

Volume

1

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iVend Electronic Commerce Module

# Installation and Administration

IVEND ELECTRONIC COMMERCEMODULE

# Installation and Administration

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# Introduction

This manual describes how to install, configure and maintain installations of iVend in a secure and efficient manner. This manual's intended audience is system administrators, software developers and others who need to understand the lower level workings of the iVend system.

## What is iVend?

iVend is a module for the Roxen Challenger web server which provides electronic commerce functions. iVend's design goals are similar to those of Roxen: modular construction, online administration and support for extended markup. These features allow iVend to provide powerful e-commerce functions quickly and easily.

Some of iVend's feature set includes:

- ❖ One virtual server with one copy of iVend may handle many stores.
- ❖ Supports browsers with or without cookies.
- ❖ Browser based store setup and administration.
- ❖ iVend's RXML tags make customizing the store's look and feel simple.
- ❖ SQL based data storage allows alternate administrative interfaces to be created using tools such as MS Access.
- ❖ Flexible tax calculation.
- ❖ Nested Groups.
- ❖ Simple and Complex pricing support, including graduated pricing scales, pricing based on quantity, such as buy X get Y schemes.
- ❖ Supports for per item, order total, and UPS Zone shipping calculation.
- ❖ Item Options, which allow attributes such as size or color to be attached and selected for items in the catalog.

- ❖ Upsell feature allows related items to be offered with an item for sale.
- ❖ Affiliate program handling allows you to host your own affiliate program. (coming soon)
- ❖ Product information pages may be predefined or dynamically generated.
- ❖ iVend can export data to order entry systems, external databases, and other systems using events and XML.
- ❖ The iVend engine may be extended by defining custom tags and containers, event handlers, path handlers and more.
- ❖ Plus, all of Roxen's power is still available within an iVend store.

Virtually every part of iVend's behavior is customizable. The iVend engine itself can also be extended by adding new tags, pricing and shipping handlers, and other low level additions. For more information about these topics, refer to the iVend Programmer's Guide.

iVend is currently in the early stages of development, and as such there will be bugs and missing features. Hopefully with the support of alpha and beta testers iVend will grow up to be a mature, powerful and useful tool.

## iVend System Requirements

iVend has been designed to fit into your existing Roxen installation as easily as possible. However, there are a few prerequisites that you'll need to have ready before iVend will work properly.

- ❖ A system running Roxen Challenger version 1.2 or higher with Crypto support enabled. See the section *A Note About Compatibility* below. iVend will not run without Cryptography support (you shouldn't even think about doing electronic commerce without this anyhow.)
- ❖ A copy of Pike in your PATH for running the setup scripts.
- ❖ An SQL database server supported by Pike and Roxen Challenger. (iVend was developed using MySQL 3.22, however other RDBMS systems may work as well with minimal changes to the code.) Please see the section *A Note About Compatibility* below.

- ❖ Administrative rights to the database system, as well as Roxen.
- ❖ A working knowledge of HTML, SQL databases, and Unix.

## A Note About Compatibility

### Roxen Versions

iVend has been tested with Roxen releases 1.2 final and higher. Because of added security features in iVend, certain releases of Roxen and Pike are missing functions that are required to function.

If you are using iVend with Roxen release 1.2, you will need to replace the file `RSA.pmod` located in `server/lib/pike/modules/Standards.pmod/PKCS.pmod` with a copy of `RSA.pmod` available from the patches directory at the same location you downloaded iVend.

You will also need to upgrade the same file in any other installations of Pike on your system.

Releases 1.3.30 and higher do not require any patches to the Roxen base release.

Master download site: <http://hww3.riverweb.com/dist/patches>

### RDBMS versions

iVend was written tested to work with the MySQL3.22 database system. There is very little reason that another RDBMS would not work with minor modifications. The setup wizard does require that your chosen RDBMS support the GRANT statement, such as mySQL 3.22 or higher. Your mileage may vary. If you do try another RDBMS, please let me know of your results.





## Installation

Installing iVend is a relatively painless process. This chapter will help step you through the process of installing iVend on your Roxen Challenger server.

### First things first

It is recommended that you begin with a clean copy of Roxen. By doing this you minimize the chances that some of your Roxen files have changed or modified, which may cause problems with the iVend installation process.

