

e-Start Your Web Store with Zen Cart™

A Hands-On Guide For Entrepreneurs & Businesses

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Credits

About the Author

Goh Koon Hoek has been working in the IT industry for the last seven years. He has been involved with numerous large scale projects for both local and overseas entities in the public and private sector.

He has performed roles as diverse as software programmer, project leader and technical consultant. His main interest lies in the area of business software – using IT to realize business objectives. He hopes you will find this book helpful in your business endeavors.

Acknowledgment

This book would never have been possible without the foresight, hard work and great technical abilities of the Zen Cart team in building such a wonderful piece of software that has helped so many store owners around the world set up their own online businesses.

Its been a truly enriching experience working with them throughout the production of this book. They are professional, honest, and meticulous; and I'm convinced those qualities must surely be part of the reason why the software works so well. I want to thank each and every one of them (*Chris Brown, Ian C Wilson, Kim Elliot, Linda McGrath and Steve Strassburg*) for their patience and guidance while reviewing this book.

Finally, I want to thank my fiancée, family and friends for believing in me and providing the support I need to write this book.

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Foreword

The Zen Cart Team met Goh Koon Hoek in late 2006 via an email asking if we would review the book he had written about the program. As we each read our copy of the email the first question we all had was 'who?' Since those first emails we have come to know and admire Koon Hoek ("KH" to his friends).

KH has been working in the IT industry for the last 7 years. His various roles as project leader, consultant, programmer, software tester, and more have afforded him a broad range of knowledge and experience while enjoying his own passion of using IT to help realize business objectives. He has now expanded his portfolio by becoming an author as well.

He chanced upon Zen Cart (late 2005) while evaluating which shopping cart to install for a client. At that time, Zen Cart was at v1.2.6d. He was impressed by the clean code design and the number of features that came "out of the box" in Zen Cart. Although there are other programs available in other languages, he felt it suited his client's requirements best and set up the shop using it. As he became more familiar with it, he also fell in love with its simplicity and power. KH had been 'Zenned' as we say on the support forum.

On New Year's Day 2006, his fiancée suggested he write a book on Zen Cart and use part of the proceeds to help the Zen Cart Project. KH agreed it would be more effective than a single donation. Twenty percent of each book's profit is donated to the Zen Cart Project. The ongoing income will help speed the code's progress and it will free some time from answering the questions in the forums, but the biggest advantage to the Zen Cart community, is having a comprehensive, written document that covers Zen Cart operations from start to finish.

A little over a year ago, this book was just an idea. It is now reality. We, the Zen Cart Development Team, congratulate Goh Koon Hoek. The Zen Cart Team is proud of you and your "new baby". The book is everything we hoped it would be. Clear, concise, easy to understand and most of all thorough. Thank you.

The Zen Cart Development Team
February 2007

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Preface

Today, millions of people are already doing their shopping online. With the number of online shoppers set to explode as Internet access becomes more affordable and Internet infrastructure more available to the masses, businesses cannot afford not to have an online presence to cater to such demand.

Contrary to popular belief, you do not have to spend loads of money just to establish an online store. With this book, you will learn how to use the *free* and open source Zen Cart software to start building and running your own online store.

This practical book provides a step-by-step guide to on how to perform all the necessary tasks required to run an online store. Many screen shots are also included to help reinforce your learning experience and help you visualize the steps even when you are away from a computer.

Why This Book Was Written

This book serves to address two major concerns for store owners who are using Zen Cart to run their online stores.

Firstly, it goes into detail on how to set up a Zen Cart store on a reader's *local* computer.

With this approach, store owners can familiarize themselves with the software before they start searching for a web hosting provider and putting their store on the Internet.

Another advantage is that the local installation of Zen Cart is able to act as a test bed for store owners to try out different ideas before they actually implement those ideas on their 'live' online store on the Internet.

Secondly, this book acts as a form of *structured* documentation for Zen Cart.

Now, anyone can start learning how to use this powerful piece of software in a structured manner and see how the different pieces fit together. This "proactive" approach is in stark contrast to the "reactive" approach that current users employ: asking questions in the forums, reading the Wiki or browsing the FAQs on Zen Cart's site.

Ultimately, store owners can save themselves the time, effort and headaches of sifting through the forums to look for answers to most of their problems. The developers of Zen Cart can then have more time to continue enhancing this wonderful software and not repeatedly answering the same questions that keep popping up ever so often on the forums.

Audience

This book is aimed at anyone who wants to use Zen Cart to set up an online store to sell products or services. It is *not* a book for *programmers* learning how to program Zen Cart!

It assumes you are comfortable with using a web browser (Internet Explorer, Mozilla Firefox, etc) and already

familiar with your operating system (Windows XP, Mac OS X, etc). This would allow you to install and set up your online store comfortably.

You should also be familiar with commonly used Internet terms like web server, web hosting provider, HTTP, FTP, etc. Knowledge of programming languages like HTML, CSS and PHP is not strictly necessary but does allow you to customize your store in greater detail.

Finally, you need a large dose of patience and perseverance. Setting up an online store is relatively easy, but tailoring it to suit your business requirements will require time and effort.

How To Use This Book

This book covers Zen Cart version 1.3.7.1 which is the latest version at the time this book goes to print.

