Smarty - the compiling PHP template engine

Monte Ohrt <monte@ispi.net>
Andrei Zmievski <andrei@php.net>


Table of Contents

Preface

I. Getting Started
   1. What is Smarty? [Smarty?]
   2. Installation
      Requirements
      Basic Installation
      Extended Setup

II. Smarty For Template Designers
   3. Basic Syntax
      Comments
      Functions
      Attributes
      Embedding Vars in Double Quotes
      Math

   4. Variables
      Variables assigned from PHP [PHP]
      Variables loaded from config files
      {$smarty} reserved variable

   5. Variable Modifiers
      capitalize
      count_characters
      cat
      count_paragraphs
      count_sentences
      count_words
      date_format
      default
      escape
6. **Combining Modifiers**

7. **Built-in Functions**
   - capture
   - config_load
   - foreach, foreachelse
   - include
   - include_php
   - insert
   - if, elseif, else
   - ldelim, rdelim
   - literal
   - php
   - section, sectionelse
   - strip

8. **Custom Functions**
   - assign
   - counter
   - cycle
   - debug
   - eval
   - fetch
   - html_checkboxes
   - html_image
   - html_options
   - html_radios
   - html_select_date
   - html_select_time
9. Config Files
10. Debugging Console
III. Smarty For Programmers
11. Constants
    SMARTY_DIR [Smarty]
12. Variables
    $template_dir
    $compile_dir
    $config_dir
    $plugins_dir
    $debugging
    $debug_tpl
    $debugging_ctrl
    $global_assign
    $undefined
    $autoload_filters
    $compile_check
    $force_compile
    $caching
    $cache_dir
    $cache_lifetime
    $cache_handler_func
    $cache_modified_check
    $config_overwrite
    $config_booleanize
    $config_read_hidden
    $config_fix_newlines
    $default_template_handler_func
    $php_handling [php]
    $security
    $secure_dir
    $security_settings
    $trusted_dir
13. Methods
   append
   append_by_ref
   assign
   assign_by_ref
   clear_all_assign
   clear_all_cache
   clear_assign
   clear_cache
   clear_compiled_tpl
   clear_config
   config_load
   display
   fetch
   get_config_vars
   get_registered_object
   get_template_vars
   is_cached
   load_filter
   register_block
   register_compiler_function
   register_function
   register_modifier
   register_object
   register_outputfilter
   register_postfilter
   register_prefilter
   register_resource
   trigger_error
   template_exists
unregister_block []
unregister_compiler_function []
unregister_function []
unregister_modifier []
unregister_object []
unregister_outputfilter []
unregister_postfilter []
unregister_prefilter []
unregister_resource []

14. Caching []
   Setting Up Caching []
   Multiple Caches Per Page []
   Cache Groups []
   Controlling Cacheability of Plugins’ Output []

15. Advanced Features []
   Objects []
   Prefilters []
   Postfilters []
   Output Filters []
   Cache Handler Function []
   Resources []

16. Extending Smarty With Plugins [Smarty]
   How Plugins Work []
   Naming Conventions []
   Writing Plugins []
   Template Functions []
   Modifiers []
   Block Functions []
   Compiler Functions []
   Prefilters/Postfilters []
   Output Filters []
   Resources []
   Inserts []

IV. Appendixes []

17. Troubleshooting []
    Smarty/PHP errors [Smarty/PHP ]

18. Tips & Tricks []
    Blank Variable Handling []
    Default Variable Handling []
Smarty - the compiling PHP template engine

Smarty - PHP
Preface[]

It is undoubtedly one of the most asked questions on the PHP mailing lists: scripts independent of the layout? While PHP is billed as "HTML embedded scripting language," after writing a couple of projects that mixed PHP and HTML freely one comes up with the idea that separation of form and content is a Good Thing [TM]. In addition, in many companies, the roles of layout designer and programmer are separate. Consequently, the search for a templating system ensues.

In our company for example, the development of an application goes on as follows: once requirements docs are done, the interface designer makes mockups of the interface and give them to the programmer. The programmer implements business logic in PHP and uses the interface mockups to create skeleton templates. The project is then handed off to the HTML designer, who brings the templates up to their full glory. The project may go back and forth between the programmer/HTML a couple of times. Thus, it’s important to have good template support because programmers don’t want anything to do with HTML and don’t want HTML designers mucking around with PHP code. Designers need support for config files, dynamic blocks and other interface issues, but they don’t want to have to deal with intricacies of the PHP programming language.

Looking at many templating solutions available for PHP today, most of them are a way of substituting variables into templates and do a limited form of dynamic block functionality. But our needs required a bit more than that. We didn’t want programmers to be dealing with HTML at ALL, but this was almost inevitable. For instance, if a designer wanted to alternate on dynamic blocks, this had to be worked out with the programmer. Designers needed designers to be able to use their own configuration files, and pull variables from them into the templates. The list goes on.

We started out writing out a spec for a template engine back in late 1999. We began to work on a template engine written in C that would hopefully be accepted for inclusion with PHP. Not only did we run into many complicated technical barriers, but there was also much heated debate about exactly what a template engine should and should not do. For this reason, we decided that the template engine should be written in PHP as a class, for anyone to use as they see fit. So we wrote an engine that did just that and SmartTemplate came into existence (although it was never submitted to the public). It was a class that did almost everything...
variable substitution, supported including other templates, integration with PHP code, limited 'if' statement functionality and much more robust dynamic multiply nested. It did all this with regular expressions and the code turned impenetrable. It was also noticeably slow in large applications from all the parsing and regular expression work it had to do on each invocation. The biggest problem from a programmer's point of view was all the necessary work in the PHP script to setup and process templates and blocks. How do we make this easier?

1999, cphp

'if'

Then came the vision of what ultimately became Smarty. We know how fast PHP overhead of template parsing. We also know how meticulous and overbearing the PHP language may look to the average designer, and this could be masked with a much simpler templating syntax. So what if we combined the two strengths? Thus, Smarty was born...

smartyphpphp''

Smarty......
I. Getting Started

Table of Contents
1. What is Smarty? smaty?
2. Installation
Smarty - the compiling PHP template engine
Chapter 1. What is Smarty?

Smarty is a template engine for PHP. More specifically, it facilitates a manageable way to separate application logic and content from its presentation. This is best described in a situation where the application programmer and the template designer play different roles, or in most cases are not the same person. For example, let's say you are creating a web page that is displaying a newspaper article. The article headline, tagline, author and body are content elements, they contain no information about how they will be presented. They are passed into Smarty by the application, then the template designer edits the templates and uses a combination of HTML tags and template tags to format the presentation of these elements (HTML tables, background colors, font sizes, style sheets, etc.) One day the programmer needs to change the way the article content is retrieved (a change in application logic.) This change does not affect the template designer, the content will still arrive in the template exactly the same. Likewise, if the template designer wants to completely redesign the templates, this requires no changes to the application logic. Therefore, the programmer can make changes to the application logic without the need to restructure templates, and the template designer can make changes to templates without breaking application logic.

Now for a short word on what Smarty does NOT do. Smarty does not attempt to completely separate logic from the templates. There is no problem with logic in your templates under the condition that this logic is strictly for presentation. A word of advice: keep application logic out of the templates, and presentation logic out of the application. This will most definately keep things manageable and scalable for the foreseeable future.

smartysmarty,
One of the unique aspects about Smarty is the template compiling. This means Smarty reads the template files and creates PHP scripts from them. Once they are created, they are executed from then on. Therefore there is no costly template file parsing for each request, and each template can take full advantage of PHP compiler cache solutions such as Zend Accelerator (http://www.zend.com) or PHP Accelerator (http://www.php-accelerator.co.uk).

Some of Smarty's features:

- It is extremely fast.
- It is efficient since the PHP parser does the dirty work.
- No template parsing overhead, only compiles once.
- It is smart about recompiling only the template files that have changed.
- You can make custom functions and custom variable modifiers, so the template language is extremely extensible.
- Configurable template delimiter tag syntax, so you can use {}, {{}}, <!--{}-->, etc.
- The if/elseif/else/endif constructs are passed to the PHP parser, so the {if ...} expression syntax can be as simple or as complex as you like.
- Unlimited nesting of sections, ifs, etc. allowed.

Smartyphp,Zend(http://www.zend.com) (http://www.php-accelerator.co.uk)
• It is possible to embed PHP code right in your template files, although this may not be needed (nor recommended) since the engine is so customizable.

• Built-in caching support

• Arbitrary template sources

• Custom cache handling functions

• Plugin architecture
Smarty - the compiling PHP template engine
Chapter 2. Installation

Table of Contents
Requirements
Basic Installation
Extended Setup
Requirements

Smarty requires a web server running PHP 4.0.6 or later.
Smartywebphp4.0.6.
Basic Installation

Install the Smarty library files which are in the /libs/ directory of the distribution. These are the PHP files that you SHOULD NOT edit. They are shared among all applications and they only get updated when you upgrade to a new version of Smarty.
Smarty/libs/(). php.,smarty

Example 2-1. Smarty library files
2-1.Smarty

Smarty.class.php
Smarty.Compiler.class.php
Config_File.class.php
debug.tpl
/core/*.php (all of them)
/plugins/*.php (all of them)

Smarty uses a PHP constant named Smarty_DIR which is the system filepath Smarty library directory. Basically, if your application can find the Smarty.class.php file, you do not need to set Smarty_DIR, Smarty will figure it out on its own. Therefore, if Smarty.class.php is not in your include_path, or you do not supply an absolute path to it in your application, then you must define Smarty_DIR manually. Smarty_DIR must include a trailing slash.
Smarty'SMARTY_DIR'php,
SMARTY_DIR,Smarty, Smarty.class.phpinclude_path(s
,SMARTY_DIR ()SMARTY_DIR

Here is how you create an instance of Smarty in your PHP scripts:
phpsmarty:

Example 2-2. Create Smarty instance of Smarty
2-2.Smarty

require('Smarty.class.php');
$smarty = new Smarty;
Try running the above script. If you get an error saying the `Smarty.class.php` file could not be found, you have to do one of the following:

Example 2-3. Supply absolute path to library file

```
require('/usr/local/lib/php/Smarty/Smarty.class.php');
$smarty = new Smarty;
```

Example 2-4. Add library directory to php_include path

```
// Edit your php.ini file, add the Smarty library directory to the include_path and restart web server
// Then the following should work:
require('Smarty.class.php');
$smarty = new Smarty;
```

Example 2-5. Set SMARTY_DIR constant manually

```
define('SMARTY_DIR','/usr/local/lib/php/Smarty/');
require(SMARTY_DIR.'Smarty.class.php');
$smarty = new Smarty;
```

Now that the library files are in place, it's time to setup the Smarty directories for your application. Smarty requires four directories which are (by default) named `templates`, `templates_c`, `configs` and `cache`. Each of these are definable by the Smarty class properties `$template_dir`, `$compile_dir`, `$config_dir`, and `$cache_dir` respectively. It is highly recommended that you setup a separate set of these directories for each application that will use Smarty.
Smarty: $template_dir, $compile_dir, $config_dir, and $cache_dir
respectivelysmarty!

Be sure you know the location of your web server document root. In our example, the document root is "/web/www.mydomain.com/docs/". The Smarty directories are only accessed by the Smarty library and never accessed directly by the web browser. Therefore to avoid any security concerns, it is recommended to place these directories outside of the document root.

web,"/web/www.mydomain.com/docs/"Smarty4

For our installation example, we will be setting up the Smarty environment for a guest book application. We picked an application only for the purpose of a directory naming convention. You can use the same environment for any application, just replace "guestbook" with the name of your app. We'll place our Smarty directories under "/web/www.mydomain.com/smarty/guestbook/".

"smarty","guestbook"Smarty
"/web/www.mydomain.com/smarty/guestbook/"

You will need as least one file under your document root, and that is the script accessed by the web browser. We will call our script "index.php", and place it in a subdirectory under the document root called "/guestbook/".

"index.php"."/guestbook/".

**Technical Note:** It is convenient to setup the web server so that "index.php" can be identified as the default directory index, so if you access "http://www.mydomain.com/guestbook/", the index.php script will be executed without "index.php" in the URL. In Apache you can set this up by adding "index.php" onto the end of your DirectoryIndex setting (separate each entry with a space.)

webweb"http://www.mydomain.com/guestbook/"URL"index.php"index.phpApacheDirectoryIndex"index.php"

Lets take a look at the file structure so far:
Example 2-6. Example file structure
2-6.

```
/usr/local/lib/php/Smarty/Smarty.class.php
/usr/local/lib/php/Smarty/Smarty_Compiler.class.php
/usr/local/lib/php/Smarty/Config_File.class.php
/usr/local/lib/php/Smarty/debug.tpl
/usr/local/lib/php/Smarty/core/*.php
/usr/local/lib/php/Smarty/plugins/*.php
/web/www.mydomain.com/smarty/guestbook/templates/
/web/www.mydomain.com/smarty/guestbook/templates_c/
/web/www.mydomain.com/smarty/guestbook/configs/
/web/www.mydomain.com/smarty/guestbook/cache/
/web/www.mydomain.com/docs/guestbook/index.php
```

Smarty will need write access to the `$compile_dir` and `$cache_dir`, so be sure the web server user can write to them. This is usually user "nobody" and group "nobody". For OS X users, the default is user "www" and group "www". If you are using Apache, you can look in your httpd.conf file (usually in "/usr/local/apache/conf/") to see what user and group are being used.

Smarty $compile_dir $cache_dir user "nobody" group "nob OSX, user "web" group "web" Apache, httpd.conf
"/usr/local/apache/conf/") user group

Example 2-7. Setting file permissions
2-7

```
chmod 770 /web/www.mydomain.com/smarty/guestbook/templates_c/
chmod 770 /web/www.mydomain.com/smarty/guestbook/cache/
```
Technical Note: chmod 770 will be fairly tight security, it only allows user "nobody" and group "nobody" read/write access to the directories. If you would like to open up read access to anyone (mostly for your own convenience of viewing these files), you can use 775 instead.

```bash
: chmod 770, user "nobody" group "nobody" /
775
```

We need to create the index.tpl file that Smarty will load. This will be located in your $template_dir.

```
index.tplsmarty. $template_dir
```

Example 2-8. Editing
```
/web/www.mydomain.com/smarty/guestbook/templates/index.tpl
```
```
/web/www.mydomain.com/smarty/templates/index.tpl
```
```
{*
Smarty *
}
```
```
Hello, {$name}!
```

Technical Note: `{* Smarty *}` is a template comment. It is not required, but it is good practice to start all your template files with this comment. It makes the file easy to recognize regardless of the file extension. For example, text editors could recognize the file and turn on special syntax highlighting.

```
{*
Smarty *
}
```

Now lets edit index.php. We'll create an instance of Smarty, assign a template variable and display the index.tpl file. In our example environment, "!/usr/local/lib/php/Smarty" is in our include_path. Be sure you do the same, or use absolute paths.

```php
index.phpSmarty, 
```
```
index.tpl, 
```
```
include_path
```

```php
// load Smarty library
require('Smarty.class.php');

$smarty = new Smarty;
$smarty->template_dir = '/web/www.mydomain.com/smarty/guestbook/templates/';
$smarty->compile_dir = '/web/www.mydomain.com/smarty/guestbook/templates_c/';
$smarty->config_dir = '/web/www.mydomain.com/smarty/guestbook/configs/';
$smarty->cache_dir = '/web/www.mydomain.com/smarty/guestbook/cache/';
$smarty->assign('name','Ned');
$smarty->display('index.tpl');
```

**Technical Note:** In our example, we are setting absolute paths to all of the Smarty directories. If '/web/www.mydomain.com/smarty/guestbook/' is within your PHP include_path, then these settings are not necessary. However, it is more efficient and (from experience) less error-prone to set them to absolute paths. This ensures that Smarty is getting files from the directories you intended.

```
,Smarty
include_path, ,
```

Now load the index.php file from your web browser. You should see "Hello, Ned!"
index.php,"Hello, Porky!"

You have completed the basic setup for Smarty!
Smarty,!!
Extended Setup

This is a continuation of the basic installation, please read that first!

A slightly more flexible way to setup Smarty is to extend the class and initialize your Smarty environment. So instead of repeatedly setting directory paths, assigning the same vars, etc., we can do that in one place. Let's create a new directory "/php/includes/guestbook/" and make a new file called "setup.php". In our example environment, "/php/includes" is in our include_path. Be sure you set this up too, or use absolute file paths.

Smarty, smarty

, /
/php/includes/guestbook/" "setup.php"
smarty

Example 2-10. Editing /php/includes/guestbook/setup.php

2-10. /php/includes/guestbook/setup.php

```
// load Smarty library
require('Smarty.class.php');

// The setup.php file is a good place to load
// required application library files, and you
// can do that right here. An example:
// require('guestbook/guestbook.lib.php');()
//index

class Smarty_GuestBook extends Smarty {

    function Smarty_GuestBook() {

        // Class Constructor. These automatica
        //.
```
$this->Smarty();
$this->template_dir = '/web/www.mydomain.com/smarty/guestbook/templates/';
$this->compile_dir = '/web/www.mydomain.com/smarty/guestbook/templates_c/';
$this->config_dir = '/web/www.mydomain.com/smarty/guestbook/configs/';
$this->cache_dir = '/web/www.mydomain.com/smarty/guestbook/cache/';
$this->caching = true;
$this->assign('app_name','Guest Book');
}
}

Now let's alter the index.php file to use setup.php:

Example 2-11. Editing
/web/www.mydomain.com/docs/guestbook/index.php

require('guestbook/setup.php');
$smarty = new Smarty_GuestBook;
$ smarty->assign('name','Ned');
$smarty->display('index.tpl');

Now you see it is quite simple to bring up an instance of Smarty, just use Smarty_GuestBook which automatically initializes everything for our application.
Smarty.Smarty_GuestBook,^_^
Smarty - the compiling PHP template engine
II. Smarty For Template Designers

Table of Contents
3. Basic Syntax
4. Variables
5. Variable Modifiers
6. Combining Modifiers
7. Built-in Functions
8. Custom Functions
9. Config Files
10. Debugging Console
Smarty - the compiling PHP template engine
Chapter 3. Basic Syntax

Table of Contents[]
Comments[]
Functions[]
Attributes[]
Embedding Vars in Double Quotes[]
Math[]

All Smarty template tags are enclosed within delimiters. By default, these delimiters are { and }, but they can be changed.

smarty.
{}.

For these examples, we will assume that you are using the default delimiters. In Smarty, all content outside of delimiters is displayed as static content, or unchanged. When Smarty encounters template tags, it attempts to interpret them, and displays the appropriate output in their place.

,.
smarty,.
smarty, .
Comments[]

Template comments are surrounded by asterisks, and that is surrounded by the delimiter tags like so: {* this is a comment *} Smarty comments are not displayed in the final output of the template. They are used for making internal notes in the templates.

*, {* this is a comment *}
smarty.

Example 3-1. Comments

3-1.

{* Smarty *}

{* include the header file here *}
{include file="header.tpl"}

{include file=$includeFile}

{include file=#includeFile#}

{* display dropdown lists *}
<SELECT name=company>
{html_options values=$vals selected=$selected output=$
</SELECT>
Functions

Each Smarty tag either prints a variable or invokes some sort of function. Functions are processed and displayed by enclosing the function and its attributes into delimiters like so: `{funcname attr1="val" attr2="val"}`.

Example 3-2. function syntax

```
{config_load file="colors.conf"}
{include file="header.tpl"}

{if $highlight_name}
    Welcome, <font color="{#fontColor#}">{$name}!</font>
{else}
    Welcome, {$name}!
{/if}

{include file="footer.tpl"}
```

Both built-in functions and custom functions have the same syntax in the templates. Built-in functions are the inner workings of Smarty, such as `{if}`, `{section}` and `{strip}`. They cannot be modified. Custom functions are additional functions implemented via plugins. They can be modified to your liking, or you can add new ones. `{html_options}` and `{html_select_date}` are examples of custom functions.
{html_options} .. {html_select_date}
Attributes

Most of the functions take attributes that specify or modify their behavior. Attributes to Smarty functions are much like HTML attributes. Static values don’t have to be enclosed in quotes, but it is recommended for literal strings. Variables may also be used, and should not be in quotes.

SMARTYHTML.

Some attributes require boolean values (true or false). These can be specified as either unquoted true, on, and yes, or false, off, and no.

Example 3-3. function attribute syntax

3-3.

{include file="header.tpl"}

{include file=$includeFile}

{include file=#includeFile#}

{html_select_date display_days=yes}

<SELECT name=company>
{html_options values=$vals selected=$selected output=$} 
</SELECT>
Functions

Up

Embedding Vars in Double Quotes
Embedding Vars in Double Quotes

Smarty will recognize assigned variables embedded in double quotes so long as the variables contain only numbers, letters, underscores and brackets[]. With any other characters (period, object reference, etc.) the variable must be surrounded by backticks.

Smarty[].``('`

Example 3-4. embedded quotes syntax

3-4.

SYNTAX EXAMPLES:
{func var="test $foo test"} <-- sees $foo
{func var="test $foo_bar test"} <-- sees $foo_bar
{func var="test $foo[0] test"} <-- sees $foo[0]
{func var="test $foo[bar] test"} <-- sees $foo[bar]
{func var="test $foo.bar test"} <-- sees $foo (not $foo.bar)
{func var="test `$foo.bar` test"} <-- sees $foo.bar

PRACTICAL EXAMPLES:
{include file="subdir/$tpl_name.tpl"} <-- will replace $tpl_name
{cycle values="one,two,`$smarty.config.myval`"} <-- much more
Math

Math can be applied directly to variable values.

Example 3-5. math examples

3-5.

```$foo+1$

```$foo*$bar```

`{* some more complicated examples *}

```$foo->bar-$bar[1]*$baz->foo->bar()-3*7```

```if ($foo+$bar.test%$baz*134232+10+$b+10)`

```$foo|truncate:``$fooTruncCount/$barTruncFactor-1`"`}

```assign var="foo" value="`$foo+$bar`"```
Smarty - the compiling PHP template engine
Variables assigned from PHP

Variables loaded from config files

{$smarty} reserved variable

Smarty has several different types of variables. The type of the variable depends on what symbol it is prefixed with (or enclosed within).

Smarty.

Variables in Smarty can be either displayed directly or used as arguments for function attributes and modifiers, inside conditional expressions, etc.

To print a variable, simply enclose it in the delimiters so that it is the only thing contained between them. Examples:

Smarty modifiers,

{$Name}

{$Contacts[row].Phone}

<body bgcolor="#bgcolor#"
Variables assigned from PHP

Variables that are assigned from PHP are referenced by preceding them with a dollar sign $.
Variables assigned from within the template with the assign function are also displayed this way.

PHP"$".php
assign.$

Example 4-1. assigned variables

index.php:

$smarty = new Smarty;
$smarty->assign('firstname', 'Doug');
$smarty->assign('lastLoginDate', 'January 11th, 2001')
$smarty->display('index.tpl');

index.tpl:

Hello {$firstname}, glad to see you could make it.
<p>
Your last login was on {$lastLoginDate}.

OUTPUT:

Hello Doug, glad to see you could make it.
<p>
Your last login was on January 11th, 2001.
Variables loaded from config files

Variables that are loaded from the config files are referenced by enclosing them within hash marks (#), or with the smarty variable $smarty.config.

The second syntax is useful for embedding into quoted attribute values.

"#"smarty $smarty.config.

```
{include file="#includefile#"}
{include file="``$smarty.config.includefile``"}
```

Example 4-5. config variables
4-5.

foo.conf:

pageTitle = "This is mine"
bodyBgColor = "#eeeeee"
tableBorderSize = "3"
tableBgColor = "#bbbbbb"
rowBgColor = "#cccccc"

index.tpl:

{config_load file="foo.conf"}
<html>
<title>{pageTitle}</title>
<body bgcolor="{bodyBgColor}"
<table border="{tableBorderSize}" bgcolor="{tableBgColor}"
<tr bgcolor="{rowBgColor}"
    <td>First</td>
    <td>Last</td>
    <td>Address</td>
</tr>
</table>
</body>
</html>
index.tpl: (alternate syntax)

```
{config_load file="foo.conf"}
<html>
<title>{$smarty.config.pageTitle}</title>
<body bgcolor="{$smarty.config.bodyBgColor}"
<table border="{$smarty.config.tableBorderSize}" bgcolor="{$smarty.config.tableBgColor}"
<tr bgcolor="{$smarty.config.rowBgColor}">
    <td>First</td>
    <td>Last</td>
    <td>Address</td>
</tr>
</table>
</body>
</html>
```

OUTPUT: (same for both examples)

```
<html>
<title>This is mine</title>
<body bgcolor="#eeeeee">
<table border="3" bgcolor="#bbbbbb">
<tr bgcolor="#cccccc">
    <td>First</td>
    <td>Last</td>
    <td>Address</td>
</tr>
</table>
</body>
</html>
```

Config file variables cannot be used until after they are loaded in from a config file. This procedure is explained later in this document under `{config_load}`.
<table>
<thead>
<tr>
<th>Prev</th>
<th>PHP</th>
<th>Home</th>
<th>Next</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>Up</td>
<td>{$smarty} reserved variable</td>
<td>[{$smarty}]</td>
</tr>
</tbody>
</table>
{$smarty} reserved variable {$smarty}

Table of Contents
Request variables[] (get, post, server, session)
{$smarty.now}
{$smarty.const}
{$smarty.capture}
{$smarty.config}
{$smarty.section}, {$smarty.foreach}
{$smarty.template}

The reserved {$smarty} variable can be used to access several special template variables. The full list of them follows.

{$smarty}.:

---

Prev PHP Home Next
Variables loaded from config files Up Request variables []
Smarty - the compiling PHP template engine
Chapter 5. Variable Modifiers []

Variable modifiers can be applied to variables, custom functions or strings. To apply a modifier, specify the value followed by the | (pipe) and the modifier name. A modifier may accept additional parameters that affect its behavior. These parameters follow the modifier name and are separated by : (colon).

Example 5-1. modifier example

5-1.

{* Uppercase the title *}

Table of Contents []
capitalize
count_characters
cat
count_paragraphs
count_sentences
count_words
date_format
default
escape
indent
lower
nl2br
regex_replace
replace
spacify
string_format
strip
strip_tags
truncate
upper
wordwrap
If you apply a modifier to an array variable instead of a single value variable, the modifier will be applied to every value in that array. If you really want the modifier to work on an entire array as a value, you must prepend the modifier name with an @ symbol like so:

```php
{$articleTitle}@count
```

(this will print out the number of elements in the `$articleTitle` array.)

@  {$articleTitle}@count  $articleTitle

Modifiers can be autoloaded from your `$plugins_dir` (also see: Naming Conventions) or can be registered explicitly (see: register_modifier). Additionally all php-functions can be used as modifiers implicitly. (The @count-example above actually uses php's count-function and not a smarty-modifier). Using php-functions as modifiers has two little pitfalls: First: Sometimes the order of the function-parameters is not the desirable one ({"%2.f"|sprintf:$float} actually works, but asks for the more intuitive {For example: $float|string_format:"%2.f"} that is provided by the Smarty distribution). Second: with $security turned on all php-functions that are to be used as modifiers have to be declared trusted in the $security_settings['MODIFIER_FUNCS']-array.
capitalize

This is used to capitalize the first letter of all words in a variable.

