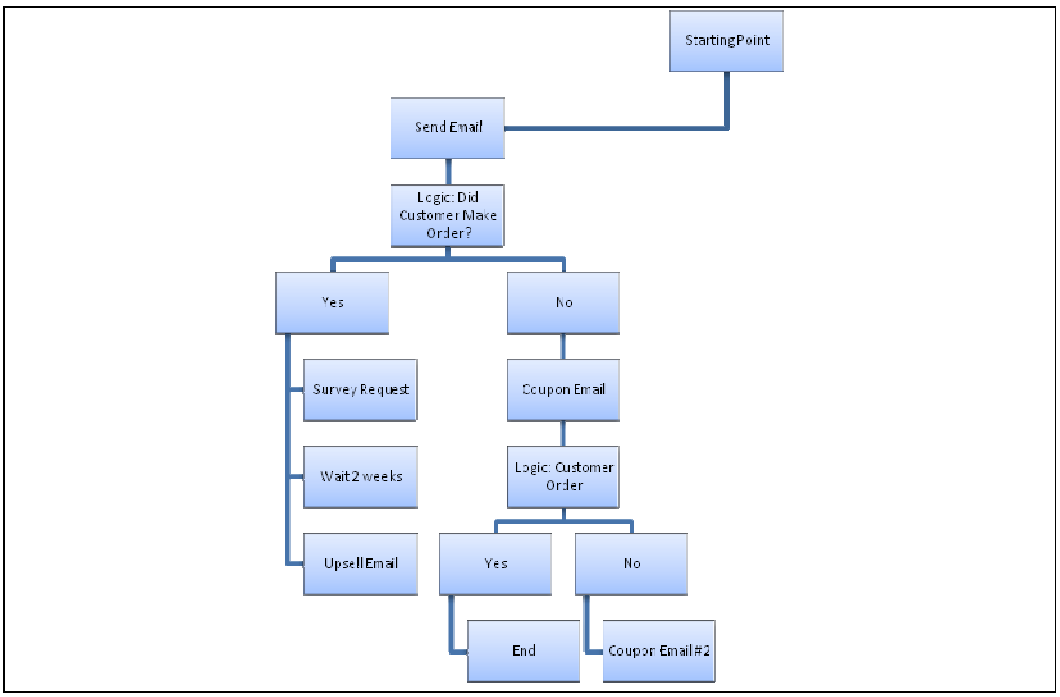
Email Autoresponder

Introduction

The Email Autoresponder may be considered either an extension of the normal marketing campaigns or even a replacement. It ties into the normal marketing campaigns by using the Email Lists described earlier. However, an Autoresponder differs from a simple Marketing Campaign with the ability to have multiple emails programmatically delivered to a customer by providing the following features.

Features

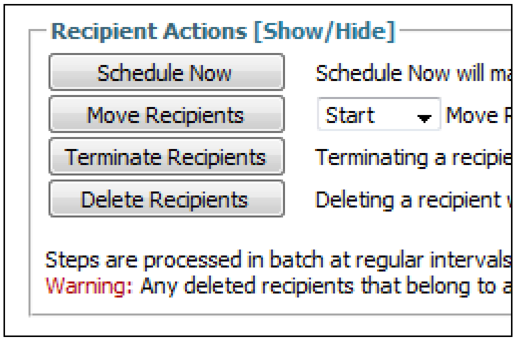
- Complex Execution Paths – A single campaign can contain multiple steps containing complex logic allowing for automatic reactions to customer actions. Logic steps provide velocity code to dynamically determine the next steps in a campaign, custom pause steps delay for varying time periods. The following figure gives a small sample of the power available to an Autoresponder Campaign.



- Parameterized, Reusable Email Templates – Define an email template once and reuse numerous times within multiple campaigns by change parameters as needed.
- Emails are sent through your mail server, from you.
- Email Autoresponder automatically checks your POP3 box for bounces and updates email recipients accordingly.
- In addition to email lists and manual enrollment, customers may be enrolled in campaign automatically based on these events.
    - Abandon Cart

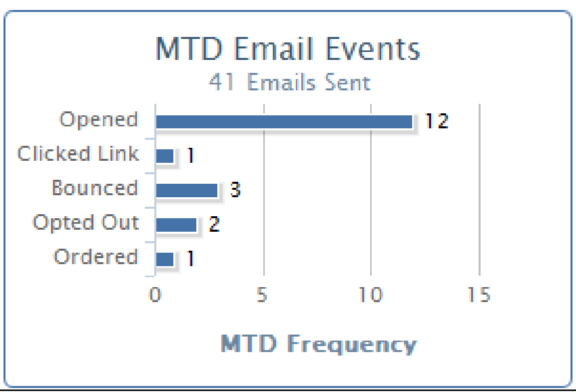
- Purchased Product
- Auto Order: Decline
- Auto Order: Credit Card Expiration
- Auto Order: Cancelled

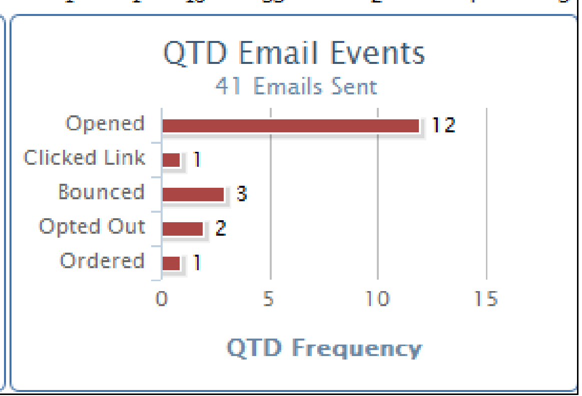
- Individual and Group Management of campaign recipients.
  - Terminating a recipient
  - Restarting a recipient as a particular step
  - Force a campaign step to execute immediately for a recipient



- Performance monitoring
  - Orders are tied to campaigns and steps providing easy to track returns for campaigns
  - Daily snapshots of emails sent, bounced, opened, links clicked, opt outs, and products ordered
  - Detailed history for every campaign customer.

Campaign	Step Name	Category	Event	MTD	QTD	YTD	Total	Mar 10	Feb 10	Jan 10
Campaign1	Step1	Expense	Sent	41	41	351	1,221	99	104	107
		Positive Reaction	Opened	12	12	90	340	28	18	32
			Clicked Link	1	1	23	88	6	9	7
		Negative Reaction	Bounced	3	3	24	71	6	9	6
			Opted Out	2	2	27	77	8	4	13
		Revenue	Ordered	1	1	10	33	2	4	3





Creating a Campaign

This section introduces the core functionality of the Email Autoresponder in the order needed to create a campaign. The section should be followed in sequential order.

Campaigns Home

Navigate to:

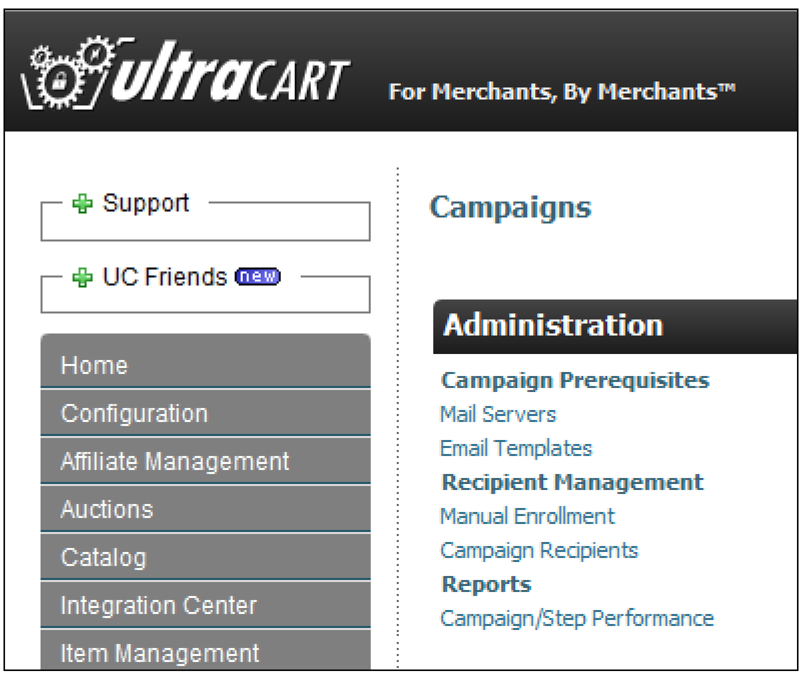
Main Menu → Marketing → Autoresponder

The Autoresponder Campaigns Home page contains Administration Links and a listing of all campaigns.

Administrative Links

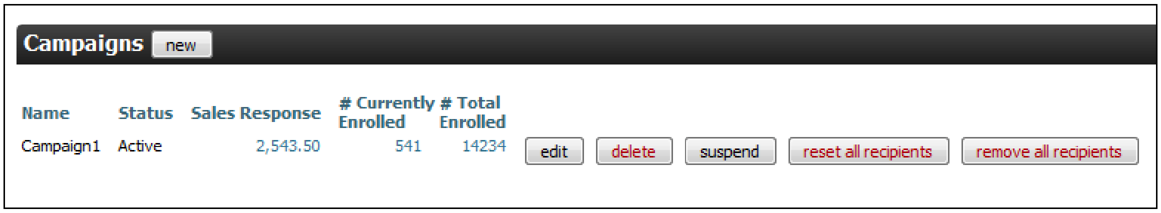
The administrative links contains three sections.

1. Prerequisites for a campaign – these are items that must exist prior to creating a campaign. The list currently includes a mail server and email templates. Each is described in detail in the following sections.
2. Recipient Management – tools for managing customers participating in a campaign. These are described in detail in the Recipients Section.
3. Reports – Performance reporting to analyze campaign performance. See the section "Performance Analysis" for a description of this feature.

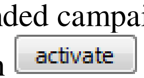


Campaign Lists

In additional to the 'new' button, which creates a new campaign, the campaign lists provides lifecycle controls for each campaign.



Lifecycle Controls

Type of Control	Label	Description
Hyperlink	Sales Response	Clicking the *dollar amount* for a campaign will display a page showing every order placed by campaign customers
Hyperlink	# Currently Enrolled	Clicking the currently enrolled *number* for a campaign will display a page showing all recipients *currently active* for a campaign
Hyperlink	# Total Enrolled	Clicking the total enrolled *number* for a campaign will display a page of *every* recipient that has ever participated in a campaign.
Button	Edit	Click the edit button to make changes to a campaign or its steps
Button	Delete	Click the delete button to delete a campaign entirely
Button	Suspend	Click the suspend button to stop sending emails. A suspended campaign will display an activate button  to begin sending emails again.
Button	Reset all recipients	Click the reset all recipients button to move all recipients back to the starting step for re-execution. This may be useful if significant changes are done to a campaign, or for initial testing with small customer sets over and over until you're satisfied with the results.
Button	Remove all recipients	Click the remove all recipients buttons to delete every recipient completely. This operation cannot be undone.

Mail Server

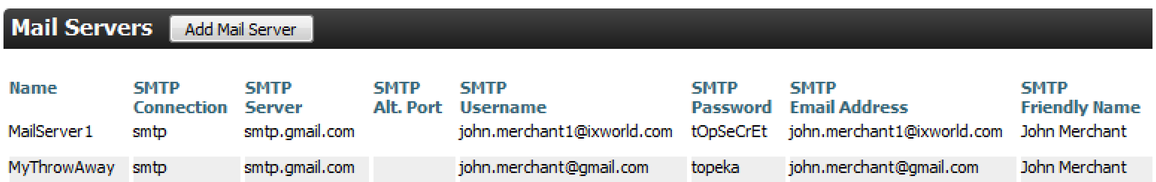
Configuring a mail server is a pain. There are hundreds of mail servers, each with their own nuances. The Autoresponder attempts to minimize the pain by providing a tool to test your mail server configuration from the start.

Before you create a campaign, you must have a mail server configured. It just makes sense. ☺ To configure a mail server, click on the Mail Servers link from the Autoresponder Home. This will display a list of all mail servers configured.

TIP: *Create more than one mail server. Configure and test your campaign with a mail server account you can afford to lose. Some companies *cough* Google *cough* are unforgiving when it comes to spam. If Google decides you're a spammer, the suspended account can never, ever be used again. So use a throwaway as you develop your email templates and your campaign flow. Then, when everything is in place, switch to your main mail server and run through a final test.*

Mail Servers List

The Mail Servers screen contains a [Add Mail Server] button in the black title bar that will display the edit fields needed to configure a new mail server. Below that, a list of mail servers shows the smtp and pop3 settings. It's a long list, so scroll to the far right to see the management button.



Mail Servers [Add Mail Server]

Name	SMTP Connection	SMTP Server	SMTP Alt. Port	SMTP Username	SMTP Password	SMTP Email Address	SMTP Friendly Name
MailServer1	smtp	smtp.gmail.com		john.merchant1@ixworld.com	tOpSeCrEt	john.merchant1@ixworld.com	John Merchant
MyThrowAway	smtp	smtp.gmail.com		john.merchant@gmail.com	topeka	john.merchant@gmail.com	John Merchant

Figure 57 - First part of Mail Servers list

POP3 Connection	POP3 Server	POP3 Alt. Port	POP3 Username	POP3 Password	Edit	Delete
pop3	pop.gmail.com		john.merchant1@ixworld.com	tOpSeCrEt	edit	Can't Delete - 1 Campaign(s)
pop3	pop.gmail.com		john.merchant@gmail.com	topeka	edit	delete

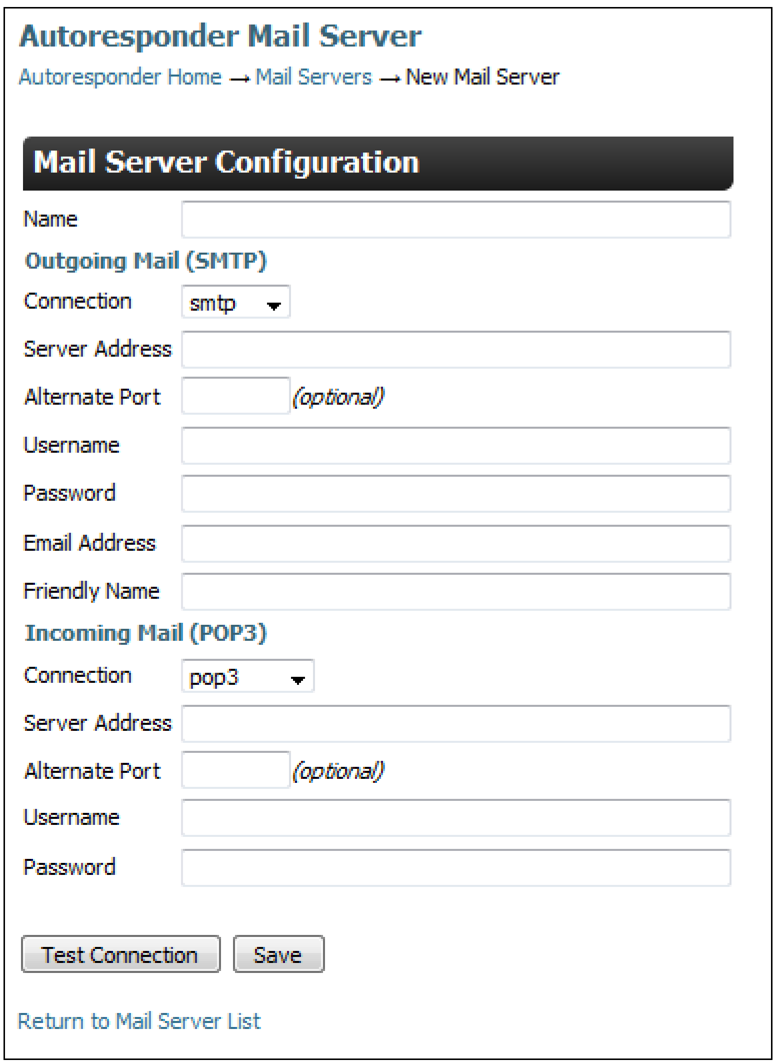
Figure 58 - Second part of Mail Servers list

Button	Description
edit	Click the edit button to change smtp or pop3 settings for your mail server. The edit page also contains a test button, so this is a good place to troubleshoot problems.
delete	The delete button will delete a mail server. If a mail server is currently active for a campaign, the delete button is replaced by a message indicating that an active mail server cannot be deleted. Click the message to display a list of campaigns currently using that mail server (see figure below). The delete button is removed for active mail servers for safety reasons. Deleting an active mail server would be bad – like *feeding gremlins after midnight* bad. 