This book is divided into 5 parts. If you are reading this book for the first time, you should go through the book in sequence from Part 1 to Part 5. After that, you can jump around the different chapters to accomplish a specific task.

Part 1: Getting Started

Chapter 1, “*Introduction to Zen Cart*” - Introduces you to Zen Cart’s history and features and why you should use Zen Cart to set up your online store.

Chapter 2, “*Installing Zen Cart on Your Local Machine*” - Goes into details on how to install a Zen Cart store on your local computer. All supporting software installation like Apache web server, MySQL database server, Mercury mail server, etc, will also be covered.

Chapter 3, “*Store Quick Tour*” - Brings you on a quick tour of Zen Cart’s Admin Console and Store Front interfaces. Also covers the creation of sample data for use in later chapters.

Part 2: Setting Up Your Store

Chapter 4, “*Email*” - Shows you how to integrate Zen Cart to a mail server for sending emails. Also breaks down the various email options into manageable sections for you to understand and configure.

Chapter 5, “*Location*” - Helps you understand and configure location-related information which will be used throughout the online store.

Chapter 6, “*Store Contact Information*” - Shows you the different mediums in which your store contact information will be displayed to customers; email, packing slips, invoices, etc.

Chapter 7, “*Currency*” - Covers how to setup multiple currencies and also how to update these currencies in real time without you having to deal with exchange rates manually.

Chapter 8, “*Weighting Unit*” - Discusses how to change the unit of measure for weight.

Chapter 9, “*Taxes*” - Discusses the concepts behind sales tax configuration and then shows you how to set up sales tax for any region.

Chapter 10, “*Shipping*” - Discusses the various shipping concepts before going through the configuration of various shipping options.

Chapter 11, “*Payment*” - Goes through the configuration of various payment options.

Part 3: Managing Your Store Catalog

Chapter 12, “*Categories, Product Types and Products*” - Goes through the concepts of categories, product types and products before using them to set up a proper online catalog for your goods.

Chapter 13, “*Product Attributes*” - Discusses how to add new attributes to your products and also how to tie pricing and weighting information to these attributes.

Chapter 14, “*Other Product Manipulation Techniques*” - Shows you how to add multiple product images, make use of sample clips for your goods, add downloadable products for sale, etc.

Chapter 15, “*Order Totals, Surcharges and Discounts*” - Discusses how order totals affect a customer's order pricing during checkout. Also examines the different surcharges and discounts you can apply to specific goods, categories or the entire store.

Part 4: Customizing Your Store

Chapter 16, “*Simple Customization*” - Introduces you to the layout components in your Zen Cart store and shows you how to customize your store's look mainly from your web browser.

Chapter 17, “*Advanced Customization*” - Explains how to use the Override System to make changes to your store. You will also be shown how to change templates and add multiple language support to your store.

Part 5: Managing Your Store

Chapter 18, “*Managing Customers*” - Shows you how to manage common and individual customer information.

Chapter 19, “*Managing Orders*” - Covers how to deal with orders and understand the order statistics generated by Zen Cart. Also shows you how to generate invoices and packing slips from the orders.

Chapter 20, “*Managing Stock*” - Discusses how to interpret and make use of stock-related information including setting low-stock warnings and configuring low stock email alerts.

Chapter 21, “*Marketing*” - Discusses the use of various marketing techniques like discount vouchers, gift certificates, newsletters, banners, etc, for attracting customers to your store and helping them with their purchasing decisions.

Chapter 22, “*System Administration*” - Covers the non-business related functions like backup, security, performance and upgrades which ensure the smooth operation of your online store.

Appendices

Appendix A, “*Utility Software*” - Covers the various computer programs like text editors, FTP programs and file comparison programs that you will need to properly configure and customize Zen Cart.

Appendix B, “*Setting Up Shop on the Internet*” - Deals with the details of getting your Zen Cart store hosted on a remote server on the Internet.

Appendix C, “*Test Account Information*” - Consolidates all account information used throughout this book for easy

reference.

Conventions Used

This book makes use of various typefaces and graphics to help you distinguish between regular text and what you see on your screen.

Light Bold type is used for words or objects on the screen that you are to do something with. For example, “Click on **Configuration > My Store** to access general store settings.”.

Italic type is used for a word or phrase that is being defined or otherwise deserves special emphasis.

Monospaced Underline type is used for text that you are to type from the keyboard. For example, enter false into the **Enable Images** field.

Monospaced type is used to illustrate directories or files on your OS. For example, the directory path C:\apache\htdocs\store\docs holds documentation that comes with Zen Cart.

File contents will be contained in blocks as shown below.

```
<html>
  <head><title>Greeting</title></head>
  <body><h1>Hello World</h1></body>
</html>
```

Examples are contained in blocks with shadows instead.

```
Area of Rectangle = Length x Breadth
Area of Triangle = ½ x Length x Breadth
```

Furthermore, there are several graphic elements to bring your attention to specific items in the book.



Note

Expects you to pay particular attention to how something is done or why something is done in a specific manner.



Tip

Provides a faster means of accomplishing the same task.



Warning

Be wary of how something is done or what can happen if you do not follow the instructions carefully.

Contacting Us

We want to know what we are doing right and how we can do better. So if you have any comments regarding this book or wish to suggest other titles we should publish, please send an email to comments@cucumbermedia.com.