You must have previously installed Roxen Challenger and the RDBMS you intend to use with iVend. Make sure that support for your RDBMS has been properly compiled into Roxen, and that you are able to access your chosen database system using Roxen's database support.

If you haven't already, take a few moments to double check these steps. An easy way to check to see that Roxen is able to communicate with your RDBMS is to use the `<sqltable>` tag, which is provided by the SQL module. An example for those using MySQL might include placing the following tag in a page:

```
<sqltable database="test" query="show tables" >
```

If you get any errors from your test, you should correct them before continuing. By doing this, you can eliminate the possibility that iVend can't communicate with your database system.

In order to install iVend, you should be logged in as the user under which your Roxen server was installed under. iVend may be located anywhere in your filesystem, but should not be located in any publicly accessible area, such as a directory which is also an NFS mount point, or web server document directory. A good place to install iVend would be under `roxen/local`.

## Unpacking the iVend distribution

You should have received iVend as a gzipped tar file. In order to unpack the distribution, you must have gzip installed on your system. gzip may be downloaded from any GNU FTP mirror site.

If you have GNU tar installed on your system, use the following command to unpack the iVend distribution:

```
tar xzvf ivend-1.0.XX.tar.gz (XX is the build number)
```

If you don't have GNU tar installed, you should use this command:

```
zcat ivend-1.0.XX.tar.gz | tar xvf -
```

This step should give you a directory called `ivend/`. We'll call this directory the iVend distribution directory. Do not move or rename files in this directory. For example, if you unpacked the distribution file under `/usr/local/roxen`, your iVend distribution directory would be `/usr/local/roxen/ivend`.

## Instances and Configurations

In order to use iVend, you must add an instance of iVend module to a virtual server. An instance is a single copy of iVend running on a virtual server. A single iVend instance can handle one or more stores.

You may add multiple iVend instances to a single virtual server, provided they are “mounted” to different locations in your virtual server filesystem. Similarly, you may add iVend instances to more than one virtual server running on a single copy of Roxen Challenger.

The only provision you must make when using more than one instance of iVend is to give each instance of iVend a different configuration directory. If you don't, each iVend instance use the same set of configuration files. This means that each instance will essentially be clones of each other; that is, each instance will provide the same stores, which isn't very productive. Sometimes this is what you really want. A good example is when you want iVend to serve the same store or stores on different virtual servers, one on a HTTP port and one using SSL.

## Adding the Module to a Server

Make sure that the `src/` directory within the iVend distribution directory is in Roxen's module search path, located in the Global Variables section of the Roxen Configuration Interface. For the example we introduced earlier in this chapter, you'd add `/usr/local/roxen/ivend/src` to your module search path.

Now that you've told Roxen where to find iVend, you can choose a virtual server from the Roxen Configuration interface. When you are in that virtual server's configuration note, click on the Add Module button. Roxen will generate a list of modules that you may add to this virtual server. Find iVend in this list and click on it's title.

After you have added the module, you should review the master settings for the iVend instance you have just added. Following are descriptions of the various settings and suggestions for values:

**Configuration User:** This is the username that you will need to supply when entering the iVend Configuration system. By default, this is the same as your Roxen Configuration username.

**Configuration Password:** This is the password that you will need to supply when entering the iVend Configuration system. By default, this is the same as your Roxen Configuration password.

**Word File:** iVend generates passwords for new store administration users. In order to accomplish this, iVend uses a word file to randomly select passwords from. This file is usually located at `/usr/dict/words` or `/usr/share/dict/words`, depending on your operating system. If you don't have this file on your system, you can set this variable to a file containing random words, one to a line.

**iVend Root Directory:** This is the iVend distribution directory. In our example, it would be `/usr/local/roxen/ivend`.

**iVend Config Directory:** iVend puts store configuration data in this directory. The default location is `ivend/configurations`. Instances of the iVend module that share the same configuration directory will have the same store setup. You may wish to change this if you are adding multiple instances of iVend to a machine and don't want them to provide the same stores. If you are going to specify a location other than the default, you should create the directory before changing this setting. In our example you would specify `/usr/local/roxen/ivend/configurations`.

**iVend Data Directory:** This is usually `ivend/data`. In our example you would specify `/usr/local/roxen/ivend/data`. Normally, you don't need to change this setting.

**Mount Path:** this is where iVend will be located within your server's virtual filesystem. The default is `/ivend/`. You can change this to anything you'd like.