Figure 59 - A list of campaigns using a mail server

Adding/Editing a Mail Server

Click the Add Mail Server button (shown above). The Mail Server configuration screen will display the fields needed to set up both smtp and pop3 connections.



Name	The name can be anything you desire. Spaces and strange

	characters are allowed.
SMTP Connection	Choose smtp or smtp-ssl. For google, choose smtp. For others, it will depend on your method of connecting
SMTP Server Address	Example: smtp.gmail.com. Your mail provider should have this address
SMTP Alternate Port	If your smtp server is running on a non-standard port, enter it here. This is an uncommon situation.
SMTP Username	Enter your username. Most often this is your email address.
SMTP Password	The password for making an smtp connection. This is usually the password used for checking your email.
SMTP Email Address	The 'from' address. All email will originate from this address.
SMTP Friendly Name	This will appear in the from field of the email. This should be descriptive. Using a friend name of 'joe' won't cut it. Represent your store with this name.
POP3 Connection	POP3 of pop-ssl. Regular pop3 is most common.
POP3 Server Address	Example: pop.gmail.com. Your mail provider should have this address.
POP3 Alternate Port	If your pop3 server is running on a non-standard port, enter it here. This is an uncommon situation.
POP3 Username	Enter your username. Most often this is your email address.
POP3 Password	The password for making a pop3 connection. This is usually the password used for checking your email.

TIP: *Before saving, test your connection!*
It's important to realize that any failure to send an email will mark a recipient as 'Failed'. You must then reset them if you wish to try again. An incorrectly configured mail server will do two things: 1) cause all your recipients to end up 'Failed' and probably disable your mail account due to repeated login failures. Test your connection!

Validating mail server connections

The Test Connection button will use your mail server settings to login to both the smtp and pop3 servers. A test email will be sent, and the pop3 inbox will be accessed. The results of this test will display in the dialog box below.

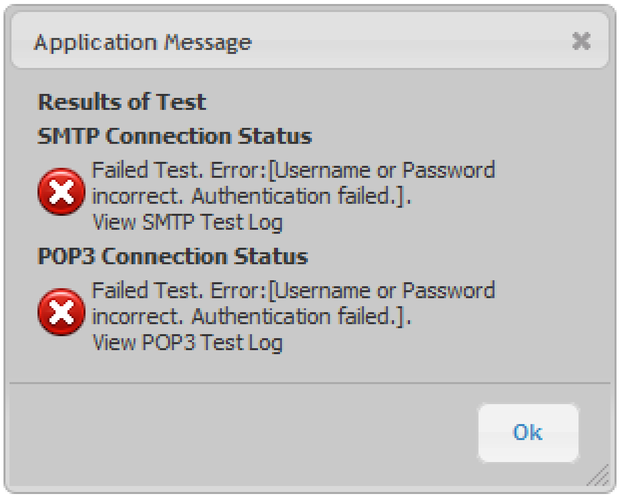
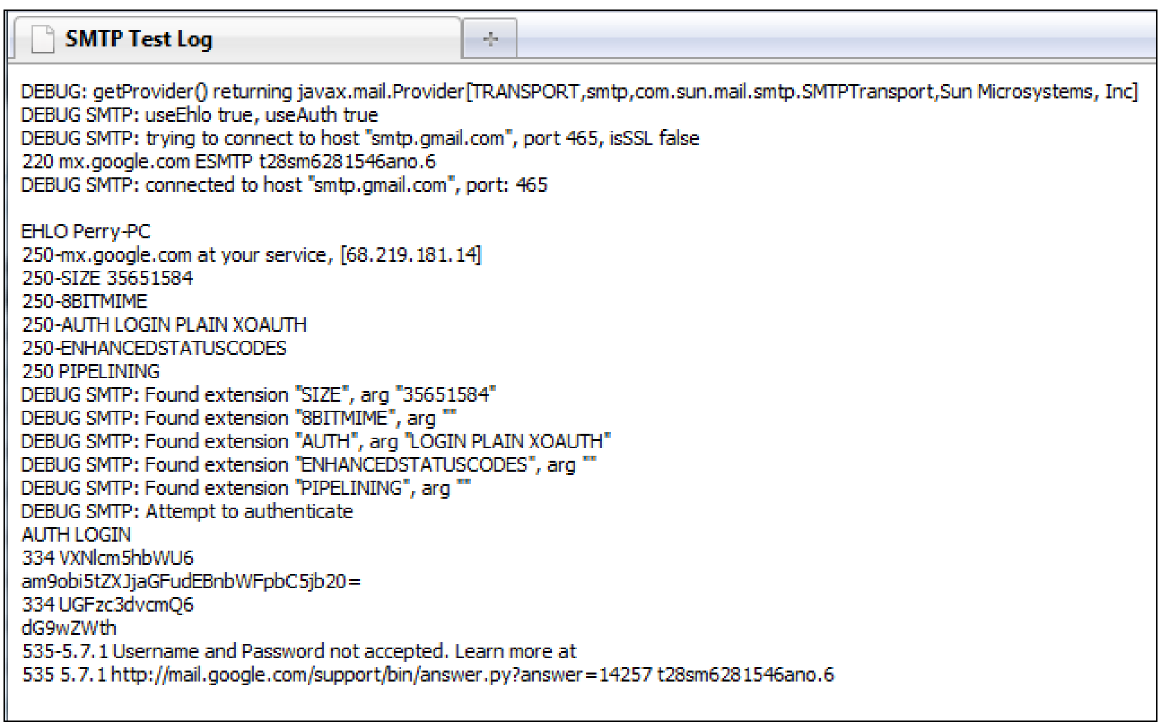


Figure 60 - Results of testing a mail server configuration

If a red X appears, the connection was unsuccessful. Click the View Log link for either connection to read the mail server conversation for clues to the failure. The conversation will pop to a new window (you do allow popups for ultracart.com, don't you??)


SMTP Test Log

```
DEBUG: getProvider() returning javax.mail.Provider[TRANSPORT,smtp,com.sun.mail.smtp.SMTPTransport,Sun Microsystems, Inc]
DEBUG SMTP: useEhlo true, useAuth true
DEBUG SMTP: trying to connect to host "smtp.gmail.com", port 465, isSSL false
220 mx.google.com ESMTP t28sm6281546ano.6
DEBUG SMTP: connected to host "smtp.gmail.com", port: 465

EHLO Perry-PC
250-mx.google.com at your service, [68.219.181.14]
250-SIZE 35651584
250-8BITMIME
250-AUTH LOGIN PLAIN XOAUTH
250-ENHANCEDSTATUSCODES
250 PIPELINING
DEBUG SMTP: Found extension "SIZE", arg "35651584"
DEBUG SMTP: Found extension "8BITMIME", arg ""
DEBUG SMTP: Found extension "AUTH", arg "LOGIN PLAIN XOAUTH"
DEBUG SMTP: Found extension "ENHANCEDSTATUSCODES", arg ""
DEBUG SMTP: Found extension "PIPELINING", arg ""
DEBUG SMTP: Attempt to authenticate
AUTH LOGIN
334 VXNlcm5hbWU6
am9obi5tZXJjaGFudEBnbWFpbC5jb20=
334 UGFzc3dvcmQ6
dG9wZWth
535-5.7.1 Username and Password not accepted. Learn more at
535 5.7.1 http://mail.google.com/support/bin/answer.py?answer=14257 t28sm6281546ano.6
```

Figure 61- Mail Server Conversation

In the example above, the second to last line reveals that either the username or password is incorrect. A response like that should prompt you to attempt to login to your mail server through normal means (i.e. check your mail). That can often shed light to the problem. This conversation may also be helpful to your mail support staff in diagnosing a problem.

Email Templates

Email templates are reusable emails that may contain both substitution parameters and velocity code. The parameters and velocity code give the templates their high reuse factor. Imagine an email offering a customer a coupon. With parameters and code, it becomes possible to create a single coupon template that can vary the percentage or offer based on customer history or the position of an email within a campaign.

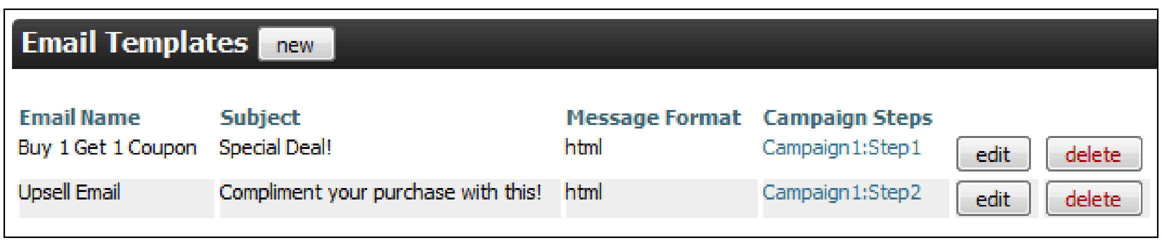
Templates are associated with a campaign by inserting an email step (discussed below) into a campaign. During the step creation, the desired template is selected. The remainder of this section discusses the creation of a template. The Email Step section talks about using templates.

Template Lists

If you're not already in the Autoresponder portion of UltraCart, navigate to:

Main Menu → Marketing → Autoresponder

From the Administration links, click on Email Templates. A list of previously defined email templates will display, along with a 'new' button for creating a new email template.



Email Templates new

Email Name	Subject	Message Format	Campaign Steps		
Buy 1 Get 1 Coupon	Special Deal!	html	Campaign1:Step1	edit	delete
Upsell Email	Compliment your purchase with this!	html	Campaign1:Step2	edit	delete

The list contains summary information about the email template.

Email Name	An internally used description of the email. This can be anything to help you remember what the template is about. The customer will never see this name.
Subject	The email subject. The subject may contain parameters and velocity code. The can allow for personalization in the subject line.
Message Format	html, text, or both html: only the html message is sent to the customer text: only the text message is sent to the customer as a plain text email both: the message is sent as a multipart email containing both plain text and html, with most email clients displaying the html message unless the customer has requested text-only emails.
Campaign Steps	This column lists all steps configured to use the template. An email template cannot be deleted if it's in use, so this column is useful to see what steps are affected by edits as well as what steps must be assigned different templates before this one can be deleted.
edit button	Click the edit button to edit the template
delete button	Click the delete button to delete the template

Add/Edit an Email Template

Clicking the ‘new’ button or the edit button of an existing template will display the email template edit screen. This screen contains three tabs to help design the template.

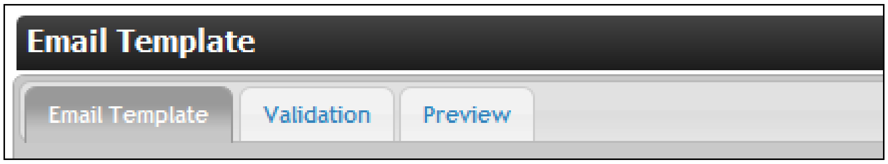


Figure 62 - The Email Template edit screen contains three tabs

The Email Template tab contains the input fields for designing the template. The Validation tab lists common issues with html emails and the results of how the current html email passed the validation. The Preview window displays the html email in an iframe to give an *approximate* rendering of the email. No parameter substitution or velocity code execution is done however, and beyond that, the final product may still differ from the Preview window, **so test the template in real email clients before sending it to customers**!

Creating the Email Template

General Information

Begin creation of an email template by supplying the general information.

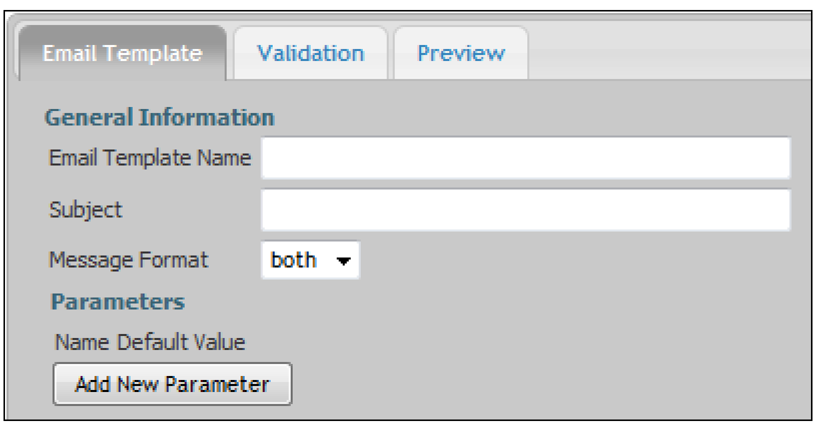


Figure 63 - Email Template General Information

Email Template Name	An internally used description of the email. This can be anything to help you remember what the template is about. The customer will never see this name.
Subject	The email subject. The subject may contain parameters and velocity code (discussed in following pages). The can allow for personalization in the subject line.
Message Format	html, text, or both

	html: only the html message is sent to the customer text: only the text message is sent to the customer as a plain text email both: the message is sent as a multipart email containing both plain text and html, with most email clients displaying the html message unless the customer has requested text-only emails.
Parameters	Parameters are complex and are discussed in a separate section to follow

Message Html

The Message html field has a wysiwyg editor attached to it. The editor is activated by clicking the 'Toggle WYSIWYG editor' link above the textarea.

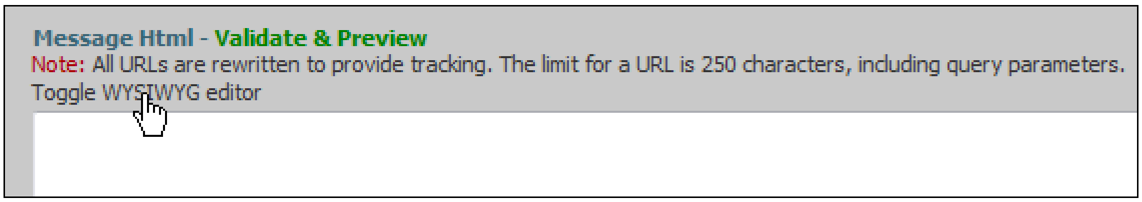


Figure 64 - Email Template Message Html WYSIWYG editor link

The wysiwyg editor is used throughout UltraCart.com, and is useful to create html blocks. Clicking the toggle like will display buttons on the top of the text area and and editor will render your input as html.

