



EZ Merchant Solutions

***Business Tools for the Online
Merchant***

EZ-cart - Customizing Your Store

***Simply the Easiest Way
to Manage a Web Based Business...***

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Customizing Your Store

(EZ Merchant Solutions)
Version 2.0

1.0 About This Guide

How can I customize my store and not have my changes overwritten by future upgrades to the store software?

This is a common question. Every distribution of EZ-cart includes an *addon* called *Local Modifications*. This *addon* provides you the structure to make custom changes that are separate from the core software.

This guide is intended to get you started by telling you what's available and how to work with things to maintain your local customizations independent of future upgrades. This does NOT mean that your local modifications are guaranteed to function as you expect after an upgrade, but it definitely gets you much closer to that goal.

This guide addresses the *Customer* view of the store only. It is not intended to be an integration guide for system developers.

2.0 Introduction and Background

Your EZ-cart system is a robust software system. It was designed around the desire to be easily extensible and to enable different vendors to add functionality without having to change the core software (core code).

The vast majority of the UI (user interface) for the *Customer* view is controlled through standard CSS (Cascading Style Sheets). In addition to CSS, HTML code is modified in templates defined by the *Smarty Template Engine*. Almost all of the *Customer* view is driven by *Smarty Templates* (visit <http://www.smarty.com> for more information).

EZ-cart uses the concept of 'skins'. Skins are different layouts and themes (colors, styles, etc.) where the information in your store is presented to customers in different ways. Skins determine their "look and feel" via template code, different HTML but mostly through CSS styles. By default, the skin used in the standard EZ-cart distribution is the 'Basic' skin. In the examples below, we will use the

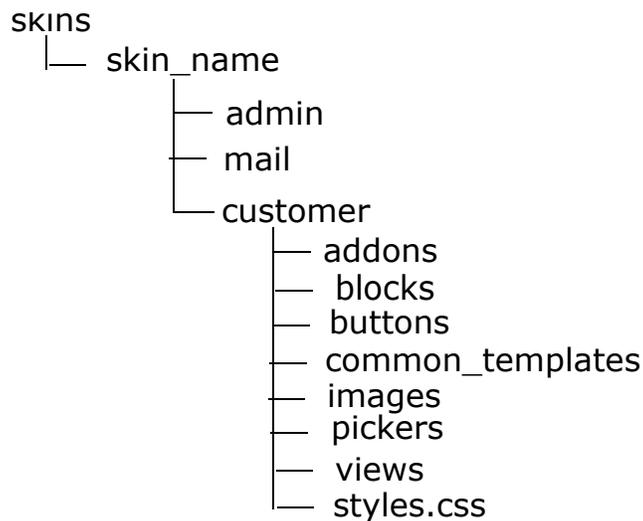
'Basic' skin as the "active skin" but any skin can be used as the basis.

2.1 Skin architecture

As a brief introduction, the skin architecture is as follows.

2.1.1 Directory structure

When you install a new skin via the *Administration->Skin selector* link in the Admin Panel), the following directory tree is created with the files related to the selected skin:



2.1.2 Controllers

Each directory under the *customer* directory has specific functionality based on the type of operation being performed. These 'types' of operations are referred to as *controllers*. I.e. they 'control' the presentation of information for the requested action. Examples of *controllers* are:

1. *category* - presentation of your catalog or other *category* views
2. *products* - product detail views
3. *checkout* - the checkout page/process including the 'view cart' action.
4. *index* - your home page

2.1.3 Page Layout

Every page on the system is broken up into 6 distinct areas (or areas for layout). These are:

1. Main Content (the page header)

2. Left column
3. Right column
4. Main Box Intro (top of main content)
5. Main Box (center)
6. Page Footer (bottom-most content)

2.1.4 Page Loading

To walk through the process of displaying your home page, here's what happens:

1. After any pre-processing that occurs (gathering of data to be presented such as *Featured Products* or *Testimonials*, loads the template named *skins/basic/customer/main.tpl* which supplies the appropriate HTML for drawing the header area (*Main Content*).
2. It then loads the content for the *Main Box*
3. Then the *Left Column*
4. Then the *Right Column*
5. Then the *Footer*

Each of these areas (except the Main Content) can have blocks associated with them as well as other content. As information is gathered about what to display, the system generates HTML code from various templates specific to the type (category, product, etc.) of content data.

