* [Welcome to CodeIgniter](http://docs.google.com/general/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/general/index.html)
  + [CodeIgniter URLs](http://docs.google.com/general/urls.html)
  + [Controllers](http://docs.google.com/general/controllers.html)
  + [Reserved Names](http://docs.google.com/general/reserved_names.html)
  + [Views](http://docs.google.com/general/views.html)
  + [Models](http://docs.google.com/general/models.html)
  + [Helpers](http://docs.google.com/general/helpers.html)
  + [Using CodeIgniter Libraries](http://docs.google.com/general/libraries.html)
  + [Creating Libraries](http://docs.google.com/general/creating_libraries.html)
  + [Using CodeIgniter Drivers](http://docs.google.com/general/drivers.html)
  + [Creating Drivers](http://docs.google.com/general/creating_drivers.html)
  + [Creating Core System Classes](http://docs.google.com/general/core_classes.html)
  + [Creating Ancillary Classes](http://docs.google.com/general/ancillary_classes.html)
  + [Hooks - Extending the Framework Core](http://docs.google.com/general/hooks.html)
  + [Auto-loading Resources](http://docs.google.com/general/autoloader.html)
  + [Common Functions](http://docs.google.com/general/common_functions.html)
  + [Compatibility Functions](http://docs.google.com/general/compatibility_functions.html)
  + [URI Routing](http://docs.google.com/general/routing.html)
  + [Error Handling](http://docs.google.com/general/errors.html)
  + [Caching](http://docs.google.com/general/caching.html)
  + [Profiling Your Application](http://docs.google.com/general/profiling.html)
  + [Running via the CLI](http://docs.google.com/general/cli.html)
  + [Managing your Applications](http://docs.google.com/general/managing_apps.html)
  + [Handling Multiple Environments](http://docs.google.com/general/environments.html)
  + [Alternate PHP Syntax for View Files](http://docs.google.com/general/alternative_php.html)
  + [Security](http://docs.google.com/general/security.html)
  + [PHP Style Guide](http://docs.google.com/general/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/index.html)
  + [Array Helper](http://docs.google.com/array_helper.html)
  + CAPTCHA Helper
  + [Cookie Helper](http://docs.google.com/cookie_helper.html)
  + [Date Helper](http://docs.google.com/date_helper.html)
  + [Directory Helper](http://docs.google.com/directory_helper.html)
  + [Download Helper](http://docs.google.com/download_helper.html)
  + [Email Helper](http://docs.google.com/email_helper.html)
  + [File Helper](http://docs.google.com/file_helper.html)
  + [Form Helper](http://docs.google.com/form_helper.html)
  + [HTML Helper](http://docs.google.com/html_helper.html)
  + [Inflector Helper](http://docs.google.com/inflector_helper.html)
  + [Language Helper](http://docs.google.com/language_helper.html)
  + [Number Helper](http://docs.google.com/number_helper.html)
  + [Path Helper](http://docs.google.com/path_helper.html)
  + [Security Helper](http://docs.google.com/security_helper.html)
  + [Smiley Helper](http://docs.google.com/smiley_helper.html)
  + [String Helper](http://docs.google.com/string_helper.html)
  + [Text Helper](http://docs.google.com/text_helper.html)
  + [Typography Helper](http://docs.google.com/typography_helper.html)
  + [URL Helper](http://docs.google.com/url_helper.html)
  + [XML Helper](http://docs.google.com/xml_helper.html)