Part 1 *Getting Started*

This section introduces you to Zen Cart's history and features. Next, you will walk through how to set up Zen Cart and all supporting software on your local machine. Finally, you will be introduced to how a Zen Cart store functions and how to set up sample test data for use in the later parts of the book.

This section covers the following topics:

- Introduction to Zen Cart
- Installing Zen Cart on Your Local Machine
- Store Quick Tour

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Chapter 1 Introduction to Zen Cart

What is Zen Cart?

Zen Cart (<http://www.zen-cart.com>) is a piece of shopping cart software that allows you to create an online, e-commerce store for selling your goods and services. It is written in PHP and requires a MySQL database to work. You can use Zen Cart to create an online store to sell *physical* goods like shoes, pianos or *digital* goods like gift certificates, music downloads, etc. You can even sell *services* like insurance policies, IT support plans, etc.

The developers of Zen Cart have adopted the line, “The Art of E-Commerce”, as their goal when developing the software. Hence, you will find that the software is designed to cater specifically to the requirements of store owners and shoppers first. Store owners do not need an IT degree to set up and administer their web sites, and shoppers can navigate the online store and check out their items easily. Programmers are also not forgotten, as the code for Zen Cart is well-structured and well-designed for easy maintenance and custom logic.

Zen Cart comes absolutely *free* with many e-commerce features available out-of-the-box. Therefore, you do not have to invest a lot of money to establish an online, robust and professional e-commerce presence. All you need is to pay the web hosting fees and possibly some web design fees if you want to give your online store a more polished look.

The source code for Zen Cart is distributed under the GNU General Public License (GPL). In essence, this license gives anyone the right to modify the source code to suit their needs. However, derivative works that modify the source code have to adhere to certain restrictions if they are to be re-distributed. More information on the GNU GPL can be found at <http://www.fsf.org/licensing/licenses/gpl.html>.

Features

Zen Cart has a wide user base and is currently deployed across many ‘live’ sites around the world. Due to input from this user base and a very active forum, Zen Cart is able to offer many useful and robust e-commerce features out-of-the-box.

A list of the features that come with a default Zen Cart distribution is shown below.

Simple Web-Based Installation – Once you have the necessary supporting software (i.e. PHP and MySQL) ready, installing Zen Cart is easily performed using a web browser.

Supports Physical and Virtual Goods – Physical goods (computers, cars, flowers, etc) and virtual goods (digital music, e-books, etc) can be sold. Product samples like brochures or music clips can also be provided together with these goods.

Product Customization through Attributes – Product attributes can be added to further customize products. For example, customers can specify the colors, size and wordings for T-shirts that are being sold.

Simple Checkout Process – Customer checkout is a simple three-step process which is designed to reduce the occurrence of shopping cart abandonment. Customers only need to specify their shipping and billing information and

then confirm their orders to complete the checkout.

Multiple Payment Options – Credit Card, Check/Money Orders, Cash-On-Delivery, PayPal and many other payment options are supported by default. Payment options can also be enabled for customers based on their locations.

Multiple Shipping Options – Flat Rate, Per Item, Free Shipping, UPS and many other shipping options are supported by default. Shipping options can also be enabled for customers based on their locations.

Multiple Languages, Currencies and Taxes – To cater for customers from different geographical and cultural backgrounds, additional currencies and languages can be defined to smoothen their shopping experience. Taxes are calculated based on zone information and tax rates which store owners define.

Wide Array of Marketing Tools – To help store owners promote their products and retain their customers, many marketing tools like newsletters, product reviews, customer referrals, banners, etc are available.

Advanced Pricing Options – Discounts based on store-wide, category-wide or product-specific selections are possible. Surcharges can also be applied for customer orders below a certain amount, cash-on-delivery payment options, etc.

Order Total Calculation – Customers can choose to use discount coupons, gift certificates or their group discount status to offset their order total amounts either partially or fully.

Order Management – Store owners can easily manage orders by assigning order statuses to them. Customers can then log in to their individual accounts to view the status of their orders. Invoices and delivery orders can also be automatically generated by Zen Cart at the click of a button.

Custom Look-and-Feel – A store's look-and-feel can be dramatically modified just by modifying some CSS and HTML. Maintenance efforts are also reduced with the use of the Override System in Zen Cart. Additional web pages can also be easily added using the EZ-Pages feature.

The above features are only the tip of the iceberg when it comes to what Zen Cart can do for store owners. Additional features that do not come bundled with the default Zen Cart distribution are easily downloaded from the Zen Cart site and plugged-into an existing store. No programming experience is required to use these third-party downloads.

The list of third-party downloads can be accessed via the *downloads* area at Zen Cart's website.

History

Zen Cart was borne out of another shopping cart software known as osCommerce (<http://www.oscommerce.com>) back in June 2003. Since then, it has undergone major code enhancements and several releases to make it stand out from osCommerce and other e-commerce software.

Although anyone can contribute to Zen Cart's development, there is a group of core developers churning out the code and ensuring the quality of the overall product. This team of developers include:

- Ian C Wilson (*wilt*)
- Kim Elliott (*Kim*)
- Steve Strassburg (*Steve*)
- Linda McGrath (*Ajeh*)
- Chris Brown (*DrByte*)

Their nicknames are in brackets and you will usually encounter them in the forums where they can be seen answering

questions on Zen Cart.