When complete, the final HTML is output to the customer's browser and the page is displayed.

2.2 Role Of Addons

The *addon* architecture plays a significant role in how the system behaves. For instance, if *Gift Certificates* are enabled then a gift certificate input box needs to be displayed on the checkout page.

So how is this done? It is done through the use of *addons* and a part of the system called *hooks*. The standard template code contains strategically placed blocks of code inside of what are known as 'hooks'. With these *hooks* you are able to prepend templates before the code inside the hook is executed, overwrite the code within the hook tags, or append template code following the 'hook' tag. See the appendix for a list of all hooks as of version 2.0.6.

But following our example, the system goes to display the checkout page. But first, it looks to see if there are any 'views' for any addons

related to the checkout page. It does this by scanning the *addons* directory and looking to see if any of the addons have a `views/checkout/components/checkout_body.tpl` file present. If so, it executes that template so the data can be added to the checkout page. The *addon* template is responsible for knowing whether it has any data available to present or not and if not does not generate any html.

What all this means is that through the use of *addons* and *hooks* a great deal of flexibility can be accomplished.

3.0 Local Modifications Addon

Each EZ-cart installation has an *addon* available called *Local Modifications*. This *addon* provides the structure to allow you to customize a large part of the system.

The *addon* has a couple of setup parameters:

CSS Path - the path to css files within the `skins/<active_skin>/addons/local` directory structure (default is `css`).

Check for controller specific css - If checked (default is not), load a *controller specific* css file from the *CSS Path* directory called `<controller_name>.css` where *controller_name* is the name of the active controller.

There are two 'hooks' provided by default in the path `skins/<active_skin>/customer/addons/local/hooks/index` directory called *bottom.override.tpl* and *styles.post.tpl*. These files and what they do are described below. Additionally there is an empty file called *local_styles.css* which resides in the `skins/<active_skin>/customer/addons/local/css` directory.

This rudimentary structure is described below. But basically it demonstrates two of the most common types of local modifications.

3.1 Overriding Styles

The system loads its own stylesheets for the customer view (`skins/<active_skin>/customer/styles.css`). There is a 'hook' within the code that allows you to add your own stylesheet to modify the standard styles. Inside of the file named `skins/<active_skin>/customer/common_templates/styles.tpl` exists a line that reads: `{hook name="index:styles"}/{/hook}`. This tells the system to look in the *addons* directories for all addons associated with the *customer* view for a file named either *styles.pre.tpl*, *styles.post.tpl*, or *styles.over-*

ride.tpl. If it finds one, then it will either prepend, append or override what is between the 'hook' tags. In this case, because there is nothing between the 'hook' tags, pre, post and override all have the same effect. However, it will see that the `skins/<active_skin>/customer/addons/local/index/styles.post.tpl` file exists and execute whatever template code it contains (if any).

The template code for the *styles.post.tpl* file simply loads the *local_styles.css* file from the `css` directory and checks to see if the controller specific checkbox is checked. If so, it also loads a `<current_controller>.css` file from the same directory.

While this document is NOT a `css` tutorial nor a *Smarty Template Engine* tutorial, we try to give good examples so you can get a feel for how all this works.

For instance, if we want to override the standard background color and put a 1 pixel maroon colored border around the box for the product detail page, we would simply add a couple of lines to the *local_styles.css* file of:

```
.product-description {
    border:1px solid #990000;
    background-color:#F8F8F8;
}
```

When the product detail page is loaded, this style definition will override the standard definition and (since our file is loaded last) our definition will prevail.

This method can be applied to all the styles in the system. We recommend using a good `CSS` debugging tool such as *Firebug* (a Firefox addon) to clearly see what `CSS` definitions are being used for each page you want to change.

3.2 Using Hooks

Most system templates contain 'hooks' that allow you to prepend, append or override certain template code. The EZ-cart *Local Customization* addon provides one hook in addition to the *styles.post.tpl* file. This hook will override the "bottom" area of all pages (the system footer where "Powered By..." is located).