Example 5-2. capitalize

index.php:

```php
$smarty = new Smarty;
$smarty->assign('articleTitle', 'Police begin campaign to rundown jaywalkers.);
$smarty->display('index.tpl');
```

index.tpl:

```smarty
{$articleTitle}
{$articleTitle|capitalize}
```

OUTPUT:

Police begin campaign to rundown jaywalkers.
Police Begin Campaign To Rundown Jaywalkers.
count_characters[]

<table>
<thead>
<tr>
<th>Parameter Position</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td>This determines whether or not to include whitespace characters in the count.</td>
</tr>
</tbody>
</table>

This is used to count the number of characters in a variable.

Example 5-3. count_characters

index.php:

```php
$smarty = new Smarty;
$smarty->assign('articleTitle', 'Cold Wave Linked to Temperatures.');
$smarty->display('index.tpl');
```

index.tpl:

```template
{$articleTitle}
{$articleTitle|count_characters}
{$articleTitle|count_characters:true}
```

OUTPUT:

Cold Wave Linked to Temperatures.
29
33
<table>
<thead>
<tr>
<th>Parameter Position</th>
<th>Type</th>
<th>Required</th>
<th>cat</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>string</td>
<td>No</td>
<td>empty</td>
<td>This value to catentate to the given variable. cat.</td>
</tr>
</tbody>
</table>

This value is concatenated to the given variable. cat.

**Example 5-4. cat**

```
index.php:

$smarty = new Smarty;
$smarty->assign('articleTitle', "Psychics predict world didn't end");
$smarty->display('index.tpl');

index.tpl:

{{$articleTitle|cat:" yesterday."}}

OUTPUT:

Psychics predict world didn't end yesterday.
```
**count_paragraphs[]**

This is used to count the number of paragraphs in a variable.

**Example 5-5. count_paragraphs**

```php
index.php:

$smarty = new Smarty;
$smarty->assign('articleTitle', "War Dims Hope for Peace. Child's Death Ruins Couple's Holiday.\n\nMan is Fatally Slain. Death Causes Loneliness, Feeling of Isolation.");
$smarty->display('index.tpl');

index.tpl:

{$articleTitle}
{$articleTitle|count_paragraphs}

OUTPUT:

War Dims Hope for Peace. Child's Death Ruins Couple's
Man is Fatally Slain. Death Causes Loneliness, Feeling
2
```
count_sentences[](en)

This is used to count the number of sentences in a variable.

Example 5-6. count_sentences

```php
index.php:

$smarty = new Smarty;
$smarty->assign('articleTitle', 'Two Soviet Ships Collide - One Dies. Enraged Cow Injures Farmer with Axe.);
$smarty->display('index.tpl');

index.tpl:

{$articleTitle}
{$articleTitle|count_sentences}

OUTPUT:

Two Soviet Ships Collide - One Dies. Enraged Cow Injures Farmer with Axe.
2
```
count_words[]

This is used to count the number of words in a variable.

Example 5-7. count_words

index.php:

```php
$smarty = new Smarty;
$ smarty->assign('articleTitle', 'Dealers Will Hear Car Talk at Noon.');
$smarty->display('index.tpl');
```

index.tpl:

```html
{$articleTitle}
{$articleTitle|count_words}
```

OUTPUT:

Dealers Will Hear Car Talk at Noon.
7
**date_format[]**

<table>
<thead>
<tr>
<th>Parameter Position</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>string</td>
<td>No</td>
<td>%b %e, %Y</td>
<td>This is the format for the outputted date.</td>
</tr>
<tr>
<td>2</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>This is the default date if the input is empty.</td>
</tr>
</tbody>
</table>

This formats a date and time into the given strftime() format. Dates can be passed to Smarty as unix timestamps, mysql timestamps or any string made up of month day year (parsable by strtotime). Designers can then use date_format to have complete control of the formatting of the date. If the date passed to date_format is empty and a second parameter is passed, that will be used as the date to format.

strftime()  
 Unix mysql (parsable by strtotime) smarty  
date_format  
date_format,

**Example 5-8. date_format[]**

index.php:

```php
$smarty = new Smarty;
$smarty->assign('yesterday', strtotime('-1 day'));
$smarty->display('index.tpl');
```

index.tpl:
Example 5-9. date_format conversion specifiers

%a - abbreviated weekday name according to the current
""
%A - full weekday name according to the current locale
""
%b - abbreviated month name according to the current locale
""
%B - full month name according to the current locale
""
%c - preferred date and time representation for the current locale
%C - century number (the year divided by 100 and truncated)
%d - day of the month as a decimal number (range 00 to 31)
%D - same as %m/%d/%y

%e - day of the month as a decimal number, a single digit preceded by a space (range 1 to 31)

%g - Week-based year within century [00,99]

%G - Week-based year, including the century [0000,9999]

%h - same as %b

%H - hour as a decimal number using a 24-hour clock (range 00 to 23)

%I - hour as a decimal number using a 12-hour clock (range 01 to 12)

%j - day of the year as a decimal number (range 001 to 366)

%k - Hour (24-hour clock) single digits are preceded by a blank. (range 0 to 23)

%l - hour as a decimal number using a 12-hour clock, single digits preceded by a space (range 1 to 12)

%m - month as a decimal number (range 01 to 12)

%M - minute as a decimal number

%n - newline character

%p - either `am' or `pm' according to the given time value

%r - time in a.m. and p.m. notation

%R - time in 24 hour notation

%S - second as a decimal number

%t - tab character

%T - current time, equal to %H:%M:%S
%u - weekday as a decimal number [1,7], with 1 representing Monday
%U - week number of the current year as a decimal number
%V - The ISO 8601:1988 week number of the current year is the first week that has at least 4 days in the current year.
%w - day of the week as a decimal, Sunday being 0
%W - week number of the current year as a decimal number, starting with the first Monday as the first day of the first week.
%x - preferred date representation for the current locale
%X - preferred time representation for the current locale
%y - year as a decimal number without a century (range 00 to 99)
%Y - year as a decimal number including the century
%Z - time zone or name or abbreviation
%% - a literal `%' character

PROGRAMMERS NOTE: date_format is essentially a wrapper function. You may have more or less conversion specifiers available on your system's strftime() function where PHP was compiled. Check your system's manpage for a full list of valid specifiers.

: date_format
phpstrftime()
default[]

<table>
<thead>
<tr>
<th>Parameter Position</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>string</td>
<td>No</td>
<td>empty</td>
<td>This is the default value to output if the variable is empty.</td>
</tr>
</tbody>
</table>

This is used to set a default value for a variable. If the variable is empty or unset, the given default value is printed instead. Default takes one argument.

**Example 5-10. default**

index.php:

```php
$smarty = new Smarty;
$smarty->assign('articleTitle', 'Dealers Will Hear Car Talk at Noon.);
$smarty->display('index.tpl');
```

index.tpl:

```html
{$articleTitle|default:"no title"}
{$myTitle|default:"no title"}
```

OUTPUT:

Dealers Will Hear Car Talk at Noon.
no title
**escape[]**

<table>
<thead>
<tr>
<th>Parameter Position</th>
<th>Type</th>
<th>Required</th>
<th>Possible Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>string</td>
<td>No</td>
<td>html, htmlall, url, quotes, hex, hexentity, javascript</td>
</tr>
</tbody>
</table>

This is used to html escape, url escape, escape single quotes on a variable not already escaped, hex escape, hexentity or javascript escape. By default, the variable is html escaped.

html, url, quotes, hex, hexentity, javascript

Example 5-11. escape

**index.php:**

```php
$smarty = new Smarty;
$smarty->assign('articleTitle', "'Stiff Opposition Expected to Casketless Funeral Plan'" );
$smarty->display('index.tpl');
```

**index.tpl:**

```template
{$articleTitle}
{$articleTitle|escape}
{$articleTitle|escape:"html"} {* escapes & " ' < > *} 
{$articleTitle|escape:"htmlall"} {* escapes ALL html entities *} 
{$articleTitle|escape:"url"} 
{$articleTitle|escape:"quotes"}
<a href="mailto:{$EmailAddress|escape:"hex"}">{$EmailAddress|escape:"hexentity"}</a>
```

**OUTPUT:**

'Stiff Opposition Expected to Casketless Funeral Plan'

'Stiff Opposition Expected to Casketless Funeral Plan'
Stiff Opposition Expected to Casketless Funeral Plan"
indent[]

<table>
<thead>
<tr>
<th>Parameter Position</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>integer</td>
<td>No</td>
<td>4</td>
<td>This determines how many characters to indent to.</td>
</tr>
<tr>
<td>2</td>
<td>string</td>
<td>No</td>
<td>(one space)</td>
<td>This is the character used to indent with.</td>
</tr>
</tbody>
</table>

This indents a string at each line, default is 4. As an optional parameter, you can specify the number of characters to indent. As an optional second parameter, you can specify the character to use to indent with. (Use "\t" for tabs.)

HTML

Example 5-12. indent

index.php:

```php
$smarty = new Smarty;
$smarty->assign('articleTitle', 'NJ judge to rule on nude beach.' underside ')
$smarty->display('index.tpl');
```

index.tpl:

```html
{$articleTitle}
```
NJ judge to rule on nude beach.
Sun or rain expected today, dark tonight.
Statistics show that teen pregnancy drops off significantly.

NJ judge to rule on nude beach.
Sun or rain expected today, dark tonight.
Statistics show that teen pregnancy drops off significantly.

NJ judge to rule on nude beach.
Sun or rain expected today, dark tonight.
Statistics show that teen pregnancy drops off significantly.
lower

This is used to lowercase a variable.

Example 5-13. lower

index.php:

```php
$smarty = new Smarty;
$smarty->assign('articleTitle', 'Two Convicts Evade Noose.');
$smarty->display('index.tpl');
```

index.tpl:

```html
{$articleTitle}
{$articleTitle|lower}
```

OUTPUT:

Two Convicts Evade Noose, Jury Hung.
two convicts evade noose, jury hung.
**nl2br**

<br />

All linebreaks will be converted to `<br />` tags in the given variable. This is equivalent to the PHP `nl2br()` function.

`<br />`.PHPnI2br().

**Example 5-14. nl2br**

5-14. `<br />`

index.php:

```php
$smarty = new Smarty;
$smarty->assign('articleTitle', "Sun or rain expected");
$smarty->display('index.tpl');
```

index.tpl:

```html
{$articleTitle|nl2br}
```

**OUTPUT:**

Sun or rain expected<br />today, dark tonight
A regular expression search and replace on a variable. Use the syntax for `preg_replace()` from the PHP manual.

```php
Phppreg_replace().

Example 5-15. regex_replace
5-15.
```

index.php:

```php
$smarty = new Smarty;
$smarty->assign('articleTitle', "Infertility unlikely to be passed on, experts say.");
$smarty->display('index.tpl');
```

index.tpl:

```text
{* replace each carriage return, tab & new line with a space *}  
{* ,tab, *}  
{$articleTitle}  
{$articleTitle|regex_replace:="/\[\r\t\n\]/":" "}
OUTPUT:

Infertility unlikely to be passed on, experts say.
Infertility unlikely to be passed on, experts say.
replace

<table>
<thead>
<tr>
<th>Parameter Position</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>This is the string of text to be replaced.</td>
</tr>
<tr>
<td>2</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>This is the string of text to replace with.</td>
</tr>
</tbody>
</table>

A simple search and replace on a variable.

Example 5-16. replace

5-16.

index.php:

```php
$smarty = new Smarty;
$smarty->assign('articleTitle', "Child's Stool Great for Use in Garden.");
$smarty->display('index.tpl');
```

index.tpl:

```php
{{$articleTitle}}
{{$articleTitle|replace:"Garden":"Vineyard"}}
{{$articleTitle|replace:" ":" "}
```

OUTPUT:

Child's Stool Great for Use in Garden.
Child's Stool Great for Use in Vineyard.
Child's Stool Great for Use in Garden.
**spacify**

<table>
<thead>
<tr>
<th>Parameter Position</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>string</td>
<td>No</td>
<td><em>one space</em></td>
<td>This what gets inserted between each character of the variable.</td>
</tr>
</tbody>
</table>

spacify is a way to insert a space between every character of a variable. You can optionally pass a different character (or string) to insert. 

(,^^)().

**Example 5-17. spacify**

5-17.

```
index.php:

$smarty = new Smarty;
$smarty->assign('articleTitle', 'Something Went Wrong');
$smarty->display('index.tpl');

index.tpl:

{$articleTitle}
{$articleTitle|spacify}
{$articleTitle|spacify:"^^"}

OUTPUT:

Something Went Wrong in Jet Crash, Experts Say. Something Went Wrong in Jet Crash S^^o^^m^^e^^t^^h^^i^^n^^g^^ ^^W^^e^^n^^t^^ ^^W^^r^^o^^
**string_format**

<table>
<thead>
<tr>
<th>Parameter Position</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>This is what format to use. (sprintf)</td>
</tr>
</tbody>
</table>

This is a way to format strings, such as decimal numbers and such. Use the syntax for sprintf for the formatting.

..sprintf

**Example 5-18. string_format**

index.php:

```php
$smarty = new Smarty;
$smarty->assign('number', 23.5787446);
$smarty->display('index.tpl');
```

index.tpl:

```template
${number}
${number|string_format:"%.2f"}
${number|string_format:"%d"}
```

OUTPUT:

```
23.5787446
23.58
24
```
spacify[]    Up    strip[]}
**strip ()**

This replaces all repeated spaces, newlines and tabs with a single space, or with a supplied string.

..

**Note:** If you want to strip blocks of template text, use the `strip function`.

::, strip

**Example 5-19. strip 5-19.()**

index.php:

```php
$smarty = new Smarty;
$smarty->assign('articleTitle', "Grandmother of\n\neight makes hole in one.");
$smarty->display('index.tpl');
```

index.tpl:

```html
{$articleTitle}
{$articleTitle|strip}
/{$articleTitle|strip:"
\n"}
```

OUTPUT:

Grandmother of
eight makes hole in one.
Grandmother of eight makes hole in one.
Grandmother&nbsp;of&nbsp;eight&nbsp;makes&nbsp;hole&nbsp;and
**strip_tags html**

This strips out markup tags, basically anything between `<` and `>`. `<>,<>.

**Example 5-20. strip_tags**

5-20.Html

```php
index.php:

$smarty = new Smarty;
$smarty->assign('articleTitle', "Blind Woman Gets <font face="helvetica">New Kidney</font> from Dad she Hasn't Seen in <b>years</b>.";)
$smarty->display('index.tpl');

index.tpl:

{{$articleTitle}}
{{$articleTitle|strip_tags}}

OUTPUT:

Blind Woman Gets <font face="helvetica">New Kidney</font> from Dad she Hasn't Seen in years.
## truncate

<table>
<thead>
<tr>
<th>Parameter Position</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>integer</td>
<td>No</td>
<td>80</td>
<td>This determines how many characters to truncate to.</td>
</tr>
<tr>
<td>2</td>
<td>string</td>
<td>No</td>
<td>...</td>
<td>This is the text to append if truncation occurs.</td>
</tr>
<tr>
<td>3</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td>This determines whether or not to truncate at a word boundary (false), or at the exact character (true).</td>
</tr>
</tbody>
</table>

This truncates a variable to a character length, default is 80. As an optional second parameter, you can specify a string of text to display at the end if the variable was truncated. The characters in the string are included with the original truncation length. By default, truncate will attempt to cut off at a word boundary. If you want to cut off at the exact character length, pass the optional third parameter of true.
Example 5-21. truncate

```php
index.php:

$smarty = new Smarty;
$smarty->assign('articleTitle', 'Two Sisters Reunite after Eighteen Years at Checkout Counter.);
$smarty->display('index.tpl');

index.tpl:

{$articleTitle}
{$articleTitle|truncate}
{$articleTitle|truncate:30}
{$articleTitle|truncate:30:"

OUTPUT:

Two Sisters Reunite after Eighteen Years at Checkout Counter.
Two Sisters Reunite after Eighteen Years at Checkout Counter.
Two Sisters Reunite after...
Two Sisters Reunite after
Two Sisters Reunite after---
Two Sisters Reunite after Eigh
Two Sisters Reunite after E...
upper

This is used to uppercase a variable.

Example 5-22. upper

index.php:

```php
$smarty = new Smarty;
$smarty->assign('articleTitle', "If Strike isn't Settled Quickly it may Last a While.
$smarty->display('index.tpl');
```

index.tpl:

```html
{$articleTitle}
{$articleTitle|upper}
```

OUTPUT:

If Strike isn't Settled Quickly it may Last a While.
IF STRIKE ISN'T SETTLED QUICKLY IT MAY LAST A WHILE.
# wordwrap

<table>
<thead>
<tr>
<th>Parameter Position</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>integer</td>
<td>No</td>
<td>80</td>
<td>This determines how many columns to wrap to. ()</td>
</tr>
<tr>
<td>2</td>
<td>string</td>
<td>No</td>
<td>\n</td>
<td>This is the string used to wrap words with.</td>
</tr>
<tr>
<td>3</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td>This determines whether or not to wrap at a word boundary (false), or at the exact character (true).</td>
</tr>
</tbody>
</table>

This wraps a string to a column width, default is 80.
As an optional second parameter, you can specify a string of text to wrap the text to the next line (default is carriage return \n).
By default, wordwrap will attempt to wrap at a word boundary. If you want to cut off at the exact character length, pass the optional third parameter of true.

(,),80. 
,(\n). 
smarty,ture
Example 5-23. wordwrap

index.php:

$smarty = new Smarty;
$smarty->assign('articleTitle', "Blind woman gets new kidney from dad she hasn't seen in years.");
$smarty->display('index.tpl');

index.tpl:

{$articleTitle}

{$articleTitle|wordwrap:30}

{$articleTitle|wordwrap:20}

{$articleTitle|wordwrap:30:"<br>\n"}

{$articleTitle|wordwrap:30:"\n":true}

OUTPUT:

Blind woman gets new kidney from dad she hasn't seen in years.

Blind woman gets new kidney from dad she hasn't seen in years.

Blind woman gets new kidney from dad she hasn't seen in years.

Blind woman gets new kidney<br>from dad she hasn't seen in years.

Blind woman gets new kidney from dad she hasn't seen in years.
upper[]
Smarty - the compiling PHP template engine
You can apply any number of modifiers to a variable. They will be applied in the order they are combined, from left to right. They must be separated with a | (pipe) character.

"|

Example 6-1. combining modifiers
6-1.

index.php:

$smarty = new Smarty;
$smarty->assign('articleTitle', 'Smokers are Productive, but Death Cuts Efficiency.
$smarty->display('index.tpl');

index.tpl:

{$articleTitle}
{$articleTitle|upper|spacify}
{$articleTitle|lower|spacify|truncate}
{$articleTitle|lower|truncate:30|spacify}
{$articleTitle|lower|spacify|truncate:30":". . ."}

OUTPUT:

Smokers are Productive, but Death Cuts Efficiency.
SMOKERS ARE PRODUCTIVE, BUT DEATH CUTS EFFICIENCY.
Smokers are productive, but Death Cuts Efficiency.

...
wordwrap[]    Up[]    Built-in Functions[]
Chapter 7. Built-in Functions

Smarty comes with several built-in functions. Built-in functions are integral to the template language. You cannot create custom functions with the same names, nor can you modify built-in functions.

Smarty.
**capture**

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>string</td>
<td>no</td>
<td>default</td>
<td>The name of the captured block</td>
</tr>
<tr>
<td>assign</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>The variable name where to assign the captured output to</td>
</tr>
</tbody>
</table>

Capture is used to collect the output of the template into a variable instead of displaying it. Any content between `{capture name="foo"}` and `{/capture}` is collected into the variable specified in the name attribute. The captured content can be used in the template from the special variable `$smarty.capture.foo` where foo is the value passed in the name attribute. If you do not supply a name attribute, then "default" will be used. All `capture` commands must be paired with `/{capture}`. You can nest capture commands.

capture,,
{capture name="foo"}{/capture}$fooname.
$smarty.capture.foo.
name,"default".
{capture}{/capture},.

**Technical Note:** Smarty 1.4.0 - 1.4.4 placed the captured content into the variable named `$return`. As of 1.4.5, this behavior was changed to use the name attribute, so update your templates accordingly.
Caution

Be careful when capturing `{insert}` output. If you have caching turned on and you have `{insert}` commands that you expect to run within cached content, do not capture this content.

Example 7-1. capturing template content

7-1.

```php
{* we don't want to print a table row unless content is present *}
{capture name=banner}
{include file="get_banner.tpl"}
{/capture}
{if $smarty.capture.banner ne ""}
   <tr>
      <td>
         {$smarty.capture.banner}
      </td>
   </tr>
{/if}
```
### config_load

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>file</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>The name of the config file to include</td>
</tr>
<tr>
<td>section</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>The name of the section to load</td>
</tr>
<tr>
<td>scope</td>
<td>string</td>
<td>no</td>
<td>local</td>
<td>How the scope of the loaded variables are treated, which must be one of local, parent or global. local means variables are loaded into the local template context. parent means variables are loaded into both the local context and the parent template that called it. global means variables are available to all</td>
</tr>
</tbody>
</table>
Whether or not variables are visible to the parent template, same as scope=parent.

NOTE: This attribute is deprecated by the scope attribute, but still supported. If scope is supplied, this value is ignored.

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Default</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>file</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>section</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>scope</td>
<td>string</td>
<td>no</td>
<td>local</td>
<td></td>
</tr>
<tr>
<td>global</td>
<td>boolean</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>
Example 7-2. function config_load

7-2. config_load

```java
{config_load file="colors.conf"}
```

```html
<title>{pageTitle#}</title>
<body bgcolor="{bodyBgColor#}">
<table border="{tableBorderSize#}" bgcolor="{tableBgColor#}">
<tr bgcolor="{rowBgColor#}">
    <td>First</td>
    <td>Last</td>
    <td>Address</td>
</tr>
</table>
</body>
</html>
```

Config files may also contain sections. You can load variables from within a section with the added attribute `section`.

section

NOTE: Config file sections and the built-in template function called `section` have nothing to do with each other, they just happen to share a common naming convention.

`section  section`

Example 7-3. function config_load with section

7-3. section config_load

```java
{config_load file="colors.conf" section="Customer"}
```

```html
<title>{pageTitle#}</title>
<body bgcolor="{bodyBgColor#}">
<table border="{tableBorderSize#}" bgcolor="{tableBgColor#}">
```
<tr bgcolor="#{rowBgColor#}">
    <td>First</td>
    <td>Last</td>
    <td>Address</td>
</tr>
Smarty - the compiling PHP template engine
# foreach, foreachelse

## Table of Contents

- iteration
- first
- last
- show
- total

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>from</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>The name of the array you are looping through</td>
</tr>
<tr>
<td>item</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>The name of the variable that is the current element</td>
</tr>
<tr>
<td>key</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>The name of the variable that is the current key</td>
</tr>
<tr>
<td>name</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>The name of the foreach loop for accessing foreach properties</td>
</tr>
</tbody>
</table>
foreach loops are an alternative to section loops. foreach is used to loop over a single associative array. The syntax for foreach is much easier than section, but as a tradeoff it can only be used for a single array. foreach tags must be paired with /foreach tags. Required parameters are from and item. The name of the foreach loop can be anything you like, made up of letters, numbers and underscores. foreach loops can be nested, and the nested foreach names must be unique from each other. The from variable (usually an array of values) determines the number of times foreach will loop. foreachelse is executed when there are no values in the from variable.

```
foreach section().
foreach () section.
foreach /foreach from item.
name().
foreach foreach.
from().
foreachelse from.
```

Example 7-4. foreach

7-4. foreach

```{*
/* this example will print out all the values of the $custid */
foreach from=$custid item=curr_id
  id: {$curr_id}<br>
{/foreach}
```

OUTPUT:

id: 1000<br>
id: 1001<br>
id: 1002<br>

Example 7-5. foreach key

7-5. foreach
{* The key contains the key for each looped value

assignment looks like this:

$smarty->assign("contacts", array(array("phone" => "1",
array("phone" => "555-4444", "fax" => "555-3333", "cell" => "760-1234"));

{foreach name=outer item=contact from=$contacts}
{foreach key=key item=item from=$contact}
{$key}:	{$item}<br>
{/foreach}
{/foreach}

OUTPUT:

phone: 1<br>
fax: 2<br>
cell: 3<br>
phone: 555-4444<br>
fax: 555-3333<br>
cell: 760-1234<br>

Foreach-loops also have their own variables that handle foreach

properties. These are indicated like so:

{$smarty.foreach.foreachname.varname} with foreachname being the
name specified as the name attribute of foreach

foreach . {$smarty.foreach.foreachname.varname}
foreachname foreach name .

Prev  PHP  Home  Next
config_load  Up  iteration
### include

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>file</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>The name of the template file to include</td>
</tr>
<tr>
<td>assign</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>The name of the variable that the output of include will be assigned to</td>
</tr>
<tr>
<td>[var ...]</td>
<td>[var type]</td>
<td>No</td>
<td>n/a</td>
<td>variable to pass local to template</td>
</tr>
</tbody>
</table>

Include tags are used for including other templates in the current template. Any variables available in the current template are also available within the included template. The include tag must have the attribute "file", which contains the template resource path.

Include . . file .

You can optionally pass the assign attribute, which will specify a template variable name that the output of include will be assigned to instead of displayed.

#### assign

Example 7-6. function include
7-6. include
You can also pass variables to included templates as attributes. Any variables explicitly passed to an included template as attributes are only available within the scope of the included file. Attribute variables override current template variables, in the case they are named alike.

...  

**Example 7-7. function include passing variables**

7-7. include

```{include file="header.tpl" title="Main Menu" tablebgcolor="#c0c0c0"}
{include file="footer.tpl" logo="http://my.domain.com/`

Use the syntax for [template resources](#template_resources) to include files outside of the $template_dir directory.

$template_dir

**Example 7-8. function include template resource examples**

7-8. include

```{% absolute_filepath %}
{include file="/usr/local/include/templates/header.tpl"}

{% absolute_filepath (same thing) %}
{include file="file:/usr/local/include/templates/header.tpl"}

{% windows absolute filepath (MUST use "file:" prefix) %}
{include file="file:C:/www/pub/templates/header.tpl"}

{* include from template resource named "db" *}
{include file="db:header.tpl"}
### include_php

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>file</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>The name of the php file to include</td>
</tr>
<tr>
<td>once</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td>whether or not to include the php file more than once if included multiple times</td>
</tr>
<tr>
<td>assign</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>The name of the variable that the output of include_php will be assigned to</td>
</tr>
</tbody>
</table>

include_php tags are used to include a php script in your template. If security is enabled, then the php script must be located in the $trusted_dir path. The include_php tag must have the attribute "file", which contains the path to the included php file, either relative to $trusted_dir, or an absolute path.

```php
include_php php $trusted_dir . include_php
php "$trusted_dir".
```
include_php is a nice way to handle componentized templates, and keep PHP code separate from the template files. Lets say you have a template that shows your site navigation, which is pulled dynamically from a database. You can keep your PHP logic that grabs database content in a separate directory, and include it at the top of the template. Now you can include this template anywhere without worrying if the database information was assigned by the application before hand.

include_php php .