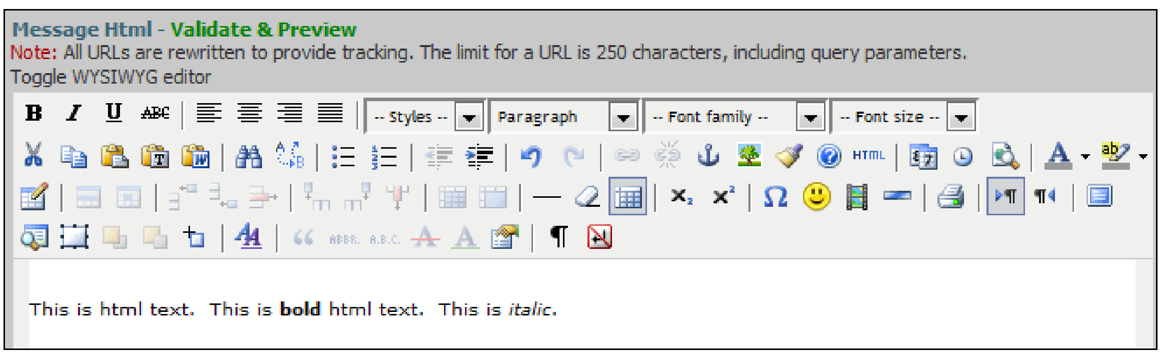


Figure 65 - Email Template Message Html WYSIWYG editor

Click the Toggle link again to revert back to the normal textarea.

TIP: Email html has lots of restrictions. Popular email clients such as Gmail or Outlook place severe restrictions on what is allowed in an html email. The WYSIWYG editor creates valid web page email, but is not concerned about html email restrictions. Be warned! The html generated by the editor will probably not work in most email clients. Some changes will be needed. Validate, preview, and test everything created by the editor, if you use it.

Message Plain Text

The message plain text is the component of the email that will display if the email template type is 'Plain Text' or if the client has html email turned off. This is an important part of the email that should not be neglected. The plain text message may also contain parameters and velocity code.

Validating the Email Template

Immediately above the Message Html is a link for validating your email template's html code. Click the link, then click on the Validation tab at the top.

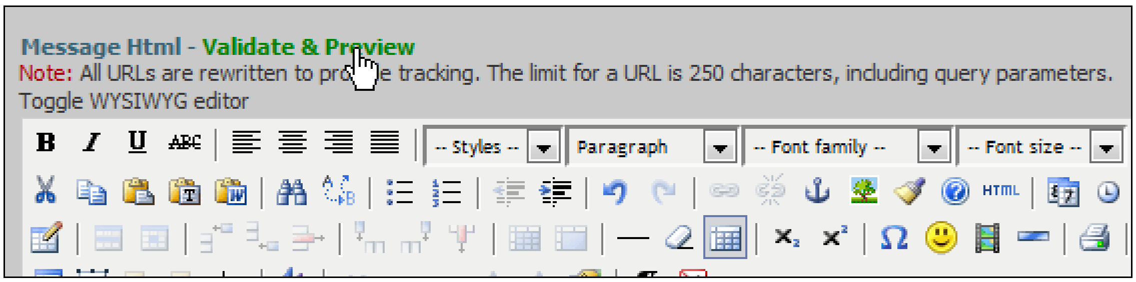
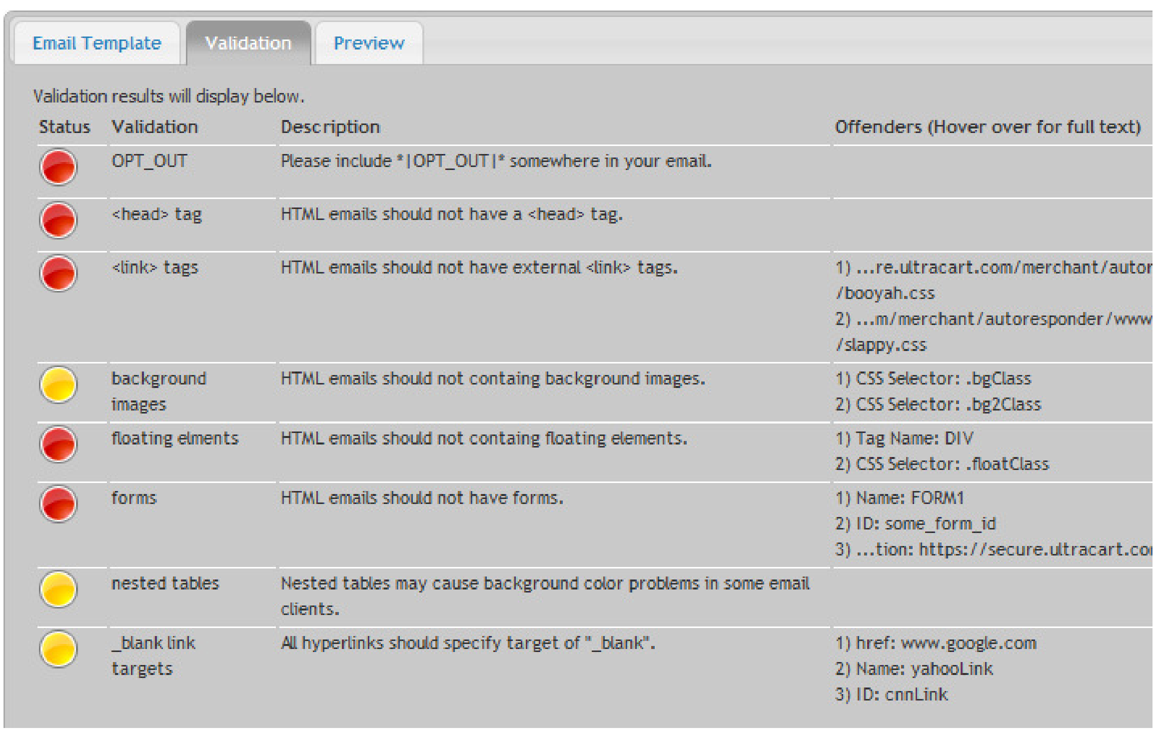


Figure 66 - Click the Validate & Preview button to populate both tabs

The Validation tab displays a list of common issues with email html code, even though it will render correctly in a browser. Most issues revolve around security and browser control rules put in place by the email client to protect their users from malicious emails.



Status	Validation	Description	Offenders (Hover over for full text)
	OPT_OUT	Please include *|OPT_OUT|* somewhere in your email.	
	<head> tag	HTML emails should not have a <head> tag.	
	<link> tags	HTML emails should not have external <link> tags.	1) ...re.ultracart.com/merchant/autor /booyah.css 2) ...m/merchant/autoresponder/www /slappy.css
	background images	HTML emails should not containg background images.	1) CSS Selector: .bgClass 2) CSS Selector: .bg2Class
	floating elments	HTML emails should not containg floating elements.	1) Tag Name: DIV 2) CSS Selector: .floatClass
	forms	HTML emails should not have forms.	1) Name: FORM1 2) ID: some_form_id 3) ...tion: https://secure.ultracart.co
	nested tables	Nested tables may cause background color problems in some email clients.	
	_blank link targets	All hyperlinks should specify target of "_blank".	1) href: www.google.com 2) Name: yahooLink 3) ID: cnnLink

The image above shows a sample validation, specifically created to show a failure or warning for each validation. Aside from the first validation (OPT_OUT), each validation test should be easily understandable. If not, please google the validation, such as ‘head tag’ along with the words ‘html email’ and you’ll see results for myriad of discussions about the issue at hand. The OPT_OUT parameter is discussed in the parameters section that follows.

The Offenders column in the prior image attempts to give hints as to what element is causing the problem. If the issue is a css rule, the rule name is listed. If it is a link, then the href is listed. If it is an element, such as a form, then a number of things are listed in the order they are found, including the id, name, src, etc. If nothing can be found, then a blank number is listed to show the count of offenders.

If an offender is too long to display, it will display truncated. Hover over a truncated offender to see the full description.

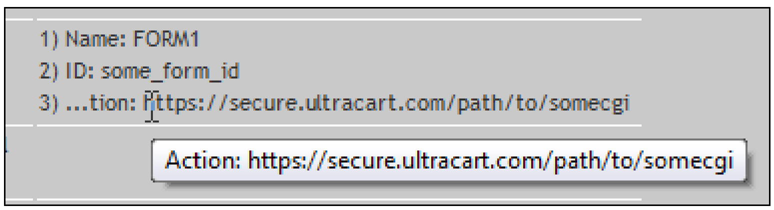
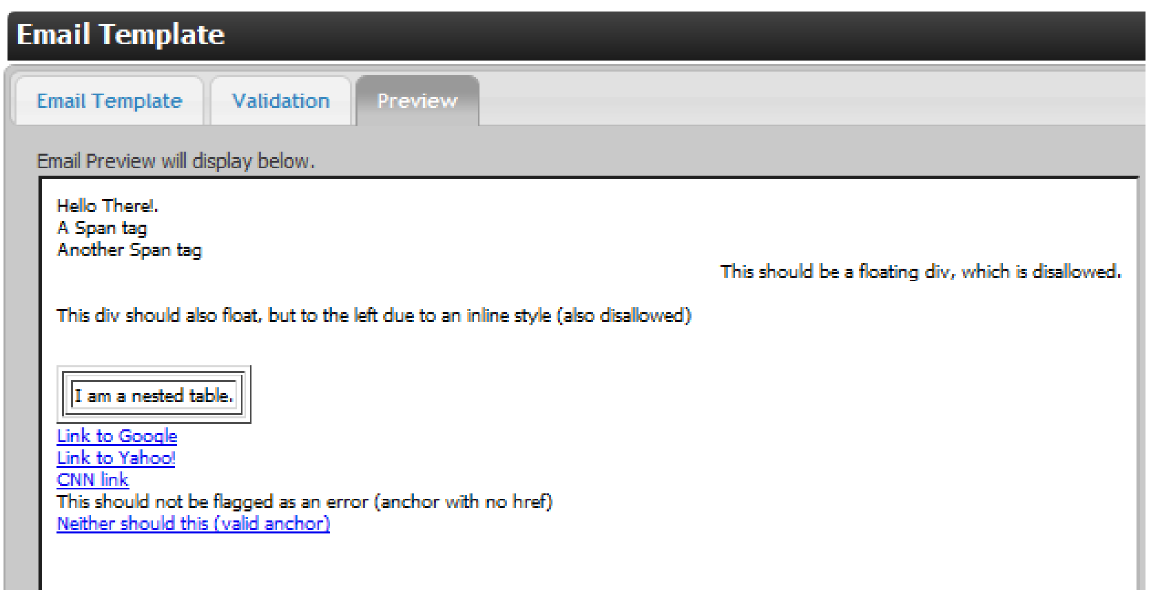


Figure 67 - Hovering over a truncated offender will display the entire string

Previewing the Email Template

The Validation & Preview button, when clicked, will also populate an iframe in the Preview tab displaying your rendered html code.



Some rules about the preview tab:

1. The html code is displaying in an iframe. This *could* cause rendering issues. It probably won't, but it *could*. Keep that in mind.
2. A good looking Preview does not guarantee a good email. Test your email in different clients!
3. A bad looking Preview will probably lead to a bad looking email. If elements are misaligned here, it probably won't get better in an email client.

Keep it simple.
Use simple tables, with simple css, with simple images, and a powerful offer.

Email Template Parameters

Email parameters foster template reuse. A single parameterized 'coupon' email could be used for different coupons by making the percent off a parameter. The same can be done for product promotions.

Parameters are substituted as the email is being sent, allowing for emails tailored to a customer. A parameter may contain a default, supplied on the email template screen, or an override, supplied on the campaign edit screen.

Syntax for Parameters

`*|TEMPLATE_NAME|*`
Asterisk pipe name pipe asterisk

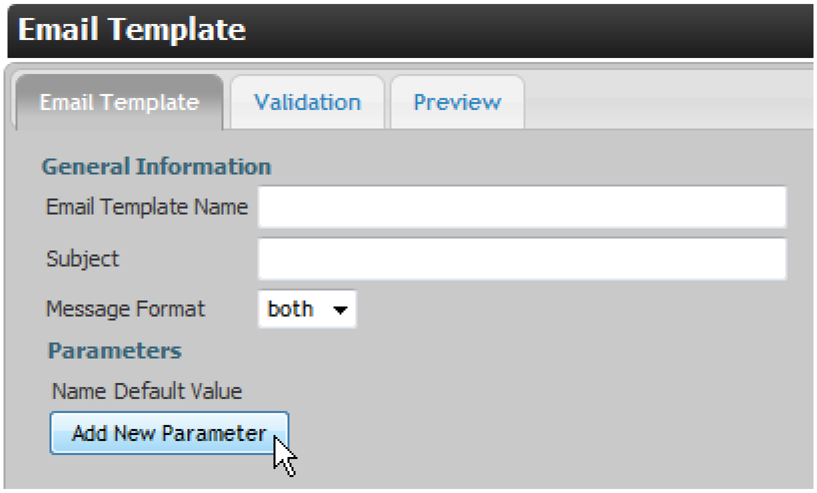
Some guidelines:

- Be consistent. This will save time in the long run.
- You may have upper and lower case letters, as well as spaces. However, be consistent.
- The recommended format for a template name is ALL CAPS with underscores separating words. The makes parameters jump out on the page and helps prevent mismatches between parameters and email content.

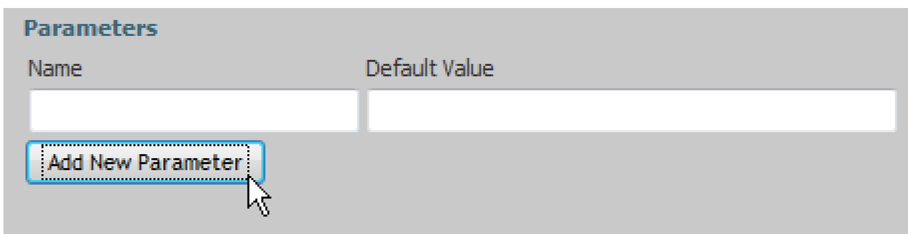
Adding a Parameter

On the Email Template tab (first tab), click the 

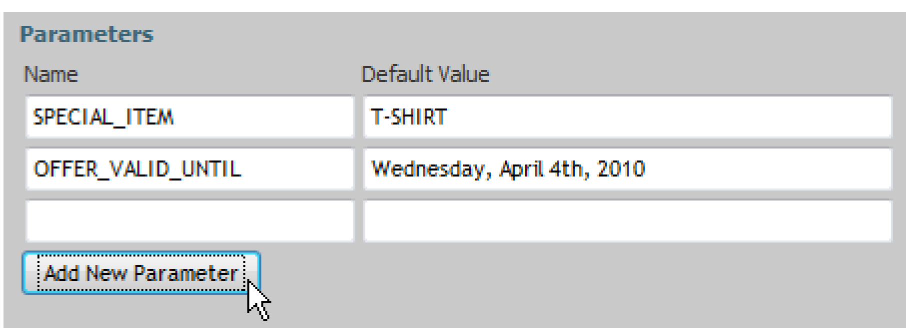
button.



Two next text fields will appear, one for a name, and the other for a default value. The name is required, the default value is optional. Do not add the asterisk or pipe in the name.



