/call_function.html)
  + [Query Caching](http://docs.google.com/database/caching.html)
  + [Database Manipulation with Database Forge](http://docs.google.com/database/forge.html)
  + [Database Utilities Class](http://docs.google.com/database/utilities.html)
  + [Database Driver Reference](http://docs.google.com/database/db_driver_reference.html)
* [Helpers](http://docs.google.com/helpers/index.html)
  + [Array Helper](http://docs.google.com/helpers/array_helper.html)
  + [CAPTCHA Helper](http://docs.google.com/helpers/captcha_helper.html)
  + [Cookie Helper](http://docs.google.com/helpers/cookie_helper.html)
  + [Date Helper](http://docs.google.com/helpers/date_helper.html)
  + [Directory Helper](http://docs.google.com/helpers/directory_helper.html)
  + [Download Helper](http://docs.google.com/helpers/download_helper.html)
  + [Email Helper](http://docs.google.com/helpers/email_helper.html)
  + [File Helper](http://docs.google.com/helpers/file_helper.html)
  + [Form Helper](http://docs.google.com/helpers/form_helper.html)
  + [HTML Helper](http://docs.google.com/helpers/html_helper.html)
  + [Inflector Helper](http://docs.google.com/helpers/inflector_helper.html)
  + [Language Helper](http://docs.google.com/helpers/language_helper.html)
  + [Number Helper](http://docs.google.com/helpers/number_helper.html)
  + [Path Helper](http://docs.google.com/helpers/path_helper.html)
  + [Security Helper](http://docs.google.com/helpers/security_helper.html)
  + [Smiley Helper](http://docs.google.com/helpers/smiley_helper.html)
  + [String Helper](http://docs.google.com/helpers/string_helper.html)
  + [Text Helper](http://docs.google.com/helpers/text_helper.html)
  + [Typography Helper](http://docs.google.com/helpers/typography_helper.html)
  + [URL Helper](http://docs.google.com/helpers/url_helper.html)
  + [XML Helper](http://docs.google.com/helpers/xml_helper.html)

[CodeIgniter](http://docs.google.com/index.html)

* [Docs](http://docs.google.com/index.html) »
* [General Topics](http://docs.google.com/index.html) »
* Hooks - Extending the Framework Core

classic layout

Hooks - Extending the Framework Core[**¶**](#30j0zll)

CodeIgniter’s Hooks feature provides a means to tap into and modify the inner workings of the framework without hacking the core files. When CodeIgniter runs it follows a specific execution process, diagramed in the [Application Flow](http://docs.google.com/overview/appflow.html) page. There may be instances, however, where you’d like to cause some action to take place at a particular stage in the execution process. For example, you might want to run a script right before your controllers get loaded, or right after, or you might want to trigger one of your own scripts in some other location.

Enabling Hooks[**¶**](#1fob9te)

The hooks feature can be globally enabled/disabled by setting the following item in the **application/config/config.php** file:

$config['enable\_hooks'] = TRUE;

Defining a Hook[**¶**](#3znysh7)

Hooks are defined in the **application/config/hooks.php** file. Each hook is specified as an array with this prototype:

$hook['pre\_controller'] = array(  
 'class' => 'MyClass',  
 'function' => 'Myfunction',  
 'filename' => 'Myclass.php',  
 'filepath' => 'hooks',  
 'params' => array('beer', 'wine', 'snacks')  
);

**Notes:**

The array index correlates to the name of the particular hook point you want to use. In the above example the hook point is pre\_controller. A list of hook points is found below. The following items should be defined in your associative hook array:

* **class** The name of the class you wish to invoke. If you prefer to use a procedural function instead of a class, leave this item blank.
* **function** The function (or method) name you wish to call.
* **filename** The file name containing your class/function.
* **filepath** The name of the directory containing your script. Note: Your script must be located in a directory INSIDE your *application/* directory, so the file path is relative to that directory. For example, if your script is located in *application/hooks/*, you will simply use ‘hooks’ as your filepath. If your script is located in *application/hooks/utilities/* you will use ‘hooks/utilities’ as your filepath. No trailing slash.
* **params** Any parameters you wish to pass to your script. This item is optional.

You can also use lambda/anoymous functions (or closures) as hooks, with a simpler syntax:

$hook['post\_controller'] = function()  
{  
 /\* do something here \*/  
};

Multiple Calls to the Same Hook[**¶**](#2et92p0)

If want to use the same hook point with more than one script, simply make your array declaration multi-dimensional, like this:

$hook['pre\_controller'][] = array(  
 'class' => 'MyClass',  
 'function' => 'MyMethod',  
 'filename' => 'Myclass.php',  
 'filepath' => 'hooks',  
 'params' => array('beer', 'wine', 'snacks')  
);  
  
$hook['pre\_controller'][] = array(  
 'class' => 'MyOtherClass',  
 'function' => 'MyOtherMethod',  
 'filename' => 'Myotherclass.php',  
 'filepath' => 'hooks',  
 'params' => array('red', 'yellow', 'blue')  
);

Notice the brackets after each array index:

$hook['pre\_controller'][]

This permits you to have the same hook point with multiple scripts. The order you define your array will be the execution order.

Hook Points[**¶**](#tyjcwt)

The following is a list of available hook points.

* **pre\_system** Called very early during system execution. Only the benchmark and hooks class have been loaded at this point. No routing or other processes have happened.
* **pre\_controller** Called immediately prior to any of your controllers being called. All base classes, routing, and security checks have been done.
* **post\_controller\_constructor** Called immediately after your controller is instantiated, but prior to any method calls happening.
* **post\_controller** Called immediately after your controller is fully executed.
* **display\_override** Overrides the \_display() method, used to send the finalized page to the web browser at the end of system execution. This permits you to use your own display methodology. Note that you will need to reference the CI superobject with $this->CI =& get\_instance() and then the finalized data will be available by calling $this->CI->output->get\_output().
* **cache\_override** Enables you to call your own method instead of the \_display\_cache() method in the [Output Library](http://docs.google.com/libraries/output.html). This permits you to use your own cache display mechanism.
* **post\_system** Called after the final rendered page is sent to the browser, at the end of system execution after the finalized data is sent to the browser.

[Next](http://docs.google.com/autoloader.html)   [Previous](http://docs.google.com/ancillary_classes.html)

© Copyright 2014 - 2018, British Columbia Institute of Technology. Last updated on Jun 12, 2018.

Built with [Sphinx](http://sphinx-doc.org/) using a [theme](https://github.com/snide/sphinx_rtd_theme) provided by [Read the Docs](https://readthedocs.org).