Toggle Table of Contents

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

* [Welcome to CodeIgniter](http://docs.google.com/general/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/general/index.html)
  + [CodeIgniter URLs](http://docs.google.com/general/urls.html)
  + [Controllers](http://docs.google.com/general/controllers.html)
  + [Reserved Names](http://docs.google.com/general/reserved_names.html)
  + [Views](http://docs.google.com/general/views.html)
  + [Models](http://docs.google.com/general/models.html)
  + [Helpers](http://docs.google.com/general/helpers.html)
  + [Using CodeIgniter Libraries](http://docs.google.com/general/libraries.html)
  + [Creating Libraries](http://docs.google.com/general/creating_libraries.html)
  + [Using CodeIgniter Drivers](http://docs.google.com/general/drivers.html)
  + [Creating Drivers](http://docs.google.com/general/creating_drivers.html)
  + [Creating Core System Classes](http://docs.google.com/general/core_classes.html)
  + [Creating Ancillary Classes](http://docs.google.com/general/ancillary_classes.html)
  + [Hooks - Extending the Framework Core](http://docs.google.com/general/hooks.html)
  + [Auto-loading Resources](http://docs.google.com/general/autoloader.html)
  + [Common Functions](http://docs.google.com/general/common_functions.html)
  + [Compatibility Functions](http://docs.google.com/general/compatibility_functions.html)
  + [URI Routing](http://docs.google.com/general/routing.html)
  + [Error Handling](http://docs.google.com/general/errors.html)
  + [Caching](http://docs.google.com/general/caching.html)
  + [Profiling Your Application](http://docs.google.com/general/profiling.html)
  + [Running via the CLI](http://docs.google.com/general/cli.html)
  + [Managing your Applications](http://docs.google.com/general/managing_apps.html)
  + [Handling Multiple Environments](http://docs.google.com/general/environments.html)
  + [Alternate PHP Syntax for View Files](http://docs.google.com/general/alternative_php.html)
  + [Security](http://docs.google.com/general/security.html)
  + [PHP Style Guide](http://docs.google.com/general/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/index.html)
  + [Array Helper](http://docs.google.com/array_helper.html)
  + CAPTCHA Helper
  + [Cookie Helper](http://docs.google.com/cookie_helper.html)
  + [Date Helper](http://docs.google.com/date_helper.html)
  + [Directory Helper](http://docs.google.com/directory_helper.html)
  + [Download Helper](http://docs.google.com/download_helper.html)
  + [Email Helper](http://docs.google.com/email_helper.html)
  + [File Helper](http://docs.google.com/file_helper.html)
  + [Form Helper](http://docs.google.com/form_helper.html)
  + [HTML Helper](http://docs.google.com/html_helper.html)
  + [Inflector Helper](http://docs.google.com/inflector_helper.html)
  + [Language Helper](http://docs.google.com/language_helper.html)
  + [Number Helper](http://docs.google.com/number_helper.html)
  + [Path Helper](http://docs.google.com/path_helper.html)
  + [Security Helper](http://docs.google.com/security_helper.html)
  + [Smiley Helper](http://docs.google.com/smiley_helper.html)
  + [String Helper](http://docs.google.com/string_helper.html)
  + [Text Helper](http://docs.google.com/text_helper.html)
  + [Typography Helper](http://docs.google.com/typography_helper.html)
  + [URL Helper](http://docs.google.com/url_helper.html)
  + [XML Helper](http://docs.google.com/xml_helper.html)

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

* [Docs](http://docs.google.com/index.html) »
* [Helpers](http://docs.google.com/index.html) »
* CAPTCHA Helper

classic layout

CAPTCHA Helper[**¶**](#gjdgxs)

The CAPTCHA Helper file contains functions that assist in creating CAPTCHA images.

* [Loading this Helper](#30j0zll)
* [Using the CAPTCHA helper](#1fob9te)
  + [Adding a Database](#3znysh7)
* [Available Functions](#2et92p0)

[**Loading this Helper**](#tyjcwt)[**¶**](#30j0zll)

This helper is loaded using the following code:

$this->load->helper('captcha');

[**Using the CAPTCHA helper**](#3dy6vkm)[**¶**](#1fob9te)

Once loaded you can generate a CAPTCHA like this:

$vals = array(  
 'word' => 'Random word',  
 'img\_path' => './captcha/',  
 'img\_url' => 'http://example.com/captcha/',  
 'font\_path' => './path/to/fonts/texb.ttf',  
 'img\_width' => '150',  
 'img\_height' => 30,  
 'expiration' => 7200,  
 'word\_length' => 8,  
 'font\_size' => 16,  
 'img\_id' => 'Imageid',  
 'pool' => '0123456789abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ',  
  
 // White background and border, black text and red grid  
 'colors' => array(  
 'background' => array(255, 255, 255),  
 'border' => array(255, 255, 255),  
 'text' => array(0, 0, 0),  
 'grid' => array(255, 40, 40)  
 )  
);  
  