You may continue clicking the Add New Parameter button to add additional parameters. There is no limit to the number of parameters you may add, but common sense should rule the day. An email will fifty parameters is probably too complex and will be dismissed by a customer.



Opt-Out Parameter

The Opt-Out parameter *|OPT_OUT|* is a special parameter. You do not add it to your parameter list. It is a built-in parameter. However, your email MUST include it to comply with spam legislation. The best places to add it are the beginning and/or end of your email, near the opening or closing body tag. When the email is sent, the *|OPT_OUT|* parameter is replaced by a the following hyperlink:

```
<a class='optout' href='http://secure.ultracart.com/ar/o?_t=[tracking guid]'>Manage Email Settings</a>
```

The tracking guid parameter will contain a 32 character GUID to associate the email with a customer.   You have two responsibilities concerning the *|OPT_OUT|* parameter.

1. Put it in your email somewhere visible.
2. Add a css rule for the class ‘optout’ to make the hyperlink look consistent with your email. You may also wish to make is smaller text, etc.

For an understanding of the customer experience opting out, see the Recipients section that follows titled ‘Opting-Out’.

Velocity Code in Email Templates

Your email message may contain velocity code . Unlike the Logic steps, an email is not required to contain velocity code, and has no requirements for its usage other than it be valid syntax.

The Autoresponder service makes several customer objects available to your velocity code. Please see the Velocity Code section that follows for a detailed reference.

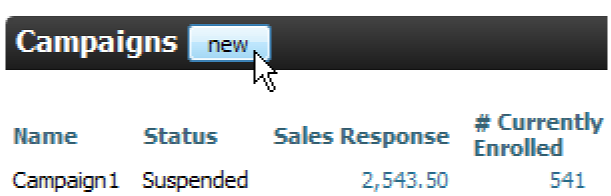
Campaign

Pre-requisites: A mail server must be configured prior to creating a campaign.
Pre-requisites: Email Templates must exist prior to create campaign email steps.

Navigate to:

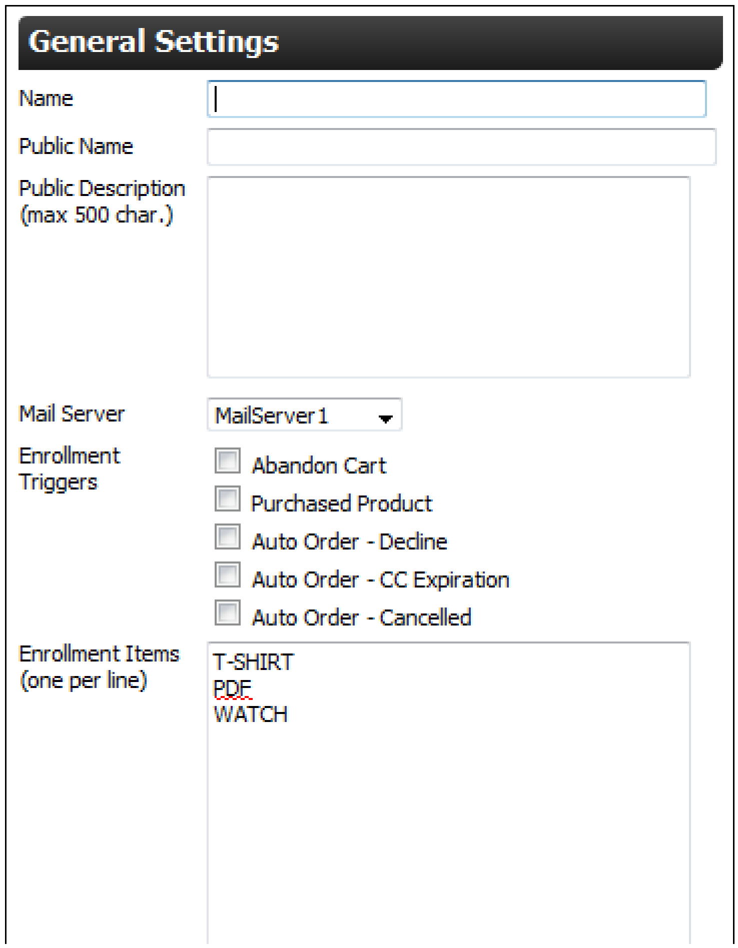
Main Menu → Marketing → Autoresponder

The Autoresponder Campaigns Home page contains Administration Links and a listing of all campaigns. Click the new button located in the black header.



The Add/Edit Campaign page is unique to the UltraCart site. When viewing an empty page, it contains standard html input elements. However, after saving a campaign, it will also contain a step hierarchy below those elements allowing for step creation and management.

TIP: First things first – check the Suspended box. The moment you create your campaign, it will be activated during the *very next* scheduled process. Depending on load, a campaign will process every 30 minutes to an hour. To avoid painful happenings, suspend the campaign until you have everything ready.



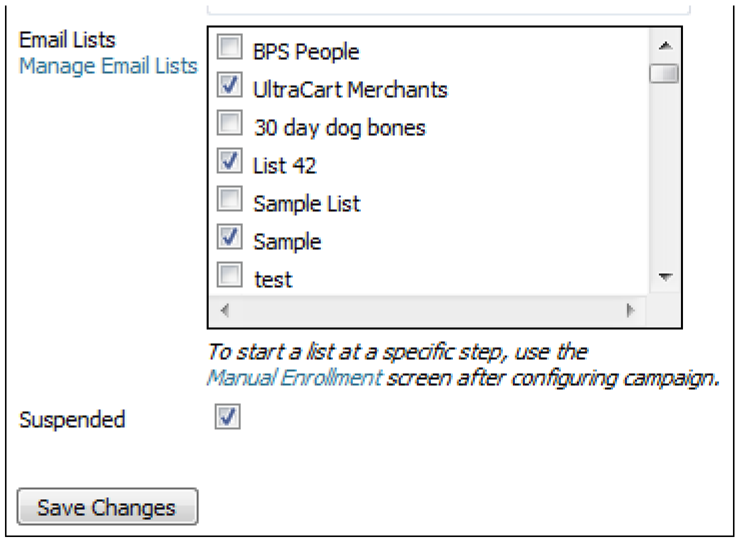
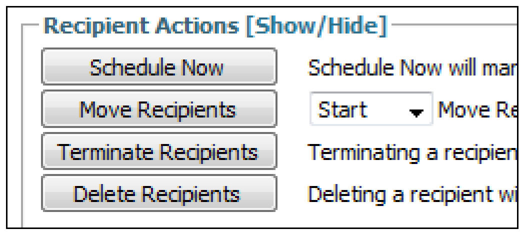


Figure 68 - Autoresponder Campaign General Settings

Field	**Description**
Name	An internal reference to the campaign. The customer will never see this name. Choose anything to provide a handy reminder as to what this campaign does. Examples: *Abandoned Cart Campaign* *Weekly Coupons* *Upsell Item XYZ*
Public Name	The customer will see this name if he/she chooses to opt out of the campaign. Make this name something attractive to the customer. Bad Example: *Ways to make moolah* Good Examples: *Weekly Special Deals* *Special Offers* *New Product Announcements*
Public Description	The customer will also see this description on the opt out screen. *Use this field to provide information that would make a customer not want to opt out!* Good information to include in this field is the frequency of emails. If a customer is opting out after receiving two emails from you, they might not if they see a description contains "3-4 emails a month", etc.
Mail Server	Select a mail server to send emails. As mentioned above in the Mail Server section, you are advised to develop and test your campaign with a non-vital sender address to ensure you don't lose a critical mail address to a spam list if you accidentally do something offensive with your campaign.
Enrollment Triggers	The triggers are hooks to the shopping experiences that allow for automatic enrollment to a campaign based on an event. There are five triggers.

	• Abandon Cart – This trigger will enroll any abandoned cart with an email address into the campaign. • Purchased Product – This trigger will enroll any customer making a purchase into the campaign. Enrollment Items can restrict enrollment. • Auto Order Decline – This trigger will enroll any customer who has an auto order declined. • Auto Order CC Expiration – This trigger will enroll any customer who has an auto order credit card expired. • Auto Order Canceled – This trigger will enroll any customer who has an auto order canceled.
Enrollment Items	The enrollment items work in conjunction with the enrollment triggers. They are filters for the triggers. If you provide a list of items, then only events with those items involved will trigger an enrollment. For example, let's say you have an item 'PDF', and you insert that here, and also check the enrollment trigger 'Purchased Product'. With that configuration, *only* purchases of PDF items will result in enrollment. This is useful if you with to upsell certain items, or provide item specific marketing material. • Enrollment Items only affect triggers. Items are meaningless with triggers. • Enrollment Items affect all triggers. There is no pairing certain items with certain triggers. If you need different items for your triggers, create separate campaigns. • No Enrollment Items is the default and triggers will fire for all items. Remember that Enrollment Items act as filters. • You probably would not want to add any enrollment items to Auto Order triggers. That would cause those triggers to selectively fire, which would be undesired.
Email Lists	Email Lists are managed in a different part of the site. Navigate to Main Menu → Marketing → Email Lists to manage lists. By associating an email list with a campaign, the site will, on a regular basis, scan the list and enroll any new emails. This is yet another powerful way to automatically enroll customers. Be warned! The process will add any emails not in the campaign. The following scenario will happen if caution is not exercised: • An Email List is associated with a campaign • During the next sync, customers from the list are added to the campaign • You delete a customer belonging to the mail list • During a subsequent sync, the process will see the customer as 'new' and re-add them to the campaign,

	enrolling them as active at step 1. If Email Lists are used, a good practice is to never delete a customer from a campaign. If the customer should not progress in the campaign any further, use the Recipients screen to terminate the customer. *But wait! How will I use the bulk operations to restart my campaign customers, etc. Won't that customer be selected as well?* **No.** The  button on the campaign list screen does not affect terminated recipients. The only way to affect terminated customer is explicitly using the Recipients screen (see following image).  **Figure 69 - Individual Recipient Actions**
Suspended	This check box will suspend or activate a campaign. A suspended campaign will not sync Email Lists or run through the hourly processing.
Save Changes	Click to save your changes.

After saving changes, the page will reload with an additional item on the page – a start step. This is the initial step upon which all other steps in the campaign will originate from.

WARNING: The Campaign page makes heavy use of Javascript and Ajax. The page communicates with the server frequently. If you see the message box below appear on the screen, wait. Seriously, just wait. The page doesn't lock the controls or treat you like a child – you *could* go click happy while the message box is up. But that would be bad - bad like "*I hear something in the basement, I don't have a flashlight, but I think I'll go check it out any way*" bad.

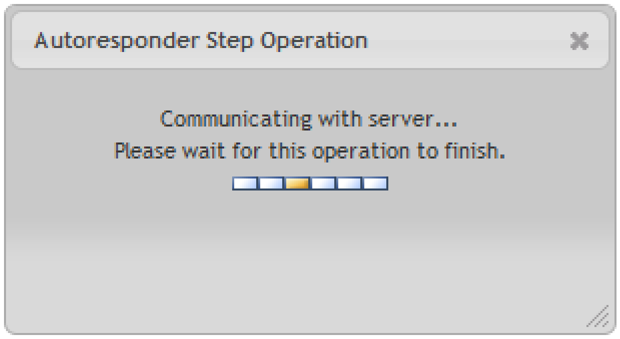


Figure 70 - Campaign Edit Screen Wait Message

Steps

Start Step

The start step is automatically created when the campaign is first created. It is displayed at the bottom of the screen (scroll down). It does no action. It serves as an anchor. The start step can contain only one child step and cannot be deleted.

The start step contains hyperlinks common to all steps.   While the start step cannot be deleted, all other steps also contain a [Delete] link. The Delete action is discussed separately later in the chapter because it is complex.

Hyperlink	Action
[View History]	This link will open a report page showing every customer that has ever passed through the step. The Step & Recipient History section discusses the history report in detail.
In Queue	This link will display all active recipients whose 'Next Step' is the Start step. These are customers who are newly enrolled.
Total Executions	This link will display all recipients – active or otherwise – who have ever passes through this step.
Successful	This link displays a history of all customers

	who have successfully completed this step. The start step does nothing, so all recipients will succeed this step.
Failed	This link displays a history of all customers who failed at this step. The start step cannot fail. Other steps may fail for numerous reasons. Logic steps may fail for invalid velocity code or an invalid $result. Email steps may fail for a myriad of reasons such as connectivity issues, template errors or velocity code errors. Pause steps never fail.
[Add Step]	The Add Step link displays the Add Step form.

Adding a Step

TIP: A brief word about step names. The name can be anything you wish within the max character limit. However, the names are used as the output from logic steps to determine which step executes next. For that reason, keep your names simple. Do not add leading or trailing spaces, as that's sure to cause trouble down the road. Underscores instead of spaces may also prevent typing errors when matching logic outputs to child steps. The velocity error checker does not validate your $result values to child step names. It is your responsibility to get it correct.

Click the [Add Step] link at the bottom right of any step to add a step. The link will not be available for any step restricted to one child and already having a child. The Edit/Add Step form displays all properties available for all steps. Once a type is selected, non-applicable properties are grayed out.

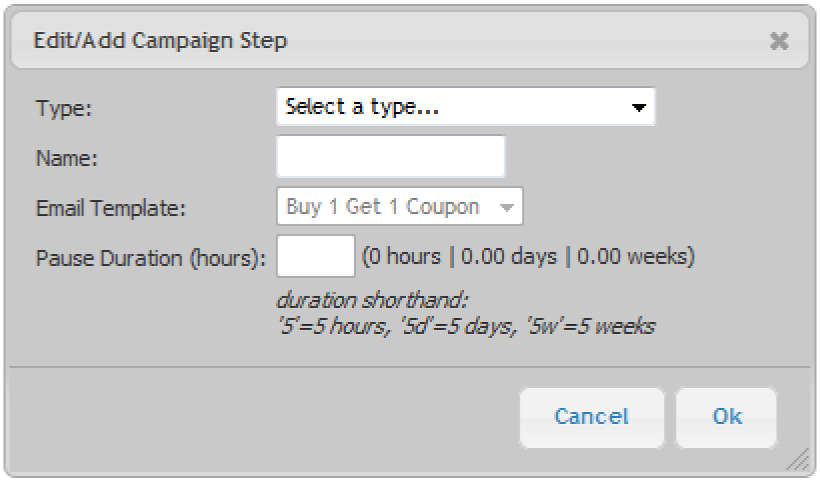


Figure 71 - Edit/Add Campaign Step Form

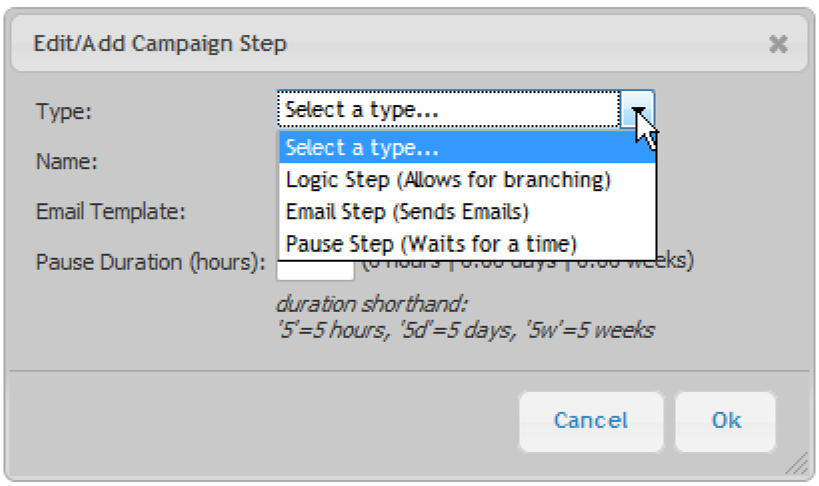


Figure 72 - Add/Edit Step Form showing the different types of Steps

Logic Step

The Logic Step allows for branching. Why branch? Branching is desired any time a different email should be sent based upon the customer. Possible reasons for branching:

- Has the customer ordered before?
- Has the customer ordered a specific item before?
- Has the customer ordered with the last XX days?
- How many items has the customer ordered?
- Has the customer spent more than XX dollars?
- Is today a particular month/week/day?
- Is the customer in a particular state or region where one offer may be preferred?