By default, php files are only included once even if called multiple times in the template. You can specify that it should be included every time with the once attribute. Setting once to false will include the php script each time it is included in the template.

```
php .  once .  once false.
```

You can optionally pass the assign attribute, which will specify a template variable name that the output of include_php will be assigned to instead of displayed.

```
assign php php
```

The smarty object is available as $this within the PHP script that you include.

```
php $this smarty .
```

**Example 7-9. function include_php**

**7-9. include_php**

```
<?php

// load in variables from a mysql db and assign
// mysql
require_once("MySQL.class.php");
$sql = new MySQL;
$sql->query("select * from site_nav_sections order by name");
$快报->query("select * from site_nav_sections order by name");
$this->assign('sections',$sql->record);

```
index.tpl

{"absolute path, or relative to $trusted_dir *}
{" $trusted_dir *}
{include_php file="/path/to/load_nav.php"}

{foreach item="curr_section" from=$sections}
    <a href="{$curr_section.url}">{$curr_section.name}</a><br>
{/foreach}
Smarty - the compiling PHP template engine

Prev    PHP    Chapter 7. Built-in Functions[.]    Next
## insert

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>The name of the insert function (insert_name)</td>
</tr>
<tr>
<td>assign</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>The name of the template variable the output will be assigned to</td>
</tr>
<tr>
<td>script</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>The name of the php script that is included before the insert function is called</td>
</tr>
<tr>
<td>[var ...]</td>
<td>[var type]</td>
<td>No</td>
<td>n/a</td>
<td>variable to pass to insert function</td>
</tr>
</tbody>
</table>

Insert tags work much like include tags, except that insert tags are not cached when you have template **caching** enabled. They will be executed on every invocation of the template.
Let's say you have a template with a banner slot at the top of the page. The banner can contain any mixture of HTML, images, flash, etc. so we can't just use a static link here, and we don't want this contents cached with the page. In comes the insert tag: the template knows #banner_location_id# and #site_id# values (gathered from a config file), and needs to call a function to get the banner contents.

Example 7-10. function insert

```php
{insert name="getBanner" lid=#banner_location_id# sid=#site_id#}
```

In this example, we are using the name "getBanner" and passing the parameters #banner_location_id# and #site_id#. Smarty will look for a function named `insert_getBanner()` in your PHP application, passing the values of #banner_location_id# and #site_id# as the first argument in an associative array. All insert function names in your application must be prepended with "insert_" to remedy possible function name-space conflicts. Your insert_getBanner() function should do something with the passed values and return the results. These results are then displayed in the template in place of the insert tag. In this example, Smarty would call this function: `insert_getBanner(array("lid" => "12345","sid" => "67890"));` and display the returned results in place of the insert tag.

```php
getBanner name #banner_location_id# #site_id#.
Smarty php insert_getBanner() #banner_location_id#
#site_id#. insert insert_. insert_getBanner()
Smarty insert_getBanner(array("lid"=>"12345","sid"=>67890"));.
```

If you supply the "assign" attribute, the output of the insert tag will be assigned to this template variable instead of being output to the template. NOTE: assigning the output to a template variable isn't too useful with caching enabled.
assign ..

If you supply the "script" attribute, this php script will be included (only once) before the insert function is executed. This is the case where the insert function may not exist yet, and a php script must be included first to make it work. The path can be either absolute, or relative to $trusted_dir. When security is enabled, the script must reside in $trusted_dir.

script ()script php .

The Smarty object is passed as the second argument. This way you can reference and modify information in the Smarty object from within the insert function.

Smart $this smarty .

**Technical Note:** It is possible to have portions of the template not cached. If you have caching turned on, insert tags will not be cached. They will run dynamically every time the page is created, even within cached pages. This works good for things like banners, polls, live weather, search results, user feedback areas, etc.

: . , insert . .
if, elseif, else

if statements in Smarty have much the same flexibility as php if statements, with a few added features for the template engine. Every if must be paired with an /if. else and elseif are also permitted. "eq", "ne", "neq", "gt", "lt", "lte", "le", "gte" "ge", "is even", "is odd", "is not even", "is not odd", "not", "mod", "div by", "even by", "odd by", "==", "!=", ">", ">=", "<", "<=", ">=" are all valid conditional qualifiers, and must be separated from surrounding elements by spaces.

Smarty if php if .if .else
eqneneqgtltltelegtgeis evenis oddis not evenis oddis not oddnotmoddiv byeven byodd by==!=<><=><<==>.

Example 7-11. if statements

7-11. if

{if $name eq "Fred"}
    Welcome Sir.
{elseif $name eq "Wilma"}
    Welcome Ma'am.
{else}
    Welcome, whatever you are.
{/if}

{/* an example with "or" logic */}
{if $name eq "Fred" or $name eq "Wilma"}
    ...
{/if}

{/* same as above */}
{if $name == "Fred" || $name == "Wilma"}
    ...
{/if}

{/* the following syntax will NOT work, conditional quali must be separated from surrounding elements by spaces */}
{if $name==="Fred" || $name==="Wilma"}
... 

{if ( $amount < 0 or $amount > 1000 ) and $volume >= #minVolAmt#} 
... 

{if count($var) gt 0} 
... 

{if $var is even} 
... 

{if $var is odd} 
... 

{if $var is not odd} 
... 

{if $var is div by 4} 
... 

{if $var is even by 2} 
... 

{if $var is even by 3} 
...
{/if}
ldelim, rdelim

Idelim and rdelim are used for displaying the literal delimiter, in our case "{" or "}". The template engine always tries to interpret delimiters, so this is the way around that.

Idelim rdelim "{ "}"..

Example 7-12. Idelim, rdelim

7-12. Idelim, rdelim

{* this will print literal delimiters out of the template *

{ldelim}funcname{rdelim} is how functions look in Smarty!

OUTPUT:

{funcname} is how functions look in Smarty!
Literal tags allow a block of data to be taken literally, not being interpreted by the Smarty engine. This is handy for things like javascript sections, where there maybe curly braces and such things that would confuse the template parser. Anything within {literal}{/literal} tags is not interpreted, but displayed as-is.

**Example 7-13. literal tags**

```html
{literal}
<script language=javascript>

<!--
function isblank(field) {
if (field.value == '')
{ return false; }
else
{
document.loginform.submit();
return true;
}
// -->

</script>
{/literal}
```
php tags allow php to be embedded directly into the template. They will not be escaped, regardless of the $php_handling setting. This is for advanced users only, not normally needed.

```php
<?php

// including a php script directly from the template.
include('/path/to/display_weather.php');

?>
```

Example 7-14. php tags

7-14. php

...
Smarty - the compiling PHP template engine
# section, section else

## Table of Contents
- index
- index_prev
- index_next
- iteration
- first
- last
- rownum
- loop
- show
- total

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>The name of the section</td>
</tr>
<tr>
<td>loop</td>
<td>[$variable_name]</td>
<td>Yes</td>
<td>n/a</td>
<td>The name of the variable to determine # of loop iterations</td>
</tr>
<tr>
<td>index</td>
<td></td>
<td></td>
<td></td>
<td>The index position that the section will begin looping. If the value is</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>negative, the start position is calculated from the end of the array.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>For example, if there are</td>
</tr>
<tr>
<td>start</td>
<td>integer</td>
<td>No</td>
<td>0</td>
<td>seven values in the loop array and start is -2, the start index is 5. Invalid values (values outside of the length of the loop array) are automatically truncated to the closest valid value.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>step</td>
<td>integer</td>
<td>No</td>
<td>1</td>
<td>The step value that will be used to traverse the loop array. For example, step=2 will loop on index 0,2,4, etc. If step is negative, it will step through the array backwards.</td>
</tr>
<tr>
<td>max</td>
<td>integer</td>
<td>No</td>
<td>1</td>
<td>Sets the maximum number of times the section will loop.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>determines</td>
</tr>
<tr>
<td>show</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td>whether or not to show this section</td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
<td>--------</td>
<td>-------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>name</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>loop</td>
<td>[$variable_name]</td>
<td>Yes</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>start</td>
<td>integer</td>
<td>No</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>step</td>
<td>integer</td>
<td>No</td>
<td>1</td>
<td>step=2024. step.</td>
</tr>
<tr>
<td>max</td>
<td>integer</td>
<td>No</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>show</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td></td>
</tr>
</tbody>
</table>

Template sections are used for looping over arrays of data. All *section* tags must be paired with */section* tags. Required parameters are *name* and *loop*. The name of the section can be anything you like, made up of letters, numbers and underscores. Sections can be nested, and the nested section names must be unique from each other. The loop variable (usually an array of values) determines the number of times the section will loop. When printing a variable within a section, the section name must be given next to variable name within brackets[]. *sectionelse* is executed when there are no values in the loop variable.

```
section .  section .  name  loop  .  name  .
loop ().
```

**Example 7-15. section**

7-15. section

```
{*
  this example will print out all the values of the $custid
*
{section name=customer loop=$custid}
  id:  {$custid[customer]}<br>
{/section}
```
Example 7-16. section loop variable
7-16.loop

{* the loop variable only determines the number of times you can access any variable from the template within
This example assumes that $custid, $name and $address
arrays containing the same number of values *}
{section name=customer loop=$custid}
    id: {$custid[customer]}<br>
    name: {$name[customer]}<br>
    address: {$address[customer]}<br>
<p>
{/section}

OUTPUT:

id: 1000<br>
name: John Smith<br>
address: 253 N 45th<br>
<p>
id: 1001<br>
name: Jack Jones<br>
address: 417 Mulberry ln<br>
<p>
id: 1002<br>
name: Jane Munson<br>
address: 5605 apple st<br>
<p>

Example 7-17. section names
7-17. section

{* the name of the section can be anything you like, and it is used to reference the data within the section *}
{section name=mydata loop=$custid}
   id: {$custid[mydata]}<br>
   name: {$name[mydata]}<br>
   address: {$address[mydata]}<br>
<p>
{/section}

Example 7-18. nested sections

7-18. section

{* sections can be nested as deep as you like. With nested sections you can access complex data structures, such as multi-dimensional arrays. In this example, $contact_type[customer]$ is an array of contact types for the current customer. *}
{section name=customer loop=$custid}
   id: {$custid[customer]}<br>
   name: {$name[customer]}<br>
   address: {$address[customer]}<br>
   {section name=contact loop=$contact_type[customer]
      {$contact_type[customer][contact]}: {$contact_info[customer][contact]}
   }
<p>
{/section}

OUTPUT:

id: 1000<br>
name: John Smith<br>
address: 253 N 45th<br>
home phone: 555-555-5555<br>
cell phone: 555-555-5555<br>
e-mail: john@mydomain.com<br>
<p>
Example 7-19. sections and associative arrays
7-19. section

{* This is an example of printing an associative array
of data within a section *}
{section name=customer loop=$contacts}
    name: {$contacts[customer].name}<br>
    home: {$contacts[customer].home}<br>
    cell: {$contacts[customer].cell}<br>
    e-mail: {$contacts[customer].email}<p>
{/section}

OUTPUT:

name: John Smith<br>
home: 555-555-5555<br>
cell: 555-555-5555<br>
e-mail: john@mydomain.com<p>
name: Jack Jones<br>
home phone: 555-555-5555<br>
cell phone: 555-555-5555<br>
e-mail: jack@mydomain.com<p>
Example 7-20. sectionelse
7-20. sectionelse

{* sectionelse will execute if there are no $custid values *}
{section name=customer loop=$custid}
   id: {$custid[customer]}<br>
{sectionelse}
   there are no values in $custid.
{/section}

Sections also have their own variables that handle section properties. These are indicated like so: {$smarty.section.sectionname.varname}

Section . {$smarty.section.sectionname.varname}.

NOTE: As of Smarty 1.5.0, the syntax for section property variables has been changed from {%sectionname.varname%} to {$smarty.section.sectionname.varname}. The old syntax is still supported, but you will only see reference to the new syntax in the manual examples.

Smarty 1.5.0 section {%sectionname.varname%}
{$smarty.section.sectionname.varname}.
Many times web designers run into the issue where white space and carriage returns affect the output of the rendered HTML (browser "features"), so you must run all your tags together in the template to get the desired results. This usually ends up in unreadable or unmanageable templates.

Web HTML(""). Anything within {strip}{/strip} tags in Smarty are stripped of the extra spaces or carriage returns at the beginnings and ends of the lines before they are displayed. This way you can keep your templates readable, and not worry about extra white space causing problems.

Smarty {strip}{/strip}.

**Technical Note:** {strip}{/strip} does not affect the contents of template variables. See the [strip modifier function](#).

---

**Example 7-31. strip tags**

```html
{*
the following will be all run into one line upon output
*}
{strip}
<table border=0>
  <tr>
    <td>
      <A HREF="{$url}"
        <font color="red">This is a test</font>
      </A>
    </td>
  </tr>
</table>
{/strip}
```
Notice that in the above example, all the lines begin and end with HTML tags. Be aware that all the lines are run together. If you have plain text at the beginning or end of any line, they will be run together, and may not be desired results.

HTML...
Smarty - the compiling PHP template engine
Smarty - php
Chapter 8. Custom Functions[

Table of Contents

assign
counter
cycle
debug
eval
fetch
html_checkboxes
html_image
html_options
html_radios
html_select_date
html_select_time
html_table
math
mailto
popup_init
popup
textformat

Smarty comes with several custom functions that you can use in the templates.

Smarty .
assign

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>var</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>The name of the variable being assigned</td>
</tr>
<tr>
<td>value</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>The value being assigned</td>
</tr>
</tbody>
</table>

assign is used for assigning template variables during the execution of the template.

Example 8-1. assign

8-1. assign

```{assign var="name" value="Bob"}
```

The value of $name is {{name}}.

OUTPUT:

The value of $name is Bob.
Smarty - the compiling PHP template engine

Smarty - php

Chapter 8. Custom Functions[. ]
## counter

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>string</td>
<td>No</td>
<td>default</td>
<td>The name of the counter</td>
</tr>
<tr>
<td>start</td>
<td>number</td>
<td>No</td>
<td>1</td>
<td>The initial number to start counting from</td>
</tr>
<tr>
<td>skip</td>
<td>number</td>
<td>No</td>
<td>1</td>
<td>The interval to count by</td>
</tr>
<tr>
<td>direction</td>
<td>string</td>
<td>No</td>
<td>up</td>
<td>The direction to count (up/down)</td>
</tr>
<tr>
<td>print</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td>Whether or not to print the value</td>
</tr>
<tr>
<td>assign</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>the template variable the output will be assigned to</td>
</tr>
</tbody>
</table>

counter is used to print out a count. counter will remember the count on each iteration. You can adjust the number, the interval and the direction of the count, as well as determine whether or not to print the value. You
can run multiple counters concurrently by supplying a unique name for each one. If you do not supply a name, the name 'default' will be used.

counter . counter . interval direction . "default" .

If you supply the special "assign" attribute, the output of the counter function will be assigned to this template variable instead of being output to the template.

"assign" assign .

**Example 8-2. counter**

8-2. counter

```{*
initialize the count *
}
{counter start=0 skip=2 print=false}

{counter}<br>
{counter}<br>
{counter}<br>
{counter}<br>
{counter}<br>

OUTPUT:

2<br>  
4<br>  
6<br>  
8<br>
```
## cycle

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>string</td>
<td>No</td>
<td>default</td>
<td>The name of the cycle</td>
</tr>
<tr>
<td>values</td>
<td>mixed</td>
<td>Yes</td>
<td>N/A</td>
<td>The values to cycle through, either a comma delimited list (see delimiter attribute), or an array of values.</td>
</tr>
<tr>
<td>print</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td>Whether to print the value or not</td>
</tr>
<tr>
<td>advance</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td>Whether or not to advance to the next value</td>
</tr>
<tr>
<td>delimiter</td>
<td>string</td>
<td>No</td>
<td>,</td>
<td>The delimiter to use in the values attribute.</td>
</tr>
<tr>
<td>assign</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>the template variable the output will be assigned to</td>
</tr>
</tbody>
</table>
Cycle is used to cycle though a set of values. This makes it easy to alternate between two or more colors in a table, or cycle through an array of values.

**Cycle**

You can cycle through more than one set of values in your template by supplying a name attribute. Give each set of values a unique name.

name.

You can force the current value not to print with the print attribute set to false. This would be useful for silently skipping a value.

print false.

The advance attribute is used to repeat a value. When set to false, the next call to cycle will print the same value.

advance false.

If you supply the special "assign" attribute, the output of the cycle function will be assigned to this template variable instead of being output to the template.

"assign" assign.

**Example 8-3. cycle**

```html
{section name=rows loop=$data}
<tr bgcolor="{cycle values="#eeeeee,#d0d0d0"}">
<td>{$data[rows]}</td>
</tr>
```

</tr>
{/section}

OUTPUT:

<tr bgcolor="#eeeeee">
  <td>1</td>
</tr>
<tr bgcolor="#d0d0d0">
  <td>2</td>
</tr>
<tr bgcolor="#eeeeee">
  <td>3</td>
</tr>
</tr>
# debug

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>output</td>
<td>string</td>
<td>No</td>
<td>html</td>
<td>output type, html or javascript</td>
</tr>
</tbody>
</table>

{debug} dumps the debug console to the page. This works regardless of the debug settings in Smarty. Since this gets executed at runtime, this is only able to show the assigned variables, not the templates that are in use. But, you see all the currently available variables within the scope of this template.

{debug} . Smarty       debug . . .
**eval**

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>var</td>
<td>mixed</td>
<td>Yes</td>
<td>n/a</td>
<td>variable (or string) to evaluate</td>
</tr>
<tr>
<td>assign</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>the template variable the output will be assigned to</td>
</tr>
</tbody>
</table>

eval is used to evaluate a variable as a template. This can be used for things like embedding template tags/variables into variables or tags/variables into config file variables.

`eval .//.

If you supply the special "assign" attribute, the output of the eval function will be assigned to this template variable instead of being output to the template.

"assign" assign .

**Technical Note:** Evaluated variables are treated the same as templates. They follow the same escapement and security features just as if they were templates.

: ..

**Technical Note:** Evaluated variables are compiled on every invocation, the compiled versions are not saved! However if you have caching enabled, the output will be cached with the rest of the template.
Example 8-4. eval

8-4. eval

setup.conf
--------

emphstart = <b>
emphend = </b>
title = Welcome to {$company}'s home page!
ErrorCity = You must supply a {#emphstart#}city{#emphend#}.
ErrorState = You must supply a {#emphstart#}state{#emphend#}.

index.tpl
--------

{config_load file="setup.conf"}

{eval var=$foo}
{eval var=#title#}
{eval var=#ErrorCity#}
{eval var=#ErrorState# assign="state_error"}
{$state_error}

OUTPUT:

This is the contents of foo.
Welcome to Foobar Pub & Grill's home page!
You must supply a <b>city</b>.
You must supply a <b>state</b>.
**fetch**

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>file</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>the file, http or ftp site to fetch</td>
</tr>
<tr>
<td>assign</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>the template variable the output will be assigned to</td>
</tr>
</tbody>
</table>

fetch is used to fetch files from the local file system, http, or ftp and display the contents. If the file name begins with "http://", the web site page will be fetched and displayed. If the file name begins with "ftp://", the file will be fetched from the ftp server and displayed. For local files, the full system file path must be given, or a path relative to the executed php script.

fetch HTTPFTP. "http://".

If you supply the special "assign" attribute, the output of the fetch function will be assigned to this template variable instead of being output to the template. (new in Smarty 1.5.0)

"assign" assign .(Smarty

**Technical Note:** This will not support http redirects, be sure to include a trailing slash on your web page fetches where necessary.

: HTTPwebwww.domain.comindex.phpindex.htm
default.phpurlurl.

**Technical Note:** If template security is turned on and you are
fetching a file from the local file system, this will only allow files from within one of the defined secure directories. ($secure_dir)

: . ($secure_dir)

**Example 8-5. fetch**

8-5. fetch

```php
/* include some javascript in your template */
{fetch file="/export/httpd/www.domain.com/docs/navbar.js"

/* embed some weather text in your template from another */
{fetch file="http://www.myweather.com/68502/"

/* fetch a news headline file via ftp */
{fetch file="ftp://user:password@ftp.domain.com/path/to/currentheadlines.txt"

/* assign the fetched contents to a template variable */
{fetch file="http://www.myweather.com/68502/" assign="$weather"
{if $weather ne "}"

  <b>{$weather}</b>

{/if}
```
# html_checkboxes

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>string</td>
<td>No</td>
<td>checkbox</td>
<td>name of checkbox list</td>
</tr>
<tr>
<td>values</td>
<td>array</td>
<td>Yes, unless using options attribute</td>
<td>n/a</td>
<td>an array of values for checkbox buttons</td>
</tr>
<tr>
<td>output</td>
<td>array</td>
<td>Yes, unless using options attribute</td>
<td>n/a</td>
<td>an array of output for checkbox buttons</td>
</tr>
<tr>
<td>selected</td>
<td>string/array</td>
<td>No</td>
<td>empty</td>
<td>the checked checkbox element(s)</td>
</tr>
<tr>
<td>options</td>
<td>associative array</td>
<td>Yes, unless using values and output</td>
<td>n/a</td>
<td>an associative array of values and output</td>
</tr>
<tr>
<td>separator</td>
<td>string</td>
<td>No</td>
<td>empty</td>
<td>string of text to separate each checkbox item</td>
</tr>
<tr>
<td>labels</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td>add &lt;label&gt;-tags to the output</td>
</tr>
</tbody>
</table>
html_checkboxes is a custom function that creates an html checkbox group with provided data. It takes care of which item(s) are selected by default as well. Required attributes are values and output, unless you use options instead. All output is XHTML compatible.

```
html_checkboxes .. values output
```

All parameters that are not in the list above are printed as name/value-pairs inside each of the created <input>-tags.

```
<input />
```

**Example 8-6. html_checkboxes**

**8-6. html_checkboxes**

```php
index.php:

require('Smarty.class.php');
$smarty = new Smarty;
$smarty->assign('cust_ids', array(1000, 1001, 1002, 1003));
$smarty->assign('cust_names', array('Joe Schmoe', 'Jack Smith', 'Jane Johnson', 'Charlie Brown'));
$smarty->assign('customer_id', 1001);
$smarty->display('index.tpl');
```

```html
index.tpl:

{html_checkboxes values=$cust_ids checked=$customer_id output=$cust_names separator=<br/>}
```
index.php:

```
require('Smarty.class.php');
$smarty = new Smarty;
$smarty->assign('cust_checkboxes', array(
    1000 => 'Joe Schmoe',
    1001 => 'Jack Smith',
    1002 => 'Jane Johnson',
    1003 => 'Charlie Brown'));
$smarty->assign('customer_id', 1001);
$smarty->display('index.tpl');
```

index.tpl:

```
{html_checkboxes name="id" options=$cust_checkboxes checked=$customer_id separator="<br/>"}
```

OUTPUT: (both examples)

```
<label><input type="checkbox" name="checkbox[]" value="1000"/>Joe Schmoe</label><br/>
<label><input type="checkbox" name="checkbox[]" value="1001" checked="checked"/>Jack Smith</label><br/>
<label><input type="checkbox" name="checkbox[]" value="1002"/>Jane Johnson</label><br/>
<label><input type="checkbox" name="checkbox[]" value="1003"/>Charlie Brown</label><br/>
```
## html_image

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>file</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>name/path to image</td>
</tr>
<tr>
<td>border</td>
<td>string</td>
<td>No</td>
<td>0</td>
<td>size of border around image</td>
</tr>
<tr>
<td>height</td>
<td>string</td>
<td>No</td>
<td><code>actual image height</code></td>
<td>height to display image</td>
</tr>
<tr>
<td>width</td>
<td>string</td>
<td>No</td>
<td><code>actual image width</code></td>
<td>width to display image</td>
</tr>
<tr>
<td>basedir</td>
<td>string</td>
<td>no</td>
<td><code>web server doc root</code></td>
<td>directory to base relative paths from</td>
</tr>
<tr>
<td>alt</td>
<td>string</td>
<td>no</td>
<td>&quot;&quot;</td>
<td>alternative description of the image</td>
</tr>
<tr>
<td>href</td>
<td>string</td>
<td>no</td>
<td>n/a</td>
<td>href value to link the image to</td>
</tr>
</tbody>
</table>
html_image is a custom function that generates an HTML tag for an image. The height and width are automatically calculated from the image file if none are supplied.

```
html_image  HTML
```

basedir is the base directory that relative image paths are based from. If not given, the web server document root (env variable DOCUMENT_ROOT) is used as the base. If security is enabled, the path to the image must be within a secure directory.

```
basedir . WEB( DOCUMENT_ROOT).
```

```
href  is the href value to link the image to. If link is supplied, an <a href="LINKVALUE">tag is put around the image tag.
```

```
href
```

**Technical Note:** html_image requires a hit to the disk to read the image and calculate the height and width. If you don't use template caching, it is generally better to avoid html_image and leave image tags static for optimal performance.

Example 8-7. html_image

8-7. html_image

```
index.php:

require('Smarty.class.php');
$smarty = new Smarty;
$smarty->display('index.tpl');

index.tpl:

{html_image file="pumpkin.jpg"}
{html_image file="/path/from/docroot/pumpkin.jpg"}
{html_image file="../path/relative/to/currdir/pumpkin.jpg"}

OUTPUT: (possible)
```
## html_options

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>values</td>
<td>array</td>
<td>Yes, unless using options attribute</td>
<td>n/a</td>
<td>an array of values for dropdown</td>
</tr>
<tr>
<td>output</td>
<td>array</td>
<td>Yes, unless using options attribute</td>
<td>n/a</td>
<td>an array of output for dropdown</td>
</tr>
<tr>
<td>selected</td>
<td>string/array</td>
<td>No</td>
<td>empty</td>
<td>the selected option element(s)</td>
</tr>
<tr>
<td>options</td>
<td>associative array</td>
<td>Yes, unless using values and output</td>
<td>n/a</td>
<td>an associative array of values and output</td>
</tr>
<tr>
<td>name</td>
<td>string</td>
<td>No</td>
<td>empty</td>
<td>name of select group</td>
</tr>
</tbody>
</table>
html_options is a custom function that creates html option group with provided data. It takes care of which item(s) are selected by default as well. Required attributes are values and output, unless you use options instead.

```html
html_options . values . output
```

If a given value is an array, it will treat it as an html OPTGROUP, and display the groups. Recursion is supported with OPTGROUP. All output is XHTML compatible.

```html
OPTGROUP . XHTML .
```

If the optional `name` attribute is given, the `<select name="groupname"></select>` tags will enclose the option list. Otherwise only the option list is generated.

```html
name <select name="groupname"> </select> .
```

All parameters that are not in the list above are printed as name/value-pairs inside the `<select>-tag. They are ignored if the optional `name` is not given.

```html
<select name="/" . name . 
```

Example 8-8. html_options

8-8. html_options

```php
index.php:

```require('Smarty.class.php');
$smarty = new Smarty;
$smarty->assign('cust_ids', array(1000,1001,1002,1003));
$smarty->assign('cust_names', array('Joe Schmoe','Jack Smith','Jane Johnson','Carlie Brown'));
$smarty->assign('customer_id', 1001);
$smarty->display('index.tpl');
```

```html
index.tpl:

```
<select name=customer_id>
 {html_options values=$cust_ids selected=$customer_id}
```
$smarty->assign('customer_id', 1001);
$smarty->display('index.tpl');

index.tpl:

<select name=customer_id>
    {html_options options=$cust_options selected=$customer_id}
</select>

OUTPUT: (both examples)

<select name=customer_id>
    <option value="1000">Joe Schmoe</option>
    <option value="1001" selected="selected">Jack Smith</option>
    <option value="1002">Jane Johnson</option>
    <option value="1003">Charlie Brown</option>
</select>
Smarty - the compiling PHP template engine
Smarty - php

Chapter 8. Custom Functions[. ]
### html_radios

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>string</td>
<td>No</td>
<td>radio</td>
<td>name of radio list</td>
</tr>
<tr>
<td>values</td>
<td>array</td>
<td>Yes, unless using options attribute</td>
<td>n/a</td>
<td>an array of values for radio buttons</td>
</tr>
<tr>
<td>output</td>
<td>array</td>
<td>Yes, unless using options attribute</td>
<td>n/a</td>
<td>an array of output for radio buttons</td>
</tr>
<tr>
<td>checked</td>
<td>string</td>
<td>No</td>
<td>empty</td>
<td>the checked radio element</td>
</tr>
<tr>
<td>options</td>
<td>associative array</td>
<td>Yes, unless using values and output</td>
<td>n/a</td>
<td>an associative array of values and output</td>
</tr>
<tr>
<td>separator</td>
<td>string</td>
<td>No</td>
<td>empty</td>
<td>string of text to separate each radio item</td>
</tr>
</tbody>
</table>
html_radios is a custom function that creates html radio button group with provided data. It takes care of which item is selected by default as well. Required attributes are values and output, unless you use options instead. All output is XHTML compatible.

html_radios.. values output
XHTML.