When you've finished checking your module's settings, click on the Save button at the bottom of the Roxen Configuration page. This will save the settings and activate the iVend module.

Congratulations! You should now have a functional iVend installation. At this point, you'll probably want to start adding stores. Refer to the next chapter [Setting Up a New Store](#) for more information.

## Setting Up a New Store

### Planning the Store

In order to use iVend to it's fullest potential, you should carefully plan the details of your store and it's operation before you actually create it. Time spent planning now will save countless hours of frustration later when you try to change a decision made earlier because it wasn't what you really had in mind.

The following section describes the parameters you must supply in order to create a new store. Appendix A contains a worksheet for answering many of the questions you'll need to have when creating a new store.

#### IMPORTANT NOTE

You must have a good grasp of db administration and security techniques before you can properly set up iVend in a production environment. Since you will be dealing with sensitive information, please take this area of store setup very seriously. Helpful tips for new MySQL users are located in Appendix E: Tips for New MySQL Users.

Please note that iVend uses database access permissions to determine who has permission to administer your iVend store. Because of this, make sure that you don't grant access permission to this database to anyone that you would not allow store admin privileges. By default, MySQL installs global permissions to a passwordless user called root. This means that unless you change the default access configuration by adding a password for root, anyone can access any database (and therefore any store administration area just by logging in as "root" without a password. This feature also allows multiple logins with access to a store, as well as read-only access to store admin features. While this may seem more complex at first, it allows much more flexible setup of store administrators. Be sure

you know who (or what) has access to your databases at all times.

**Store Name:** A short (25 characters or less) description of your store. The value of this parameter is used when generating the Store Administration interface and Index of Stores page.

**Store ID:** This is the unique identifier for this store. This is one word, alphanumeric characters are allowed. If you have numerous stores, this store will be mounted on the directory `/mountpoint/id/`.

**Create Database:** The New Configuration Wizard can create and configure a store database automatically. If you already have a database or want to create the database yourself, you should answer “No” to this question.

**Database Host:** Host your database is located on. If the database server that you plan on using is running on the same host as iVend, you should enter `localhost` as your response to this question.

**Database User / Password:** If you want the Wizard to create a database for you, you must provide login credentials for a user with administrative rights for the database server. This user must have the following permissions granted to them: `CREATE DATABASE`, `CREATE TABLE`, `GRANT PERMISSION`, `INSERT`. If you have chosen not to have the Wizard create the database, you should provide logon credentials for the user that will access the database.

**Database Name:** If you have chosen not to have the Wizard create the database, you should specify the name of the database here. If the Wizard will be creating the database for you, the database name will be the same as your Store ID.

**Store Root:** This is the location where your store's data files will be housed. This directory does not need to exist, as the Wizard will create it.

**Create Directory:** If you have not created a directory for your store, you should answer “Yes” to this question. If you already have a store directory, answer “No.”

**Session Timeout:** The Session Timeout value determines how long a shopping cart will remain active before it is deleted. The timeout is a value in seconds.

**Secure DB Permissions:** If you are using MySQL, the Wizard can set the database access permissions to only allow access to the database from the host running iVend. Doing this makes access to the database more secure, but may not work properly on all systems, especially those with improperly configured DNS systems. Unless you are extremely paranoid, you should answer “No” to this question.

**Store Style:** This parameter determines the template set used to create the new store. The available template sets are stored in the `examples/` directory of your iVend distribution.

**Copy Template Files:** If you already have a store directory populated, you should not allow the Wizard to copy the new template files, which would erase any modifications made to the existing directory.

**Populate Database:** If you already have a store database populated, you should not allow the Wizard to populate the database, which would erase any modifications made to the existing store database. If you plan on modifying the database setup, you should not have the Wizard populate your database.

**Administrator Email:** You should supply the email address of the individual acting as the store's administrator. Error and status messages are usually sent to the administrator's email address.

## The New Configuration Wizard

Once you have determined the parameters for the store you are about to create, you may use the New Configuration Wizard to create and save your store.

To add a new store configuration, first enter the iVend Configuration interface. Click on "New Configuration." The process of adding a new store is Wizard based and should be fairly straightforward.

If you wish, the wizard will even create and populate the store directory and set up the proper tables in your database.