WARNING: The Logic step is a two-part step. The step is created and saved first, then the logic is added.

This allows for extra error checking of the velocity code. Do not forget to add code to your logic step.

Forgetting to add code to your logic step will cause the step to fail, halting all recipients at that step. That would be bad – bad like digging up an alien gate, activating it, and then going through it with only light weapons and a single nuke.

To create a logic step, select Logic as the type, provide a name for the step, and click Ok. No other settings are needed. Once created, the logic step will appear below its parent, and the overall tree structure will re-position accordingly. A small warning icon will appear in the bottom left of the step. This is an alert for empty logic. Any step with empty logic will fail, so the alert is your cue to add logic.

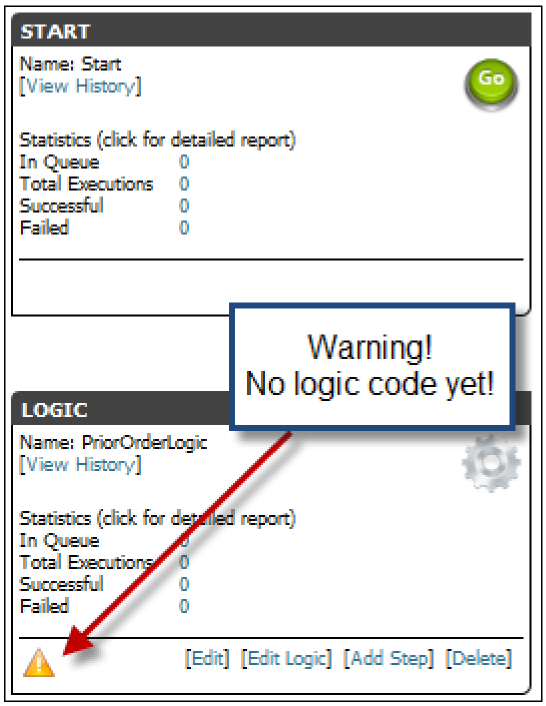


Figure 73 - Warning! A newly created logic step needs code!

Click the [Edit Logic] link to add velocity code. A form will display providing a text area for velocity code. The Velocity Code section that follows provides detail on creating complex code.

At a bare minimum, the logic step code must set the value of $result to the name of a child step.

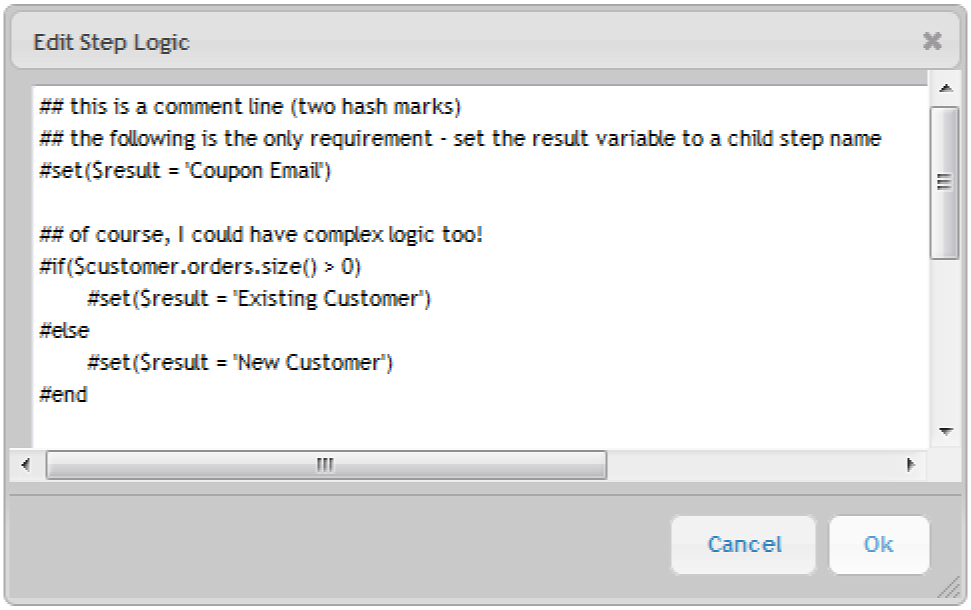


Figure 74 - Campaign Logic Step - Logic Editor

The editor will validate the code when the Ok button is clicked. Any errors will display the output from the velocity compiler. Admittedly, the error messages can be vague. However, the most important feedback is the line number. Use the line number to troubleshoot the problem. Google, the UltraCart forums, and the Apache Velocity mailing lists will help solve the problem.

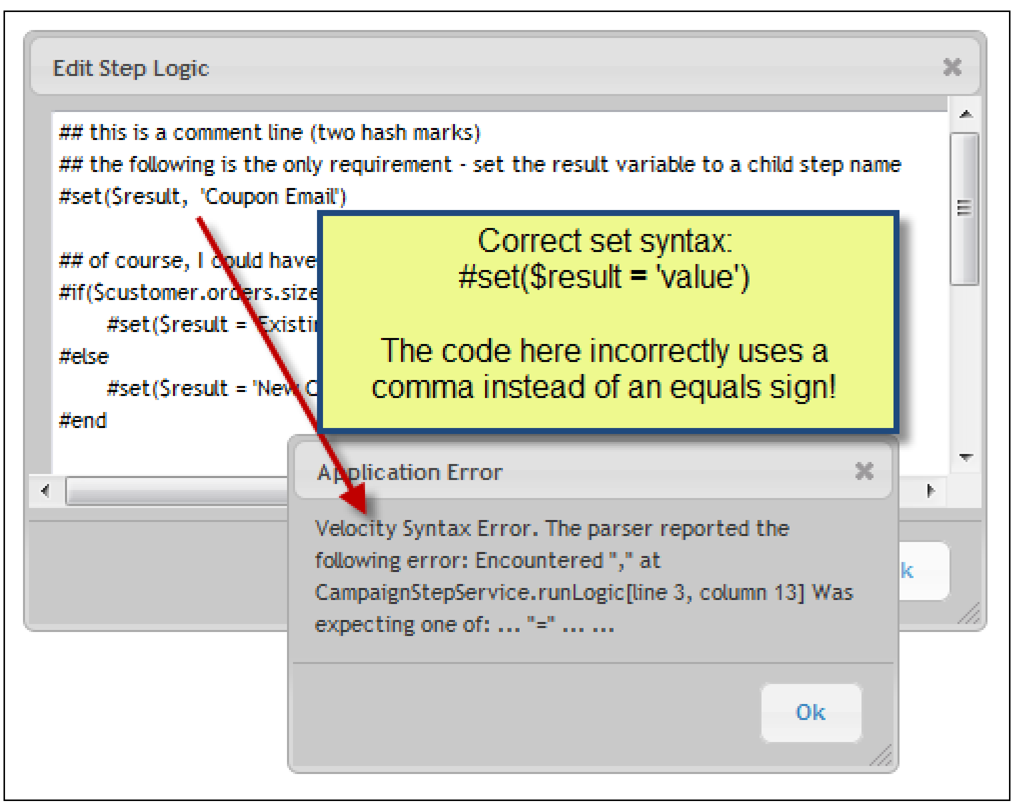
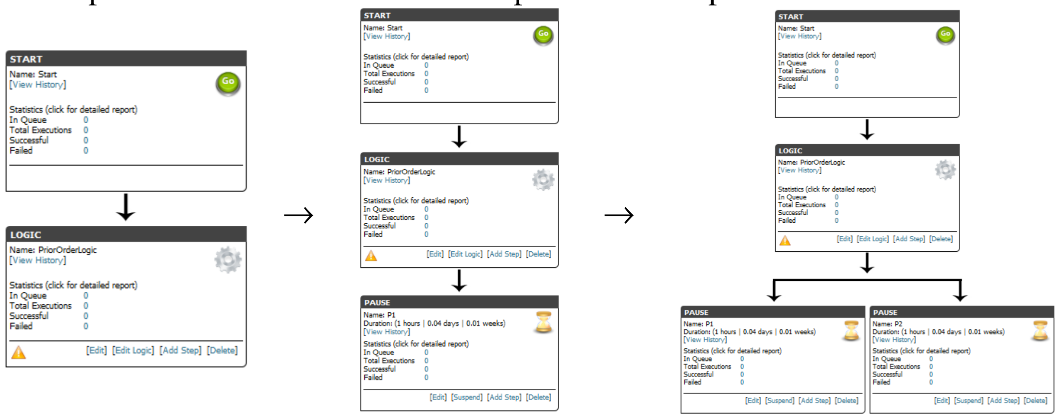


Figure 75 - Campaign Logic Step - Velocity Syntax Error Message

A logic step may have as many children as desired. Simply click the [Add Step] link and add steps as needed. The screen will re-position the steps as each are added.



Email Step

Because email steps use templates, creating an email step is relatively simple. The major decisions are template selection and parameter overrides. Create an email step by clicking the [Add Step]. Supply a name and select a template. Click the Ok button to create the step.

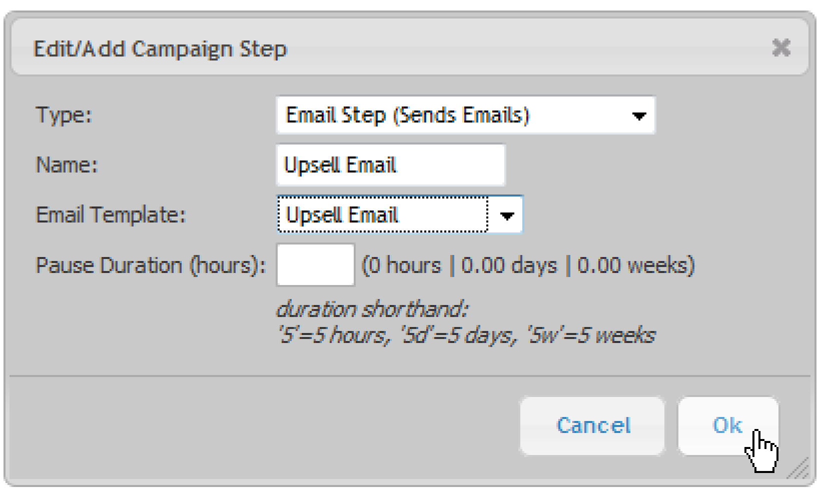


Figure 76 - Email Step Creation Example

The Email Step (shown below) has some links on it the other steps do not.

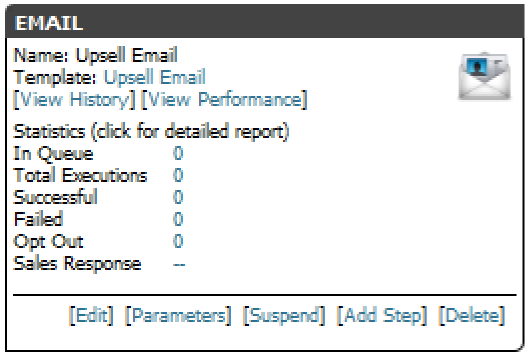


Figure 77 - Autoresponder Campaign Email Step

Email Step Links

Hyperlink	Action
Template	Click the template name to visit the template. From there, you may change the email content or parameters.
[View Performance]	This link will open a performance report showing email specific results for the step including bounces, opens, link clicking, and purchasing as a result of a campaign.
Opt Out	The Opt Out statistic displays the count of recipients who opted out during this step. Click the link to see a detailed list of every recipient who opted out of the campaign at this step.
Sales Response	This link displays the total sales attributed to this email. Click the link to see a list of all recipients who placed orders for this campaign. Please see the section near the end of the chapter titled “Attributing Sales to a Campaign” for a important details about Sales Response.
Suspend	Click to suspend the step. A suspended step is skipped over, and the next step executes.
[Parameters]	Click to edit email parameters. See the following discussion on editing parameters.

Editing Parameters

Email Templates containing parameters may have step specific values. To edit parameters, click the [Parameters] link on the Email step. You’ll notice that the pointer doesn’t change to a hand icon. This is a result of the drag-n-drop ability of steps (discussed later).

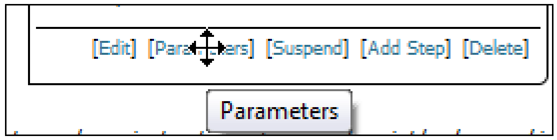
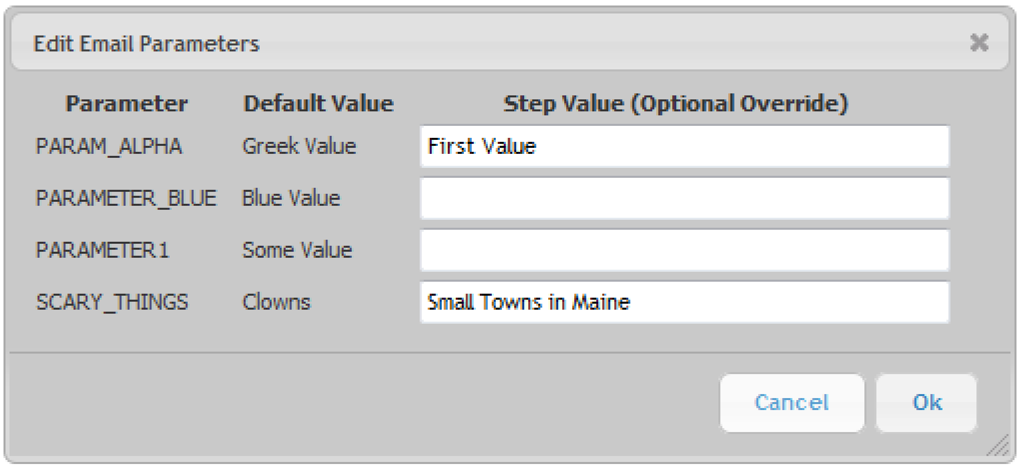


Figure 78 - Email Step's Parameters link

When clicked, a form appears displaying the email template parameters and the defaults. Override any defaults by filling in the input field to the right of the default value. Leave the field blank to use the default.



Pause Step

The Pause step does what it's named. It pauses. Pauses are useful to allow a customer to react to an email, or to simply avoid sending customers too many emails.

To create a Pause step, click the [Add Step] link of any step and set the type to Pause in the Add/Edit Step form. The only other requirement for a Pause step is the duration. The Pause Duration is stored in hours, but the entry field allows shorthand for days and weeks as well. If no unit is provided, the number is assumed to be hours. The Pause Duration only accepts whole numbers. If 3.5 days are needed, enter hours (84h).