All parameters that are not in the list above are printed as name/value-pairs inside each of the created <input>-tags.

Example 8-9. html_radios

8-9. html_radios

```php
index.php:
require('Smarty.class.php');
$smarty = new Smarty;
$smarty->assign('cust_ids', array(1000,1001,1002,1003));
$smarty->assign('cust_names', array('Joe Schmoe','Jack Smith','Jane Johnson','Carlie Brown'));
$smarty->assign('customer_id', 1001);
$smarty->display('index.tpl');

index.tpl:
{html_radios values=$cust_ids checked=$customer_id output=$cust_names separator=<br/>}
```

```php
index.php:
require('Smarty.class.php');
$smarty = new Smarty;
$smarty->assign('cust_radios', array( 1001 => 'Joe Schmoe', 1002 => 'Jack Smith', 1003 => 'Carlie Brown', 1000 => 'Jane Johnson' ));
$smarty->display('index.tpl');
```
$smarty->assign('customer_id', 1001);
$smarty->display('index.tpl');

index.tpl:

{html_radios name="id" options=$cust_radios checked=$customer_id separator="<br/>"}

OUTPUT: (both examples)

<input type="radio" name="id[]" value="1000"> Joe Schmoe<br/>
<input type="radio" name="id[]" value="1001" checked="checked"><br/>
<input type="radio" name="id[]" value="1002"> Jane Johnson<br/>
<input type="radio" name="id[]" value="1003"> Charlie Brown<br/>
## html_select_date

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>prefix</td>
<td>string</td>
<td>No</td>
<td>Date_</td>
<td>what to prefix the var name with</td>
</tr>
<tr>
<td>time</td>
<td>timestamp/YYYY-MM-DD</td>
<td>No</td>
<td>current time in unix timestamp or YYYY-MM-DD format</td>
<td>what date/time to use</td>
</tr>
<tr>
<td>start_year</td>
<td>string</td>
<td>No</td>
<td>current year</td>
<td>the first year in the dropdown, either year number, or relative to current year (+/- N)</td>
</tr>
<tr>
<td>end_year</td>
<td>string</td>
<td>No</td>
<td>same as start_year</td>
<td>the last year in the dropdown, either year number, or relative to current year (+/- N)</td>
</tr>
<tr>
<td>display_days</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td>whether to display days or not</td>
</tr>
<tr>
<td>display_months</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td>whether to display months or not</td>
</tr>
<tr>
<td>Field</td>
<td>Type</td>
<td>Required</td>
<td>Default</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------</td>
<td>----------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>display_years</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td>Whether to display years or not</td>
</tr>
<tr>
<td>month_format</td>
<td>string</td>
<td>No</td>
<td>%B</td>
<td>What format the month should be in (strftime)</td>
</tr>
<tr>
<td>day_format</td>
<td>string</td>
<td>No</td>
<td>%02d</td>
<td>What format the day output should be in (strftime)</td>
</tr>
<tr>
<td>day_value_format</td>
<td>string</td>
<td>No</td>
<td>%d</td>
<td>What format the day value should be in (strftime)</td>
</tr>
<tr>
<td>year_as_text</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td>Whether or not to display the year as text</td>
</tr>
<tr>
<td>reverse_years</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td>Display years in reverse order</td>
</tr>
<tr>
<td>field_array</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td>If a name is given, the select boxes will be drawn such that the results will be returned to PHP in the form of 'name[Day], name[Year], name[Month]'</td>
</tr>
<tr>
<td>day_size</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td>Adds size attribute to select tag if</td>
</tr>
<tr>
<td>Field</td>
<td>Type</td>
<td>Required</td>
<td>Default</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>----------</td>
<td>----------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>month_size</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td>adds size attribute to select tag if given</td>
</tr>
<tr>
<td>year_size</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td>adds size attribute to select tag if given</td>
</tr>
<tr>
<td>all_extra</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td>adds extra attributes to all select/input tags if given</td>
</tr>
<tr>
<td>day_extra</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td>adds extra attributes to select/input tags if given</td>
</tr>
<tr>
<td>month_extra</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td>adds extra attributes to select/input tags if given</td>
</tr>
<tr>
<td>year_extra</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td>adds extra attributes to select/input tags if given</td>
</tr>
<tr>
<td>field_order</td>
<td>string</td>
<td>No</td>
<td>MDY</td>
<td>the order in which to display the fields</td>
</tr>
<tr>
<td>field_separator</td>
<td>string</td>
<td>No</td>
<td>\n</td>
<td>string printed between different fields</td>
</tr>
<tr>
<td>Field</td>
<td>Type</td>
<td>Default</td>
<td>Value Format</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>----------</td>
<td>---------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>month_value_format</td>
<td>string</td>
<td>No</td>
<td>%m</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>month values, default is %m for month numbers.</td>
<td></td>
</tr>
<tr>
<td>prefix</td>
<td>string</td>
<td>No</td>
<td>Date_</td>
<td></td>
</tr>
<tr>
<td>time</td>
<td>timestamp/YYYY-MM-DD</td>
<td>No</td>
<td>UNIX--(data/time)</td>
<td></td>
</tr>
<tr>
<td>start_year</td>
<td>string</td>
<td>No</td>
<td>start_year</td>
<td></td>
</tr>
<tr>
<td>end_year</td>
<td>string</td>
<td>No</td>
<td>start_year</td>
<td></td>
</tr>
<tr>
<td>display_days</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td></td>
</tr>
<tr>
<td>display_months</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td></td>
</tr>
<tr>
<td>display_years</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td></td>
</tr>
<tr>
<td>month_format</td>
<td>string</td>
<td>No</td>
<td>%B</td>
<td></td>
</tr>
<tr>
<td>day_format</td>
<td>string</td>
<td>No</td>
<td>%02d</td>
<td></td>
</tr>
<tr>
<td>day_value_format</td>
<td>string</td>
<td>No</td>
<td>%d</td>
<td></td>
</tr>
<tr>
<td>year_as_text</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td></td>
</tr>
<tr>
<td>reverse_years</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td></td>
</tr>
<tr>
<td>field_array</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td></td>
</tr>
<tr>
<td>day_size</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td></td>
</tr>
<tr>
<td>month_size</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td></td>
</tr>
<tr>
<td>year_size</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td></td>
</tr>
<tr>
<td>all_extra</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td></td>
</tr>
<tr>
<td>day_extra</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td></td>
</tr>
<tr>
<td>month_extra</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td></td>
</tr>
<tr>
<td>year_extra</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td></td>
</tr>
</tbody>
</table>
html_select_date is a custom function that creates date dropdowns for you. It can display any or all of year, month, and day.

Example 8-10. html_select_date

```html
8-10. html_select_date

{html_select_date}

OUTPUT:

```html
<select name="Date_Month">
  <option value="1">January</option>
  <option value="2">February</option>
  <option value="3">March</option>
  <option value="4">April</option>
  <option value="5">May</option>
  <option value="6">June</option>
  <option value="7">July</option>
  <option value="8">August</option>
  <option value="9">September</option>
  <option value="10">October</option>
  <option value="11">November</option>
  <option value="12" selected>December</option>
</select>

<select name="Date_Day">
  <option value="1">01</option>
  <option value="2">02</option>
  <option value="3">03</option>
  <option value="4">04</option>
  <option value="5">05</option>
  <option value="6">06</option>
```

Example 8-11. html_select_date
8-11. html_select_date

{"start and end year can be relative to current year
{html_select_date prefix="StartDate" time=$time start_

OUTPUT: (current year is 2000)
<select name="StartDateMonth">
  <option value="1">January</option>
  <option value="2">February</option>
  <option value="3">March</option>
  <option value="4">April</option>
  <option value="5">May</option>
  <option value="6">June</option>
  <option value="7">July</option>
  <option value="8">August</option>
  <option value="9">September</option>
  <option value="10">October</option>
  <option value="11">November</option>
  <option value="12" selected>December</option>
</select>

<select name="StartDateYear">
  <option value="1999">1995</option>
  <option value="1999">1996</option>
  <option value="1999">1997</option>
  <option value="1999">1998</option>
  <option value="1999">1999</option>
  <option value="2000" selected>2000</option>
  <option value="2001">2001</option>
</select>
Smarty - the compiling PHP template engine
Smarty - php
Chapter 8. Custom Functions[. ]
## html_select_time

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>prefix</td>
<td>string</td>
<td>No</td>
<td>Time_</td>
<td>what to prefix the var name with</td>
</tr>
<tr>
<td>time</td>
<td>timestamp</td>
<td>No</td>
<td>current time</td>
<td>what date/time to use</td>
</tr>
<tr>
<td>display_hours</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td>whether or not to display hours</td>
</tr>
<tr>
<td>display_minutes</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td>whether or not to display minutes</td>
</tr>
<tr>
<td>display_seconds</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td>whether or not to display seconds</td>
</tr>
<tr>
<td>display_meridian</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td>whether or not to display meridian (am/pm)</td>
</tr>
<tr>
<td>use_24_hours</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td>whether or not to use 24 hour clock</td>
</tr>
<tr>
<td>minute_interval</td>
<td>integer</td>
<td>No</td>
<td>1</td>
<td>number interval in minute dropdown</td>
</tr>
<tr>
<td>second_interval</td>
<td>integer</td>
<td>No</td>
<td>1</td>
<td>number interval in second dropdown</td>
</tr>
<tr>
<td>Field</td>
<td>Type</td>
<td>Required</td>
<td>Nullable</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------</td>
<td>----------</td>
<td>----------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>field_array</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>values to array of this name</td>
</tr>
<tr>
<td>all_extra</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td>adds extra attributes to select/input tags if given</td>
</tr>
<tr>
<td>hour_extra</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td>adds extra attributes to select/input tags if given</td>
</tr>
<tr>
<td>minute_extra</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td>adds extra attributes to select/input tags if given</td>
</tr>
<tr>
<td>second_extra</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td>adds extra attributes to select/input tags if given</td>
</tr>
<tr>
<td>meridian_extra</td>
<td>string</td>
<td>No</td>
<td>null</td>
<td>adds extra attributes to select/input tags if given</td>
</tr>
<tr>
<td>prefix</td>
<td>string</td>
<td>No</td>
<td></td>
<td>Time_</td>
</tr>
<tr>
<td>time</td>
<td>timestamp</td>
<td>No</td>
<td>UNIX--</td>
<td>(data/time)</td>
</tr>
<tr>
<td>display_hours</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td></td>
</tr>
<tr>
<td>display_minutes</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td></td>
</tr>
<tr>
<td>display_seconds</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td></td>
</tr>
<tr>
<td>display_meridian</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td>(/)</td>
</tr>
<tr>
<td>use_24_hours</td>
<td>boolean</td>
<td>No</td>
<td>true</td>
<td>24</td>
</tr>
<tr>
<td>minute_interval</td>
<td>integer</td>
<td>No</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>second_interval</td>
<td>integer</td>
<td>No</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
html_select_time is a custom function that creates time dropdowns for you. It can display any or all of hour, minute, second and meridian.

Example 8-12. html_select_time

8-12. html_select_time

```javascript
{html_select_time use_24_hours=true}

OUTPUT:

<select name="Time_Hour">
<option value="00">00</option>
<option value="01">01</option>
<option value="02">02</option>
<option value="03">03</option>
<option value="04">04</option>
<option value="05">05</option>
<option value="06">06</option>
<option value="07">07</option>
<option value="08">08</option>
<option value="09" selected>09</option>
<option value="10">10</option>
<option value="11">11</option>
<option value="12">12</option>
<option value="13">13</option>
<option value="14">14</option>
<option value="15">15</option>
<option value="16">16</option>
```
<option value="17">17</option>
<option value="18">18</option>
<option value="19">19</option>
<option value="20">20</option>
<option value="21">21</option>
<option value="22">22</option>
<option value="23">23</option>
</select>
<select name="Time_Minute">
<option value="00">00</option>
<option value="01">01</option>
<option value="02">02</option>
<option value="03">03</option>
<option value="04">04</option>
<option value="05">05</option>
<option value="06">06</option>
<option value="07">07</option>
<option value="08">08</option>
<option value="09">09</option>
<option value="10">10</option>
<option value="11">11</option>
<option value="12">12</option>
<option value="13">13</option>
<option value="14">14</option>
<option value="15">15</option>
<option value="16">16</option>
<option value="17">17</option>
<option value="18">18</option>
<option value="19">19</option>
<option value="20" selected>20</option>
<option value="21">21</option>
<option value="22">22</option>
<option value="23">23</option>
<option value="24">24</option>
<option value="25">25</option>
<option value="26">26</option>
<option value="27">27</option>
<option value="28">28</option>
<option value="29">29</option>
<select name="Time_Second">
  <option value="00">00</option>
  <option value="01">01</option>
  <option value="02">02</option>
  <option value="03">03</option>
  <option value="04">04</option>
  <option value="05">05</option>
  <option value="06">06</option>
</select>
<option value="46">46</option>
<option value="47">47</option>
<option value="48">48</option>
<option value="49">49</option>
<option value="50">50</option>
<option value="51">51</option>
<option value="52">52</option>
<option value="53">53</option>
<option value="54">54</option>
<option value="55">55</option>
<option value="56">56</option>
<option value="57">57</option>
<option value="58">58</option>
<option value="59">59</option>
</select>
<select name="Time_Meridian">
<option value="am" selected>AM</option>
<option value="pm">PM</option>
</select>
Smarty - the compiling PHP template engine
Smarty - php

Chapter 8. Custom Functions[. ]
### html_table

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>loop</td>
<td>array</td>
<td>Yes</td>
<td>n/a</td>
<td>array of data to loop through</td>
</tr>
<tr>
<td>cols</td>
<td>integer</td>
<td>No</td>
<td>3</td>
<td>number of columns in the table</td>
</tr>
<tr>
<td>table_attr</td>
<td>string</td>
<td>No</td>
<td>border=&quot;1&quot;</td>
<td>attributes for table tag</td>
</tr>
<tr>
<td>tr_attr</td>
<td>string</td>
<td>No</td>
<td>empty</td>
<td>attributes for tr tag (arrays are cycled)</td>
</tr>
<tr>
<td>td_attr</td>
<td>string</td>
<td>No</td>
<td>empty</td>
<td>attributes for td tag (arrays are cycled)</td>
</tr>
<tr>
<td>trailpad</td>
<td>string</td>
<td>No</td>
<td> </td>
<td>value to pad the trailing cells on last row with (if any)</td>
</tr>
<tr>
<td>hdir</td>
<td>string</td>
<td>No</td>
<td>right</td>
<td>direction of one row to be rendered. possible values: left / right</td>
</tr>
<tr>
<td>vdir</td>
<td>string</td>
<td>No</td>
<td>down</td>
<td>direction of the columns to be rendered. possible values: up /</td>
</tr>
</tbody>
</table>
### html_table

*html_table* is a custom function that dumps an array of data into an HTML table. The *cols* attribute determines how many columns will be in the table. The *table_attr*, *tr_attr* and *td_attr* values determine the attributes given to the table, tr and td tags. If *tr_attr* or *td_attr* are arrays, they will be cycled through. *trailpad* is the value put into the trailing cells on the last table row if there are any present.

```html
html_table HTML . cols . table_attr , tr_attr td_attr tr td .
tr_attr td_attr .
trailpad .
```

### Example 8-13. html_table

#### 8-13. html_table

```php
index.php:

```php
require('Smarty.class.php');
$smarty = new Smarty;
$smarty->assign('data',array(1,2,3,4,5,6,7,8,9));
$smarty->assign('tr',array('bgcolor="#eeeeee"','bgcolor="#dddddd"'));
$smarty->display('index.tpl');
```

```html
index.tpl:

```
```html
{html_table loop=$data}
{html_table loop=$data cols=4 table_attr='border="0"'}
{html_table loop=$data cols=4 tr_attr=$tr}

OUTPUT:

<table border="1">
<tr><td>1</td><td>2</td><td>3</td></tr>
<tr><td>4</td><td>5</td><td>6</td></tr>
<tr><td>7</td><td>8</td><td>9</td></tr>
</table>
<table border="0">
<tr><td>1</td><td>2</td><td>3</td><td>4</td></tr>
<tr><td>5</td><td>6</td><td>7</td><td>8</td></tr>
<tr><td>9</td><td>&nbsp;</td><td>&nbsp;</td><td>&nbsp;</td></tr>
</table>
<table border="1">
<tr bgcolor="#eeeeee"><td>1</td><td>2</td><td>3</td><td>4</td></tr>
<tr bgcolor="#dddddd"><td>5</td><td>6</td><td>7</td><td>8</td></tr>
<tr bgcolor="#eeeeee"><td>9</td><td>&nbsp;</td><td>&nbsp;</td><td>&nbsp;</td></tr>
</table>
```
**math**

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>equation</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>the equation to execute</td>
</tr>
<tr>
<td>format</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>the format of the result (<a href="https://www.php.net/manual/en/function.sprintf.php">sprintf</a>)</td>
</tr>
<tr>
<td>var</td>
<td>numeric</td>
<td>Yes</td>
<td>n/a</td>
<td>equation variable value</td>
</tr>
<tr>
<td>assign</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>template variable the output will be assigned to</td>
</tr>
<tr>
<td>[var ...]</td>
<td>numeric</td>
<td>Yes</td>
<td>n/a</td>
<td>equation variable value</td>
</tr>
</tbody>
</table>

**equation** allows the template designer to do math equations in the template. Any numeric template variables may be used in the equations, and the result is printed in place of the tag. The variables used in the equation are passed as parameters, which can be template variables or static values. +, -, /, *, abs, ceil, cos, exp, floor, log, log10, max, min, pi, pow, rand, round, sin, sqrt, srans and tan are all valid operators. Check the PHP documentation for further information on these math functions.
If you supply the special "assign" attribute, the output of the math function will be assigned to this template variable instead of being output to the template.

"assign" assign.

**Technical Note:** math is an expensive function in performance due to its use of the php eval() function. Doing the math in PHP is much more efficient, so whenever possible do the math calculations in PHP and assign the results to the template. Definately avoid repetitive math function calls, like within section loops.

: php eval() math. PHP
section math.

### Example 8-14. math

```php
{*
$height=4, $width=5 *
}

{math equation="x + y" x=$height y=$width}

OUTPUT:
9

{*
$row_height = 10, $row_width = 20, #col_div# = 2, assigned in template *
}

{math equation="height * width / division"
 height=$row_height
 width=$row_width
 division=#col_div#}

OUTPUT:
```
100

{* you can use parenthesis *}
{math equation="( ( x + y ) / z )" x=2 y=10 z=2}
OUTPUT:
6

{* you can supply a format parameter in sprintf format *}
{math equation="x + y" x=4.4444 y=5.0000 format="% .2f"}
OUTPUT:
9.44
Smarty - the compiling PHP template engine
Smarty - php
Chapter 8. Custom Functions[. ]
<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>address</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>the e-mail address</td>
</tr>
<tr>
<td>text</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>the text to display, default is the e-mail address</td>
</tr>
<tr>
<td>encode</td>
<td>string</td>
<td>No</td>
<td>none</td>
<td>How to encode the e-mail. Can be one of none, hex or javascript.</td>
</tr>
<tr>
<td>cc</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>e-mail addresses to carbon copy. Separate entries by a comma.</td>
</tr>
<tr>
<td>bcc</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>e-mail addresses to blind carbon copy. Separate entries by a comma.</td>
</tr>
<tr>
<td>subject</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>e-mail subject.</td>
</tr>
<tr>
<td>newsgroups</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>newsgroups to post to. Separate</td>
</tr>
</tbody>
</table>
mailto automates the creation of mailto links and optionally encodes them. Encoding e-mails makes it more difficult for web spiders to pick up e-mail addresses off of your site.

**Technical Note:** javascript is probably the most thorough form of encoding, although you can use hex encoding too.
Example 8-15. mailto

8-15. mailto

```javascript
{mailto address="me@domain.com"}
{mailto address="me@domain.com" text="send me some mail"}
{mailto address="me@domain.com" encode="javascript"}
{mailto address="me@domain.com" encode="hex"}
{mailto address="me@domain.com" subject="Hello to you!
{mailto address="me@domain.com" cc="you@domain.com,they@domain.com"
{mailto address="me@domain.com" extra='class="email"'}

OUTPUT:

<a href="mailto:me@domain.com">me@domain.com</a>
<a href="mailto:me@domain.com">send me some mail</a>
<SCRIPT language="javascript">eval(unescape('%64%6f%63%61%20%68%72%65%66%3d%22%6d%61%69%6c%74%65%28%27%3c%61%20%68%72%65%66%3d%22%6d%61%69%6c%74%65%2e%63%6f%6d%22%29%3b'))</SCRIPT>
<a href="mailto:%6d%65@%64%6f%6d%61%69%6e.%63%6f%6d">&#x6d;&#x65;&#x40;&#x64;&x6f;&#x6d;&#x61;&#x69;&#x6e;&#x2e;&#x63;&#x6f;&#x6d;</a>
<a href="mailto:me@domain.com?subject=Hello%20to%20you!">me@domain.com</a>
<a href="mailto:me@domain.com?cc=you@domain.com%2Cthey@domain.com">me@domain.com</a>
<a href="mailto:me@domain.com" class="email">me@domain.com</a>
```
**popup_init**

popup is an integration of overLib, a library used for popup windows. These are used for context sensitive information, such as help windows or tooltips. popup_init must be called once at the top of any page you plan on using the popup function. overLib was written by Erik Bosrup, and the homepage is located at http://www.bosrup.com/web/overlib/.

```
popup overLib() . . popup popup_init . overLib
```

As of Smarty version 2.1.2, overLib does NOT come with the release. Download overLib, place the overlib.js file under your document root and supply the relative path to this file as the "src" parameter to popup_init.

```
Smarty 2.1.2 overLib . overlib.js popup_init "src".
```

**Example 8-16. popup_init**

```
8-16. popup_init

{*
popup_init must be called once at the top of the page
{popup_init src="/javascripts/overlib.js"}
```
## popup