The New Configuration Wizard will step you through the process of collecting information. More detailed descriptions of the information that will be collected is contained below. You may also use the Help icon in the Wizard to display more detailed information about requested parameters as you use the Wizard.

After you provide the information, the wizard will let you know what it's about to do. After the wizard completes this work, you will be given a store administration username and password, as well as the location of your store's data files.

If you are adding an existing store to a new server or are reinstalling a store that had been removed from a server, you should make a backup copy of the store's RSA keys, which by default are located in the `private/` directory of your store. If the existing RSA keys are deleted or overwritten, you will not be able to access any information encrypted with the old keys.

You should be presented with a list of active stores. Click on "Save Configurations." Your new store should appear in the list.

You can access your new store by clicking on the store's name. A page will be displayed listing the configuration parameters for the store. You may make any additional changes at this point or you may travel directly to the store by clicking on the store's name at the top of the page.

If this is the first time you have entered the configuration interface, you should also review the settings under the "Global" tab. After you've done this, click on the "Modify Settings" button, then save the changes to your global configurations using the "Save Changes" link.

For more information about store and global settings, see Appendix A.



## iVend Markup Entities

Much of iVend's flexibility and ease of use comes from the use of custom RXML tags and containers that make it easy to customize a store for a particular purpose. This chapter describes the syntax of all of the tags and containers provided by the iVend system.

### Markup available through the iVend module

The following markup is defined in the main iVend module. The markup in this section is available throughout any iVend store. Note that much of the markup described is only available in an iVend store, and then only within the `<HTML>..</>` or `<IVML>..</>` containers. Exceptions to this rule will be noted as necessary

```
<IVML>..</>
```

```
<HTML>..</>
```

The IVML and HTML containers are interchangeable. They are the master containers that enable parsing of all other iVend tags. Each page within a store should contain the HTML/IVML container. All attributes are passed through the HTML/IVML container.

#### ATTRIBUTES

**QUIET** do not output HTML container. Only return the parsed contents of the container. (Optional)

#### EXTRAFIELDS

```
<ICART>..</>
```

Display the Cart. Items in the cart to be updated and deleted.

You may specify as many fields from the products table to be included in the cart display in addition to the item's price, options selected and quantity. The

first field specified by the FIELDS attribute will be displayed with a link to the product's information page.

Upon a successful access to the cart, the contents of this container are returned following the Cart Widget along with a TRUE result. If an error occurs, a FALSE result will be returned, allowing the use of <ELSE>...</>.

#### ATTRIBUTES

**FIELDS** A comma separated list of fieldnames to include in the cart display.  
(Optional)

**NAMES** A comma separated list of names to use as column headers in the cart display. If not specified, the cart will use the values from the FIELDS attribute.  
(Optional)

**CONT** If specified, the cart will display a button labeled "Continue" with the value of this attribute as the destination. (Optional)

**CHECKOUT\_URL** If specified, the cart will display a button labelled "Check Out" with the value of this attribute as the destination. (Optional)

#### <PROCEDURE>

Defines a procedure event, tag or container in pike. For more information, see the iVend Programmer's Manual.

#### <ADDITEM>

Generates and responds to requests to add items to the session cart.

This tag has two modes: generate and respond. To add an item, you must generate a request, then respond to that request. These two actions may occur on the same page, or a request generated on one page may be responded to on another. Multiple items may be added at one time. See the examples below for more details.

You do not have to use this tag to generate a request; a properly formatted form submission to a page with a listening <additem> tag will also work for this purpose. If you place multiple <additem> tags on one page, the first <additem> tag only will add the items.

If no arguments are supplied to this tag, <additem> will respond to requests only. A tag set to generate the request may also respond, allowing items to be added to the cart without requiring a visit to a different page.

When the ITEM attribute is present, the tag will generate a full or partial add item request. By default, a form is generated with an optional quantity input box, as well as a form submit button.