Support

If you are worried about the fact that Zen Cart does not offer any support because it is not commercial software, you can put your mind at ease. The great number of Zen Cart users have given rise to a lively community of users who include programmers, graphic designers and store owners. These people, and the developers of Zen Cart, provide an excellent source of support for most of your queries.

Before you consider seeking help from the community, do spend some time familiarizing yourself with Zen Cart's site. If you are a non-English speaking user, you might even be able to locate a Zen Cart support site which is in your native language.

To help you seek help from the community more effectively, you might like to follow this approach when using Zen Cart's site.

1. Check the *tutorials/FAQ* section to see if an answer already exists for a question you are about to ask.
2. Go to the *Wiki* section to find out if your area of concern has already been addressed in one of the write-ups.
3. Check the *downloads* section to see whether any of the third-party contributions like side-boxes, payment and shipping modules serve your particular needs.
4. Finally, go to the *Support Forum* if you still do not find a satisfactory answer to your problems. Before you post any queries, spend some time reading through other people's posts or simply do a search of the forums to see if a question similar to yours might have been answered before.

Finally, do consider donating to the project if the software has benefited you. It is a great way to give back to the developers for all that they have done to build the software and to answer queries from users around the world.

This PDF has been licensed for use to:
[joey tanker <joeytanker@gmail.com>](mailto:joeytanker@gmail.com)

joeytanker@gmail.com

Chapter 2 Installing Zen Cart on Your Local Machine

Overview

This chapter guides you through the process of installing Zen Cart on your *local* computer. This is not an easy undertaking because Zen Cart is a web-based application which requires several other pieces of software to be installed and configured properly beforehand.

If you already have a running Zen Cart installation either on your local machine or a remote server, you should still quickly browse through this chapter. This is because some sample values created here will be used in our examples in the following chapters.



Note

Only installation on *Windows XP SP2* is shown. Unix/Linux and Mac users can read through the chapter to give themselves an idea of how to install Zen Cart for their respective operating systems.

Pre-Installation Requirements

Before you begin installing and configuring Zen Cart to run on your machine, you need to fulfill certain requirements. These requirements are crucial to the success of your installation, so make sure you go through them.

Hardware Requirements

For your local machine, I would recommend at least 512MB of RAM to run all the server software (Apache, MySQL, etc) and client applications (Web Browser, FTP application, etc). In addition, you may need to have a fast CPU (at least 1GHz) since you will need all these applications to be running at the same time as well.

If you are running Zen Cart on a remote server with a web hosting provider, you would need to gather some statistics (server load at different times of the day, server hardware specifications, etc) before you decide on your hardware requirements.

Software Requirements

To install Zen Cart version 1.3.7.1, the following software is *recommended*:

- PHP (*version 4.4.x or higher*)
- Apache web server (*version 1.3.x or 2.x*)
- MySQL database server (*version 3.2.x or 4.x.x*)

You will also need a *Mail Server* in order to send emails from within Zen Cart.

For more information on the different server software versions that are compatible with different Zen Cart versions, refer to <http://www.zen-cart.com/wiki/index.php/Installation#Required>.

Zen Cart is able to run on any *operating system (OS)* that supports the above software. The list of operating systems would include Windows, Unix/Linux and Mac OS.



Note

Do not start downloading any of the aforementioned recommended software now. We shall be using a software package called XAMPP later for our installation.

PHP

Web Address: <http://www.php.net/>

PHP is a programming language widely used for developing web-based applications. It is free and open source and is one of the most popular computer languages with web developers because of its simplicity and power.

Zen Cart is written entirely in PHP but you do not need to know much about it to run your online store successfully. All you need is some basic information (PHP version, PHP settings, etc) to help you troubleshoot any problems you might face when running your online store.

Apache Web Server

Web Address: <http://httpd.apache.org/>

Because Zen Cart is a web-based application accessed via a web browser, you will need a web server to host your application. Theoretically, you should be able to use any web server that supports PHP. However, most people run PHP with Apache so I'd suggest you do the same. This will save you lots of time and frustration if you encounter set up or performance problems because most people are familiar with Apache and should be able to answer any questions you have relatively faster.

MySQL Database

Web Address: <http://www.mysql.com/>

Zen Cart uses a database to store all product, customer, order and configuration details. Currently, MySQL is the only supported database. It is a robust and popular database; and is used to power high traffic sites like Yahoo Finance and Google.

The developers of Zen Cart have also begun work on supporting another open source database called PostgreSQL (<http://www.postgresql.org>) although it is not supported at the moment. Do check with your web hosting provider on whether they provide this database if you intend to use it as your Zen Cart database in future.

Mercury Mail Server (Optional)

Web Address: http://www.pmail.com/overviews/ovw_mercury.htm

A mail server (e.g. Microsoft Exchange) is used for sending and receiving emails. Many mail servers are available for you to install and try out but we shall be using the Mercury Mail Server for this book. You can choose not to install this mail server if you already have another mail server installed on your system or simply

prefer another mail server you are more comfortable with.

Other Installation Requirements

Before we begin, make sure you fulfill the following conditions:

- You have full administrative rights to your computer.
- You have control over your computer's firewall settings.
- You have a collection of software as outlined in Appendix A: "Utility Software".