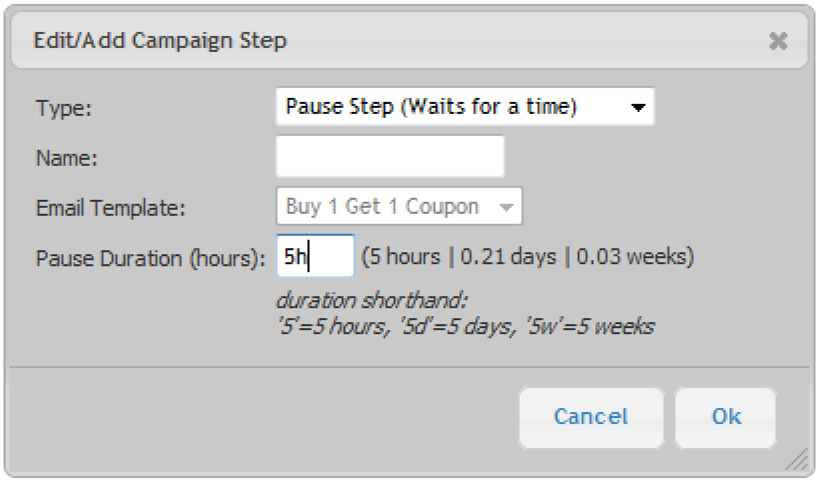
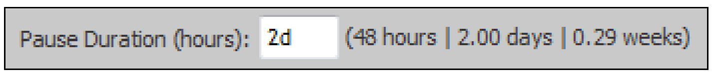
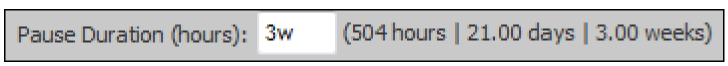
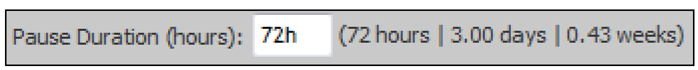


Figure 79 - Adding a Pause Step

Here are some shorthand examples:

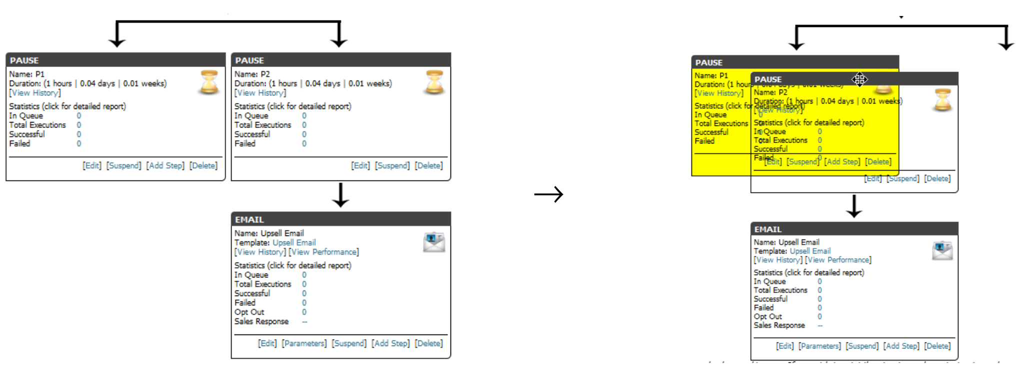






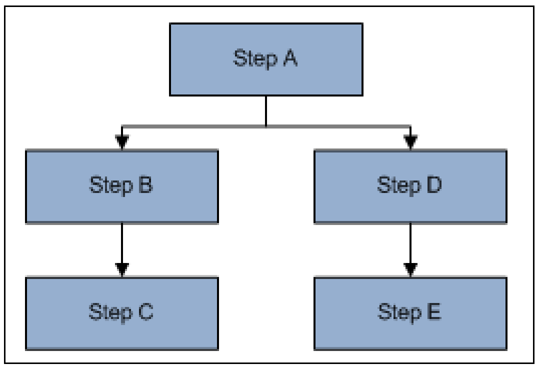
Rearranging Steps

Campaign steps may be rearranged by dragging and dropping a step onto another. When a step is dragged and dropped, all of its children come with it. The target step will highlight in yellow when another step is dragged onto it. Be patient with moving steps. Do not make a move while the Wait message is displaying.

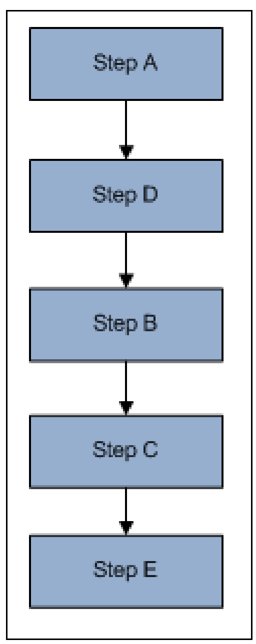


Rules for Rearranging

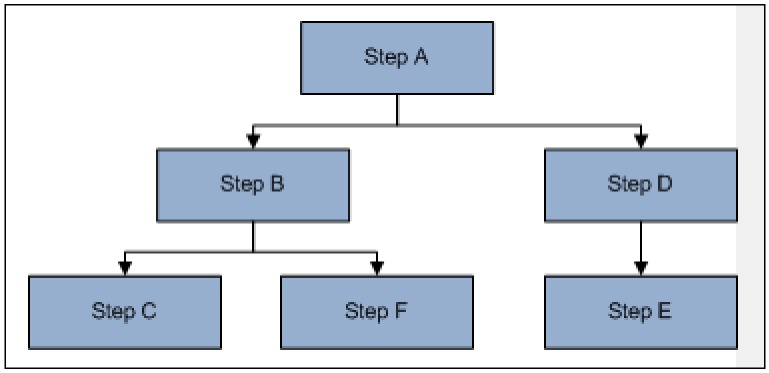
1. Dragging steps onto a step with no children is a straightforward appending to the target step. The dragged step becomes a children of the target step.
2. If a target already has children, the result depends on the target type.
    a. If steps are dropped onto a logic step, they become children of the logic step. Since a logic step can have numerous children, the dropped step becomes a sibling to any other children the logic step already has.
    b. If steps are dropped onto any other step that already has children, then the dropped step (and its children) are injected in between the target and the target's children.



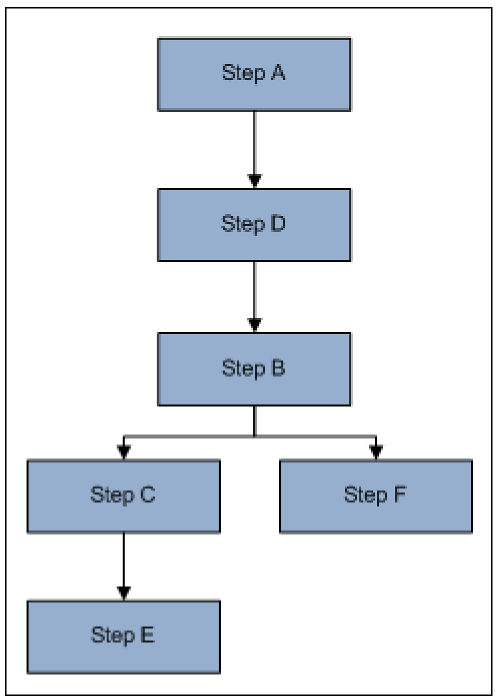
Drag Step B onto Step D
Result: Step B and C inject between Step D (target) and its children (Step E)



    c. If the step being dragged (moved) has more than one branch, the target children are appended to the first branch. For the example below, Step B is dragged onto Step D. Step C is appended to the first branch. If this is not desired, simple move Step C to its new parent.



Drag Step B onto Step D
Result: Step B, C and F inject between Step D (target) and its children (Step E). Step E is appended to Step C.



Deleting Steps

Deleting a step raises two issues.

1. What do I do with the children of the step (subsequent steps in the chain)?

Choices:

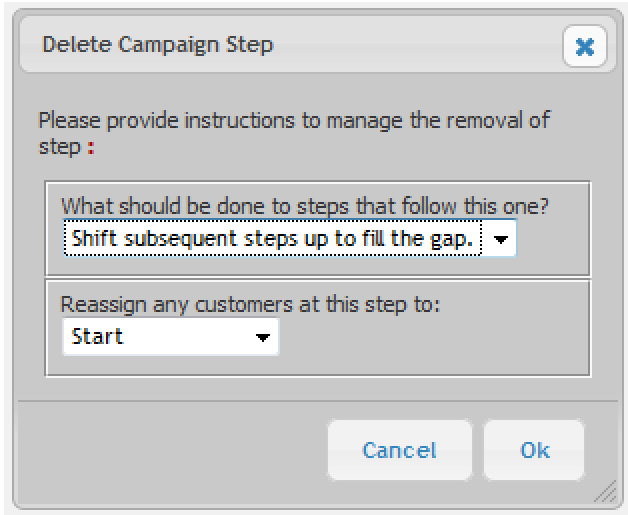
- Delete the children as well
- Shift the children up, filling the hole caused by deleting the step.

2. What do I do with recipients who are currently scheduled for the deleted step?

Choices:

- Move them to another step of your choice.

These options are presented when the [Delete] link is clicked for a step.



Please note: if you delete a Logic step containing more than one branch, the branches cannot be shifted up because they would collide. If you wish to keep the branches, move them to different steps before deleting the Logic, then move them back in the desired order.

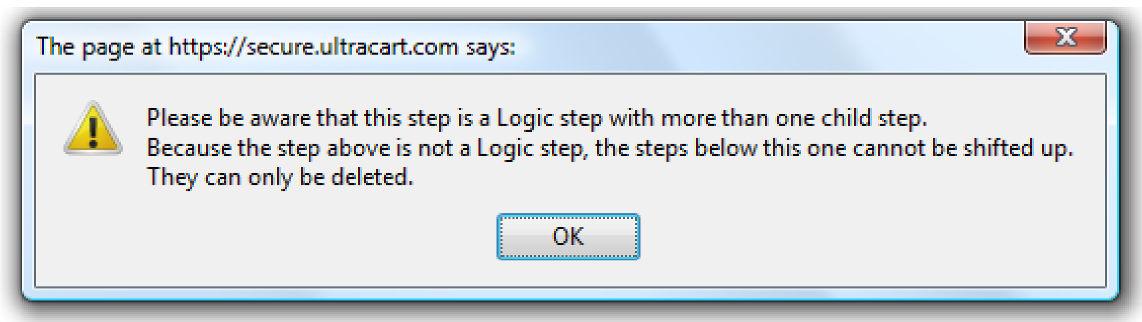


Figure 80 - Warning Message when deleting a Logic Step with multiple children

Recipients

The term for a person receiving an auto response from UltraCart is called a recipient. They might be a customer or they might be a potential customer. To keep things proper and avoid any run-ins with the nomenclature police, the word 'recipient' is used to describe the person receiving emails. It doesn't roll off the tongue like 'customer', but it's accurate. ☺

Enrollment

There are three ways to enroll a recipient into a campaign, 1) Enrollment Triggers, 2) Email Lists, and 3) Manual Enrollment.

Enrollment Triggers

Enrollment triggers are part of a campaign's general settings. To manage them, navigate to the Autoresponder home page.

Main Menu → Marketing → Autoresponder

From there, click on a campaign's edit button. The triggers are listed in the general settings of the campaign.

The triggers are hooks to the shopping experiences that allow for automatic enrollment to a campaign based on an event. There are five triggers.

- Abandon Cart – This trigger will enroll any abandoned cart with an email address into the campaign.
- Purchased Product – This trigger will enroll any customer making a purchase into the campaign. Enrollment Items can restrict enrollment.
- Auto Order Decline – This trigger will enroll any customer who has an auto order declined.
- Auto Order CC Expiration – This trigger will enroll any customer who has an auto order credit card expired.

Auto Order Canceled – This trigger will enroll any customer who has an auto order canceled.

Enrollment Items

The enrollment items work in conjunction with the enrollment triggers. They are filters for the triggers. If you provide a list of items, then only events with those items involved will trigger an enrollment.

For example, let's say you have an item 'PDF', and you insert that here, and also check the enrollment trigger 'Purchased Product'. With that configuration, *only* purchases of PDF items will result in enrollment. This is useful if you with to upsell certain items, or provide item specific marketing material.

- Enrollment Items only affect triggers. Items are meaningless with triggers.
- Enrollment Items affect all triggers. There is no pairing certain items with certain triggers. If you need different items for your triggers, create separate campaigns.
- No Enrollment Items is the default and triggers will fire for all items. Remember that Enrollment Items act as filters.

You probably would not want to add any enrollment items to Auto Order triggers. That would cause those triggers to selectively fire, which would be undesired.

Email Lists

Email Lists are managed in a different part of the site. Navigate to Main Menu → Marketing → Email Lists to manage lists. By associating an email list with a campaign, the site will, on a regular basis, scan the list and enroll any new emails. Click on the edit button for a campaign to manage the Email Lists associated with it. The Campaign section of this documentation has additional tips and warnings about Email Lists.

Manual Enrollment

To manually enroll someone in a campaign, first navigate to the Autoresponder home page.

Main Menu → Marketing → Autoresponder

From there, click the Manual Enrollment link within the Administration section.

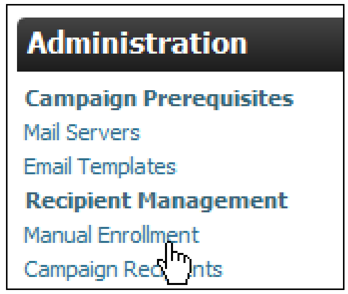


Figure 81 - Link for Manual Enrollment

Manual enrollment is a two step process. Select a campaign on the initial screen. Selecting a campaign allows the site to compile a list of campaign steps. With this list, it is possible in add a new recipient at any point in a campaign.

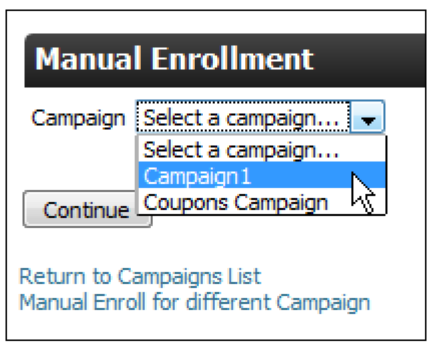


Figure 82 - Step One for Manual Enrollment

When the next screen loads, fill out the fields to enroll a recipient.

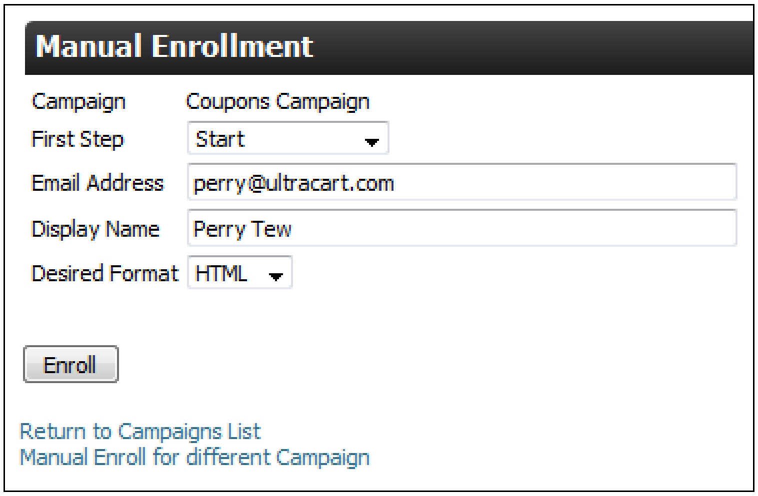


Figure 83 - Step Two for Manual Enrollment

Field	Description
First Step	Select the step where the recipient will begin. This will typically be the start step, but there may be times when a recipient should be started mid-stream depending on the relationship with the customer.
Email Address	The recipient's email address
Display Name	The friendly name of the recipient. If this is unknown, for example, if you only have an email address, then enter the email address here as well. You must supply a Display Name.
Desired Format	Select HTML or TEXT. If text, the customer will not receive html emails. If HTML is selected, the decision is then left up to the settings for the email template.