#### ATTRIBUTES

ITEM Product code of the item to be added. (Required for request generation)

NOFORM Do not produce the html form container. Use when manually generating part of the request, or when using multiple <additem> tags to add more than one item at a time to the session cart. (Optional)

SILENT Suppress display of a form submit button and quantity input box. (Optional)

SHOWQUANTITY Display a quantity input box as part of the request generation form. This attribute has no effect if the SILENT attribute is used. (Optional)

QUANTITY Default quantity to add or display (if SHOWQUANTITY attribute is present) for a particular item. If this attribute is not present, the default value is 1. (Optional)

ACTION The action page containing an <additem> tag for reception of the additem request. Has no effect when used with NOFORM. If not provided, the default value is the current page. (Optional)

#### EXAMPLES

To display a form for adding item ABC123 with a quantity box, use the following code:

```
<additem item="ABC123" showquantity>
```

To add item ABC123 and DEF456 to the cart, use the following:

```
<form action="my_additem_page.html">
<additem item="ABC123" quantity="1" noform silent>
<additem item="DEF456" quantity="1" noform>
</form>
```

#### <IVENDLOGO>

Displays either the iVend logo button with a link to the iVend web site or a large version of the iVend logo.

#### ATTRIBUTES

**LARGE** Displays a large version of the iVend logo. No link is included. (Optional)

#### EXAMPLES

The following code:

```
<ivendlogo>
```

Displays:

| | Insert photo here | |

#### <SESSIONID>

Returns the current shopping session identifier, used to identify the browser to the iVend system during a shopping session.

#### ATTRIBUTES

None.

#### EXAMPLES

The following code:

```
<sessionid>
```

Returns:

S1234567890

## <GENERATEVIEWS>

Generates Product lists that are grouped on a field in the individual product records. After generating groups of items, the item list is passed to <LISTITEMS> for the actual display of items.

### ATTRIBUTES

**TYPE** Select type of records to display. Valid value is PRODUCT. (Required)

**FIELD** determines which field is used to group by. All records are grouped by the value of this field. (Required)

**ID** designates the group to select products from. Must be a valid Group ID. (Optional)

All other attributes are passed to <LISTITEMS> when the products lists are generated.

### EXAMPLES

The following code:

```
<GENERATEVIEWS TYPE="PRODUCT"  
FIELD="SubCategory" ID="PRODGRP21">
```

will generate a series of item listings that contain all products in group PRODGRP21. The items will be displayed in groups organized by the value of the field SubCategory.

## <LISTITEMS>

Generates lists of items (product or group) formatted for display and browsing. If the query returns no items, a <FALSE> tag is returned, allowing use of the <ELSE>...</> container.

### ATTRIBUTES

**HEADLINEBGCOLOR** Specifies the background color of the title bar. (Optional)

**HEADLINEFONTCOLOR** Specifies the color of the title bar font. (Optional)

**LISTBGCOLOR** Specifies the background color of odd item bars. (Optional)

**LISTBGCOLOR2** Specifies the background color of even item bars. (Optional)

**LISTFONTCOLOR** Specifies the color of the item list font. (Optional)

**FIELDS** Specifies the fields to display in the item list. (Required)

**NAMES** Specifies alternate names for fields in the item list. (Optional)

**TYPE** Specifies the type of item to generate. Valid options are PRODUCTS, GROUPS, or CUSTOM. (Required)

**QUERY** If a TYPE of CUSTOM is specified, use this SQL query to select items. (Optional)

**PARENT** If a TYPE of GROUPS is specified, select groups with this parent id. (Optional)

**SHOW** If not present, this tag will return all items. If present, this tag will filter on items with a status of "A". If a value is presented, this tag will filter on items with a status of "VALUE". (Optional)

**LIMIT** If present, the tag will limit like an addition to an SQL WHERE clause. (Optional)

**ORDER** If present, the tag will order the results of the item selection by "VALUE". (Optional)

**QUIET** If this attribute is specified and no items are returned, the tag will return nothing. Otherwise, a message indicating the situation will be returned. (Optional)

TEMPLATE If present, the tag will add a TEMPLATE specification of VALUE to the Item's link. (Optional)

TITLE If present, this tag will return VALUE in a <listitemtitle>...</> container. (Optional)

MODULO Specifies the number of lines in each color band. Default value is 1. (Optional)

#### EXAMPLES

<A>...</>

This modified version of the <A>...</> tag handles session tracking and also provides some shortcuts to common iVend paths. The contents of the container will be contained within the <A>..</> container.