The file *bottom.override.tpl* exists in the `skins/<active_skin>customer/addons/local/index` directory and replaces the contents that exists within the `{hook name="index:bottom"}...` in the template file `skins/<active_skin>customer/bottom.tpl` file.

There are many, many hooks within the templates for accessing many different parts of the cart. Please see the appendix for a list of current hooks as of version 2.0.6.

For this 'hook' we simply copied the standard template code between the 'hook' tags (hook...}{...{/hook}) and then replaced some of the values with what we wanted.

4.0 Summary

In closing, hooks are used in a variety of ways. The most common is to override CSS styles via the *local_styles.css* file. Or, whole chunks of HTML can be augmented or replaced using various *hook templates*.

Feel free to experiment. The big win is that using hooks, your modifications will NOT cause conflicts during subsequent upgrade processes. This means your store will be back on line quicker and the majority of your changes will be transparent to the system.

Please note that if the *Local Modifications* addon is uninstalled, then all the changes you have made will be lost. So before you uninstall/reinstall the *Local Modifications* addon, please ensure you have backed up your directory tree.

5.0 Appendix

Hooks within the 'skins' templates are listed below. You will have to determine if these hooks meet your customization needs or not. If so, the smart choice is to make your customizations through the *Local Modifications* addon. If you really must modify standard template code, then keep track of what you do (by using comments in the code) so that when upgrade conflicts are noted, you will remember what changes you make.

The 'Directory' column listed below is the name of the directory in your `skins/<active_skin>/customer/addons/local/hooks` directory. The 'Base Name' is the base filename. It should be constructed as `<base_name>.post.tpl` (or `pre` or `override`).

5.1 Skin Hooks

Skin Path	Directory	Base Name
skins/mail/addons/gift_certificates/hooks/orders/extra_list.post.tpl	orders	product_info
skins/mail/addons/rma/hooks/orders/ordered_products.post.tpl	orders	product_info
skins/mail/addons/product_configurator/hooks/orders/items_list_row.override.tpl	orders	product_info
skins/mail/addons/product_configurator/hooks/orders/items_list_row.override.tpl	orders	product_info
skins/mail/orders/print_packing_slip.tpl	orders	invoice
skins/mail/orders/invoice.tpl	orders	items_list_row
skins/mail/orders/invoice.tpl	orders	product_info
skins/mail/orders/invoice.tpl	orders	extra_list
skins/mail/orders/invoice.tpl	orders	ordered_products
skins/mail/orders/invoice.tpl	orders	totals
skins/mail/orders/invoice.tpl	orders	invoice
skins/admin/common_templates/scripts.tpl	index	scripts
skins/admin/common_templates/styles.tpl	index	styles
skins/admin/main.tpl	index	main_content
skins/admin/views/order_management/totals.tpl	order_management	product_info
skins/admin/views/order_management/totals.tpl	order_management	extra_list
skins/admin/views/order_management/totals.tpl	order_management	totals_extra
skins/admin/views/order_management/totals.tpl	order_management	totals_shipping
skins/admin/views/order_management/totals.tpl	order_management	totals
skins/admin/views/profiles/manage.tpl	profiles	list_extra_links
skins/admin/views/profiles/update.tpl	profiles	general_content
skins/admin/views/profiles/update.tpl	profiles	detailed_content
skins/admin/views/profiles/update.tpl	profiles	tabs_content
skins/admin/views/profiles/update.tpl	profiles	tabs_extra
skins/admin/views/profiles/components/profiles_account.tpl	profiles	account
skins/admin/views/profiles/components/profiles_info.tpl	orders	payment_info
skins/admin/views/profiles/components/users_search_form.tpl	profiles	search_form
skins/admin/views/site_layout/logos.tpl	site_layout	logos
skins/admin/views/site_layout/manage.tpl	site_layout	detailed_content
skins/admin/views/site_layout/manage.tpl	site_layout	tabs_content
skins/admin/views/site_layout/manage.tpl	site_layout	tabs_extra
skins/admin/views/product_options/update.tpl	product_options	edit_product_options
skins/admin/views/product_options/update.tpl	product_options	edit_product_options
skins/admin/views/static_data/components/multi_list.tpl	static_data	list_extra_links