$cap = create\_captcha($vals);  
echo $cap['image'];

* The captcha function requires the GD image library.
* Only the **img\_path** and **img\_url** are required.
* If a **word** is not supplied, the function will generate a random ASCII string. You might put together your own word library that you can draw randomly from.
* If you do not specify a path to a TRUE TYPE font, the native ugly GD font will be used.
* The “captcha” directory must be writable
* The **expiration** (in seconds) signifies how long an image will remain in the captcha folder before it will be deleted. The default is two hours.
* **word\_length** defaults to 8, **pool** defaults to ‘0123456789abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ’
* **font\_size** defaults to 16, the native GD font has a size limit. Specify a “true type” font for bigger sizes.
* The **img\_id** will be set as the “id” of the captcha image.
* If any of the **colors** values is missing, it will be replaced by the default.

[**Adding a Database**](#1t3h5sf)[**¶**](#3znysh7)

In order for the captcha function to prevent someone from submitting, you will need to add the information returned from create\_captcha() to your database. Then, when the data from the form is submitted by the user you will need to verify that the data exists in the database and has not expired.

Here is a table prototype:

CREATE TABLE captcha (  
 captcha\_id bigint(13) unsigned NOT NULL auto\_increment,  
 captcha\_time int(10) unsigned NOT NULL,  
 ip\_address varchar(45) NOT NULL,  
 word varchar(20) NOT NULL,  
 PRIMARY KEY `captcha\_id` (`captcha\_id`),  
 KEY `word` (`word`)  
);

Here is an example of usage with a database. On the page where the CAPTCHA will be shown you’ll have something like this:

$this->load->helper('captcha');  
$vals = array(  
 'img\_path' => './captcha/',  
 'img\_url' => 'http://example.com/captcha/'  
);  
  
$cap = create\_captcha($vals);  
$data = array(  
 'captcha\_time' => $cap['time'],  
 'ip\_address' => $this->input->ip\_address(),  
 'word' => $cap['word']  
);  
  
$query = $this->db->insert\_string('captcha', $data);  
$this->db->query($query);  
  
echo 'Submit the word you see below:';  
echo $cap['image'];  
echo '<input type="text" name="captcha" value="" />';

Then, on the page that accepts the submission you’ll have something like this:

// First, delete old captchas  
$expiration = time() - 7200; // Two hour limit  
$this->db->where('captcha\_time < ', $expiration)  
 ->delete('captcha');  
  
// Then see if a captcha exists:  
$sql = 'SELECT COUNT(\*) AS count FROM captcha WHERE word = ? AND ip\_address = ? AND captcha\_time > ?';  
$binds = array($\_POST['captcha'], $this->input->ip\_address(), $expiration);  
$query = $this->db->query($sql, $binds);  
$row = $query->row();  
  
if ($row->count == 0)  
{  
 echo 'You must submit the word that appears in the image.';  
}

[**Available Functions**](#4d34og8)[**¶**](#2et92p0)

The following functions are available:

create\_captcha([*$data = ''*[, *$img\_path = ''*[, *$img\_url = ''*[, *$font\_path = ''*]]]])[¶](#2s8eyo1)

| Parameters: | * **$data** (*array*) – Array of data for the CAPTCHA * **$img\_path** (*string*) – Path to create the image in * **$img\_url** (*string*) – URL to the CAPTCHA image folder * **$font\_path** (*string*) – Server path to font |
| --- | --- |
| Returns: | array(‘word’ => $word, ‘time’ => $now, ‘image’ => $img) |
| Return type: | array |

Takes an array of information to generate the CAPTCHA as input and creates the image to your specifications, returning an array of associative data about the image.

array(  
 'image' => IMAGE TAG  
 'time' => TIMESTAMP (in microtime)  
 'word' => CAPTCHA WORD  
)

The **image** is the actual image tag:

<img src="http://example.com/captcha/12345.jpg" width="140" height="50" />

The **time** is the micro timestamp used as the image name without the file extension. It will be a number like this: 1139612155.3422

The **word** is the word that appears in the captcha image, which if not supplied to the function, will be a random string.

[Next](http://docs.google.com/cookie_helper.html)   [Previous](http://docs.google.com/array_helper.html)

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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).