#### ATTRIBUTES

HREF Specifies the location of a file to be linked to. (Optional)

PARSE If specified, the contents of HREF will be parsed. (Optional)

EXTERNAL Specifies that session tracking be disabled for this link. (Optional)

REFERER Specifies that the link will point back to previous page. Overrides HREF. (Optional)

ADD Causes a link to be generated that will cause the current item to be added to the cart. (Optional)

CART Generates a link to the current shopping cart. (Optional)

CHECKOUT Generates a link to the checkout location. (Optional)

TEMPLATE When link is to a product or group, specifies the template to use. (Optional)

All other attributes are passed on to the browser.

<IVSTATUS>

Displays session status information such as items added to the session cart. Returns a <STATUS>...</> container for each status message.

<IVMG>

Displays an image associated with an item. May be an image attached to a product/group, or an image stored in the appropriate images/ directory. <IVMG> sets the image size attributes of the image if the image is in GIF, JPEG or PNG format.

#### ATTRIBUTES

FIELD If specified, will return the image attached to field VALUE for the current item. (Optional)

SRC If specified, will return the image VALUE located in the directory \$STOREROOT/html/images/. (Optional)

<FORM>..</>

The <FORM>..</> container has been modified to provide session tracking capabilities. All arguments to the form container are passed through to the browser.

<CATEGORY\_OUTPUT>..</>

The <CATEGORY\_OUTPUT>..</> container allows custom output for groups and types based using the features available in the Roxen <FORMOUTPUT>...</> containers.

If one or more <FORMROTATE>..</> containers are present within the contents of this container, the contents of the <FORMROTATE>..</> containers will be used in a rotating fashion as input to the <CATEGORY\_OUTPUT>..</> container, allowing more complex markup to be generated.



## ARGUMENTS

**TYPE** Selects the type of record to operate on. Legitimate values include PRODUCTS or GROUPS. (Required unless using QUERY attribute below)

**SHOWALL** If TYPE attribute is set to PRODUCTS, all items will be returned, regardless of their status with a group. (Optional)

**SHOW** If selected, only items with a status of 'A / Active' will be eligible for selection. (Optional)

**RESTRICTION** Allows further eligibility restriction. Value must be a valid SQL where substring. (Optional)

**ORDER** Allows ordering of the selected items. The value of this attribute should follow SQL syntax for the ORDER BY clause. (Optional)

**PARENT** If TYPE attribute is set to GROUPS, only those items with a Parent field equal to the value of this attribute will be eligible for selection. Alternately, if a form variable "parent" is present, the value of that will be used instead. The value of this attribute should either be empty (") or the ID/primary key value of another group. (Optional)

**QUERY** Bypasses all other listed arguments by passing a SQL statement directly to the underlying database system. (Optional)

**RANDOM** If used with <FORMROTATE>..<> containers, the order of <FORMROTATE>..<> will be randomly selected. (Optional)

Additionally, all attributes supported by the <FORMOUTPUT>..<> container are available for use by <CATEGORY\_OUTPUT>..<>.

<FORMROTATE>..<>

This container is used within the <CATEGORY\_OUTPUT>..<> container, and is only active within that container. See the description of <CATEGORY\_OUTPUT>..<> for more information about the use of this container.

<ITEMOUTPUT>..  
</>

<ITEMOUTPUT>..  
</> generates output for an item (GROUP or PRODUCT) using same facility as other Roxen <FORMOUTPUT>..  
</> containers.

#### ATTRIBUTES

ITEM Specifies the item to use as source for the output. (Required when not used on a Group/Product page, or when the current Group/Product is not the desired source)

TYPE Specifies the type of item as source. Legitimate values for this attribute are PRODUCT or GROUP. (Required when the current item scope is not the same as the desired output type)

EXTRAFIELDS Allows additional or calculated fields to be included for use in the output of this container. Value should be legitimate SQL field specifications- field as 'field1', COUNT(\*) as 'field2', etc. (Optional)

Additionally, all attributes recognized by <FORMOUTPUT>..  
</> are available for use within this container.

<IVINDEX>..  
</>

<IVINDEX>..  
</> generates output for all configured Stores using the same facility as other Roxen <FORMOUTPUT>..  
</> containers. This tag is only available on the iVend Module Index Page (\$IVENDROOT/data/index.html), and is displayed if the Appropriate Global Settings are enabled. The data fields available are the same as the variable names used in the Store configuration files located in \$CONFIGDIR/.

#### ATTRIBUTES

This tag takes all attributes supported by the <FORMOUTPUT>..  
</> container.