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>text</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td>the text/html to display in the popup window</td>
</tr>
<tr>
<td>trigger</td>
<td>string</td>
<td>No</td>
<td>onMouseOver</td>
<td>What is used to trigger the popup window. Can be one of onMouseOver or onClick</td>
</tr>
<tr>
<td>sticky</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td>Makes the popup stick around until closed</td>
</tr>
<tr>
<td>caption</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>sets the caption to title</td>
</tr>
<tr>
<td>bgcolor</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>color of the border of the popup box</td>
</tr>
<tr>
<td>textcolor</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>sets the color of the text inside the box</td>
</tr>
<tr>
<td>capcolor</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>sets color of the box's caption</td>
</tr>
<tr>
<td>closecolor</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>sets the color of the close</td>
</tr>
<tr>
<td>Parameter</td>
<td>Type</td>
<td>Required</td>
<td>Default</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>--------</td>
<td>----------</td>
<td>---------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>textfont</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>sets the font to be used by the main text</td>
</tr>
<tr>
<td>captionfont</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>sets the font of the caption</td>
</tr>
<tr>
<td>closefont</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>sets the font for the &quot;Close&quot; text</td>
</tr>
<tr>
<td>textsize</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>sets the size of the main text's font</td>
</tr>
<tr>
<td>captionsize</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>sets the size of the caption's font</td>
</tr>
<tr>
<td>closesize</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>sets the size of the &quot;Close&quot; text's font</td>
</tr>
<tr>
<td>width</td>
<td>integer</td>
<td>No</td>
<td>n/a</td>
<td>sets the width of the box</td>
</tr>
<tr>
<td>height</td>
<td>integer</td>
<td>No</td>
<td>n/a</td>
<td>sets the height of the box</td>
</tr>
<tr>
<td>left</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td>makes the popups go to the left of the mouse</td>
</tr>
<tr>
<td>right</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td>makes the popups go to the right of the mouse</td>
</tr>
<tr>
<td>center</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td>makes the popups go to the center of the mouse</td>
</tr>
<tr>
<td>Feature</td>
<td>Type</td>
<td>Default</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------</td>
<td>---------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>above</td>
<td>boolean</td>
<td>No</td>
<td>false makes the popups go below the mouse. NOTE: only possible when height has been set</td>
<td></td>
</tr>
<tr>
<td>below</td>
<td>boolean</td>
<td>No</td>
<td>false makes the popups go below the mouse</td>
<td></td>
</tr>
<tr>
<td>border</td>
<td>integer</td>
<td>No</td>
<td>n/a makes the border of the popups thicker or thinner</td>
<td></td>
</tr>
<tr>
<td>offsetx</td>
<td>integer</td>
<td>No</td>
<td>n/a how far away from the pointer the popup will show up, horizontally</td>
<td></td>
</tr>
<tr>
<td>offsety</td>
<td>integer</td>
<td>No</td>
<td>n/a how far away from the pointer the popup will show up, vertically</td>
<td></td>
</tr>
<tr>
<td>fgbackground</td>
<td>url to image</td>
<td>No</td>
<td>n/a defines a picture to use instead of color for the inside of the popup.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>n/a defines a picture to use instead of</td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Type</td>
<td>Default</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>------------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>bgcolor</td>
<td>url to image</td>
<td>No</td>
<td>Sets the background color for the border of the popup. NOTE: You will want to set bgcolor to &quot;&quot; or the color will show as well. NOTE: When having a Close link, Netscape will re-render the table cells, making things look incorrect.</td>
<td></td>
</tr>
<tr>
<td>closetext</td>
<td>string</td>
<td>No</td>
<td>Sets the &quot;Close&quot; text to something else</td>
<td></td>
</tr>
<tr>
<td>noclose</td>
<td>boolean</td>
<td>No</td>
<td>Does not display the &quot;Close&quot; text on stickies with a caption</td>
<td></td>
</tr>
<tr>
<td>status</td>
<td>string</td>
<td>No</td>
<td>Sets the text in the browsers status bar</td>
<td></td>
</tr>
<tr>
<td>autostatus</td>
<td>boolean</td>
<td>No</td>
<td>Sets the status bar's text to the popup's text. NOTE: overrides status setting</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sets the text in the browsers status bar</td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Type</td>
<td>Default</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>--------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>autostatuscap</td>
<td>string</td>
<td>No</td>
<td>status bar's text to the caption's text. NOTE: overrides status and autostatus settings</td>
<td></td>
</tr>
<tr>
<td>inarray</td>
<td>integer</td>
<td>No</td>
<td>tells overLib to read text from this index in the ol_text array, located in overlib.js. This parameter can be used instead of text.</td>
<td></td>
</tr>
<tr>
<td>caparray</td>
<td>integer</td>
<td>No</td>
<td>tells overLib to read the caption from this index in the ol_caps array.</td>
<td></td>
</tr>
<tr>
<td>capicon</td>
<td>url</td>
<td>No</td>
<td>displays the image given before the popup caption.</td>
<td></td>
</tr>
<tr>
<td>snapx</td>
<td>integer</td>
<td>No</td>
<td>snaps the popup to an even position in a horizontal grid.</td>
<td></td>
</tr>
<tr>
<td>snapy</td>
<td>integer</td>
<td>No</td>
<td>snaps the popup to an even position</td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Type</td>
<td>Default</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>fixx</td>
<td>integer</td>
<td>No</td>
<td>locks the popups horizontal position Note: overrides all other horizontal placement</td>
<td></td>
</tr>
<tr>
<td>fixy</td>
<td>integer</td>
<td>No</td>
<td>locks the popups vertical position Note: overrides all other vertical placement</td>
<td></td>
</tr>
<tr>
<td>background</td>
<td>url</td>
<td>No</td>
<td>sets image to be used instead of table box background</td>
<td></td>
</tr>
<tr>
<td>padx</td>
<td>integer,integer</td>
<td>No</td>
<td>pads the background image with horizontal whitespace for text placement. Note: this is a two parameter command</td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Type</td>
<td>Default</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>---------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>pady</td>
<td>integer, integer</td>
<td>No</td>
<td>whitespace for text placement. Note: this is a two parameter command.</td>
<td></td>
</tr>
<tr>
<td>fullhtml</td>
<td>boolean</td>
<td>No</td>
<td>allows you to control the html over a background picture completely. The html code is expected in the &quot;text&quot; attribute.</td>
<td></td>
</tr>
<tr>
<td>frame</td>
<td>string</td>
<td>No</td>
<td>controls popups in a different frame. See the overlib page for more info on this function.</td>
<td></td>
</tr>
<tr>
<td>timeout</td>
<td>string</td>
<td>No</td>
<td>calls the specified javascript function and takes the return value as the text that should be displayed in the popup window.</td>
<td></td>
</tr>
</tbody>
</table>
 Makes that |
<table>
<thead>
<tr>
<th>delay</th>
<th>integer</th>
<th>No</th>
<th>n/a</th>
<th>popup behave like a tooltip. It will popup only after this delay in milliseconds</th>
</tr>
</thead>
<tbody>
<tr>
<td>hauto</td>
<td>boolean</td>
<td>No</td>
<td>n/a</td>
<td>automatically determine if the popup should be to the left or right of the mouse.</td>
</tr>
<tr>
<td>vauto</td>
<td>boolean</td>
<td>No</td>
<td>n/a</td>
<td>automatically determine if the popup should be above or below the mouse.</td>
</tr>
<tr>
<td>text</td>
<td>string</td>
<td>Yes</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>trigger</td>
<td>string</td>
<td>No</td>
<td>onMouseOver() onClick()</td>
<td></td>
</tr>
<tr>
<td>sticky</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td></td>
</tr>
<tr>
<td>caption</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>fgcolor</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>bgcolor</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>textcolor</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>capcolor</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>closecolor</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>textfont</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Type</td>
<td>Default</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>---------------</td>
<td>---------</td>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>captionfont</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>closefont</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>textsize</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>captionsize</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>closesize</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>width</td>
<td>integer</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>height</td>
<td>integer</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>left</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td></td>
</tr>
<tr>
<td>right</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td></td>
</tr>
<tr>
<td>center</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td></td>
</tr>
<tr>
<td>above</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td></td>
</tr>
<tr>
<td>below</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td></td>
</tr>
<tr>
<td>border</td>
<td>integer</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>offsetx</td>
<td>integer</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>offsety</td>
<td>integer</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>fgbgcolor</td>
<td>url to image</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>bgbgcolor</td>
<td>url to image</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>closetext</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>noclose</td>
<td>boolean</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>status</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>autostatus</td>
<td>boolean</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>autostatuscap</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>inarray</td>
<td>integer</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
</tbody>
</table>

**Sets the width of the box**

**Sets the height of the box**

**false**: `above` and `below` set the height of the box.

**false**: `left` and `right` set the width of the box.
<table>
<thead>
<tr>
<th>caparray</th>
<th>integer</th>
<th>No</th>
<th>n/a</th>
<th>caption.</th>
</tr>
</thead>
<tbody>
<tr>
<td>capicon</td>
<td>url</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>snapx</td>
<td>integer</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>snapy</td>
<td>integer</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>fixx</td>
<td>integer</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>fixy</td>
<td>integer</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>background</td>
<td>url</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>padx</td>
<td>integer,integer</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>pady</td>
<td>integer,integer</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>fullhtml</td>
<td>boolean</td>
<td>No</td>
<td>n/a</td>
<td>HTML. HTML &quot;text&quot;</td>
</tr>
<tr>
<td>frame</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>. overlib</td>
</tr>
<tr>
<td>timeout</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>javascript.</td>
</tr>
<tr>
<td>delay</td>
<td>integer</td>
<td>No</td>
<td>n/a</td>
<td>()</td>
</tr>
<tr>
<td>hauto</td>
<td>boolean</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>vauto</td>
<td>boolean</td>
<td>No</td>
<td>n/a</td>
<td></td>
</tr>
</tbody>
</table>

popup is used to create javascript popup windows.

popup javascript.

**Example 8-17. popup**

8-17. popup

```html

/* popup_init must be called once at the top of the page */
{popup_init src="/javascripts/overlib.js"}

/* create a link with a popup window when you move your */
<A href="mypage.html" {popup text="This link takes you */

/* you can use html, links, etc in your popup text */
<A href="mypage.html" {popup sticky=true caption="mypage" text="<UL><LI>links</LI>pages</LI>images</UL>" snapx=10
```
## textformat

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Type</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>style</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
<td>preset style</td>
</tr>
<tr>
<td>indent</td>
<td>number</td>
<td>No</td>
<td>0</td>
<td>The number of chars to indent every line</td>
</tr>
<tr>
<td>indent_first</td>
<td>number</td>
<td>No</td>
<td>0</td>
<td>The number of chars to indent the first line</td>
</tr>
<tr>
<td>indent_char</td>
<td>string</td>
<td>No</td>
<td>(single space)</td>
<td>The character (or string of chars) to indent with</td>
</tr>
<tr>
<td>wrap</td>
<td>number</td>
<td>No</td>
<td>80</td>
<td>How many characters to wrap each line to</td>
</tr>
<tr>
<td>wrap_char</td>
<td>string</td>
<td>No</td>
<td>\n</td>
<td>The character (or string of chars) to break each line with</td>
</tr>
<tr>
<td>wrap_cut</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
<td>If true, wrap will break the line at the exact character instead of at a word</td>
</tr>
</tbody>
</table>
The template variable the output will be assigned to: "assign".

<table>
<thead>
<tr>
<th>assign</th>
<th>string</th>
<th>No</th>
<th>n/a</th>
</tr>
</thead>
</table>

The table shows the parameters for the textformat block function:

<table>
<thead>
<tr>
<th>style</th>
<th>string</th>
<th>No</th>
<th>n/a</th>
</tr>
</thead>
<tbody>
<tr>
<td>indent</td>
<td>number</td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>indent_first</td>
<td>number</td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>indent_char</td>
<td>string</td>
<td>No</td>
<td>(single space)</td>
</tr>
<tr>
<td>wrap</td>
<td>number</td>
<td>No</td>
<td>80</td>
</tr>
<tr>
<td>wrap_char</td>
<td>string</td>
<td>No</td>
<td>\n</td>
</tr>
<tr>
<td>wrap_cut</td>
<td>boolean</td>
<td>No</td>
<td>false</td>
</tr>
<tr>
<td>assign</td>
<td>string</td>
<td>No</td>
<td>n/a</td>
</tr>
</tbody>
</table>

The parameter "assign" is set to "string" and "n/a" for the output variable.

The table includes:

- parameter names
- data types
- default values
- parameters that may be set explicitly or with a preset style
- "n/a" indicates a default value
- "boundary"

**textformat** is a block function used to format text. It basically cleans up spaces and special characters, and formats paragraphs by wrapping at a boundary and indenting lines.

**textformat . . .

You can set the parameters explicitly, or use a preset style. Currently "email" is the only available style.

"email".

**Example 8-18. textformat**

8-18. textformat

```{textformat wrap=40}
This is foo.
This is foo.
This is foo.
```
This is foo.
This is foo.
This is foo.

This is bar.

bar foo bar foo foo.
bar foo bar foo foo.
bar foo bar foo foo.
bar foo bar foo foo.
bar foo bar foo foo.
bar foo bar foo foo.
bar foo bar foo foo.
bar foo bar foo foo.

{\textformat}

OUTPUT:

This is foo. This is foo. This is foo. This is foo. This is foo. This is foo.

This is bar.

bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo.

{\textformat wrap=40 indent=4}

This is foo.
This is foo.
This is foo.
This is foo.
This is foo.
This is foo.

This is bar.
This is foo. This is foo. This is foo. This is foo. This is foo.

This is bar.

bar foo bar foo foo. bar foo bar foo foo. bar foo foo. bar foo bar foo foo. bar foo foo. bar foo bar foo foo. bar foo bar foo foo.
This is foo.
This is foo.
This is foo.
This is foo.
This is foo.
This is bar.

bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo.
This is foo. This is foo. This is foo. This is foo. This is foo. This is foo.

This is bar.

bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo. bar foo bar foo foo.
Smarty - the compiling PHP template engine
Chapter 9. Config Files

Config files are handy for designers to manage global template variables from one file. One example is template colors. Normally if you wanted to change the color scheme of an application, you would have to go through each and every template file and change the colors. With a config file, the colors can be kept in one place, and only one file needs to be updated.

Example 9-1. Example of config file syntax

```
# global variables
pageTitle = "Main Menu"
bodyBgColor = #000000
tableBgColor = #000000
rowBgColor = #00ff00

[Customer]
pageTitle = "Customer Info"

[Login]
pageTitle = "Login"
focus = "username"
Intro = """"This is a value that spans more than one line. you must enclose it in triple quotes.""

# hidden section
[.Database]
host=my.domain.com
db=ADDRESSBOOK
user=php-user
pass=foobaa
```
Values of config file variables can be in quotes, but not necessary. You can use either single or double quotes. If you have a value that spans more than one line, enclose the entire value with triple quotes (""""). You can put comments into config files by any syntax that is not a valid config file syntax. We recommend using a # (hash) at the beginning of the line.

("""")

This config file example has two sections. Section names are enclosed in brackets []). Section names can be arbitrary strings not containing [ or ] symbols. The four variables at the top are global variables, or variables not within a section. These variables are always loaded from the config file. If a particular section is loaded, then the global variables and the variables from that section are also loaded. If a variable exists both as a global and in a section, the section variable is used. If you name two variables the same within a section, the last one will be used.

"[]""["""]"

Config files are loaded into templates with the built-in function {config_load}.

   { config load }

You can hide variables or entire sections by prepending the variable name or section name with a period. This is useful if your application reads the config files and gets sensitive data from them that the template engine does not need. If you have third parties doing template editing, you can be certain that they cannot read sensitive data from the config file by loading it into the template.
Smarty - the compiling PHP template engine
Chapter 10. Debugging Console

There is a debugging console included with Smarty. The console informs you of all the included templates, assigned variables and config file variables for the current invocation of the template. A template named "debug.tpl" is included with the distribution of Smarty which controls the formatting of the console. Set $debugging to true in Smarty, and if needed set $debug_tpl to the template resource path for debug.tpl (this is in SMARTY_DIR by default.) When you load the page, a javascript console window should pop up and give you the names of all the included templates and assigned variables for the current page. To see the available variables for a particular templates, see the {debug} template function. To disable the debugging console, set $debugging to false. You can also temporarily turn on the debugging console by putting SMARTY_DEBUG in the URL if you enable this option with $debugging_ctrl.

SMARTY debug.tpl
true $debug_tpl
SMARTY_DIR
{debug} SMARTY_DEBUG
false URL

Technical Note: The debugging console does not work when you use the fetch() API, only when using display(). It is a set of javascript statements added to the very bottom of the generated template. If you do not like javascript, you can edit the debug.tpl template to format the output however you like. Debug data is not cached and debug.tpl info is not included in the output of the debug console.

fetch() API display() javascript
display debug.tpl javascript
debug tpl

Note: The load times of each template and config file are in seconds, or fractions thereof.
Smarty - the compiling PHP template engine
III. Smarty For Programmers

Table of Contents []
11. Constants
[]
12. Variables
[]
13. Methods
[]
14. Caching
[]
15. Advanced Features
[]
16. Extending Smarty With Plugins [Smarty]

Prev     PHP     Home     Next
Debugging Console     Constants
Smarty - the compiling PHP template engine
Chapter 11. Constants

Table of Contents

SMARTY_DIR [Smarty]
SMARTY_DIR
Smarty

This should be the full system path to the location of the Smarty class files. If this is not defined, then Smarty will attempt to determine the appropriate value automatically. If defined, the path must end with a slash.

Example 11-1. SMARTY_DIR

```php
// set path to Smarty directory
define("SMARTY_DIR","/usr/local/lib/php/Smarty/");

require_once(SMARTY_DIR."Smarty.class.php");
```
Smarty - the compiling PHP template engine
Chapter 12. Variables

Table of Contents []
$template_dir []
$compile_dir []
$config_dir []
$plugins_dir []
$debugging []
$debug_tpl
$debugging_ctrl []
$global_assign []
$undefined []
$autoload_filters []
$compile_check []
$force_compile []
$caching []
$cache_dir []
$cache_lifetime []
$cache_handler_func []
$cache_modified_check []
$config_overwrite []
$config_booleanize []
$config_read_hidden []
$config_fix_newlines []
$default_template_handle r_func []
$php_handling [PHP]
$security []
$secure_dir []
$security_settings []
$trusted_dir []
$left_delimiter []
$right_delimiter []
$compiler_class []
$request_vars_order []
$request_use_auto_globals []
$compile_id [ID]
$use_sub_dirs []
$default_modifiers []
$default_resource_type []
$template_dir

This is the name of the default template directory. If you do not supply a resource type when including files, they will be found here. By default this is "./templates", meaning that it will look for the templates directory in the same directory as the executing php script.

"./templates"php

**Technical Note:** It is not recommended to put this directory under the web server document root.

---

<table>
<thead>
<tr>
<th>Prev</th>
<th>PHP</th>
<th>Home</th>
<th>Next</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constants[]</td>
<td>Up</td>
<td></td>
<td>[]$compile_dir</td>
</tr>
</tbody>
</table>
$compile_dir

This is the name of the directory where compiled templates are located. By default this is "./templates_c", meaning that it will look for the compile directory in the same directory as the executing php script. 

"./templates_c"php

**Technical Note:** This setting must be either a relative or absolute path. include_path is not used for writing files.

**Technical Note:** It is not recommended to put this directory under the web server document root.

web
$config_dir

This is the directory used to store config files used in the templates. Default is "./configs", meaning that it will look for the configs directory in the same directory as the executing php script. 

Technical Note: It is not recommended to put this directory under the web server document root.

---

Prev  PHP  Home  Next
$compile_dir[]  Up  []$plugins_dir
$plugins_dir

This is the directories where Smarty will look for the plugins that it needs. Default is "plugins" under the Smarty_DIR. If you supply a relative path, Smarty will first look under the Smarty_DIR, then relative to the cwd (current working directory), then relative to each entry in your PHP include path.

$smarty Smarty "plugins" Smarty Smarty php

**Technical Note:** For best performance, do not setup your plugins_dir to have to use the PHP include path. Use an absolute pathname, or a path relative to Smarty_DIR or the cwd.

smarty Smarty php

$config_dir[]

$smarty Smarty php

 Prev PHP Home Next
$debugging
$debugging

This enables the debugging console. The console is a javascript window that informs you of the included templates and assigned variables for the current template page.
$debug_tpl

This is the name of the template file used for the debugging console. By default, it is named debug.tpl and is located in the SMARTY_DIR. debug.tpl
Smarty
$debugging_ctrl

This allows alternate ways to enable debugging. NONE means no alternate methods are allowed. URL means when the keyword Smarty_DEBUG is found in the QUERY_STRING, debugging is enabled for that invocation of the script. If $debugging is true, this value is ignored.

NONE URL Smarty_DEBUG QUERY_STRING
$debugging
Smarty - the compiling PHP template engine
Chapter 12. Variables
This is a list of variables that are always implicitly assigned to the template engine. This is handy for making global variables or server variables available to all templates without having to manually assign them. Each element in the $global_assign should be either a name of the global variable, or a key/value pair, where the key is the name of the global array and the value is the array of variables to be assigned from that global array. $SCRIPT_NAME is globally assigned by default from $HTTP_SERVER_VARS.

/\$SCRIPT_NAME$HTTP_SERVER_VARS

**Technical Note:** Server variables can be accessed through the $smarty variable, such as {$smarty.server.SCRIPT_NAME}. See the section on the $smarty variable.

$smarty{$smarty.server.SCRIPT_NAME}$smarty

---

**Prev**  **PHP**  **Home**  **Next**  **Up**  **[]$undefined**
$undefined

This sets the value of $undefined for Smarty, default is null. Currently this is only used to set undefined variables in $global_assign to a default value.

Smarty,..
$autoload_filters

If there are some filters that you wish to load on every template invocation, you can specify them using this variable and Smarty will automatically load them for you. The variable is an associative array where keys are filter types and values are arrays of the filter names. For example:

```
$smarty->autoload_filters = array('pre' => array('trim', 'stamp'),
                                   'output' => array('convert'));
```

---

Prev  PHP  Home  Next
$undefined[]  Up  []$compile_check
Upon each invocation of the PHP application, Smarty tests to see if the current template has changed (different time stamp) since the last time it was compiled. If it has changed, it recompiles that template. If the template has not been compiled, it will compile regardless of this setting. By default this variable is set to true. Once an application is put into production (templates won't be changing), the compile_check step is no longer needed. Be sure to set $compile_check to "false" for maximal performance. Note that if you change this to "false" and a template file is changed, you will *not* see the change since the template will not get recompiled. If caching is enabled and compile_check is enabled, then the cache files will get regenerated if an involved template file or config file was updated. See $force_compile or clear_compiled_tpl.

PHP, Smarty ,,,,.true.(),,,,$compile_check"false".: "false",,",,.
This forces Smarty to (re)compile templates on every invocation. This setting overrides $compile_check. By default this is disabled. This is handy for development and debugging. It should never be used in a production environment. If caching is enabled, the cache file(s) will be regenerated every time.

Smarty().$compile_check.,.....,
$caching

This tells Smarty whether or not to cache the output of the templates. By default this is set to 0, or disabled. If your templates generate redundant redundant content, it is advisable to turn on caching. This will result in significant performance gains. You can also have multiple caches for the same template. A value of 1 or 2 enables caching. 1 tells Smarty to use the current $cache_lifetime variable to determine if the cache has expired. A value of 2 tells Smarty to use the cache_lifetime value at the time the cache was generated. This way you can set the cache_lifetime just before fetching the template to have granular control over when that particular cache expires. See also is_cached.

If $compile_check is enabled, the cached content will be regenerated if any of the templates or config files that are part of this cache are changed. If $force_compile is enabled, the cached content will always be regenerated.

Prep PHP Home Next
$force_compile[] Up []$cache_dir
$cache_dir

This is the name of the directory where template caches are stored. By default this is "./cache", meaning that it will look for the cache directory in the same directory as the executing php script. You can also use your own custom cache handler function to control cache files, which will ignore this setting.

Technical Note: This setting must be either a relative or absolute path. include_path is not used for writing files.

Technical Note: It is not recommended to put this directory under the web server document root.
$cache_lifetime

This is the length of time in seconds that a template cache is valid. Once this time has expired, the cache will be regenerated. $caching must be set to "true" for $cache_lifetime to have any purpose. A value of -1 will force the cache to never expire. A value of 0 will cause the cache to always regenerate (good for testing only, to disable caching a more efficient method is to set $caching = false.)

If $force_compile is enabled, the cache files will be regenerated every time, effectively disabling caching. You can clear all the cache files with the clear_all_cache() function, or individual cache files (or groups) with the clear_cache() function.

clear_all_cache(); clear_cache();

Technical Note: If you want to give certain templates their own cache lifetime, you could do this by setting $caching = 2, then set $cache_lifetime to a unique value just before calling display() or fetch().
display();fetch(); $caching = 2; $cache_lifetime.

$cache_dir[] $cache_handler_func
Smarty - the compiling PHP template engine

Chapter 12. Variables
You can supply a custom function to handle cache files instead of using the built-in method using the $cache_dir. See the custom cache handler function section for details.

$cache_dir: cache handler function section
If set to true, Smarty will respect the If-Modified-Since header sent from the client. If the cached file timestamp has not changed since the last visit, then a "304 Not Modified" header will be sent instead of the content. This works only on cached content without {insert} tags.
$config_overwrite

If set to true, variables read in from config files will overwrite each other. Otherwise, the variables will be pushed onto an array. This is helpful if you want to store arrays of data in config files, just list each element multiple times. true by default.
$config_booleanize

If set to true, config file values of on/true/yes and off/false/no get converted to boolean values automatically. This way you can use the values in the template like so: {if #foobar#} ... {/if}. If foobar was on, true or yes, the {if} statement will execute. true by default. on/true/yes off/false/no.,{if yes, {if}...
$config_read_hidden

If set to true, hidden sections (section names beginning with a period) in config files can be read from templates. Typically you would leave this false, that way you can store sensitive data in the config files such as database parameters and not worry about the template loading them. false by default.
$config_fix_newlines

If set to true, mac and dos newlines (\r and \n) in config files are converted to \n when they are parsed. true by default.
Smarty - the compiling PHP template engine

Chapter 12. Variables
$default_template_handler_func

This function is called when a template cannot be obtained from its resource.

.$config_fix_newlines[ ]
This tells Smarty how to handle PHP code embedded in the templates. There are four possible settings, default being SMARTY_PHP_PASSTHRU. Note that this does NOT affect php code within `{php}` tags in the template.

- SMARTY_PHP_PASSTHRU - Smarty echos tags as-is.
- SMARTY_PHP_QUOTE - Smarty quotes the tags as html entities.
- SMARTY_PHP_REMOVE - Smarty removes the tags from the templates.
- SMARTY_PHP_ALLOW - Smarty will execute the tags as PHP code.

NOTE: Embedding PHP code into templates is highly discouraged. Use custom functions or modifiers instead.

---

Prev  PHP  Home  Next

Up  []$security
$security

$security true/false, default is false. Security is good for situations when you have untrusted parties editing the templates (via ftp for example) and you want to reduce the risk of system security compromises through the template language. Turning on security enforces the following rules to the template language, unless specifically overridden with $security_settings:

- If $php_handling is set to SMARTY_PHP_ALLOW, this is implicitly changed to SMARTY_PHP_PASSTHRU
  $php_handlingSMARTY_PHP.Allow,SMARTY_PHP_PASSTHRU

- PHP functions are not allowed in IF statements, except those specified in the $security_settings
  PHP, $security_settings.

- templates can only be included from directories listed in the $secure_dir array
  $secure_dir.

- local files can only be fetched from directories listed in the $secure_dir array using {fetch}
  {fetch} $secure_dir.

- {php}{/php} tags are not allowed
  {php}{/php}.

- PHP functions are not allowed as modifiers, except those specified in the $security_settings
  PHP, $security_settings.
$secure_dir

This is an array of all local directories that are considered secure. 
{include} and {fetch} use this when security is enabled.
{include} {fetch}. 
$security_settings

These are used to override or specify the security settings when security is enabled. These are the possible settings:

- PHP_HANDLING - true/false. If set to true, the $php_handling setting is not checked for security.
  PHP_HANDLING - ..,$php_handling.

- IF_FUNCS - This is an array of the names of permitted PHP functions in IF statements.
  IF_FUNCS - ifphp.

- INCLUDE_ANY - true/false. If set to true, any template can be included from the file system, regardless of the $secure_dir list.
  INCLUDE_ANY - ..,$secure_dir.

- PHP_TAGS - true/false. If set to true, {php}{/php} tags are permitted in the templates.
  PHP_TAGS - ..,{php}{/php}.

- MODIFIER_FUNCS - This is an array of the names of permitted PHP functions used as variable modifiers.
  MODIFIER_FUNCS - php.
$trusted_dir

$trusted_dir is only for use when $security is enabled. This is an array of all directories that are considered trusted. Trusted directories are where you keep php scripts that are executed directly from the templates with `{include_php}`.

$security..php, `{include_php}`.
$left_delimiter

This is the left delimiter used by the template language. Default is "{".
"{".

<table>
<thead>
<tr>
<th>Prev</th>
<th>PHP</th>
<th>Home</th>
<th>Next</th>
</tr>
</thead>
<tbody>
<tr>
<td>$trusted_dir[]</td>
<td></td>
<td>Up</td>
<td>[]$right_delimiter</td>
</tr>
</tbody>
</table>
$right_delimiter
This is the right delimiter used by the template language. Default is "}".
,"}".
Prev PHP
$left_delimiter[]

Home
Up

Next
[]$compiler_class


$compiler_class

Specifies the name of the compiler class that Smarty will use to compile the templates. The default is 'Smarty_Compiler'. For advanced users only. Smarty::'Smarty_Compiler'.
$request_vars_order

The order in which request variables are registered, similar to variables_order in php.ini.
$request_use_autoGlobals

Specifies if Smarty should use php's $HTTP_*_VARS[] ($request_use_auto_globals=false which is the default value) or $_*[] ($request_use_auto_globals=true). This affects templates that make use of {$smarty.request.*}, {$smarty.get.*} etc. Caution: If you set $request_use_auto_globals to true, variable.request.vars.order has no effect but php's configuration value gpc_order is used.

Smartyphp$HTTP_*_VARS[]($request_use_auto_globals=false)$_*[] ($request_use_auto_globals=true).{$smarty.request.*}, variable.request.vars.order gpc_order.