Understanding the Installation Setup

Before we begin the installation process, you need to understand how our local setup will be different from a remote setup. This will help you understand the installation process better and allow you to picture how the different setup elements fit together.

For simplicity's sake, we shall assume that all the necessary software required to run Zen Cart is bundled together on a single machine. This is usually not the case in an actual deployment but you do not have to worry about it because your web host will take care of that.

To show the different steps that take place when accessing a remote host versus a local machine, we shall use an example of a customer trying to access a Zen Cart store via the Uniform Resource Locator (URL) - <http://www.example.com/store>.

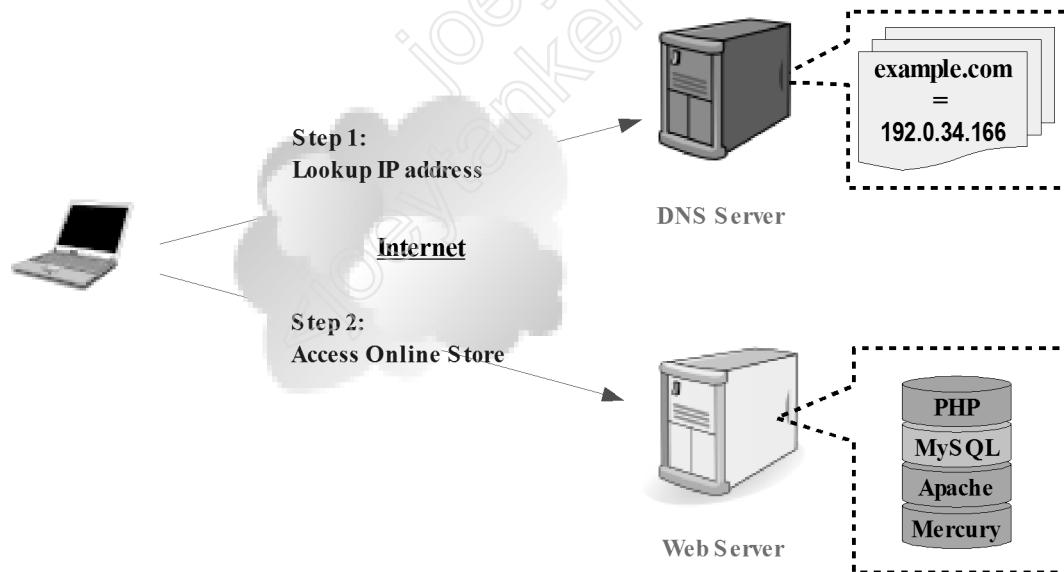


Figure 2.1: Zen Cart store located on the Internet

In Figure 2.1, the Zen Cart store is located on a *remote* machine on the Internet. When the customer types the URL into the web browser, the web browser has to fetch the IP address of the Zen Cart store from a Domain Name System (DNS) server. Based on this address, the web browser will then access the online store which is running Zen Cart.

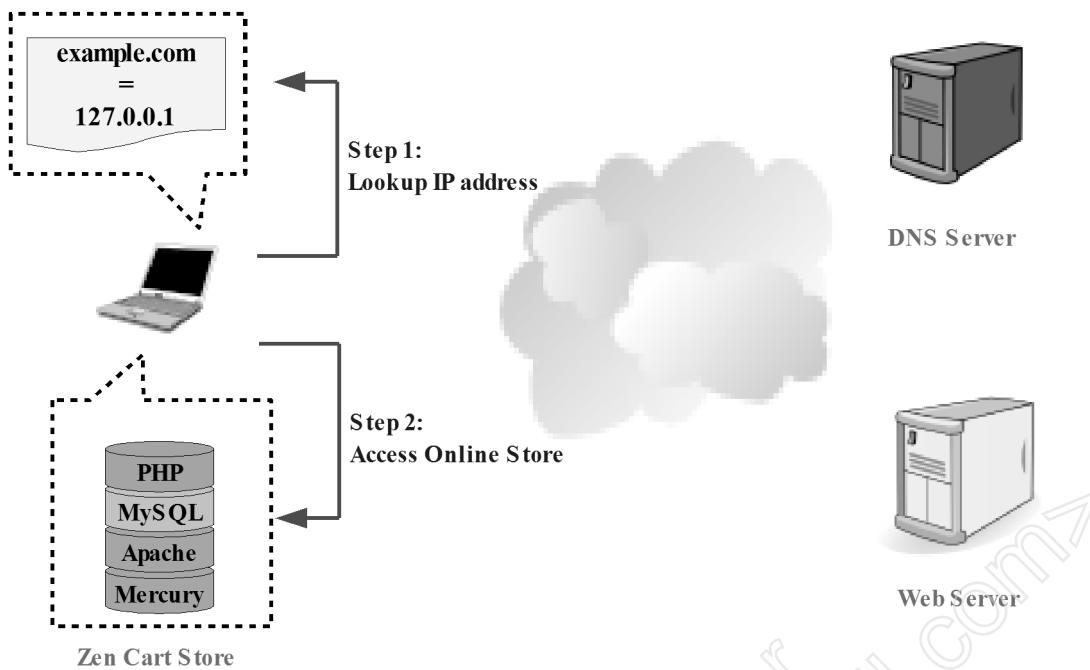


Figure 2.2: Zen Cart store located on a local PC

In Figure 2.2, the Zen Cart store is located on a *local* machine. Instead of obtaining the IP address from the remote DNS server, the web browser automatically looks for the Zen Cart store on our local machine. This is done by specifying the IP address to point to our local machine via the use of a *host* file on your local machine. This little trick makes use of the fact that computers will always look for an entry in the local *host* file before consulting the DNS when looking up IP addresses. (Note: In computer networking, 127.0.0.1 is a standard IP address that a computer uses to point to itself)



Note DNS servers contain mappings between domain names and IP addresses.

