* [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
  + [Creating Ancillary Classes](http://docs.google.com/ancillary_classes.html)
  + [Hooks - Extending the Framework Core](http://docs.google.com/hooks.html)
  + [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
  + [Creating Ancillary Classes](http://docs.google.com/ancillary_classes.html)
  + [Hooks - Extending the Framework Core](http://docs.google.com/hooks.html)
  + [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) »
* Creating Core System Classes

classic layout

Creating Core System Classes[**¶**](#gjdgxs)

Every time CodeIgniter runs there are several base classes that are initialized automatically as part of the core framework. It is possible, however, to swap any of the core system classes with your own versions or even extend the core versions.

**Most users will never have any need to do this, but the option to replace or extend them does exist for those who would like to significantly alter the CodeIgniter core.**

Note

Messing with a core system class has a lot of implications, so make sure you know what you are doing before attempting it.

System Class List[**¶**](#30j0zll)

The following is a list of the core system files that are invoked every time CodeIgniter runs:

* Benchmark
* Config
* Controller
* Exceptions
* Hooks
* Input
* Language
* Loader
* Log
* Output
* Router
* Security
* URI
* Utf8

Replacing Core Classes[**¶**](#1fob9te)

To use one of your own system classes instead of a default one simply place your version inside your local *application/core/* directory:

application/core/some\_class.php

If this directory does not exist you can create it.

Any file named identically to one from the list above will be used instead of the one normally used.

Please note that your class must use CI as a prefix. For example, if your file is named Input.php the class will be named:

class CI\_Input {  
  
}

Extending Core Class[**¶**](#3znysh7)

If all you need to do is add some functionality to an existing library - perhaps add a method or two - then it’s overkill to replace the entire library with your version. In this case it’s better to simply extend the class. Extending a class is nearly identical to replacing a class with a couple exceptions:

* The class declaration must extend the parent class.
* Your new class name and filename must be prefixed with MY\_ (this item is configurable. See below.).

For example, to extend the native Input class you’ll create a file named application/core/MY\_Input.php, and declare your class with:

class MY\_Input extends CI\_Input {  
  
}

Note

If you need to use a constructor in your class make sure you extend the parent constructor:

class MY\_Input extends CI\_Input {  
  
 public function \_\_construct()  
 {  
 parent::\_\_construct();  
 }  
}

**Tip:** Any functions in your class that are named identically to the methods in the parent class will be used instead of the native ones (this is known as “method overriding”). This allows you to substantially alter the CodeIgniter core.

If you are extending the Controller core class, then be sure to extend your new class in your application controller’s constructors.

class Welcome extends MY\_Controller {  
  
 public function \_\_construct()  
 {  
 parent::\_\_construct();  
 }  
  
 public function index()  
 {  
 $this->load->view('welcome\_message');  
 }  
}

Setting Your Own Prefix[**¶**](#2et92p0)

To set your own sub-class prefix, open your *application/config/config.php* file and look for this item:

$config['subclass\_prefix'] = 'MY\_';

Please note that all native CodeIgniter libraries are prefixed with CI\_ so DO NOT use that as your prefix.

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

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