------------------------------------------------------------------------
Prev   PHP               Home               Next
$request_vars_order[   Up                  [id]$compile_id
]
$compile_id

id

Persistant compile identifier. As an alternative to passing the same compile_id to each and every function call, you can set this compile_id and it will be used implicitly thereafter.

$id$id.
$use_sub_dirs

Set this to false if your PHP environment does not allow the creation of sub directories by Smarty. Sub directories are more efficient, so use them if you can.
$default_modifiers

This is an array of modifiers to implicitly apply to every variable in a template. For example, to HTML-escape every variable by default, use array('escape:"htmlall"'); To make a variable exempt from default modifiers, pass the special "smarty" modifier with a parameter value of "nodefaults" modifier to it, such as {$var|smarty:nodefaults}.

{$var|smarty:nodefaults}.
$default_resource_type

This tells smarty what resource type to use implicitly. The default value is 'file', meaning that $smarty->display('index.tpl'); and $smarty->display('file:index.tpl'); are identical in meaning. See the resource chapter for details.

Table of Contents
append
append_by_ref
assign
assign_by_ref
clear_all_assign
clear_all_cache
clear_assign
clear_cache
clear_compiled_tpl
clear_config
clear_load
display
fetch
get_config_vars
get_registered_object
get_template_vars
is_cached
load_filter
register_block
register_compiler_function
register_function
register_modifier
register_object
register_outputfilter
register_postfilter
register_prefilter
register_resource
trigger_error
template_exists
unregister_block
unregister_compiler_function
unregister_function
unregister_modifier
unregister_object
append

void append (mixed var)
void append (string varname, mixed var)
void append (string varname, mixed var, boolean merge)

This is used to append an element to an assigned array. If you append to a string value, it is converted to an array value and then appended to. You can explicitly pass name/value pairs, or associative arrays containing the name/value pairs. If you pass the optional third parameter of true, the value will be merged with the current array instead of appended.

, “=>” TRUE

Technical Note: The merge parameter respects array keys, so if you merge two numerically indexed arrays, they may overwrite each other or result in non-sequential keys. This is unlike the array_merge() function of PHP which wipes out numerical keys and renumbers them.

“merge” PHParray_merge()

Example 13-1. append  13-1.

// passing name/value pairs
$smarty->append("Name","Fred");
$smarty->append("Address","$address");

// passing an associative array
$smarty->append(array("city" => "Lincoln","state" => "");
append_by_ref

```
void append_by_ref (string varname, mixed var)
void append_by_ref (string varname, mixed var, boolean merge)
```

This is used to append values to the templates by reference. If you append a variable by reference then change its value, the appended value sees the change as well. For objects, append_by_ref() also avoids an in-memory copy of the appended object. See the PHP manual on variable referencing for an in-depth explanation. If you pass the optional third parameter of true, the value will be merged with the current array instead of appended.

`append_by_ref()` PHP true

**Technical Note:** The merge parameter respects array keys, so if you merge two numerically indexed arrays, they may overwrite each other or result in non-sequential keys. This is unlike the `array_merge()` function of PHP which wipes out numerical keys and renumbers them.

```
"merge" PHP array_merge()
```

**Example 13-2. append_by_ref**

13-2.

```
// appending name/value pairs
$smarty->append_by_ref("Name", $myname);
$smarty->append_by_ref("Address", $address);
```

---

**Prev**  **PHP**  **Home**  **Next**

Methods  **Up**  assign
**assign**

```php
void assign (mixed var)
void assign (string varname, mixed var)
```

This is used to assign values to the templates. You can explicitly pass name/value pairs, or associative arrays containing the name/value pairs.

```php
// passing name/value pairs /
$smarty->assign("Name","Fred");
$smarty->assign("Address",$address);

// passing an associative array
$smarty->assign(array("city" => "Lincoln","state" => "
```
assign_by_ref

void assign_by_ref (string varname, mixed var)

This is used to assign values to the templates by reference instead of making a copy. See the PHP manual on variable referencing for an explanation.

PHP

**Technical Note:** This is used to assign values to the templates by reference. If you assign a variable by reference then change its value, the assigned value sees the change as well. For objects, assign_by_ref() also avoids an in-memory copy of the assigned object. See the PHP manual on variable referencing for an in-depth explanation.

assign_by_ref() PHP

Example 13-4. assign_by_ref

```
// passing name/value pairs
$smarty->assign_by_ref("Name", $myname);
$smarty->assign_by_ref("Address", $address);
```
clear_all_assign

```php
void clear_all_assign()

This clears the values of all assigned variables.
```

Example 13-5. clear_all_assign

```php
// clear all assigned variables
$smarty->clear_all_assign();
```
clear_all_cache

void clear_all_cache (int expire time)

This clears the entire template cache. As an optional parameter, you can supply a minimum age in seconds the cache files must be before they will get cleared.

“expire time”

Example 13-6. clear_all_cache

13-6.

// clear the entire cache
$smarty->clear_all_cache();
void clear_assign (string var)

This clears the value of an assigned variable. This can be a single value, or an array of values.

Example 13-7. clear_assign
13-7.

// clear a single variable
$smarty->clear_assign("Name");

// clear multiple variables
$smarty->clear_assign(array("Name","Address","Zip"));
void clear_cache (string template [, string cache id [, string compile id [, int expire time]]]])

This clears the cache for a specific template. If you have multiple caches for this template, you can clear a specific cache by supplying the cache id as the second parameter. You can also pass a compile id as a third parameter. You can "group" templates together so they can be removed as a group. See the caching section for more information. As an optional fourth parameter, you can supply a minimum age in seconds the cache file must be before it will get cleared.

Example 13-8. clear_cache

```php
// clear the cache for a template
//
$smarty->clear_cache("index.tpl");

// clear the cache for a particular cache id in an mul
//
$smarty->clear_cache("index.tpl","CACHEID");
```
void clear_compiled_tpl (string tpl_file)

This clears the compiled version of the specified template resource, or all compiled template files if one is not specified. This function is for advanced use only, not normally needed.

Fwolf:templates_c

Example 13-9. clear_compiled_tpl

```
// clear a specific template resource
//
$smarty->clear_compiled_tpl("index.tpl");

// clear entire compile directory
//
$smarty->clear_compiled_tpl();
```
void clear_config ([string var])

This clears all assigned config variables. If a variable name is supplied, only that variable is cleared.

Example 13-10. clear_config

```php
// clear all assigned config variables.
//
$smarty->clear_config();

// clear one variable
//
$smarty->clear_config('foobar');
```
**config_load**

```c
void config_load (string file [, string section])
```

This loads config file data and assigns it to the template. This works identical to the template `config_load` function.

**Technical Note:** As of Smarty 2.4.0, assigned template variables are kept across invocations of `fetch()` and `display()`. Config vars loaded from `config_load()` are always global scope. Config files are also compiled for faster execution, and respect the `force_compile` and `compile_check` settings.

```none
Smarty 2.4.0 fetch() display() config_load() force_compile compile_check
```

**Example 13-11. config_load**

```php
// load config variables and assign them
//
$smarty->config_load('my.conf');

// load a section
//
$smarty->config_load('my.conf','foobar');
```
void display (string template [, string cache_id [, string compile_id]])

This displays the template. Supply a valid template resource type and path. As an optional second parameter, you can pass a cache id. See the caching section for more information.

As an optional third parameter, you can pass a compile id. This is in the event that you want to compile different versions of the same template, such as having separate templates compiled for different languages. Another use for compile_id is when you use more than one $template_dir but only one $compile_dir. Set a separate compile_id for each $template_dir, otherwise templates of the same name will overwrite each other. You can also set the $compile_id variable once instead of passing this to each call to display().

```
$template_dir$compile_dir$template_dir
display()                           $compile_id
```

Example 13-12. display
13-12.

```
include("Smarty.class.php");
$smarty = new Smarty;
$smarty->caching = true;

// only do db calls if cache doesn't exist
//
if(!$smarty->is_cached("index.tpl"))
{

  // dummy up some data
```
$address = "245 N 50th";
$db_data = array(
    "City" => "Lincoln",
    "State" => "Nebraska",
    "Zip" => "68502"
);

$smarty->assign("Name","Fred");
$smarty->assign("Address",$address);
$smarty->assign($db_data);

}

// display the output
//
$smarty->display("index.tpl");

Use the syntax for template resources to display files outside of the $template_dir directory.

$template_dir

Example 13-13. function display template resource examples

// absolute filepath
//
$smarty->display("/usr/local/include/templates/header.tpl");

// absolute filepath (same thing)
//
$smarty->display("file:/usr/local/include/templates/header.tpl");
// windows absolute filepath (MUST use "file:" prefix)
// WINDOS“file:"
$smarty->display("file:C:/www/pub/templates/header.tpl");

// include from template resource named "db"
// “db"
$smarty->display("db:header.tpl");
string fetch (string template [, string cache_id [, string compile_id]])

This returns the template output instead of displaying it. Supply a valid template resource type and path. As an optional second parameter, you can pass a cache id. See the caching section for more information.

As an optional third parameter, you can pass a compile id. This is in the event that you want to compile different versions of the same template, such as having separate templates compiled for different languages. Another use for compile_id is when you use more than one $template_dir but only one $compile_dir. Set a separate compile_id for each $template_dir, otherwise templates of the same name will overwrite each other. You can also set the $compile_id variable once instead of passing this to each call to fetch().

Example 13-14. fetch

```php
include("Smarty.class.php");
$smarty = new Smarty;
$smarty->caching = true;

// only do db calls if cache doesn't exist
// if(!$smarty->is_cached("index.tpl"))
{
// dummy up some data
$address = "245 N 50th";
$db_data = array(
    "City" => "Lincoln",
    "State" => "Nebraska",
    "Zip" => "68502"
);

$smarty->assign("Name","Fred");
$smarty->assign("Address",$address);
$smarty->assign($db_data);

// capture the output
//
$output = $smarty->fetch("index.tpl");

// do something with $output here
//

echo $output;
get_config_vars

array get_config_vars ([string varname])

This returns the given loaded config variable value. If no parameter is given, an array of all loaded config variables is returned.

Example 13-15. get_config_vars

```php
// get loaded config template var 'foo'  
// "foo"
$foo = $smarty->get_config_vars('foo');

// get all loaded config template vars
//
$config_vars = $smarty->get_config_vars();

// take a look at them
//
print_r($config_vars);
```
**get_registered_object**

array get_registered_object (string object_name)

This returns a reference to a registered object. This is useful from within a custom function when you need direct access to a registered object.

Example 13-16. get_registered_object

```
function smarty_block_foo($params, &$_smarty) {
    if (isset($params['object'])) {
        // get reference to registered object
        // /
        $obj_ref =& $_smarty-&get_registered_object($params['object']);
        // use $obj_ref is now a reference to
        // $obj_ref
    }
}
```

---

Prev  PHP  Home  Next
get_config_vars  Up  get_template_vars
**get_template_vars**

array get_template_vars ([string varname])

This returns the given assigned variable value. If no parameter is given, an array of all assigned variables is returned.

Example 13-17. get_template_vars

```php
// get assigned template var 'foo'
$foo = $smarty->get_template_vars('foo');

// get all assigned template vars
$tpl_vars = $smarty->get_template_vars();

// take a look at them
print_r($tpl_vars);
```
**is_cached**

```c
void is_cached (string template, [string cache_id])
```

This returns true if there is a valid cache for this template. This only works if `caching` is set to true.

**Example 13-18. is_cached**

```c
$smarty->caching = true;

if(!$smarty->is_cached("index.tpl")) {
    // do database calls, assign vars here
    //
}

$smarty->display("index.tpl");
```

You can also pass a cache id as an an optional second parameter in case you want multiple caches for the given template.

**Example 13-19. is_cached with multiple-cache template**

```c
$smarty->caching = true;

if(!$smarty->is_cached("index.tpl","FrontPage")) {
    // do database calls, assign vars here
```
$smarty->display("index.tpl","FrontPage");
void load_filter (string type, string name)

This function can be used to load a filter plugin. The first argument specifies the type of the filter to load and can be one of the following: 'pre', 'post', or 'output'. The second argument specifies the name of the filter plugin, for example, 'trim'.

“pre”“post”“output” “trim”

Example 13-20. loading filter plugins

```php
$smarty->load_filter('pre', 'trim'); // load prefilter
$smarty->load_filter('pre', 'datefooter'); // load another prefilter
$smarty->load_filter('output', 'compress'); // load output filter
```
**register_block**

```php
void register_block (string name, mixed impl, bool cacheable, array or null cache_attrs)
```

Use this to dynamically register block functions plugins. Pass in the block function name, followed by the PHP function callback that implements it.

```php
/* PHP */
$smarty->register_block("translate", "do_translation")
```

The php-function callback *impl* can be either (a) a string containing the function name or (b) an array of the form `array(&$object, $method)` with `&$object` being a reference to an object and `$method` being a string containing the method-name or (c) an array of the form `array(&$class, $method)` with `$class` being a classname and `$method` being a class method of that class.

`$cacheable` and `$cache_attrs` can be omitted in most cases. See [Controlling Cacheability of Plugins' Output](#) on how to use them properly.

```
$cacheable $cache_attrs
```

### Example 13-21. register_block

```php
function do_translation ($params, $content, &$smarty, 
if (isset($content)) {
$lang = $params['lang'];
// do some translation with $content
return $translation;
```
Hello, world!
register_compiler_function

void register_compiler_function (string name, mixed impl, bool cacheable)

Use this to dynamically register a compiler function plugin. Pass in the compiler function name, followed by the PHP function that implements it.

The php-function callback impl can be either (a) a string containing the function name or (b) an array of the form array(&$object, $method) with &object being a reference to an object and $method being a string containing the method-name or (c) an array of the form array(&$class, $method) with $class being a classname and $method being a class method of that class.

array(&$object, $method)&$object$methodarray(&$class, $method)$class$method

$cacheable can be omitted in most cases. See Controlling Cacheability of Plugins' Output on how to it properly.

$cacheable .
**register_function**

```c
void register_function (string name, mixed impl, bool cacheable, array or null cache_attrs)
```

Use this to dynamically register template function plugins. Pass in the template function name, followed by the PHP function name that implements it.

The php-function callback `impl` can be either (a) a string containing the function name or (b) an array of the form `array(&$object, $method)` with `$object` being a reference to an object and `$method` being a string containing the method-name or (c) an array of the form `array(&$class, $method)` with `$class` being a classname and `$method` being a class method of that class.

`$cacheable` and `$cache_attrs` can be omitted in most cases. See [Controlling Cacheability of Plugins' Output](#) on how to use them properly.

$cacheable  $cache_attrs  

**Example 13-22. register_function**

```c
$ smarty -> register_function ( "date_now", "print_current_date" )

function print_current_date ($params) {
    extract($params);
    if (empty($format))
        $format="%b %e, %Y";
    return strftime($format,time());
}
```
// now you can use this in Smarty to print the current date:
// or, {date_now format="%Y/%m/%d"} to format it.

// {date_now}
// {date_now format="%Y/%m/%d"}
void register_modifier (string name, mixed impl)

Use this to dynamically register modifier plugin. Pass in the template modifier name, followed by the PHP function that it implements it.

The php-function callback `impl` can be either (a) a string containing the function name or (b) an array of the form array(&$object, $method) with &$object being a reference to an object and $method being a string containing the method-name or (c) an array of the form array(&$class, $method) with $class being a classname and $method being a class method of that class.

Example 13-23. register_modifier

```php
// let's map PHP's stripslashes function to a Smarty modifier
// PHPstripslashesSmarty

$smarty->register_modifier("sslash","stripslashes");

// now you can use {$var|sslash} to strip slashes from
// {$var|sslash}
```
register_object

```php
void register_object (string object_name, object $object, array allowed methods/properties, boolean format, array block methods)
```

This is to register an object for use in the templates. See the object section of the manual for examples.
void register_outputfilter (mixed function)

Use this to dynamically register outputfilters to operate on a template's output before it is displayed. See template output filters for more information on how to set up an output filter function.

The php-function callback function can be either (a) a string containing the function name or (b) an array of the form array(&$object, $method) with &$object being a reference to an object and $method being a string containing the method-name or (c) an array of the form array(&$class, $method) with $class being a classname and $method being a class method of that class.

array(&$object, $method)&$object$methodarray(&$	class,$method)$class$method
Smarty - the compiling PHP template engine

Chapter

13.

Methods
void register_postfilter (mixed function)

Use this to dynamically register postfilters to run templates through after they are compiled. See template postfilters for more information on how to setup a postfiltering function.

The php-function callback \textit{function} can be either (a) a string containing the function name or (b) an array of the form \texttt{array(&$object, $method)} with \texttt{(&$object}} being a reference to an object and \texttt{$method}} being a string containing the method-name or (c) an array of the form \texttt{array(&$class, $method)} with \texttt{$class}} being a classname and \texttt{$method}} being a class method of that class.

\texttt{array(&$object, $method)}&$object$methodarray(&$	class, $method)$class$method
**register_prefilter**

```c
void register_prefilter (mixed function)
```

Use this to dynamically register prefilters to run templates through before they are compiled. See [template prefilters](#) for more information on how to setup a prefiltering function.

The php-function callback `function` can be either (a) a string containing the function name or (b) an array of the form `array(&$object, $method)` with `&$object` being a reference to an object and `$method` being a string containing the method-name or (c) an array of the form `array(&$class, $method)` with `$class` being a classname and `$method` being a class method of that class.

```c
array(&$object, $method) &$object $method array(&$class, $method) $class $method
```
**register_resource**

```cpp
void register_resource (string name, array resource_funcs)
```

Use this to dynamically register a resource plugin with Smarty. Pass in the name of the resource and the array of PHP functions implementing it. See [template resources](#) for more information on how to setup a function for fetching templates.

**Technical Note:** A resource name must be at least two characters in length. One character resource names will be ignored and used as part of the file path, such as `$smarty->display('c:/path/to/index.tpl');

```php
$smarty->display('c:/path/to/index.tpl');
```

The php-function-array `resource_funcs` must have 4 or 5 elements. With 4 elements the elements are the functions-callbacks for the respective "source", "timestamp", "secure" and "trusted" functions of the resource. With 5 elements the first element has to be an object reference or a class name of the object or class implementing the resource and the 4 following elements have to be the method names implementing "source", "timestamp", "secure" and "trusted".

```plaintext
454"source ""timestamp ""secure ""trusted 
54"source ""timestamp ""secure ""trusted
```

**Example 13-24. register_resource**

```php
$smarty->register_resource("db", array("db_get_template", "db_get_timestamp", "db_get_secure", "db_get_trusted"));
```
void trigger_error (string error_msg, [int level])

This function can be used to output an error message using Smarty. The $level$ parameter can be one of the values used for trigger_error() PHP function, i.e. E_USER_NOTICE, E_USER_WARNING, etc. By default it's E_USER_WARNING.

Smarty level PHP trigger_error() E_USER_NOTICE, E_USER_WARNING
template_exists

bool template_exists (string template)

This function checks whether the specified template exists. It can accept either a path to the template on the filesystem or a resource string specifying the template.
void unregister_block (string name)

Use this to dynamically unregister block function plugin. Pass in the block function name.
void unregister_compiler_function (string name)

Use this to dynamically unregister a compiler function. Pass in the name of the compiler function.

name
**unregister_function**

```cpp
void unregister_function (string name)
```

Use this to dynamically unregister template function plugin. Pass in the template function name.

Example 13-25. `unregister_function`

```cpp
// we don't want template designers to have access to

$smarty->unregister_function("fetch");
```
void unregister_modifier (string name)

Use this to dynamically unregister modifier plugin. Pass in the template modifier name.

Example 13-26. unregister_modifier
13-26.

// we don't want template designers to strip tags from
//
$smarty->unregister_modifier("strip_tags");
**unregister_object**

```c
void unregister_object (string object_name)
```

Use this to unregister an object.
**unregister_outputfilter**

```cpp
void unregister_outputfilter (string function_name)

Use this to dynamically unregister an output filter.
```
unregister_postfilter

void unregister_postfilter (string function_name)

Use this to dynamically unregister a postfilter.
unregister_prefilter

void unregister_prefilter (string function_name)

Use this to dynamically unregister a prefilter.
### unregister_resource

```php
void unregister_resource (string name)
```

Use this to dynamically unregister a resource plugin. Pass in the name of the resource.

#### Example 13-27. unregister_resource

```php
$smarty->unregister_resource("db");
```
Smarty - the compiling PHP template engine
Chapter 14. Caching []

Table of Contents []
Setting Up Caching []
Multiple Caches Per Page []
Cache Groups []
Controlling Cacheability of Plugins' Output []

Caching is used to speed up a call to display() or fetch() by saving its output to a file. If a cached version of the call is available, that is displayed instead of regenerating the output. Caching can speed things up tremendously, especially templates with longer computation times. Since the output of display() or fetch() is cached, one cache file could conceivably be made up of several template files, config files, etc.

display()fetch()display()fetch()

display()fetch()display()fetch()

display()fetch()display()fetch()

display()fetch()display()fetch()

display()fetch()display()fetch()

Since templates are dynamic, it is important to be careful what you are caching and for how long. For instance, if you are displaying the front page of your website that does not change its content very often, it might work well to cache this page for an hour or more. On the other hand, if you are displaying a page with a weather map containing new information by the minute, it would not make sense to cache this page.
Setting Up Caching []

The first thing to do is enable caching. This is done by setting $caching = true (or 1.)
$caching = true( 1.)

Example 14-1. enabling caching
14-1.

```php
require('Smarty.class.php');
$smarty = new Smarty;
$smarty->caching = true;
$smarty->display('index.tpl');
```

With caching enabled, the function call to display('index.tpl') will render the template as usual, but also saves a copy of its output to a file (a cached copy) in the $cache_dir. Upon the next call to display('index.tpl'), the cached copy will be used instead of rendering the template again.

display('index.tpl') copyn.$cache_dir.display('index.tpl')

copyn.

**Technical Note:** The files in the $cache_dir are named similar to the template name. Although they end in the "php" extention, they are not really executable php scripts. Do not edit these files!
$chche_dir.php

Each cached page has a limited lifetime determined by $cache_lifetime. The default value is 3600 seconds, or 1 hour. After that time expires, the cache is regenerated. It is possible to give individual caches their own expiration time by setting $caching = 2. See the documentation on $cache_lifetime for details.
$cache_lifetime 3600$cache=2

Example 14-2. setting cache_lifetime per cache
require('Smarty.class.php');
$smarty = new Smarty;

$smarty->caching = 2; // lifetime is per cache

// set the cache_lifetime for index.tpl to 5 minutes
$smarty->cache_lifetime = 300;
$smarty->display('index.tpl');

// set the cache_lifetime for home.tpl to 1 hour
$smarty->cache_lifetime = 3600;
$smarty->display('home.tpl');

// NOTE: the following $cache_lifetime setting will not work when $caching = 2
// The cache lifetime for home.tpl has already been set to 1 hour, and will no longer respect the value of $cache_lifetime
// The home.tpl cache will still expire after 1 hour.
// home.tpl1$smarty->cache_lifetime = 30; // 30 seconds
$smarty->display('home.tpl');

If $compile_check is enabled, every template file and config file that is involved with the cache file is checked for modification. If any of the files have been modified since the cache was generated, the cache is immediately regenerated. This is a slight overhead so for optimum performance, leave $compile_check set to false.

$compile_check = false;

Example 14-3. enabling $compile_check

require('Smarty.class.php');
$smarty = new Smarty;
If `$force_compile` is enabled, the cache files will always be regenerated. This effectively turns off caching. `$force_compile` is usually for debugging purposes only, a more efficient way of disabling caching is to set `$caching = false (or 0.)`

```php
$smarty->caching = true;
$smarty->compile_check = true;
$smarty->display('index.tpl');
```

The `is_cached()` function can be used to test if a template has a valid cache or not. If you have a cached template that requires something like a database fetch, you can use this to skip that process.

```php
if(!$smarty->is_cached('index.tpl')) {
    // No cache available, do variable assignments
    $contents = get_database_contents();
    $smarty->assign($contents);
}
```

You can keep parts of a page dynamic with the `insert` template function. Let's say the whole page can be cached except for a banner that is displayed down the right side of the page. By using an insert function for the banner, you can keep this element dynamic within the cached content. See the documentation on `insert` for details and examples.
You can clear all the cache files with the `clear_all_cache()` function, or individual cache files (or groups) with the `clear_cache()` function.

Example 14-5. clearing the cache

```php
require('Smarty.class.php');
$smarty = new Smarty;

$smarty->caching = true;

// clear out all cache files
$smarty->clear_all_cache();

// clear only cache for index.tpl
$smarty->clear_cache('index.tpl');

$smarty->display('index.tpl');
```
Multiple Caches Per Page

You can have multiple cache files for a single call to display() or fetch(). Let's say that a call to display('index.tpl') may have several different output contents depending on some condition, and you want separate caches for each one. You can do this by passing a cache_id as the second parameter to the function call.

```
display() fetch() display('index.tpl') cache_id
```

**Example 14-6. passing a cache_id to display()**

```
14-6.display() cache_id
```

```php
require('Smarty.class.php');
$smarty = new Smarty;

$smarty->caching = true;

$my_cache_id = $_GET['article_id'];

$smarty->display('index.tpl', $my_cache_id);
```

Above, we are passing the variable $my_cache_id to display() as the cache_id. For each unique value of $my_cache_id, a separate cache will be generated for index.tpl. In this example, "article_id" was passed in the URL and is used as the cache_id.