Think of them as large telephone directories which allow people to use simple names, such as "www.example.com" to locate a host, rather than using the IP address "202.27.17.190".

Once you understand the above differences between a local and remote setup, you can begin the installation process in the following sections.

Using a Pre-Packaged Solution: XAMPP

Getting PHP, Apache and MySQL properly configured to work in harmony is no easy task. The different versions and configuration possibilities can often cause problems during installation - even for seasoned developers.

To simplify our installation procedure, we shall be making use of a software package called XAMPP (<http://www.apachefriends.org/en/xampp.html>) which is available for several operating systems.

This package not only contains all the required software we need but has the added benefit that the different versions of the software will work together. In addition, it also comes bundled with useful features like SSL support and a nice

MySQL database management tool called *phpMyAdmin* (<http://www.phpmyadmin.net/>) which you might encounter if you host your Zen Cart installation with a web hosting provider in future.

Currently, the highest version of XAMPP that is able to work with Zen Cart properly is version **1.4.16**. This version has a download size of 67.3 MB and when expanded will take up 163 MB of disk space. It contains the following software:

- PHP 5.0.5
- Apache 2.0.54
- MySQL 4.1.14
- Mercury Mail Server 4.01a



Warning

Never use XAMPP to host your 'live' sites because many security rules have been relaxed! It is meant solely for development purposes.

Obtaining XAMPP

There are currently many versions of XAMPP available for download. Because Zen Cart *officially* works with MySQL version 4.x, we will need to download an older copy of XAMPP instead of the latest one available.

Follow the steps below to download the *correct* version that will work with Zen Cart:

1. Go to the official site of XAMPP at <http://www.apachefriends.org/en/xampp.html>.
2. Click on **XAMPP for Windows**, to access the page which provides all the information regarding the windows version of XAMPP.
3. Search for the **Source Forge** hyperlink and click on it to be redirected to another site which allows you to download older XAMPP releases.
4. Click on **XAMPP Windows** to access a page showing all the different release versions of XAMPP for the Windows platform.
5. Click on **1.4.16** and a sub-menu of links should appear. This version of XAMPP contains the correct version of software that can run Zen Cart.
6. Click on the **xampp-win32-1.4.16-installer.exe** hyperlink to begin downloading the software to your machine.

Installing XAMPP

Before you begin installation:

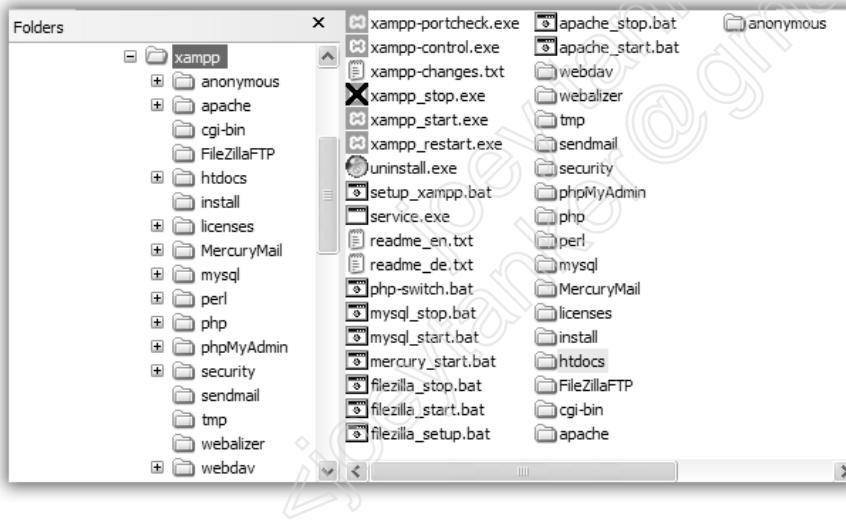
- Make sure you do not have any previous copies of Apache, MySQL or Mercury Mail server installed on your machine. Uninstall them if they are present.
- The following ports in your computer's firewall may need to be enabled. Do not allow access to other machines on the Internet unless you know what you are doing!

Table 2.1: Ports used by various local server software

Port	Protocol	Software
80	HTTP	Apache Web Server
3306	MySQL-specific	MySQL Database Server
25	SMTP	Mercury Mail Server
110	POP	Mercury Mail Server

To begin installing XAMPP:

1. Double-click on *xampp-win32-1.4.16-installer.exe* to start the installation process.
2. In the **Destination Folder** field, choose a directory *without any spaces or periods* in its path (e.g. *C:\server\xampp*) to install XAMPP before clicking **Install**.
3. Click **Yes** if you are prompted to install XAMPP, Apache and MySQL as a Windows service.
4. After installation completes, go to the directory where XAMPP is installed and you should see something similar to the following directory structure.