skins/admin/views/cart/cart_list.tpl	cart	items_list_header
skins/admin/views/cart/cart_list.tpl	cart	items_list
skins/admin/views/cart/cart_list.tpl	cart	products_list
skins/admin/views/cart/cart_list.tpl	cart	items_list_row
skins/admin/views/cart/components/ carts_search_form.tpl	cart	search_form
skins/admin/views/products/global_update.tpl	products	global_update
skins/admin/views/products/m_update.tpl	products	update_fields
skins/admin/views/products/m_update.tpl	products	update_fields_inner
skins/admin/views/products/m_update.tpl	products	update_fields_extra
		update_fields_inner _extra
skins/admin/views/products/m_update.tpl	products	manage_head
skins/admin/views/products/manage.tpl	products	manage_body
skins/admin/views/products/manage.tpl	products	list_extra_links
skins/admin/views/products/manage.tpl	products	detailed_content
skins/admin/views/products/update.tpl	products	tabs_content
skins/admin/views/products/update.tpl	products	tabs_extra
skins/admin/views/products/components/ select_product_options.tpl	products	select_options
skins/admin/views/products/components/ select_product_options.tpl	products	select_options
skins/admin/views/products/components/ select_product_options.tpl	products	select_options
skins/admin/views/products/components/ select_product_options.tpl	products	select_options_js
skins/admin/views/products/components/ products_search_form.tpl	products	search_form
skins/admin/views/shippings/update.tpl	shippings	update
	product_feat	
skins/admin/views/product_features/update.tpl	ures	extended_feature
	product_feat	
skins/admin/views/product_features/update.tpl	ures	extended_feature
skins/admin/views/categories/update.tpl	categories	detailed_content
skins/admin/views/categories/update.tpl	categories	tabs_content
skins/admin/views/categories/update.tpl	categories	tabs_extra
skins/admin/views/categories/components/ categories_select_fields.tpl	categories	fields_to_edit
skins/admin/views/search/results.tpl	search	search_results
skins/admin/views/pages/update.tpl	pages	detailed_content
skins/admin/views/pages/update.tpl	pages	tabs_content
skins/admin/views/pages/update.tpl	pages	tabs_extra
skins/admin/views/pages/components/ pages_search_form.tpl	pages	search_form
skins/admin/views/revisions_workflow/ components/select.tpl	revisions_wo	objects
	rkflow	
skins/admin/views/index/index.tpl	index	extra
skins/admin/views/index/index.tpl	index	inventory
skins/admin/views/index/index.tpl	index	users
skins/admin/views/orders/manage.tpl	orders	list_extra_links
skins/admin/views/orders/manage.tpl	orders	totals_stats