```
$my_cache_id cache_id display() index.tpl $my_cache_id "article_id" URL cache_id
```

**Technical Note:** Be very cautious when passing values from a client (web browser) into Smarty (or any PHP application.) Although the above example of using the article_id from the URL looks handy, it could have bad consequences. The cache_id is used to create a directory on the file system, so if the user decided to pass an extremely large value for article_id, or write a script that sends random article_ids at a rapid pace, this could possibly cause problems at the server level. Be sure to sanitize any data passed in before using it. In this instance, maybe you know the article_id has a
length of 10 characters and is made up of alpha-numeric only, and must be a valid article_id in the database. Check for this!
(web)Smarty(PHP)article_idURL[]cache_id
article_idarticle_id_idsarticle_id()10-
article_idCheck  for this!!

Be sure to pass the same cache_id as the second parameter to is_cached() and clear_cache().

Example 14-7. passing a cache_id to is_cached()

14-7.is_cached(cache_id)

```
require('Smarty.class.php');
$smarty = new Smarty;

$smarty->caching = true;

$my_cache_id = $_GET['article_id'];

if(!$smarty->is_cached('index.tpl',$my_cache_id)) {
    // No cache available, do variable assignments
    $contents = get_database_contents();
    $smarty->assign($contents);
}

$smarty->display('index.tpl',$my_cache_id);
```

You can clear all caches for a particular cache_id by passing null as the first parameter to clear_cache().

Example 14-8. clearing all caches for a particular cache_id

14-8.cache_id

```
require('Smarty.class.php');
$smarty = new Smarty;
```
$smarty->caching = true;

// clear all caches with "sports" as the cache_id
$smarty->clear_cache(null,"sports");

$smarty->display('index.tpl','sports');

In this manner, you can "group" your caches together by giving them the same cache_id.
Cache Groups

You can do more elaborate grouping by setting up cache_id groups. This is accomplished by separating each sub-group with a vertical bar "|" in the cache_id value. You can have as many sub-groups as you like.

cache_id|cache_id|

Example 14-9. cache_id groups

14-9.cache_id

```php
require('Smarty.class.php');
$smarty = new Smarty;
$smarty->caching = true;

// clear all caches with "sports|basketball" as the first cache_id group
$smarty->clear_cache(null,"sports|basketball");

// clear all caches with "sports" as the first cache_id group. This would include "sports|basketball", or "sports|(anything)|(anything)|(anything)|..."
$smarty->clear_cache(null,"sports");

$smarty->display('index.tpl','sports|basketball');
```

**Technical Note:** The cache grouping does NOT use the path to the template as any part of the cache_id. For example, if you have `display('themes/blue/index.tpl')`, you cannot clear the cache for everything under the "themes/blue" directory. If you want to do that, you must group them in the cache_id, such as `display('themes/blue/index.tpl','themes|blue');` Then you can clear the caches for the blue theme with `clear_cache(null,'themes|blue');`
<table>
<thead>
<tr>
<th>Multiple Caches Per Page</th>
<th>Controlling Cacheability of Plugins' Output</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Up</td>
</tr>
</tbody>
</table>
Controlling Cacheability of Plugins' Output

Since Smarty-2.6.0 plugins the cacheability of plugins can be declared when registering them. The third parameter to register_block, register_compiler_function and register_function is called $cacheable and defaults to true which is also the behaviour of plugins in Smarty versions before 2.6.0

Smarty-2.6.0 register_block register_compiler_function register_function 3$ $cacheable , true 2.6.0

When registering a plugin with $cacheable=false the plugin is called everytime the page is displayed, even if the page comes from the cache. The plugin function behaves a little like an insert function.

$cachable=false insert

In contrast to {insert} the attributes to the plugins are not cached by default. They can be declared to be cached with the fourth parameter $cache_attrs. $cache_attrs is an array of attribute-names that should be cached, so the plugin-function get value as it was the time the page was written to cache everytime it is fetched from the cache.

{insert} $cache_attrs $cache_attrs ------

Example 14-10. Preventing a plugin's output from being cached

14-10.

index.php:

require('Smarty.class.php');
$smarty = new Smarty;
$smarty->caching = true;

function remaining_seconds($params, & $smarty) {
    $remain = $params['endtime'] - time();
    if ($remain >=0)
return $remain . " second(s)";
else
return "done";
}
$smarty->register_function('remaining', 'remaining_seconds', false, array('endtime'));
if (!$smarty->is_cached('index.tpl')) {
    // fetch $obj from db and assign...
    $smarty->assign_by_ref('obj', $obj);
}
$smarty->display('index.tpl');

index.tpl:

Time Remaining: {remain endtime=$obj->endtime}

The number of seconds till the endtime of $obj is reached changes on each cached. Since the endtime attribute is cached the object only has to be pulled written to the cache but not on subsequent requests of the page.

$obj

Example 14-11. Preventing a whole passage of a template from being cached.

index.php:

require('Smarty.class.php');
$smarty = new Smarty;
$smarty->caching = true;

function smarty_block_dynamic($param, $content, &$smarty)
    return $content;
$smarty->register_block('dynamic', 'smarty_block_dynamic', false);
$smarty->display('index.tpl');

index.tpl:
Page created: "0"|date_format:"%D %H:%M:%S"
{dynamic}
Now is: "0"|date_format:"%D %H:%M:%S"
... do other stuff ...
{/dynamic}

When reloading the page you will notice that both dates differ. One is "dynamic" one is "static". You can do everything between {dynamic}...{/dynamic} and be sure it will not be cached like the rest of the page.

"""{dynamic}...{/dynamic}"""
Smarty - the compiling PHP template engine
Chapter 15. Advanced Features

Table of Contents

Objects
Prefilters
Postfilters
Output Filters
Cache Handler Function
Resources
**Objects**

Smarty allows access to PHP objects through the templates. There are two ways to access them. One way is to register objects to the template, then use access them via syntax similar to custom functions. The other way is to assign objects to the templates and access them much like any other assigned variable. The first method has a much nicer template syntax. It is also more secure, as a registered object can be restricted to certain methods or properties. However, a registered object cannot be looped over or assigned in arrays of objects, etc. The method you choose will be determined by your needs, but use the first method whenever possible to keep template syntax to a minimum.

SMARTYPHP,

If security is enabled, no private methods or functions can be accessed (beginning with "_"). If a method and property of the same name exist, the method will be used.

"_"

You can restrict the methods and properties that can be accessed by listing them in an array as the third registration parameter.

By default, parameters passed to objects through the templates are passed the same way custom functions get them. An associative array is passed as the first parameter, and the smarty object as the second. If you want the parameters passed one at a time for each argument like traditional object parameter passing, set the fourth registration parameter to false.

SMARTY

**Example 15-1. using a registered or assigned object**

```php
<?php
```
// the object

class My_Object() {
    function meth1($params, &$smarty_obj) {
        return "this is my meth1";
    }
}

$myobj = new My_Object;
// registering the object (will be by reference)
$smarty->register_object("foobar", $myobj);
// if we want to restrict access to certain methods or
$smarty->register_object("foobar", $myobj, array(\'meth1\',
// if you want to use the traditional object parameter
$smarty->register_object("foobar", $myobj, null, false);

// We can also assign objects. Assign by ref when possible
$smarty->assign_by_ref("myobj", $myobj);

$smarty->display("index.tpl");
?>

TEMPLATE:

{* access our registered object *}
{fooar->meth1 p1="foo" p2=$bar}

{* you can also assign the output *}
{fooar->meth1 p1="foo" p2=$bar assign="output"}
the output was {$output}

{* access our assigned object *}
{$myobj->meth1("foo", $bar)}
Prefilters

Template prefilters are PHP functions that your templates are ran through before they are compiled. This is good for preprocessing your templates to remove unwanted comments, keeping an eye on what people are putting in their templates, etc. Prefilters can be either registered or loaded from the plugins directory by using load_filter() function or by setting $autoload_filters variable. Smarty will pass the template source code as the first argument, and expect the function to return the resulting template source code.

Example 15-2. Using a template prefilter

```php
<?php
// put this in your application
function remove_dw_comments($tpl_source, &$smarty) {
    return preg_replace("/<!--#.*-->/U","",$tpl_source);
}

// register the prefilter
$smarty->register_prefilter("remove_dw_comments");
$smarty->display("index.tpl");
?>

{* Smarty template index.tpl *}
<!--# this line will get removed by the prefilter -->
```
Postfilters

Template postfilters are PHP functions that your templates are run through after they are compiled. Postfilters can be either registered or loaded from the plugins directory by using `load_filter()` function or by setting `$autoload_filters` variable. Smarty will pass the compiled template code as the first argument, and expect the function to return the result of the processing.

```php
<?php
// put this in your application
function add_header_comment($tpl_source, &$smarty) {
    return '<?php echo "<!-- Created by Smarty! -->\n" ?>' . $tpl_source;
}

// register the postfilter
$smarty->register_postfilter("add_header_comment");
$smarty->display("index.tpl");
?>

{* compiled Smarty template index.tpl *}
<!-- Created by Smarty! -->
{* rest of template content... *}
```
Output Filters

When the template is invoked via display() or fetch(), its output can be sent through one or more output filters. This differs from postfilters because postfilters operate on compiled templates before they are saved to the disk, and output filters operate on the template output when it is executed.

display() fetch()

Output filters can be either registered or loaded from the plugins directory by using load_filter() function or by setting $autoload_filters variable. Smarty will pass the template output as the first argument, and expect the function to return the result of the processing.

load_filter() $autoload_filters SMARTY

Example 15-4. using a template outputfilter

```php
<?php
// put this in your application
function protect_email($tpl_output, &$smarty) {
    $tpl_output = preg_replace('!(\S+)@([a-zA-Z0-9.\-]+\.[a-zA-Z]{2,3})*$1%40$2!', $tpl_output);
    return $tpl_output;
}

// register the outputfilter
$smarty->register_outputfilter("protect_email");
$smarty->display("index.tpl");

// now any occurrence of an email address in the template output will have a simple protection against spambots
?>
```
Cache Handler Function

As an alternative to using the default file-based caching mechanism, you can specify a custom cache handling function that will be used to read, write and clear cached files.

Create a function in your application that Smarty will use as a cache handler. Set the name of it in the $cache_handler_func class variable. Smarty will now use this to handle cached data. The first argument is the action, which will be one of 'read', 'write' and 'clear'. The second parameter is the Smarty object. The third parameter is the cached content. Upon a write, Smarty passes the cached content in these parameters. Upon a 'read', Smarty expects your function to accept this parameter by reference and populate it with the cached data. Upon a 'clear', pass a dummy variable here since it is not used. The fourth parameter is the name of the template file (needed for read/write), the fifth parameter is the cache_id (optional), and the sixth is the compile_id (optional).

```
Smarty $cache_handler_func Smarty
Smarty Smarty Smarty
```

Note: The last parameter ($exp_time) was added in Smarty-2.6.0.

```
$exp_time) Smarty-2.6.0
```

Example 15-5. example using MySQL as a cache source

```
<?php
/

example usage:

include('Smarty.class.php');
```
include('mysql_cache_handler.php');

$smarty = new Smarty;
$smarty->cache_handler_func = 'mysql_cache_handler';
$smarty->display('index.tpl');

mysql database is expected in this format:

create database SMARTY_CACHE;

create table CACHE_PAGES(
    CacheID    char(32) PRIMARY KEY,
    CacheContents MEDIUMTEXT NOT NULL
);

*/

function mysql_cache_handler($action, & &$smarty_obj, & $cache_content, $tpl_file=null, $cache_id=null, $compile_id=null, $exp_time=null) {
    // set db host, user and pass here
    $db_host = 'localhost';
    $db_user = 'myuser';
    $db_pass = 'mypass';
    $db_name = 'SMARTY_CACHE';
    $use_gzip = false;

    // create unique cache id
    $CacheID = md5($tpl_file.$cache_id.$compile_id);  

    if(! $link = mysql_pconnect($db_host, $db_user, $db_pass)) {
        $smarty_obj->_trigger_error_msg("cache_handler: could not connect to database");
        return false;
    }
    mysql_select_db($db_name);

    switch ($action) {
        case 'read':
            // read the cache contents
            $query = "SELECT CacheContents FROM CACHE_PAGES WHERE CacheID = " . $CacheID . "");
            $result = mysql_query($query);
            if($result) {
                $smarty_obj->assign("CacheContents", mysql_result($result, 0, "CacheContents"));
            } else {
                // cache miss
                ...
            }
        break;
        // other cases...
    }
}
// save cache to database
$results = mysql_query("select \nCacheContents \nfrom \nCACHE_PAGES \nwhere \nCacheID='\$CacheID'\n");
if(!$results)
{
    $smarty_obj->_trigger_error_msg("cache_handler: query failed.");
}
$row = mysql_fetch_array($results,MYSQL_ASSOC);
if($use_gzip && function_exists("gzuncompress"))
{
    $cache_contents = gzuncompress($row["CacheContents"]) ;
}
else
{
    $cache_contents = $row["CacheContents"] ;
}
$return = $results;
break;
case 'write':
    // save cache to database
    if($use_gzip && function_exists("gzcompress"))
    {
        // compress the contents for storage efficiency
        $contents = gzcompress($cache_content);
    }
    else
    {
        $contents = $cache_contents;
    }
$results = mysql_query("replace \ninto \nCACHE_PAGES \nvalues('\$CacheID',\n'.addslashes($contents).')\n");
if(!$results) {
    $smarty_obj->_trigger_error_msg("cache_handler: query failed.");
}
$return = $results;
break;
case 'clear':
    // clear cache info
    if(empty($cache_id) && empty($compile_id) && empty($tpl_file))
    {
        // clear them all
        $results = mysql_query("delete \nfrom \nCACHE_PAGES\n");
    }
    else
    {
        $results = mysql_query("delete \nfrom \nCACHE_PAGES \nwhere \nCacheID='\$CacheID'\n");
    }
$return = $results;
break;
if(!$results) {
    $smarty_obj->_trigger_error_msg("cache_handler: query failed.");
}
$return = $results;
break;

default:
    // error, unknown action
    $smarty_obj->_trigger_error_msg("cache_handler: unknown action "$action");
    $return = false;
    break;

mysql_close($link);
$return = $return;

?>
Resources

Table of Contents

 Templates from $template_dir
 Templates from any directory
 Templates from other sources
 Default template handler function

The templates may come from a variety of sources. When you display or fetch a template, or when you include a template from within another template, you supply a resource type, followed by the appropriate path and template name. If a resource is not explicitly given the value of $default_resource_type is assumed.
Smarty - the compiling PHP template engine
Chapter 16. Extending Smarty With Plugins

Table of Contents
How Plugins Work
Naming Conventions
Writing Plugins
Template Functions
Modifiers
Block Functions
Compiler Functions
Prefilters/Postfilters
Output Filters
Resources
Inserts

Version 2.0 introduced the plugin architecture that is used for almost all the customizable functionality of Smarty. This includes:

2.0Smarty

- functions
- modifiers
- block functions
- compiler functions
- prefilters
- postfilters
- outputfilters
- resources
- inserts

With the exception of resources, backwards compatibility with the old way of registering handler functions via register_* API is preserved. If you did not use the API but instead modified the class variables $custom_funcs, $custom.mods, and other ones directly, then you will need to adjust your scripts to either use the API or convert your custom functionality into plugins.
register_* API API
How Plugins Work

Plugins are always loaded on demand. Only the specific modifiers, functions, resources, etc invoked in the templates scripts will be loaded. Moreover, each plugin is loaded only once, even if you have several different instances of Smarty running within the same request.

Smarty

Pre/postfilters and output filters are a bit of a special case. Since they are not mentioned in the templates, they must be registered or loaded explicitly via API functions before the template is processed. The order in which multiple filters of the same type are executed depends on the order in which they are registered or loaded.

/API

The plugins directory can be a string containing a path or an array containing multiple paths. To install a plugin, simply place it in one of the directories and Smarty will use it automatically.

Smarty
Naming Conventions

Plugin files and functions must follow a very specific naming convention in order to be located by Smarty.

Smarty

The plugin files must be named as follows:

\texttt{type.name.php}

Where \texttt{type} is one of these plugin types:

- function
- modifier
- block
- compiler
- prefilter
- postfilter
- outputfilter
- resource
- insert

And \texttt{name} should be a valid identifier (letters, numbers, and underscores only).

\texttt{name}

Some examples: \texttt{function.html_select_date.php}, \texttt{resource.db.php}, \texttt{modifier.spacify.php}.

The plugin functions inside the plugin files must be named as follows:

\texttt{smarty_type_name()}

The meanings of \texttt{type} and \texttt{name} are the same as before.
Smarty will output appropriate error messages if the plugin file it needs is not found, or if the file or the plugin function are named improperly.
Chapter 16. Extending Smarty With Plugins
Writing Plugins

Plugins can be either loaded by Smarty automatically from the filesystem or they can be registered at runtime via one of the register_* API functions. They can also be unregistered by using unregister_* API functions.

Smarty register_* API unregister_* API

For the plugins that are registered at runtime, the name of the plugin function(s) does not have to follow the naming convention.

If a plugin depends on some functionality provided by another plugin (as is the case with some plugins bundled with Smarty), then the proper way to load the needed plugin is this:

Smarty

```php
require_once $smarty->_get_plugin_filepath('function', 'html_options');
```

As a general rule, Smarty object is always passed to the plugins as the last parameter (with two exceptions: modifiers do not get passed the Smarty object at all and blocks get passed &$repeat after the Smarty object to keep backwards compatibility to older versions of Smarty).

Smarty1Smarty2Smarty
Template Functions

void smarty_function_ name (array $params, object &$smarty)

All attributes passed to template functions from the template are contained in the $params as an associative array. Either access those values directly, e.g. $params['start'] or use extract($params) to import them into the symbol table.

$params

The output (return value) of the function will be substituted in place of the function tag in the template (fetch() function, for example). Alternatively, the function can simply perform some other task without any output (assign() function).

fetch()

If the function needs to assign some variables to the template or use some other Smarty-provided functionality, it can use the supplied $smarty object to do so.

Smarty

See also: register_function(), unregister_function().

Example 16-1. function plugin with output16-1

```php
<?php
/*
 * Smarty plugin
 * -----------------------------
 * File: function.eightball.php
 * Type: function
 * Name: eightball
 * Purpose: outputs a random magic answer
 * -----------------------------
 */
function smarty_function_eightball($params, &$$smarty) {
```
$answers = array('Yes', 'No', 'No way', 'Outlook not so good', 'Ask again soon', 'Maybe in your reality');

$result = array_rand($answers);
return $answers[$result];

which can be used in the template as:

Question: Will we ever have time travel?
Answer: {eightball}.

Example 16-2. function plugin without output16-2

```php
<?php
/*
 * Smarty plugin
 * -----------------------------
 * File: function.assign.php
 * Type: function
 * Name: assign
 * Purpose: assign a value to a template variable
 * -----------------------------
 */
function smarty_function_assign($params, &$_smarty)
{
    extract($params);

    if (empty($var)) {
        $_smarty->trigger_error("assign: missing 'var' parameter
```
return;

if (!in_array('value', array_keys($params))) {
    $smarty->trigger_error("assign: missing 'value' parameter");
    return;
}

$smarty->assign($var, $value);
?>
Modifiers

Modifiers are little functions that are applied to a variable in the template before it is displayed or used in some other context. Modifiers can be chained together.

mixed smarty_modifier_ name (mixed $value, [mixed $param1, ...])

The first parameter to the modifier plugin is the value on which the modifier is supposed to operate. The rest of the parameters can be optional, depending on what kind of operation is supposed to be performed.

The modifier has to return the result of its processing.

See also register_modifier(), unregister_modifier().

Example 16-3. simple modifier plugin

This plugin basically aliases one of the built-in PHP functions. It does not additional parameters.

```php
<?php

/*
 * Smarty plugin
 * ---------------------------------------------
 * File: modifier.capitalize.php
 * Type: modifier
 * Name: capitalize
 * Purpose: capitalize words in the string
 * ---------------------------------------------
 */

function smarty_modifier_capitalize($string) {
    return ucwords($string);
}
```
Example 16-4. more complex modifier plugin

```php
<?php

/*
 * Smarty plugin
 * ---------------------------------------------

 * File: modifier.truncate.php
 * Type: modifier
 * Name: truncate
 * Purpose: Truncate a string to a certain length if necessary,
 * optionally splitting in the middle of a word, and appending
 * the $etc string.
 * ---------------------------------------------
 */

function smarty_modifier_truncate($string, $length = 80, $etc = '...', $break_words = false)
{
    if ($length == 0)
        return '';

    if (strlen($string) > $length) {
        $length -= strlen($etc);
        $fragment = substr($string, 0, $length+1);
        if ($break_words)
            $fragment = substr($fragment, 0, -1);
        else
            $fragment = preg_replace('/\s+(\S+)?$/i', ',', $fragment);
    }
    else
        return $string;
}
?>
```
Smarty - the compiling PHP template engine

Chapter 16. Extending Smarty With Plugins

Smarty
### Block Functions

```php
void smarty_block_ name (array $params, mixed $content, object &$smarty)
```

Block functions are functions of the form: `{func} .. {/func}`. In other words, they enclose a template block and operate on the contents of this block. Block functions take precedence over custom functions of the same name, that is, you cannot have both custom function `{func}` and block function `{func} .. {/func}. `{func} .. {/func}{func}{func} ..

By default your function implementation is called twice by Smarty: once for the opening tag, and once for the closing tag (see &$repeat below how to change this).

```php
Smarty &$repeat
```

Only the opening tag of the block function may have attributes. All attributes passed to template functions from the template are contained in the $params as an associative array. You can either access those values directly, e.g. $params['start'] or use extract($params) to import them into the symbol table. The opening tag attributes are also accessible to your function when processing the closing tag.
```
$params['start']extract($params)
```

The value of $content variable depends on whether your function is called for the opening or closing tag. In case of the opening tag, it will be null, and in case of the closing tag it will be the contents of the template block. Note that the template block will have already been processed by Smarty, so all you will receive is the template output, not the template source.
```
$content Smarty,
```

The parameter &$repeat is passed by reference to the function implementation and provides a possibility for it to control how many times the block is displayed. By default $repeat is true at the first call of the block-function (the block opening tag) and false on all subsequent calls to the block function (the block's closing tag). Each time the function implementation returns with &$repeat being true, the contents between
{func} .. {/func} are evaluated and the function implementation is called again with the new block contents in the parameter $content.

```php
if (isset($content)) {
    $lang = $params['lang'];
    // do some intelligent translation thing here with $content
    return $translation;
}
```

If you have nested block functions, it's possible to find out what the parent block function is by accessing $smarty->_tag_stack variable. Just do a var_dump() on it and the structure should be apparent.

```php
$smarty->_tag_stack var_dump()
```

See also: register_block(), unregister_block().

**Example 16-5. block function**

```php
/*
 * Smarty plugin
 * -----------------------------
 * File: block.translate.php
 * Type: block
 * Name: translate
 * Purpose: translate a block of text
 * -----------------------------
 */
function smarty_block_translate($params, $content, &$$content) {
    if (isset($content)) {
        $lang = $params['lang'];
        // do some intelligent translation thing here with $content
        return $translation;
    }
}
```
Compiler Functions

Compiler functions are called only during compilation of the template. They are useful for injecting PHP code or time-sensitive static content into the template. If there is both a compiler function and a custom function registered under the same name, the compiler function has precedence.

PHP

mixed smarty_compiler_ name (string $tag_arg, object &$smarty)

The compiler function is passed two parameters: the tag argument string - basically, everything from the function name until the ending delimiter, and the Smarty object. It’s supposed to return the PHP code to be injected into the compiled template.

—SmartyPHP

See also register_compiler_function(), unregister_compiler_function().

Example 16-6. simple compiler function

```php
<?php
/*
 * Smarty plugin
 * -----------------------------
 * File: compiler.tplheader.php
 * Type: compiler
 * Name: tplheader
 * Purpose: Output header containing the source file name and the time it was compiled.
 * -----------------------------
 */
function smarty_compiler_tplheader($tag_arg, &$smarty) {
    return "\necho " . $smarty->_current_file . " compiled at " . date('Y-m-d	H:M')."";
}
?>
```
This function can be called from the template as:

```php
{.tplheader}
```

The resulting PHP code in the compiled template would be something like:

```php
<?php
echo 'index.tpl compiled at 2002-02-20 20:02';
?>
```
Prefilters/Postfilters/

Prefilter and postfilter plugins are very similar in concept; where they differ is in the execution -- more precisely the time of their execution.

string smarty_prefilter_ name (string $source, object &$smarty)

Prefilters are used to process the source of the template immediately before compilation. The first parameter to the prefilter function is the template source, possibly modified by some other prefilters. The plugin is supposed to return the modified source. Note that this source is not saved anywhere, it is only used for compilation.

string smarty_postfilter_ name (string $compiled, object &$smarty)

Postfilters are used to process the compiled output of the template (the PHP code) immediately after the compilation is done but before the compiled template is saved to the filesystem. The first parameter to the postfilter function is the compiled template code, possibly modified by other postfilters. The plugin is supposed to return the modified version of this code.

PHP

Example 16-7. prefilter plugin

```php
<?php
/*
 * Smarty plugin
 * -----------------------------
 * File: prefilter.pre01.php
 * Type: prefilter
 * Name: pre01
 * Purpose: Convert html tags to be lowercase.
 * -----------------------------
 */
function smarty_prefilter_pre01($source, &$smarty) {
```
Example 16-8. postfilter plugin

```php
<?php
/*
 * Smarty plugin
 * -----------------------------
 * File: postfilter.post01.php
 * Type: postfilter
 * Name: post01
 * Purpose: Output code that lists all current template vars.
 * -----------------------------
 */
function smarty_postfilter_post01($compiled, &$smarty) {
    $compiled = "<pre>
<?php print_r($this-&gt;get_template_vars());
?>
</pre>
" . $compiled;
    return $compiled;
}
?>
```
Smarty - the compiling PHP template engine
Chapter 16. Extending Smarty With Plugins
smarty
Output Filters

Output filter plugins operate on a template's output, after the template is loaded and executed, but before the output is displayed.

string smarty_outputfilter_ name (string $template_output, object &$smarty)

The first parameter to the output filter function is the template output that needs to be processed, and the second parameter is the instance of Smarty invoking the plugin. The plugin is supposed to do the processing and return the results.

Smarty

Example 16-9. output filter plugin

```php
/*
 * Smarty plugin
 * -----------------------------
 * File: outputfilter.protect_email.php
 * Type: outputfilter
 * Name: protect_email
 * Purpose: Converts @ sign in email addresses to %40
 * a simple protection against spambots
 * -----------------------------
 */
function smarty_outputfilter_protect_email($output, &
{
    return preg_replace('!(\S+)@([a-zA-Z0-9\-]+\.[a-zA-Z]{2,3}!)!',
    '$1%40$2', $output);
}
```
Smarty - the compiling PHP template engine

Chapter 16. Extending Smarty With Plugins

smarty
Resources

Resource plugins are meant as a generic way of providing template sources or PHP script components to Smarty. Some examples of resources: databases, LDAP, shared memory, sockets, and so on.

SmartyPHP:LDAPsockets

There are a total of 4 functions that need to be registered for each type of resource. Every function will receive the requested resource as the first parameter and the Smarty object as the last parameter. The rest of parameters depend on the function.

Smarty

bool smarty_resource_name_source (string $rsr_name, string &$source, object &$smarty)

bool smarty_resource_name_timestamp (string $rsr_name, int &$timestamp, object &$smarty)

bool smarty_resource_name_secure (string $rsr_name, object &$smarty)

bool smarty_resource_name_trusted (string $rsr_name, object &$smarty)

The first function is supposed to retrieve the resource. Its second parameter is a variable passed by reference where the result should be stored. The function is supposed to return true if it was able to successfully retrieve the resource and false otherwise.

true false

The second function is supposed to retrieve the last modification time of the requested resource (as a UNIX timestamp). The second parameter is a variable passed by reference where the timestamp should be stored. The function is supposed to return true if the timestamp could be successfully determined, and false otherwise.

UNIX true false

The third function is supposed to return true or false, depending on whether the requested resource is secure or not. This function is used only for template resources but should still be defined.
The fourth function is supposed to return true or false, depending on whether the requested resource is trusted or not. This function is used for only for PHP script components requested by `{{include_php}}` tag or `{{insert}}` tag with `src` attribute. However, it should still be defined even for template resources.

See also `register_resource()`, `unregister_resource()`.

**Example 16-10. resource plugin**

```php
<?php
/*
 * Smarty plugin
 * -----------------------------
 * File: resource.db.php
 * Type: resource
 * Name: db
 * Purpose: Fetches templates from a database
 * -----------------------------
 */
function smarty_resource_db_source($tpl_name, &$tpl_source, &$smarty)
{
    // do database call here to fetch your template,
    // populating $tpl_source
    $sql = new SQL;
    $sql->query("select tpl_source
    from my_table
    where tpl_name='$tpl_name'");
    if ($sql->num_rows) {
        $tpl_source = $sql->record['tpl_source'];
        return true;
    } else {
        return false;
    }
}

function smarty_resource_db_timestamp($tpl_name, &$tpl_timestamp, &$smarty)
```
{ // do database call here to populate $tpl_timestamp.
$sql = new SQL;
$sql->query("select tpl_timestamp
from my_table
where tpl_name='"$tpl_name"';
if ($sql->num_rows) {
$tpl_timestamp = $sql->record['tpl_timestamp'];
return true;
} else {
return false;
}
}

function smarty_resource_db_secure($tpl_name, & $smarty)
{
// assume all templates are secure
return true;
}

function smarty_resource_db_trusted($tpl_name, & $smarty)
{
// not used for templates
}
?>
Smarty - the compiling PHP template engine

Chapter 16. Extending Smarty With Plugins

smarty
Inserts

Insert plugins are used to implement functions that are invoked by \{insert\} tags in the template.

string smarty_insert_ name (array $params, object &$smarty)

The first parameter to the function is an associative array of attributes passed to the insert. Either access those values directly, e.g. $params['start'] or use extract($params) to import them into the symbol table.

$params['start'] = extract($params)

The insert function is supposed to return the result which will be substituted in place of the \{insert\} tag in the template.

Example 16-11. insert plugin

```php
/*
 * Smarty plugin
 * -----------------------------
 * File: insert.time.php
 * Type: time
 * Name: time
 * Purpose: Inserts current date/time according to format
 */

function smarty_insert_time($params, &$smarty)
{
    if (empty($params['format'])) {
        $smarty->trigger_error("insert time: missing 'format'");
        return;
    }

    $datetime = strftime($params['format']);
    return $datetime;
```
Smarty - the compiling PHP template engine
IV. Appendixes []

Table of Contents []
17. Troubleshooting []
18. Tips & Tricks []
19. Resources []
20. BUGS []
Chapter 17. Troubleshooting

Table of Contents
Smarty/PHP errors
**Smarty/PHP errors**

Smarty can catch many errors such as missing tag attributes or malformed variable names. If this happens, you will see an error similar to the following:

Smarty

**Example 17-1. Smarty errors**

```php
Warning: Smarty: [in index.tpl line 4]: syntax error: in /path/to/smarty/Smarty.class.php on line 1041

Smarty: index.tpl4:'%blah'

Fatal error: Smarty: [in index.tpl line 28]: syntax error: in /path/to/smarty/Smarty.class.php on line 1041

Smarty: index.tpl28: /path/to/smarty/Smarty.class.php1
```

Smarty shows you the template name, the line number and the error. After that, the error consists of the actual line number in the Smarty class that the error occurred.

Smarty

There are certain errors that Smarty cannot catch, such as missing close tags. These types of errors usually end up in PHP compile-time parsing errors.

Smarty

**Example 17-2. PHP parsing errors**

```php
```

Smarty

```php
```
When you encounter a PHP parsing error, the error line number will correspond to the compiled PHP script, not the template itself. Usually you can look at the template and spot the syntax error. Here are some common things to look for: missing close tags for {if}{/if} or {section}{/section}, or syntax of logic within an {if} tag. If you can't find the error, you might have to open the compiled PHP file and go to the line number to figure out where the corresponding error is in the template.