When finished, click the Enroll button to complete the enrollment.

Recipient Lifecycle

This section lists some general notes about the recipient lifecycle. The most important section is the brief walk through of the Opt-Out Screen

Opening the Email

The UltraCart Autoresponder will embed a 5x5 transparent image at the end of each html email message before the closing body tag. If the recipient displays images in their emails, this image tracks the opening of the email and records it.

Clicking a Link

All links are rewritten to route through the Autoresponder. When a link it clicked, the event is captured during the routing process. This creates a link click event for the recipient.

If the recipient does not display images, and therefore no Open event was captured yet, this also creates an Open event for this recipient.

Opting-Out

The Opt-Out link is discussed in detail in the Autoresponder Email Template section. If the recipient clicks the opt-out link, they are taken to a web page that displays every email campaign they are enrolled in (for you).

Figure 84 - Opt Out Screen

The recipient then has the option of opting out of each and every one of the campaigns which he/she is enrolled. If they opt out, they receive a simple notice.

```
You have been unsubscribed from these services.  Thank you.
```

Figure 85 - Opt Out Success Message

WARNING: If the history for a step or recipient is deleted, there is no way to tie the opt out tracking id to the recipient in the database. If history is deleted and a recipient then clicks the opt out link (let's imagine they've been on vacation for a week and are catching up on emails – and they hate yours), they will receive the unflattering response below. Please read the section on deleting records at the end of this chapter before deleting any part of a campaign.

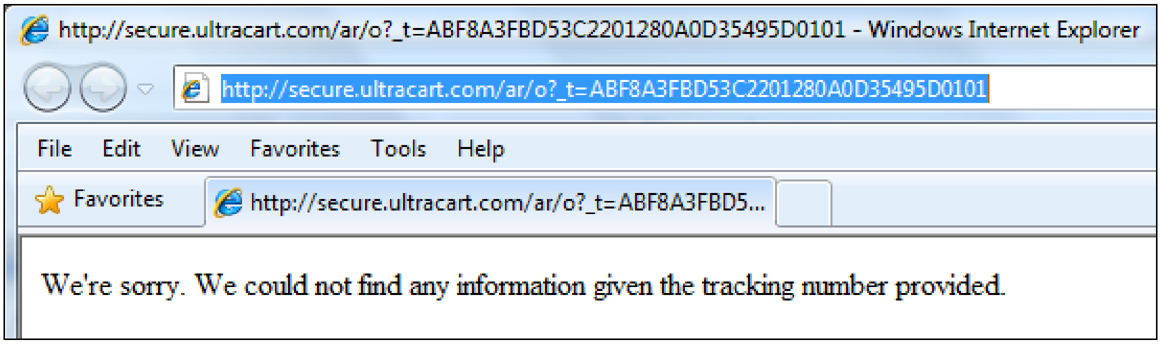


Figure 86 - Error Message for a non-existent tracking id

Placing an Order

When a recipient places an order, the sales is associated with the campaign history using an *optimistic algorithm*. The Autoresponder will attempt to capture every sale made, which includes sales generated without the email links. For example, if a recipient receives an email, opens his/her browser, uses a favorite to navigate to your site, and then makes a purchase. Such an event will carry no tracking ids to associate the purchase with a campaign. The optimistic algorithm will do a check upon purchase looking for matching email addresses to associate the sale.

The Autoresponder will look for the most recent, non Failure EMAIL step containing a history record for the recipient and associate the order with that history record.

It is possible for the wrong association to be made. One scenario would be multiple campaigns sending emails to a recipient and the recipient makes a purchase based on the earlier email. In this case, the Autoresponder will incorrectly associate the sale with the most recent email.

However, this will probably not be a problem for the following reasons:

1. You've correctly spaced your emails out to give a recipient time to react to an email.
2. You're not overwhelming a recipient with too many campaigns.

It's impossible to know the exact driver for a purchase. Perhaps the second email reminded the recipient of the first and triggered the sale?

The important result is this: *any order for a recipient with a successful email step will be captured and reported.*

Managing Recipients

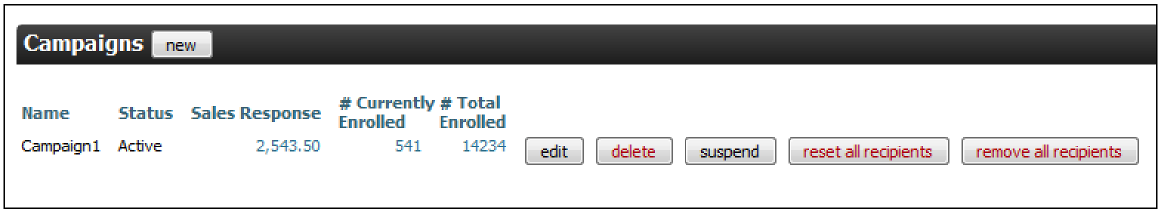
This section lists the different operations that can be done to a recipient. The list is broken down into two groups, global and individual operations. Global operations affect (most) all recipients in a campaign. Individual operations may be applied to a select group of recipients.

Global Operations

Navigate to:

Main Menu → Marketing → Autoresponder

The Autoresponder Campaigns Home page contains a campaign list providing lifecycle controls for each campaign. The last two buttons are the ones that affect all recipients.



Lifecycle Controls

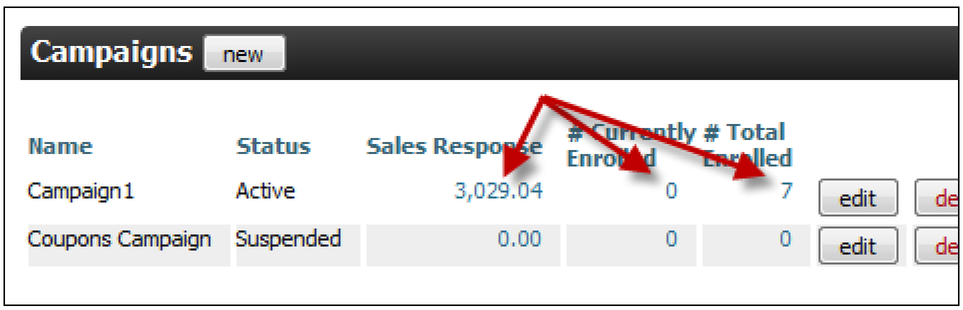
Type of Control	Label	Description
Button	reset all recipients	Click the reset all recipients button to move all recipients back to the starting step for re-execution. This may be useful if significant changes are done to a campaign, or for initial testing with small customer sets over and over until you're satisfied with the results. **Note:** This will not affect Terminated recipients. This is purposely done to provide a way to exclude a mailing list recipient and still reset an entire campaign back to the start step. If a terminated recipient needs to be reset, use the recipients screen to filter on terminated recipients and move them there.
Button	remove all recipients	Click the "remove all recipients" button to delete every recipient completely. This operation cannot be undone. This is most useful during campaign design to unload test email addresses before adding live addresses. **Be warned**: this deletes history as well. Please see the warnings on deleting history at the end of this chapter.

Individual Operations

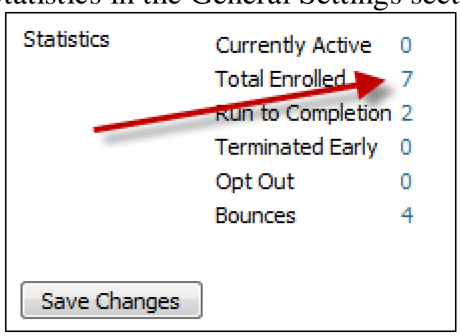
The Campaign Recipients page is a useful page for filtering, viewing, and managing campaign recipients. There are several ways to get to the page.

1. From the Autoresponder home page using the Administration link.

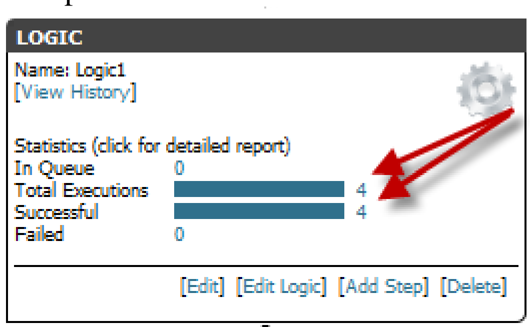
2. The enrollment stats in the campaigns list on the Home page.



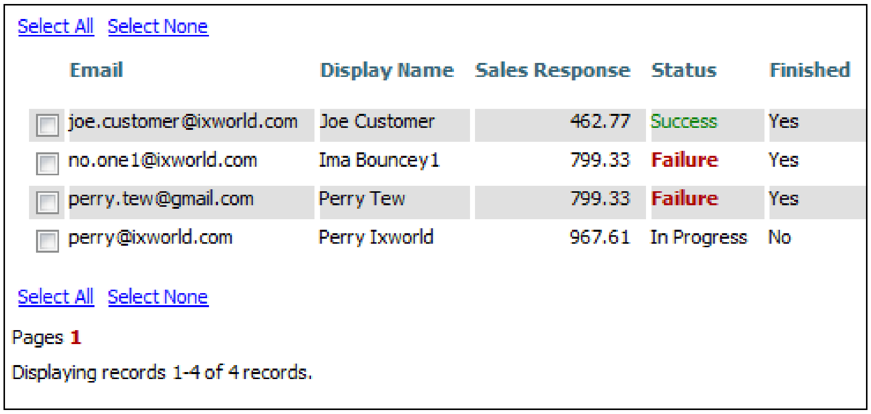
3. On the campaign edit screen, several links direct to the recipients page, each with their own filter.
   a. Campaign Statistics in the General Settings section



   b. Individual Step



The Recipients page is shown below in two parts (it is rather wide). The page contains a list of all recipients, possibly filtered.



Select All Select None

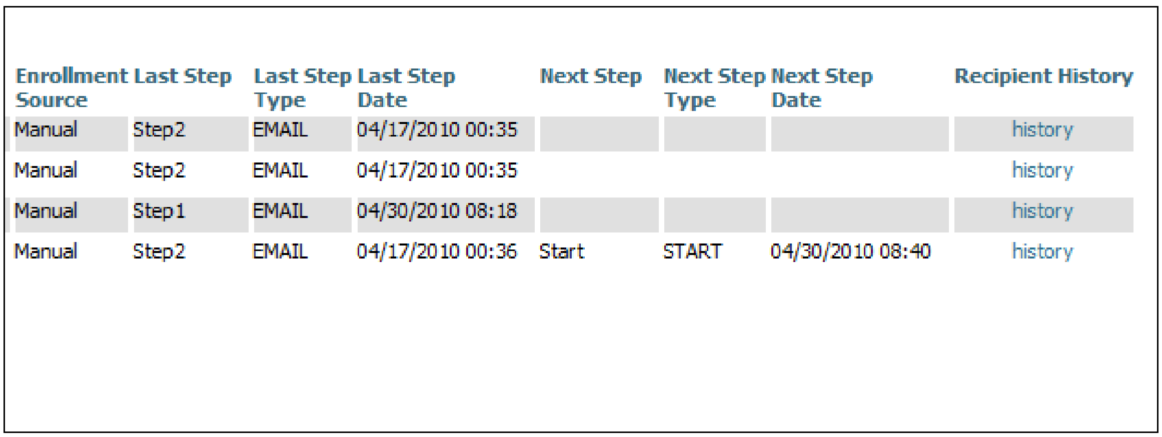
	Email	Display Name	Sales Response	Status	Finished
☐	joe.customer@ixworld.com	Joe Customer	462.77	Success	Yes
☐	no.one1@ixworld.com	Ima Bouncey1	799.33	Failure	Yes
☐	perry.tew@gmail.com	Perry Tew	799.33	Failure	Yes
☐	perry@ixworld.com	Perry Ixworld	967.61	In Progress	No

Select All Select None

Pages 1

Displaying records 1-4 of 4 records.

Figure 87 - Recipient Page - First Part



Enrollment Source	Last Step	Last Step Type	Last Step Date	Next Step	Next Step Type	Next Step Date	Recipient History
Manual	Step2	EMAIL	04/17/2010 00:35				history
Manual	Step2	EMAIL	04/17/2010 00:35				history
Manual	Step1	EMAIL	04/30/2010 08:18				history
Manual	Step2	EMAIL	04/17/2010 00:36	Start	START	04/30/2010 08:40	history

Figure 88 - Recipients Page - Second Part

Recipients Report Fields

Report Field	**Description**
Email	Recipient Email Address
Display Name	Recipient Display Name
Sales Response	The total amount of sales from this recipient attributed to this campaign
Status	Success, Failure, In Progress, Opt Out, or Terminated Failure means an email bounce, mail server problem, or system error (the history link shows detail). Terminated means you, the merchant, have explicitly stopped this recipient from progressing further in the campaign.
Finished	Yes if finished, no if not finished
Enrollment Source	Manual Enrollment, a trigger, or an email list
Last Step	The last step the recipient executed
Last Step Type	The type of the last step: START, EMAIL, LOGIC, or PAUSE
Next Step	The next step, if any, to execute
Next Step Type	The next step type
Next Step Date	The time when the next step is active. The autoresponder runs periodically, so this time does not mean the step will execute at

	that moment. Instead, it means that the step will execute during the next run after this time.
Recipient History	A link to the history for the recipient. The history page shows every step a recipient has ever executed. It will also show any events (open, link click, opt out, and ordered) associated with email steps.

Filtering on the Recipients Screen

The Recipients report is useful, but the real power comes from the filtering available. Filters allow for data mining to find the exact recipients desired. With the filters you may

- Filter on any campaign, last step, or next step
- Filter on the enrollment source or status
- Do a partial or full search on the email address. No wildcards needed.
- Filter on only those recipients who have placed orders.
- Change the records per page 50-200

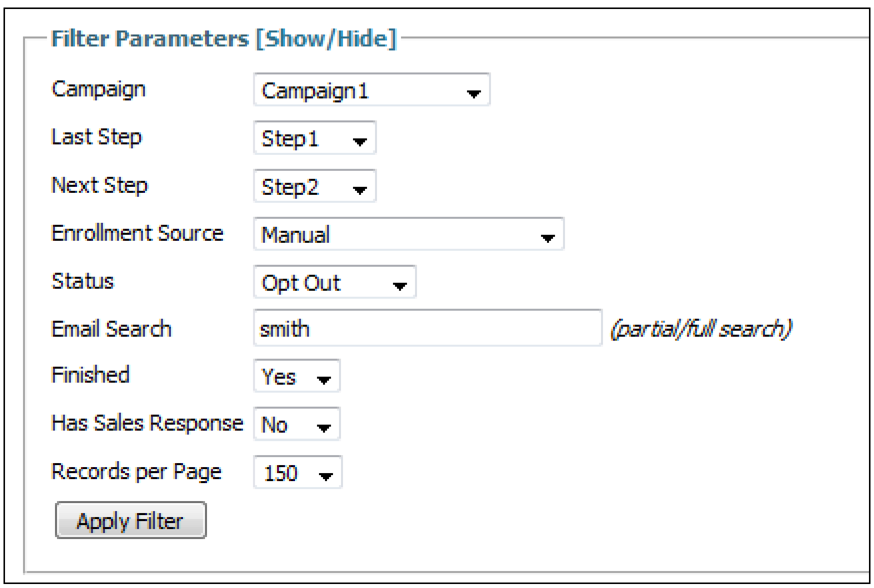
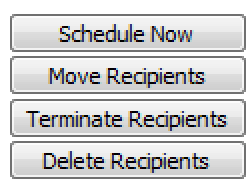


Figure 89 - Recipients Report Filters

Referring back to the first part of the Recipients report, notice that each row begins with a checkbox. After filtering for the desired list of recipients, there are buttons at the top of the list which will perform operations on the selected recipients.