skins/admin/views/orders/manage.tpl	orders	list_tools
skins/admin/views/orders/details.tpl	orders	details_tools
skins/admin/views/orders/details.tpl	orders	customer_shot_info
skins/admin/views/orders/details.tpl	orders	items_list_row
skins/admin/views/orders/details.tpl	orders	product_info
skins/admin/views/orders/details.tpl	orders	extra_list
skins/admin/views/orders/details.tpl	orders	totals
skins/admin/views/orders/details.tpl	orders	totals_content
skins/admin/views/orders/details.tpl	orders	staff_only_note
skins/admin/views/orders/details.tpl	orders	customer_info
skins/admin/views/orders/details.tpl	orders	tabs_content
skins/admin/views/orders/details.tpl	orders	tabs_extra
skins/admin/views/orders/components/ orders_search_form.tpl	orders	search_form
skins/admin/addons/reward_points/views/ reward_points/userlog.tpl	revar_d_points	userlog
skins/admin/addons/wishlist/hooks/cart/ items_list_row.post.tpl	cart	products_list
skins/admin/addons/gift_registry/views/events/ update.tpl	gift_registry	detailed_content
skins/admin/addons/gift_registry/views/events/ update.tpl	gift_registry	tabs_content
skins/admin/addons/gift_registry/views/events/ update.tpl	gift_registry	tabs_extra
skins/admin/addons/live_help/views/chat_history/ manage.tpl	live_help	header
skins/admin/addons/live_help/views/chat_history/ manage.tpl	live_help	content
skins/admin/addons/gift_certificates/hooks/ order_management/extra_list.post.tpl	order_manag ement	product_info
skins/admin/addons/gift_certificates/hooks/orders/ extra_list.post.tpl	orders	product_info
skins/admin/addons/news_and_emails/views/ news/update.tpl	news_and_e mails	detailed_content
skins/admin/addons/news_and_emails/views/ news/update.tpl	news_and_e mails	tabs_content
skins/admin/addons/news_and_emails/views/ news/update.tpl	news_and_e mails	tabs_extra
skins/admin/addons/quickbooks/views/orders/ components/export_to_iif.tpl	quickbooks	export_items
skins/admin/addons/quickbooks/views/orders/ components/export_to_iif.tpl	quickbooks	export_gift_certificat es
skins/admin/addons/quickbooks/views/orders/ components/export_to_iif.tpl	quickbooks	export_payments
skins/admin/addons/tags/views/tags/components/ tags_search_form.tpl	tags	search_form
skins/admin/addons/rma/hooks/orders/ totals.pre.tpl	orders	returned_product_inf o
skins/admin/addons/rma/views/rma/details.tpl	rma	details_tools
skins/admin/addons/rma/views/rma/details.tpl	rma	items_content

skins/admin/addons/rma/views/rma/details.tpl	rma	returned_items_header
skins/admin/addons/rma/views/rma/details.tpl	rma	returned_items_content
skins/admin/addons/rma/views/rma/details.tpl	rma	returned_items_amount
skins/admin/addons/affiliate/views/banners_manager/manage.tpl	products	list_extra_links
skins/admin/addons/product_configurator/hooks/orders/items_list_row.override.tpl	orders	product_info
skins/admin/addons/product_configurator/hooks/orders/items_list_row.override.tpl	orders	product_info
skins/admin/top.tpl	index	top
skins/customer/common_templates/search.tpl	search	additional_fields
skins/customer/common_templates/scripts.tpl	index	scripts
skins/customer/common_templates/styles.tpl	index	styles
skins/customer/main.tpl	index	main_content
skins/customer/bottom.tpl	index	bottom
skins/customer/index.tpl	index	footer
skins/customer/views/profiles/update.tpl	profiles	account_update
skins/customer/views/profiles/components/profiles_account.tpl	profiles	account_info
skins/customer/views/checkout/checkout.tpl	checkout	cart_item
skins/customer/views/checkout/checkout.tpl	checkout	terms_and_conditions
skins/customer/views/checkout/summary.tpl	checkout	terms_and_conditions_downloadable
skins/customer/views/checkout/summary.tpl	checkout	terms_and_conditions_downloadable
skins/customer/views/checkout/components/checkout_totals.tpl	checkout	payment_extra
skins/customer/views/checkout/components/checkout_totals.tpl	checkout	payment_options
skins/customer/views/checkout/components/checkout_totals.tpl	checkout	checkout_totals
skins/customer/views/checkout/components/shipping_estimation.tpl	checkout	shipping_estimation
skins/customer/views/checkout/components/cart_items.tpl	checkout	form_data
skins/customer/views/checkout/components/cart_items.tpl	checkout	items_list
skins/customer/views/checkout/components/cart_items.tpl	checkout	product_info
skins/customer/views/checkout/components/cart_items.tpl	checkout	extra_list
skins/customer/views/checkout/components/shipping_rates.tpl	checkout	shipping_rates
skins/customer/views/checkout/components/payment_methods.tpl	checkout	payment_methods
skins/customer/views/checkout/components/checkout_steps.tpl	checkout	checkout_steps
skins/customer/views/checkout/components/checkout_steps.tpl	checkout	checkout_steps