```php
phpphpif}{/if}
 {section}{/section}{if}php
```
Smarty - the compiling PHP template engine
Chapter 18. Tips & Tricks

18

Table of Contents

Blank Variable Handling
Default Variable Handling
Passing variable title to header template
Dates
WAP/WML
Componentized Templates
Obfuscating E-mail Addresses
There may be times when you want to print a default value for an empty variable instead of printing nothing, such as printing "&nbsp;" so that table backgrounds work properly. Many would use an {if} statement to handle this, but there is a shorthand way with Smarty, using the default variable modifier.

Example 18-1. Printing &nbsp; when a variable is empty

18-1

{* the long way *}

{if $title eq ""}
   &nbsp;
{else}
   {$title}
{endif}

{* the short way *}

{$title|default:"&nbsp;"}

---
Default Variable Handling

If a variable is used frequently throughout your templates, applying the default modifier every time it is mentioned can get a bit ugly. You can remedy this by assigning the variable its default value with the `assign` function.

**assign[]**

**Example 18-2. Assigning a template variable its default value**

```php
/* do this somewhere at the top of your template */
(assign var="title" value=$title|default:"no title")

/* if $title was empty, it now contains the value "no */
({$title}
```

---

`assign[]`
Passing variable title to header template

When the majority of your templates use the same headers and footers, it is common to split those out into their own templates and include them. But what if the header needs to have a different title, depending on what page you are coming from? You can pass the title to the header when it is included.

---

Example 18-3. Passing the title variable to the header template

```plaintext
18-3.

mainpage.tpl
------------
{include file="header.tpl" title="Main Page"}
{* template body goes here *}
{include file="footer.tpl"}

archives.tpl
------------
{config_load file="archive_page.conf"}
{include file="header.tpl" title=#archivePageTitle#}
{* template body goes here *}
{include file="footer.tpl"}

header.tpl
-----------
<HTML>
<HEAD>
<TITLE>{$title|default:"BC News"}</TITLE>
```
When the main page is drawn, the title of "Main Page" is passed to the header.tpl, and will subsequently be used as the title. When the archives page is drawn, the title will be "Archives". Notice in the archive example, we are using a variable from the archives_page.conf file instead of a hard coded variable. Also notice that "BC News" is printed if the $title variable is not set, using the \texttt{default} variable modifier.

[main page]'Main Page'[header.tpl][archives 'Archives'[archives_page.conf][$title]'BC
Dates

As a rule of thumb, always pass dates to Smarty as timestamps. This allows template designers to use `date_format` for full control over date formatting, and also makes it easy to compare dates if necessary.

Smarty `date_format[]`

NOTE: As of Smarty 1.4.0, you can pass dates to Smarty as unix timestamps, mysql timestamps, or any date parsable by `strtotime()`.

Smarty 1.4.0unix,mysql,[strtotime()]Smarty

**Example 18-4. using date_format**

18-4.

```php
{$startDate|date_format}
```

OUTPUT:

Jan 4, 2001

```php
{$startDate|date_format:"%Y/%m/%d"}
```

OUTPUT:

2001/01/04

```php
{if $date1 < $date2}
    ...
{/if}
```

When using `{html_select_date}` in a template, The programmer will most
likely want to convert the output from the form back into timestamp format. Here is a function to help you with that.

{html_select_date}

**Example 18-5. converting form date elements back to a timestamp**

```
// this assumes your form elements are named
// startDate_Day, startDate_Month, startDate_Year

$startDate = makeTimeStamp($startDate_Year,$startDate_Month,$startDate_Day);

function makeTimeStamp($year="" ,$month="" ,$day="" )
{
    if (empty($year))
        $year = strftime("%Y");
    if (empty($month))
        $month = strftime("%m");
    if (empty($day))
        $day = strftime("%d");

    return mktime(0,0,0,$month,$day,$year);
}
```

Passing variable title to header template

[Prev] [PHP] [Home] [Next]

[Up] [WAP/WML] [WAP/WML] [Up]
WAP/WML

WAP/WML templates require a php Content-Type header to be passed along with the template. The easiest way to do this would be to write a custom function that prints the header. If you are using caching, that won't work so we'll do it using the insert tag (remember insert tags are not cached!) Be sure that there is nothing output to the browser before the template, or else the header may fail.

WAP/WML

Example 18-6. using insert to write a WML Content-Type header

18-6. WML

```php
// be sure apache is configure for the .wml extensions
// put this function somewhere in your application, or
function insert_header() {
    // this function expects $content argument
    extract(func_get_arg(0));
    if(empty($content))
        return;
    header($content);
    return;
}

// your Smarty template _must_ begin with the insert tag

{insert name=header content="Content-Type: text/vnd.wap.wml"

<?xml version="1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.1//EN" "http://www.wapforum.org/DTD/wml_1.1.xml">
<!-- begin new wml deck -->
<wml>
<!-- begin first card -->
<card>
```
Welcome to WAP with Smarty!
Press OK to continue...

Pretty easy isn't it?

Componentized Templates

This tip is a bit of a hack, but still a neat idea. Use at your own risk. ;-)

;-)

Traditionally, programming templates into your applications goes as follows: First, you accumulate your variables within your PHP application, (maybe with database queries.) Then, you instantiate your Smarty object, assign the variables and display the template. So lets say for example we have a stock ticker on our template. We would collect the stock data in our application, then assign these variables in the template and display it. Now wouldn’t it be nice if you could add this stock ticker to any application by merely including the template, and not worry about fetching the data up front?

PHPSmarty

You can embed PHP into your templates with the {php}{/php} tags. With this, you can setup self contained templates with their own data structures for assigning their own variables. With the logic embedded like this, you can keep the template & logic together. This way no matter where the template source is coming from, it is always together as one component.

{php}{/php}PHP

Example 18-7. componentized template

18-7.

{* Smarty *}

{php}

// setup our function for fetching stock data
function fetch_ticker($symbol,&$ticker_name,&$
As of Smarty 1.5.0, there is even a cleaner way. You can include PHP in your templates with the `{include_php ...}` tag. This way you can keep your PHP logic separated from the template logic. See the `include_php` function for more information.

Smarty 1.5.0

Example 18-8. componentized template with include_php

18-8. include_php

```php
<?php
    // setup our function for fetching stock data
    function fetch_ticker($symbol,&$ticker_name,&$ticker_price)
    {
        // put logic here that fetches $ticker_name
        // and $ticker_price from some resource
    }

    // call the function
    fetch_ticker("YHOO",$ticker_name,$ticker_price);

    // assign template variables
    $this->assign("ticker_name",$ticker_name);
    $this->assign("ticker_price",$ticker_price);

{/php}

Stock Name: {$ticker_name}  Stock Price: {$ticker_price}
```
// assign template variables
$this->assign("ticker_name",$ticker_name);
$this->assign("ticker_price",$ticker_price);
?>

index.tpl
---------

{* Smarty *}

{include_php file="load_ticker.php"}

Stock Name: {$ticker_name} Stock Price: {$ticker_price}
Obfuscating E-mail Addresses

Do you ever wonder how your E-mail address gets on so many spam mailing lists? One way spammers collect E-mail addresses is from web pages. To help combat this problem, you can make your E-mail address show up in scrambled javascript in the HTML source, yet it will look and work correctly in the browser. This is done with the mailto plugin.

HTMLjavascriptmailto

Example 18-9. Example of Obfuscating an E-mail Address

18-9.

index.tpl

---------

Send inquiries to
{mailto address=$EmailAddress encode="javascript" subject="Hello"}

Technical Note: This method isn't 100% foolproof. A spammer could conceivably program his e-mail collector to decode these values, but not likely.

100%
Smarty - the compiling PHP template engine
Chapter 19. Resources

Smarty's homepage is located at http://smarty.php.net/. You can join the mailing list by sending an e-mail to smarty-general-subscribe@lists.php.net. An archive of the mailing list can be viewed at http://marc.theaimsgroup.com/?l=smarty&r=1&w=2
Smarty http://smarty.php.net/
smarty-general-subscribe@lists.php.net
http://marc.theaimsgroup.com/?l=smarty&r=1&w=2
Smarty - the compiling PHP template engine
Chapter 20. BUGS

Check the BUGS file that comes with the latest distribution of Smarty, or check the website.
Smarty
Smarty - the compiling PHP template engine
Chapter 21. LIST

- zhangyx@12365.sd.cn
- kolinwebmaster@im22.uni.cc
- libk libkhorse@sohu.com
- huix huix22@hotmail.com
- flyhan hanbd7@sina.com
- bralf ab_blunt@yahoo.com.cn
- yuuguanglou yuuguanglou@21cn.com
- fwolf fwolf001@tom.com
- gavinguo gavin@jqw.cn
- cnhfyycnhfy@126.com
- webmaster@ehome.51.net
Smarty - the compiling PHP template engine
### Associative arrays

You can also reference associative array variables that are assigned from PHP by specifying the key after the '.' (period) symbol.

**Example 4-2. accessing associative array variables**

**index.php:**

```php
$smarty = new Smarty;
$smarty->assign('Contacts',
    array('fax' => '555-222-9876',
          'email' => 'zaphod@slartibartfast.com',
          'phone' => array('home' => '555-444-3333',
                        'cell' => '555-111-1234')));
$smarty->display('index.tpl');
```

**index.tpl:**

```html
{$Contacts.fax}<br>
{$Contacts.email}<br>
{* you can print arrays of arrays as well *}
{$Contacts.phone.home}<br>
{$Contacts.phone.cell}<br>
```

**OUTPUT:**

```
555-222-9876<br>
zaphod@slartibartfast.com<br>
555-444-3333<br>
555-111-1234<br>
```
Smarty - the compiling PHP template engine
Array indexes

You can reference arrays by their index, much like native PHP syntax.

Example 4-3. accessing arrays by index

index.php:

```php
$smarty = new Smarty;
$smarty->assign('Contacts',
    array('555-222-9876',
        'zaphod@slartibartfast.com',
        array('555-444-3333',
            '555-111-1234')));
$smarty->display('index.tpl');
```

index.tpl:

```html
{$Contacts[0]}<br>
{$Contacts[1]}<br>
{* you can print arrays of arrays as well *}
{$Contacts[2][0]}<br>
{$Contacts[2][1]}<br>
```

OUTPUT:

```
555-222-9876<br>
zaphod@slartibartfast.com<br>
555-444-3333<br>
555-111-1234<br>
```
Smarty - the compiling PHP template engine
Objects

Properties of objects assigned from PHP can be referenced by specifying the property name after the '->' symbol.

Example 4-4. accessing object properties

```php
name: {$person->name}<br>
email: {$person->email}<br>
```

OUTPUT:

```
name: Zaphod Beeblebrox<br>
email: zaphod@slartibartfast.com<br>
```
Smarty - the compiling PHP template engine
{$smarty.config}

{$smarty} variable can be used to refer to loaded config variables. 
{$smarty.config.foo} is a synonym for {#foo#}. See the section on config_load for an example.
Smarty - the compiling PHP template engine
Request variables

The request variables such as get, post, cookies, server, environment, and session variables can be accessed as demonstrated in the examples below:

Example 4-6. displaying request variables

```php
{* display value of page from URL (GET) http://www.domain.com/index.php?page=foo *
{$smarty.get.page}

{* display the variable "page" from a form (POST) *
{$smarty.post.page}

{* display the value of the cookie "username" *
{$smarty.cookies.username}

{* display the server variable "SERVER_NAME" *
{$smarty.server.SERVER_NAME}

{* display the system environment variable "PATH" *
{$smarty.env.PATH}

{* display the php session variable "id" *
{$smarty.session.id}

{* display the variable "username" from merged get/post/cookies/server/env *
{$smarty.request.username}
```
Smarty - the compiling PHP template engine
The current timestamp can be accessed with \{{$smarty.now}\}. The number reflects the number of seconds passed since the so-called Epoch (January 1, 1970) and can be passed directly to date_format modifier for display purposes.

**Example 4-7. using \{{$smarty.now}\}**

* use the date_format modifier to show current date and time

\{\$smarty.now|date_format: "%Y-%m-%d %H:%M:%S"\}
Smarty - the compiling PHP template engine
You can access PHP constant values directly.

Example 4-8. using \$smarty.const

\$smarty.const._MY_CONST_VAL
{$smarty.capture}

The output captured via {capture}..{/capture} construct can be accessed using {$smarty} variable. See section on capture for an example.
Smarty - the compiling PHP template engine
{$smarty.section}, {$smarty.foreach}

{$smarty} variable can be used to refer to 'section' and 'foreach' loop properties. See docs for section and foreach.

---

Prev  PHP  Home  Next

{$smarty.config}  Up  {$smarty.template}
Smarty - the compiling PHP template engine
{$smarty.template}

This variable contains the name of the current template being processed.
Smarty - the compiling PHP template engine
iteration

iteration is used to display the current loop iteration.

iteration []

Iteration always starts with 1 and is incremented by one each iteration.

iteration 1 1.[]
Smarty - the compiling PHP template engine
**first**

*first* is set to true if the current foreach iteration is the first one.

```php
foreach
```

*first* true.
Smarty - the compiling PHP template engine
last

*last* is set to true if the current foreach iteration is the last one.

foreach

---

<table>
<thead>
<tr>
<th>Prev</th>
<th>PHP</th>
<th>Home</th>
<th>Up</th>
<th>Next</th>
<th>show</th>
</tr>
</thead>
<tbody>
<tr>
<td>first</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Smarty - the compiling PHP template engine
**show**

*show* is used as a parameter to foreach. *show* is a boolean value, true or false. If false, the foreach will not be displayed. If there is a foreachelse present, that will be alternately displayed.

*show* foreach . true false. false

  *show*. 
Smarty - the compiling PHP template engine
**total**

*total* is used to display the number of iterations that this foreach will loop. This can be used inside or after the foreach.

---

**Prev**  **PHP**  **Home**  **Next**  
**show**  **Up**  **include**
Smarty - the compiling PHP template engine
index

index is used to display the current loop index, starting with zero (or the start attribute if given), and incrementing by one (or by the step attribute if given.)

index 0(start)1(step).

**Technical Note:** If the step and start section properties are not modified, then this works the same as the iteration section property, except it starts on 0 instead of 1.

    stepstartiteration0.

Example 7-21. section property index

7-21. section index

```
{section name=customer loop=$custid}
{$smarty.section.customer.index} id: {$custid[customer[index]]}<br>
{/section}
```

OUTPUT:

```
0 id: 1000<br>
1 id: 1001<br>
2 id: 1002<br>
```

---
Smarty - the compiling PHP template engine
index_prev

index_prev is used to display the previous loop index. On the first loop, this is set to -1.

index_prev . -1.

Example 7-22. section property index_prev

7-22. section  index_prev

```
{section name=customer loop=$custid}
{$smarty.section.customer.index} id: {$custid[customer.index]}
{*
FYI, $custid[customer.index] and $custid[customer.index_prev] are identical in meaning
*}
{if $custid[customer.index_prev] ne $custid[customer.index]}
The customer id changed<br>
{/if}
{/section}
```

OUTPUT:

0 id: 1000<br>
The customer id changed<br>
1 id: 1001<br>
The customer id changed<br>
2 id: 1002<br>
The customer id changed<br>
Smarty - the compiling PHP template engine
**index_next**

index_next is used to display the next loop index. On the last loop, this is still one more than the current index (respecting the setting of the step attribute, if given.)

index_next . 1(step).

**Example 7-23. section property index_next**

7-22. section  index_next

```php
{section name=customer loop=$custid}
{$smarty.section.customer.index} id: {$custid[customer.index]}
{if $custid[customer.index_next] ne $custid[customer.index]}
The customer id will change<br>
{/if}
{/section}

OUTPUT:

0 id: 1000<br>
The customer id will change<br>
1 id: 1001<br>
The customer id will change<br>
2 id: 1002<br>
The customer id will change<br>
```
Smarty - the compiling PHP template engine
iteration

iteration is used to display the current loop iteration.

iteration.

NOTE: This is not affected by the section properties start, step and max, unlike the index property. Iteration also starts with 1 instead of 0 like index. rownum is an alias to iteration, they work identical.

iteration index startstep max1(index0).rownum iteration.

Example 7-24. section property iteration

7-24. section iteration

```php
{section name=customer loop=$custid start=5 step=2}

current loop iteration: {$smarty.section.customer.iteration}
{$smarty.section.customer.index} id: {$custid[customer.index]}

/* FYI, $custid[customer.index] and $custid[customer]
   are identical in meaning */

{if $custid[customer.index_next] ne $custid[customer.index]}
The customer id will change<br>
{/if}
{/section}

OUTPUT:

current loop iteration: 1
5 id: 1000<br>
The customer id will change<br>
current loop iteration: 2
7 id: 1001<br>
The customer id will change<br>
current loop iteration: 3
9 id: 1002<br>
The customer id will change<br>
```
Smarty - the compiling PHP template engine
first

first is set to true if the current section iteration is the first one.

first

Example 7-25. section property first  7-25. section  first

```php
{section name=customer loop=$custid}
{if $smarty.section.customer.first}
<table>
{/if}
<tr><td>{$smarty.section.customer.index} id: {$custid[customer]}</td></tr>
{if $smarty.section.customer.last}
</table>
{/if}
{/section}
```

OUTPUT:

```html
<table>
<tr><td>0 id: 1000</td></tr>
<tr><td>1 id: 1001</td></tr>
<tr><td>2 id: 1002</td></tr>
</table>
```
last

last is set to true if the current section iteration is the last one.

Example 7-26. section property last

```php
{section name=customer loop=$custid}
{if $smarty.section.customer.first}
<table>
{/if}
<tr><td>{$smarty.section.customer.index} id: {$custid[customer]}</td></tr>
{if $smarty.section.customer.last}
</table>
{/if}
{/section}

OUTPUT:

<table>
<tr><td>0 id: 1000</td></tr>
<tr><td>1 id: 1001</td></tr>
<tr><td>2 id: 1002</td></tr>
</table>
```
Smarty - the compiling PHP template engine
**rownum**

rownum is used to display the current loop iteration, starting with one. It is an alias to iteration, they work identically.

Example 7-27. section property rownum

```
7-27. section  rownum

{section name=customer loop=$custid}
{$smarty.section.customer.rownum} id: {$custid}<br>
{/section}

OUTPUT:

1 id: 1000<br>
2 id: 1001<br>
3 id: 1002<br>
```
Smarty - the compiling PHP template engine
loop

loop is used to display the last index number that this section looped. This can be used inside or after the section.

Example 7-28. section property index

```
{section name=customer loop=$custid}
{$smarty.section.customer.index} id: {$custid[
{}/section}

There were {$smarty.section.customer.loop} customers shown above.
```

OUTPUT:

```
0 id: 1000<br>
1 id: 1001<br>
2 id: 1002<br>
```

There were 3 customers shown above.
Smarty - the compiling PHP template engine
**show**

*show* is used as a parameter to *section*. *show* is a boolean value, true or false. If false, the section will not be displayed. If there is a *sectionelse* present, that will be alternately displayed.

*show* section. *show* true false. false.

Example 7-29. section attribute show

7-29. section show

```php
{* $show_customer_info may have been passed from the PHP application, to regulate whether or not this section shows

{section name=customer loop=$custid show=$show_customer_info}
{$smarty.section.customer.rownum} id: {$custid[customer]}
{/section}

{if $smarty.section.customer.show}
the section was shown.
{else}
the section was not shown.
{/if}

OUTPUT:

1 id: 1000<br>
2 id: 1001<br>
3 id: 1002<br>

the section was shown.
```
Smarty - the compiling PHP template engine
**total**

total is used to display the number of iterations that this section will loop. This can be used inside or after the section.

total . .

**Example 7-30. section property total**

```php
7-30. section  total

{section name=customer loop=$custid step=2}
{$smarty.section.customer.index} id: {$custid[customer].id}<br>
{/section}

There were {$smarty.section.customer.total} customers shown above.
```

**OUTPUT:**

```
0 id: 1000<br>
2 id: 1001<br>
4 id: 1002<br>
```

There were 3 customers shown above.
Templates from $template_dir

Templates from the $template_dir do not require a template resource, although you can use the file: resource for consistancy. Just supply the path to the template you want to use relative to the $template_dir root directory.

Example 15-6. using templates from $template_dir

```
// from PHP script
$smarty->display("index.tpl");
$smarty->display("admin/menu.tpl");
$smarty->display("file:admin/menu.tpl"); // same as one above

{* from within Smarty template *}
{include file="index.tpl"}
{include file="file:index.tpl"} {* same as one above *}
```
Smarty - the compiling PHP template engine
Templates from any directory

Table of Contents
Windows Filepaths

Templates outside of the $template_dir require the file: template resource type, followed by the absolute path and name of the template.

Example 15-7. using templates from any directory

```php
// from PHP script
$smarty->display("file:/export/templates/index.tpl");
$smarty->display("file:/path/to/my/templates/menu.tpl"

{*
from within Smarty template *
{include file="file:/usr/local/share/templates/navigation.tpl"
```

Windows Filepaths

If you are using a Windows machine, filepaths usually include a drive letter (C:) at the beginning of the pathname. Be sure to use "file:" in the path to avoid namespace conflicts and get the desired results.

Example 15-8. using templates from windows file paths

```php
// from PHP script
$smarty->display("file:C:/export/templates/index.tpl")
$smarty->display("file:F:/path/to/my/templates/menu.tpl"

{*
from within Smarty template *
{include file="file:D:/usr/local/share/templates/navigation.tpl"
```
Smarty - the compiling PHP template engine
Templates from other sources

You can retrieve templates using whatever possible source you can access with PHP: databases, sockets, LDAP, and so on. You do this by writing resource plugin functions and registering them with Smarty.

See resource plugins section for more information on the functions you are supposed to provide.

**Note:** Note that you cannot override the built-in file resource, but you can provide a resource that fetches templates from the file system in some other way by registering under another resource name.

Example 15-9. using custom resources

```php
// from PHP script

// put these function somewhere in your application
function db_get_template ($tpl_name, &$tpl_source, &$smarty_obj) {
    // do database call here to fetch your template,
    // populating $tpl_source
    $sql = new SQL;
    $sql->query("select tpl_source from my_table where tpl_name='$tpl_name');
    if ($sql->num_rows) {
        $tpl_source = $sql->record['tpl_source'];
        return true;
    } else {
        return false;
    }
}

function db_get_timestamp($tpl_name, &$tpl_timestamp, {
```
/ do database call here to populate $tpl_timestamp.
$sql = new SQL;
$sql->query("select tpl_timestamp
from my_table
where tpl_name='$tpl_name'");
if ($sql->num_rows) {
    $tpl_timestamp = $sql->record['tpl_timestamp'];
    return true;
} else {
    return false;
}
}

function db_get_secure($tpl_name, &$$smarty_obj)
{
    // assume all templates are secure
    return true;
}

function db_get_trusted($tpl_name, &$$smarty_obj)
{
    // not used for templates
}

// register the resource name "db"
$smarty->register_resource("db", array("db_get_template",
    "db_get_timestamp",
    "db_get_secure",
    "db_get_trusted"));

// using resource from php script
$smarty->display("db:index.tpl");

{% using resource from within Smarty template %}
{include file="db:/extras/navigation.tpl"}
Templates from any directory
Smarty - the compiling PHP template engine
Default template handler function

You can specify a function that is used to retrieve template contents in the event the template cannot be retrieved from its resource. One use of this is to create templates that do not exist on-the-fly.

Example 15-10. using the default template handler function

```php
<?php
// put this function somewhere in your application

function make_template ($resource_type, $resource_name, &$template_source, &$template_timestamp, &$smarty_obj) {
    if ($resource_type == 'file') {
        if (!is_readable($resource_name)) {
            // create the template file, return contents.
            $template_source = "This is a new template.";
            $template_timestamp = time();
            $smarty_obj->_write_file($resource_name,$template_source);
            return true;
        }
    } else {
        // not a file
        return false;
    }
}

// set the default handler
$smarty->default_template_handler_func = 'make_template';
?>
```