Individual Recipient Operations

Operation	Description
Schedule Now	Schedule Now will mark the selected recipients to run when the

	next batch is processed. This does nothing to finished customers. This is a lesser used option to shorten the time before the next step fires.
Move Recipients	The most often used features. This operation moves recipients to a step and schedules them to run at the next period. This is a great way to restart recipients if needed.
Terminate Recipients	Stops recipients from participating in the campaign. They are done.
Delete Recipients	Permanently deletes recipients from the campaign. There are risks to doing this. See the section at the end of the chapter on deleting data from a campaign.

Recipient & Step History

The history page displays detailed history for either a step or recipient. There are two ways to get to the page. For the step, click the [View History] link on the step in the campaign edit screen.

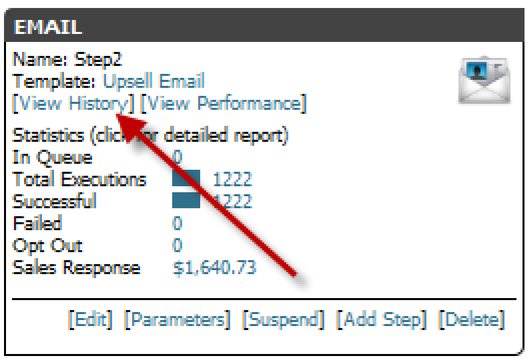


Figure 90 - The View History link is found on every step

For recipients, click the history link in the last column of the Recipients page.

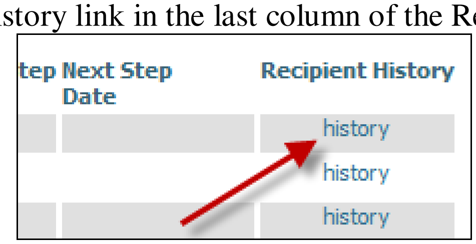


Figure 91 - Every row on the Recipients report contains a link to history.

The step or recipient history may be further filtered by date, result, and sales response.

Filter Parameters [Show/Hide]

Start Date		*(yyyy-mm-dd format)*
End Date		*(yyyy-mm-dd format)*
Result		
Has Sales Response		
Records per Page	50	

Apply Filter

The history page lists the basics, such as Email, Display Name, Step, and a timestamp. The Result column will list the result of the operation. For the email step, the Result is solely the sending of the email. If the email later bounces, that is recorded in the email's event life, and the recipient record itself is marked as a Failure to prevent further processing.

The records are listed with most recent first. Looking at the left side of the report page (see following image), the events read chronologically from the bottom up. Start → Logic1 → Step1. The Step1 row is much taller because it is an email step and contains the email's lifecycle events. Looking at the right side of the page, the Events/Orders column shows what has been tracked with the sent email. For this example, the example was sent, opened, and then opted out. Bummer. ☹

If the recipient places an order, it will appear in the Event/Orders column hyperlinked to the order viewing page.

Email	Display Name	Step	Timestamp	Result	Logic Decision
perry.tew@ixworld.com	Perry Ixworld	Step1	2010-04-30 08:50:30.0	Opt Out	
perry.tew@ixworld.com	Perry Ixworld	Logic1	2010-04-30 08:50:08.773	Success	Step1
perry.tew@ixworld.com	Perry Ixworld	Start	2010-04-30 08:50:08.747	Success	

Figure 92 - History Page, Left Side

Opt Out	Sales Response	Events/Orders	Comments
	0.00	Opted Out 04/30/2010 Opened 04/30/2010 Sent 04/30/2010	Opt Out
	0.00		
	0.00		

Figure 93 - History Page - Right Side

Following the Money – Performance Analysis

The question will arise, "What is generating the sales?" This can be difficult to know if there are numerous campaigns and thousands of recipients. The UltraCart Autoresponder provides two means for analyzing performance.

Drilling Down

Nearly every page in the Autoresponder system shows a sales response. These dollar figures are all hyperlinked to allow exploration from campaigns down to individual orders. The following flow shows one way to ad-hoc drill down through the site to find where revenue generation happens.

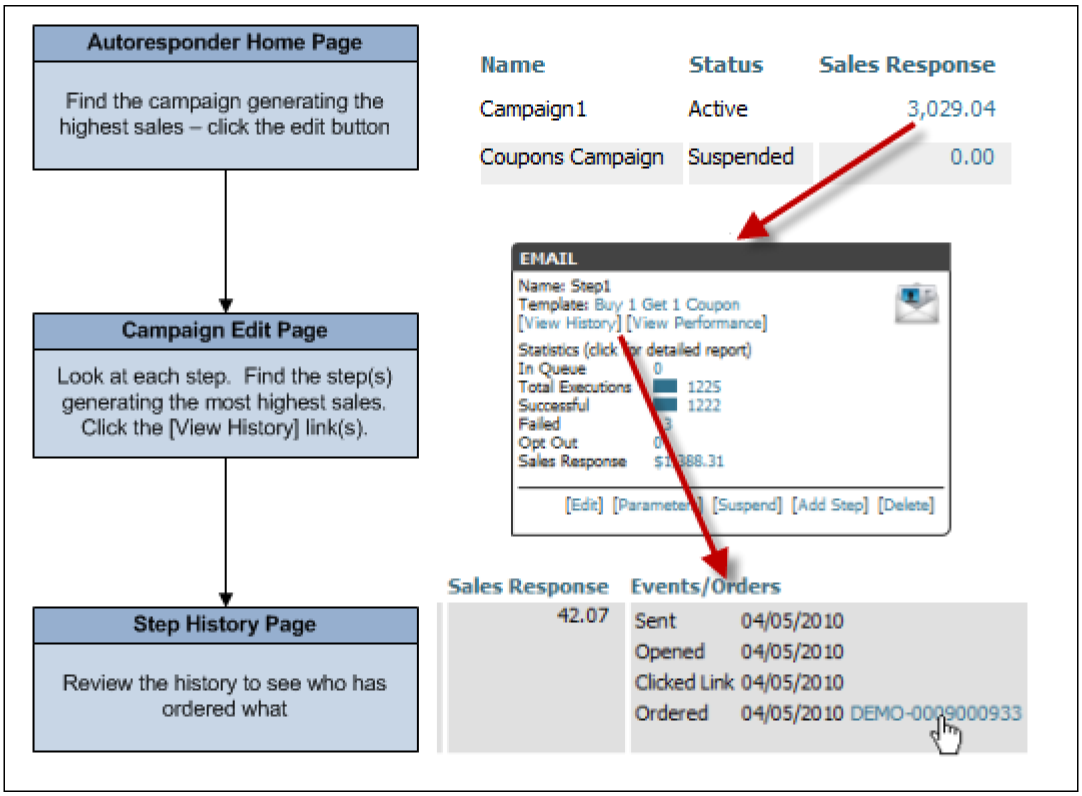


Figure 94 - Drilldown through links to find top performers

Performance Report

The performance report is a large, detailed report attempting to show all vital statistics for a campaign (or a single step). For each email step in a campaign, it lists these statistics for each event (Sent, Opened, Clicked Link, Bounced, Opted Out, Ordered):

- MTD (Month to Date) totals
- QTD totals
- YTD totals
- Grand Total (forever)
- Prior 6 months

Also, for the Sent and Ordered events, the revenue or expense is listed for comparison. In between the counts and revenue dollars is a column containing small trendlines. These trend lines show the past 6 months plus the MTD in a trend with the earliest date at the left. This provides a rough view of growth for each event.

Campaign Performance

Report Statistics Generated at 30 APR 2010 05:49:10
*Sent Expense formula: Number of Emails Sent * $0.0025*

Campaign	Step Name	Category	Event	MTD	QTD	YTD	Total	Mar 10	Feb 10	Jan 10	Dec 09	Nov 09	Oct 09
Campaign1	Step1	Expense	Sent	43	43	353	1,223	99	104	107	111	95	104
		Positive Reaction	Opened	12	12	90	340	28	18	32	30	28	31
			Clicked Link	1	1	23	88	6	9	7	10	5	7
		Negative Reaction	Bounced	4	4	25	72	6	9	6	3	3	8
			Opted Out	2	2	27	77	8	4	13	12	2	5
		Revenue	Ordered	1	1	10	33	2	4	3	5	0	4

Figure 95 - Campaign Performance - Left Side of Report

Trend	MTD $	QTD $	YTD $	Total $	Mar 10 $	Feb 10 $	Jan 10 $	Dec 09 $	Nov 09 $	Oct 09 $
	-0.11	-0.11	-0.88	-3.06	-0.25	-0.26	-0.27	-0.28	-0.24	-0.26
	42.07	42.07	420.70	1388.31	84.14	168.28	126.21	210.35	0.00	168.28

Figure 96 - Campaign Performance - Right Side of Report

Below each step section are eight charts for the step. There are two charts each for MTD, QTD, YTD, and Totals. The two charts are shown below.

The top chart displays a comparison of total counts for each event, excluding the Sent event (it dwarfs the other events, skewing the chart). The bottom chart shows percentages to allow for relative performance comparisons between steps.

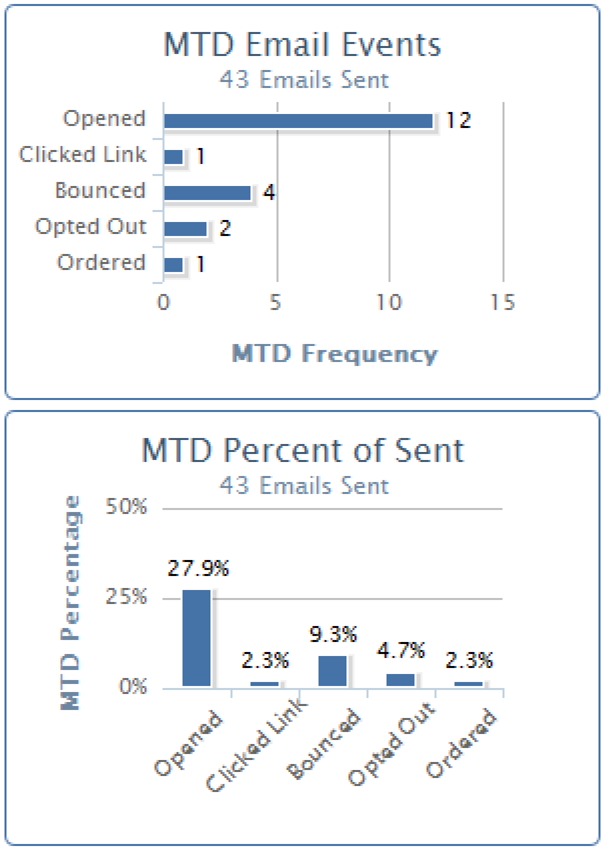


Figure 97 - Performance Report Email Event Comparison Charts

Velocity Code in Emails and Logic Steps

TIP: Get to know the velocity syntax. It's powerful!
Apache Velocity Homepage: http://velocity.apache.org/
User Guide: http://velocity.apache.org/engine/releases/velocity-1.6.2/user-guide.html
Reference Guide: http://velocity.apache.org/engine/releases/velocity-1.6.2/vtl-reference-guide.html

Requirements:

Email Templates: valid velocity syntax (if any is present)
Logic Steps: 1) valid velocity syntax and 2) must #set the variable **$result** to the name of child step.

UltraCart Objects

$customer

Child objects

$customer.orders	A list of Orders
$customer.campaignHistory	A list of CampaignHistory objects

Properties
$customer.email

Methods

getCountOfPurchasesInLastDays(numberOfDays)	# of purchases made in last X days
getCountOfPurchasesInLastDays(itemId, numberOfDays)	# of purchases of item X in last Y days
isPurchasedInLastDays(numberOfDays)	returns true if customer has placed order in last X days
isPurchasedInLastDays(itemId, numberOfDays)	returns true if customer has placed order for item X in last Y days
getTotalForAllOrders()	absolute total amount customer has spent in lifetime
getTotalForAllOrdersInLastDays(numberOfDays)	total amount customer has spent in last X days

CampaignHistory objects ($customer.campaignHistory)

Properties
stepName
stepResult
timeStamp

Sample Logic Code Blocks

```
## if this customer has placed an order before,
## execute the 'Existing Customer' step
## otherwise, execute the 'New Customer step

#if($customer.orders.size() > 0)
     #set($result = 'Existing Customer')
#else
     #set($result = 'New Customer')
#end
```

```
## check all of the customers orders
## if they have ordered the key product, send the 'Upsell' email
## if they have ordered other product, send them a 10% off coupon
## if they have never ordered, send them a 20% off coupon

#set($found_key_product = false)
#if($customer.orders.size() > 0)
      #foreach($order in $customer.orders)
            #foreach($item in $order.items)
                  #if($item.itemId = 'TSHIRT')
                        $set($found_key_product = true)
                  #end
            #end
      #end

      #if($found_key_product)
            #set($result = 'Upsell')
      #else  ## customer has ordered, but not a key product.
offer 10% coupon
            #set($result = '10% Off Coupon')
      #end

#else   ## customer has not ordered.  offer 20% coupont
      #set($result = '20% Off Coupon')
#end
```

Deleting Data

Here's the deal with deleting data. You can do it, but it can make for a bad experience for you and your customers. The history data is used to track email events to a campaign. If history is deleted, customers cannot opt out, and sales revenue cannot be attributed to a campaign. Also, deleting history skews statistics. You've been warned.

When developing a campaign, it's fine to delete whatever is needed to get it right. But when 10,000 customers have pushed through a campaign, try to avoid deleting anything. There are workarounds listed in the following sections.

History Deletion

History is automatically deleted if a recipient or step is deleted. There's no way around it. Avoid this, if possible, because the history records store the tracking ids that are embedded in the emails.

Step Deletion

Each step in the campaign edit screen contains a delete link (except the Start). To delete a step, click the link. The Campaign Edit section has details on doing this.

Workaround:
Rather than delete a step that has significant history, consider just suspending it. Execution will step right over it.

Recipient Deletion

To delete a recipient, navigate to the Recipients page, select the recipient, and click the delete button. The Recipients section of the chapter has the gory details.

Workaround:
Just terminate the recipient. They're as good as gone, but the history remains for statistical reporting.

Campaign Deletion

The Autoresponder home page contains a delete button for each campaign. Click it to delete a campaign.

Workaround:
There is none. If you really want a campaign deleted, there's no alternative.