## <ITEMOPTIONS>

Lists the options available for an item using SELECT inputs. This tag should be used within a <FORM>..<>/> container with an <ADDITEM> tag. Option types will be presented in the order in which they were defined for an item. The order of individual options will be that which the items were originally defined for the item unless the ORDER attribute (see below) is used.

### ATTRIBUTES

ITEM Sets the Product ID for which options will be displayed (Required)

ORDER Sets the Order by which individual options will be displayed within an option type.

## Markup available through the Complex Pricing Module

The following markup entities are provided through the iVend Complex Pricing Module. This module is automatically enabled when you have configured your store to use complex pricing. More information about enabling your store for complex pricing may be found in Chapter 6: Complex Pricing.

## <COMPLEX\_PRICING>

## Markup available through the Upsell Module

The following markup entities are provided through the iVend Upsell Add-in. This Add-in may be activated through the ADD-INS MANAGER in the Store Administration Interface.

## <UPSELL>

This tag displays an "Upsell" dialog, which entices shoppers to select items that may be useful or handy to have with an item on display. The items to upsell with an item are added in the admin interface page for a particular item. This tag should be used within a <FORM>..<>/> container that also contains an <ADDITEM> tag.

#### ATTRIBUTES

**ITEM** Sets the Product ID for which Upsell Items will be displayed. If not provided, the tag will guess the proper item. May not work properly if multiple items are used on one page. (Optional)

### Markup available through the Checkout Module

The following markup entities are provided through the iVend Checkout Module. The tags in this section are only available within the `<CHECKOUT>..</>` container.

#### `<SHIPPINGCOST>`

This tag displays the shipping cost calculated for an order. If an order cannot be found, or if shipping has not been added, this tag returns "0.00".

#### ATTRIBUTES

**ORDERID** The order ID to display the shipping cost for. If not specified, the current session or orderid will be used. (Optional)

#### `<SHIPPINGCALC>`

This tag calculates the cost of shipping an order using a particular shipping type. The tag returns either a numeric cost, the phrase "Actual Cost" or an error message, depending on the result of the calculation.

#### ATTRIBUTES

**TYPE** The numeric Shipping Type to calculate cost for. (Required)

**ORDERID** The order ID to calculate the shipping cost for. If not specified, the current session or orderid will be used. (Optional)

## <SHIPPINGTYPE>

This tag displays the selected shipping type for an order. If the shipping type has not yet been selected, an error will be returned.

### ATTRIBUTES

**ORDERID** The order ID to display the shipping type for. If not specified, the current session or orderid will be used. (Optional)

## <SHIPPINGADD>

Adds the calculated shipping charge for a particular shipping type to an order.

### ATTRIBUTES

**TYPE** The integer shipping type identifier. Not required if this information is supplied as a form variable "type".

**ORDERID** The order ID to operate on. If not specified, the current session or orderid will be used. (Optional)

**CHARGE** The amount for shipping to add to the order. If not specified, the amount will be dynamically calculated using defined shipping rules. (Optional)

## <SHIPPINGTYPES>

The <SHIPPINGTYPES> tag will query available shipping types and provide a list of valid options with radio buttons. This tag should be used on a page immediately before a <SHIPPINGADD> container.

### ATTRIBUTES

This tag takes no attributes.

## <CONFIRMEMAIL>

This tag will verify the validity of an email address by contacting the user's remote mail service and performing an identity check. This tag may return false positives depending on the configuration of the remote mail host.

### ATTRIBUTES

One of the following attributes is required.

**FIELD** The name of the form field that will contain the email address. All letters in the field name must be lower case. (Optional)

**EMAIL** The value of this attribute is the email address to verify. (Optional)

## <CONFIRMORDER>

This tag will confirm the customer's session information and place it as a new incoming order into the iVend system. This tag is responsible for sending confirmation email messages as follows:

notes/confirm.txt is sent to the customer.

notes/notify.txt should be sent to individual(s) responsible for checking new orders.

More information about how the files are formatted may be found in the next chapter.

If the order can not be confirmed, an error message will be returned to the browser.

### ATTRIBUTES

This tag takes no attributes.

## <SALESTAX>

The <SALESTAX> tag will calculate saletax for the order based upon the taxable flag set for each item and rules set in the Sales Tax Administration interface. The tag will accept an order id as an attribute, or in the absence of this attribute, will use the current session or order identifier.