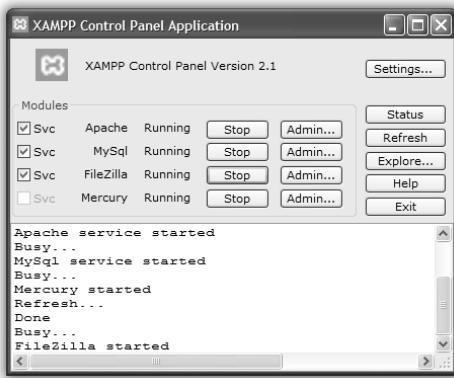
5. Restart your computer. This step is optional but I usually do it to prevent any unexpected problems with different versions of Windows.



Note The directory *xampp* shown in the preceding screen shot will be referred to as *<xampp-home>* for the rest of this book.

To check whether XAMPP has been installed successfully:

1. From your Windows menu, click on **Start > All Programs > apachefriends > xampp > CONTROL XAMPP SERVER PANEL**. This will bring up the XAMPP control panel as shown in the following screen shot.



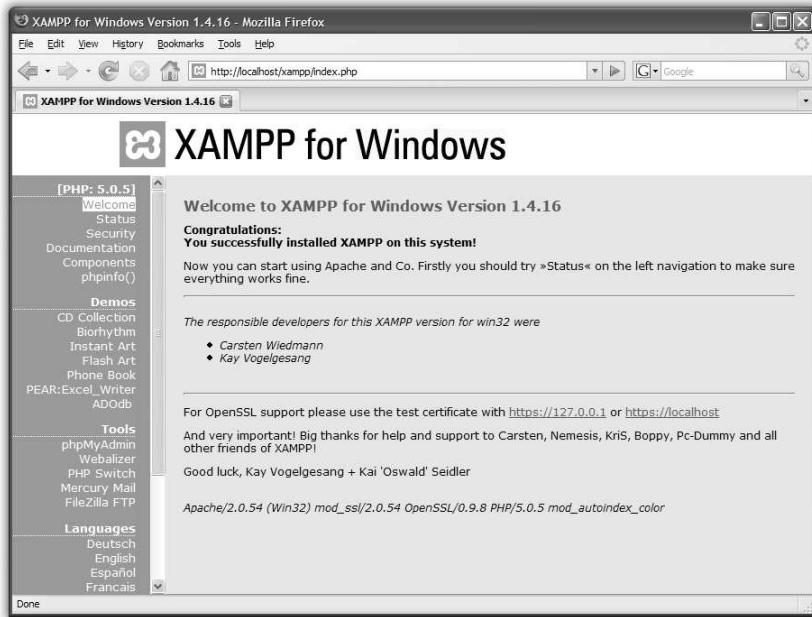
2. Make sure all the services, except FileZilla, are running. If any of them are not running, click on the respective **Start** buttons.

If you are still unable to start the Apache service after several tries, make sure you shut down any other application (e.g. Skype, Microsoft IIS, Windows Firewall) on your computer that is currently using or blocking port 80.

3. Start your preferred web browser and type in the following URL - <http://localhost>. You should see something similar to the following screen shot if everything goes well.



4. Click on the **English** hyperlink and a screen similar to the following screen shot will be shown if XAMPP has been successfully installed on your system.



Note Microsoft Windows users who encounter problems installing XAMPP or starting any of the server software should refer to the following URL for help – <http://www.apachefriends.org/en/faq-xampp-windows.html>.

Setting Up a Local Domain

Before we proceed any further, we need to first create a domain in your local machine. We need to do this because when you experiment with Zen Cart later, you will not be allowed to specify email accounts with either “*localhost*” or an IP address as the domain. For example, “john@localhost” and “john@127.0.0.1” are not allowed as inputs into Zen Cart.

Furthermore, a domain allows you to access your online store using a more realistic URL (e.g. <http://www.example.com/store>) instead of using the word “localhost” or an IP address (e.g. <http://127.0.0.1/store> or <http://localhost/store>). It also adds a touch of realism to your mail server address. For example, using “mail.example.com” instead of “localhost”.



Warning A *local* domain is not accessible outside your computer. For that, you will need to know how to set up a Domain Name Service (DNS) or have experience in setting up a network.

For the rest of this book, we shall be making use of the domain “*example.com*”. This domain is actually used specifically for documentation purposes and cannot be registered to anyone on the Internet.

If you type “<http://www.example.com>” into your web browser now, you will see something similar to the following screen shot.



To set up a domain in Windows XP:

1. Edit the file C:\WINDOWS\system32\drivers\etc\hosts with a text editor. Change the drive letter (C:) to match your own computer setup.
2. Add the following lines to the end of the file.

```
127.0.0.1      www.example.com      # For browser access
127.0.0.1      mail.example.com    # For email access
127.0.0.1      example.com        # For mercury mail server
```

3. Remember to save the contents of the file.

You should now be able to use “localhost” and “www.example.com” interchangeably when accessing your web server via a web browser. The “mail.example.com” domain will make more sense to you when you learn how to configure Zen Cart to send emails in “Mail Server Settings” on page 72. The “example.com” domain will be used in “Configuring Mercury” on page 38.



Note

If you have a problem setting up a domain on your local machine with a period in the domain name (e.g. www.example.com), go to your web browser and check your *proxy server* settings.