skins/customer/views/checkout/components/checkout_steps.tpl	checkout	checkout_steps
skins/customer/views/checkout/components/cart_status.tpl	index	cart_status
skins/customer/views/products/view.tpl	products	view_main_info
skins/customer/views/products/view.tpl	products	tabs_block
skins/customer/views/products/components/products.tpl	products	product_block
skins/customer/views/products/components/one_product.tpl	products	product_block
skins/customer/views/products/components/products_small_list.tpl	products	product_small_list
skins/customer/views/products/components/products_search_form.tpl	products	search_in
skins/customer/views/products/components/product_options.tpl	products	options_modifiers
skins/customer/views/products/components/product_options.tpl	products	options_modifiers
skins/customer/views/products/components/product_options.tpl	products	options_modifiers
skins/customer/views/products/components/product_options.tpl	products	options_modifiers_js
skins/customer/views/products/components/product_options.tpl	products	options_js
skins/customer/views/products/components/products_list.tpl	products	product_list
skins/customer/views/products/components/products_multicolumns_list.tpl	products	product_multicolumns_list
skins/customer/views/products/components/buy_now.tpl	products	prices_block
skins/customer/views/products/components/buy_now.tpl	products	options_advanced
skins/customer/views/products/components/buy_now.tpl	products	buttons_block
skins/customer/views/products/components/buy_now.tpl	products	buy_now
skins/customer/views/categories/view.tpl	categories	view
skins/customer/views/categories/catalog.tpl	categories	catalog
skins/customer/views/search/results.tpl	search	:search_results
skins/customer/views/pages/view.tpl	pages	page_content
skins/customer/views/pages/view.tpl	pages	page_extra
skins/customer/views/index/index.tpl	index	index
skins/customer/views/orders/details.tpl	orders	details_bullets
skins/customer/views/orders/details.tpl	orders	info
skins/customer/views/orders/details.tpl	orders	items_list_row
skins/customer/views/orders/details.tpl	orders	product_info
skins/customer/views/orders/details.tpl	orders	extra_list
skins/customer/views/orders/details.tpl	orders	totals
skins/customer/views/orders/details.tpl	orders	details
skins/customer/views/orders/details.tpl	orders	confirmation

skins/customer/addons/reward_points/views/reward_points/userlog.tpl	reward_points	userlog
skins/customer/addons/wishlist/views/wishlist/view.tpl	wishlist	items_list
skins/customer/addons/wishlist/views/wishlist/view.tpl	wishlist	view
skins/customer/addons/gift_registry/views/events/view.tpl	events	view
skins/customer/addons/gift_registry/views/events/update.tpl	events	fields
skins/customer/addons/gift_registry/views/events/update.tpl	events	update
skins/customer/addons/gift_certificates/hooks/checkout/cart_content.pre.tpl	checkout	product_info
skins/customer/addons/gift_certificates/hooks/checkout/extra_list.post.tpl	checkout	product_info
skins/customer/addons/gift_certificates/hooks/orders/extra_list.pre.tpl	orders	product_info
skins/customer/addons/gift_certificates/views/gift_certificates/update.tpl	gift_certificates	buttons
skins/customer/addons/form_builder/hooks/pages/page_content.override.tpl	pages	page_content
skins/customer/addons/news_and_emails/views/news/view.tpl	news	view
skins/customer/addons/news_and_emails/views/news/list.tpl	news	list
skins/customer/addons/tags/views/tags/view.tpl	tags	view
skins/customer/addons/tags/views/tags/summary.tpl	tags	summary
skins/customer/addons/subcategories_thumbnail/hooks/categories/view.override.tpl	categories	view
skins/customer/addons/rma/hooks/orders/details.post.tpl	orders	product_details
skins/customer/addons/rma/views/rma/details.tpl	orders	return_info
skins/customer/addons/affiliate/views/banner_products/view.tpl	products	prices_block
skins/customer/addons/product_configurator/hooks/checkout/items_list_row.override.tpl	checkout	product_info
skins/customer/addons/product_configurator/hooks/orders/items_list_row.override.tpl	orders	product_info
skins/customer/addons/product_configurator/hooks/orders/items_list_row.override.tpl	orders	product_info
skins/customer/meta.tpl	index	meta
skins/customer/blocks/search.tpl	search	additional_fields
skins/customer/blocks/my_account.tpl	profiles	my_account_menu