### ATTRIBUTES

**ORDERID** Use this orderid to calculate saletax. (Optional)

## <GENERATEFORM>

This tag will generate an HTML form based upon the design of a table in the store database. This tag is useful for creating input forms for checkout steps like shipping and billing address collection. This tag may also be used to generate a form that may then be modified to suit the particular design of a store. This tag will generate a form compatible with the <ADDENTRY> tag.

### ATTRIBUTES

**TABLE** The table to use as the basis of the generated form. (Required)

**AUTOFILL** If specified, this will cause the form to be filled with data already in the table for a given session or order identifier. This attribute may be used with the ORDERID and TYPE attributes. (Optional)

**ORDERID** The order ID to operate on. If not specified, the current session or orderid will be used. (Optional)

**TYPE** If a table may have more than one record for a given identifier, this attribute may be included to specify a secondary key "type" which must be present in the specified table. (Optional)

**EXCLUDE** If specified, this comma separated list of fieldnames will be excluded from the generated field. The excluded fields must not be mandatory, though. (Optional)

**HIDE** If specified, this comma separated list of fieldnames will be hidden from the form (using hidden input fields). (Optional)

PULLDOWN If specified, this comma separated list of fieldnames will be created as pulldown menus, using options specified using the "Dropdown Menu Administrator." (Optional)

#### <ADDENTRY>

This tag will insert the data collected by the <GENERATEFORM> tag into the specified table. This tag should appear on a page immediately following a page containing <GENERATEFORM>. This tag may be configured to remove an existing entry for a particular order and table, so that a step may be passed through more than once without generating an error.

#### ATTRIBUTES

NOFLUSH Do not delete any old records for this identifier and table. The default behavior is to remove any records already present before the insert takes place. (Optional)

#### <CARDCHECK>

This tag will verify a credit card number's checksum using a LOG10 algorithm. Default values for this tag will work with the supplied default store configurations.

#### ATTRIBUTES

CARD\_NUMBER the HTML field name containing the card account number. (Optional)

EXPDATE the HTML field name containing the card's expiration date. (Optional)

CARDTYPE the HTML field name containing the card type. (Optional)

#### <SUBTOTAL>



The <SUBTOTAL> tag will calculate subtotal for the order based upon the sum of taxable and nontaxable items selected for purchase. The tag will accept an order id as an attribute, or in the absence of this attribute, will use the current session or order identifier.

#### ATTRIBUTES

ORDERID Use this orderid to calculate the subtotal. (Optional)

### <GRANDTOTAL>

The <GRANDTOTAL> tag will calculate the grand total for the order based upon the sum of subtotal, other lineitems such as shipping, and salestax. The tag will accept an order id as an attribute, or in the absence of this attribute, will use the current session or order identifier.

#### ATTRIBUTES

ORDERID Use this orderid to calculate the subtotal. (Optional)

### <SHOWORDER>

The <SHOWORDER> tag will list the items selected for purchase as an HTML table. The tag will accept an order id as an attribute, or in the absence of this attribute, will use the current session or order identifier.

#### ATTRIBUTES

FIELDS A comma separated list of fields to include in the table. Valid fields include those in the sessions or products table. (Required)

NAMES A comma separated list of names to display as headers at the top of the HTML table. If not included, the field names will be substituted. (Optional)

ORDERID Use this orderid to retrieve data for. (Optional)

## Markup available through Procedures

The following markup entities are defined as procedures located in the `library/` directory of your store. They may be modified (or disabled) by editing the appropriate procedure containers.

### <RELATEDGROUPS>

This tag lists groups (with links) that an item is included in. This tag is defined in the file `library/standard_tags`.

#### ATTRIBUTES

**ITEM** If specified, use this item id. If not specified, the item of the current page will be used. (Optional)

### <GROUPMAP>

This tag lists the groups (with links) that are parents of the current group. This tag is defined in the file `library/standard_tags`.

#### ATTRIBUTES

**ITEM** If specified, use this item/group id. If not specified, the item of the current page will be used. (Optional)





## Store Planning Worksheets

New Store Planning Guide

Parameter		Value
Store Name		
Store ID		
Database Server		
Does Database Exist already?		
User Credentials		
Store Data Location		
Pricing Structure		
Altered/Additional Product and Group Fields		
Dropdown Fields		
Sales Tax		
Shipping		