For example, in Internet Explorer 7, you can go to **Tools > Internet Options** to open a dialog box. Navigate to the **Connections** tab, click **LAN settings** and *uncheck* the **Use a proxy server for your LAN** option.

Configuring Apache

We have to configure our *local* Apache to accept connections for any requests to the domain - `http://www.example.com`, instead of allowing such connections to go through the Internet.

To configure Apache to use the new domain you created:

1. Edit the file <xampp-home>/apache/conf/httpd.conf with a text editor.
2. Delete and add the following line in the file.

```
ServerName localhost:80      ServerName www.example.com:80
```

To test whether Apache has been configured properly:

1. Start your Apache service via the XAMPP Control Panel.
2. Use your web browser to point to <http://www.example.com> and you should be presented with the XAMPP welcome screen if your configuration is successful.

Note that you are still able to access your server via the old URL of <http://localhost>.

Configuring Mercury

Now we have to make sure that all emails for the domain *example.com* will be handled by our mail server.

To configure your Mercury mail server to use the new domain:

1. Stop the Mercury mail server service via your XAMPP Control Panel.
2. Edit the file <xampp-home>/MercuryMail/MERCURY.INI with a text editor.
3. Delete and add the following lines in the file.

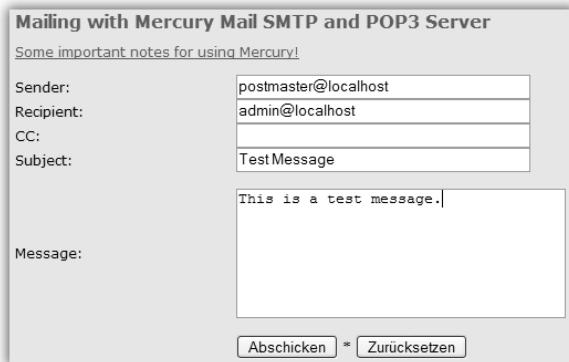
```
myname localhost # Canonical name for this server
myname example.com # Canonical name for this server
```

4. Add the following line just below the words “*localhost.com : localhost.com*” in the file.

```
example.com : example.com
```

To test whether your Mercury mail server has been configured properly:

1. Start your Mercury service via your XAMPP Control Panel. Also make sure your Apache service is started.
2. Navigate to the URL <http://www.example.com/xampp> to open up your XAMPP page.
3. Click on the **Mercury Mail** hyperlink on the left-panel. Your right-panel should refresh and appear similar to the following screen shot.



4. Enter some values for the test email you want to send. You can make use of the following settings

as an example.

- **Sender** – postmaster@example.com
- **Recipient** – admin@example.com
- **Subject** – Test Message
- **Message** – This is a test message.

5. Click on **Abschicken** to send your email. Note: “Abschicken” is the German translation for the English word “Send”.
6. If all goes well, you should see a message telling you that the email has been successfully sent.

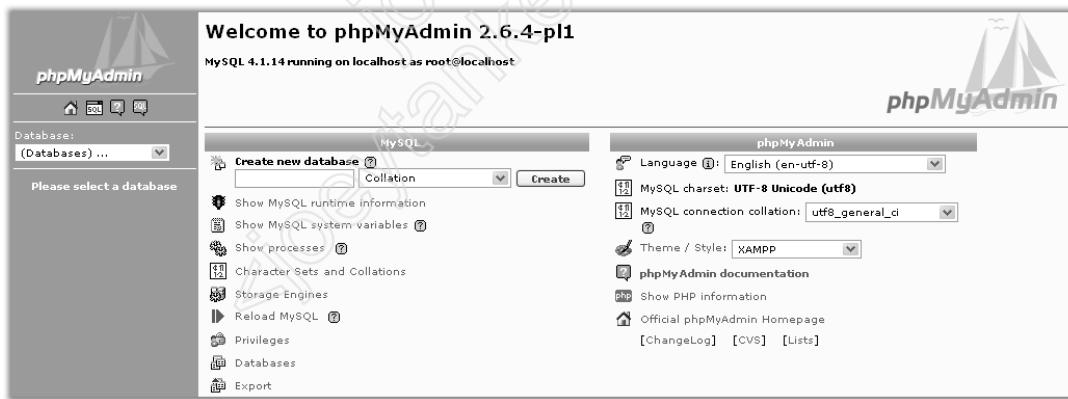
Preparing for Zen Cart Installation

Creating Your Store's Database

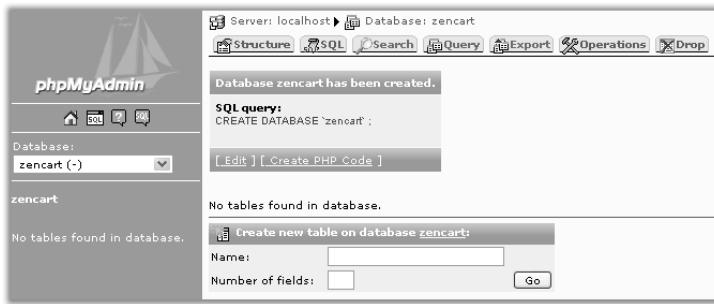
A database is used to store your configuration information during the installation process and also all your store's settings, customer and product information, etc. Our database will be created in the MySQL database server which we have installed when we installed XAMPP.

To create a database:

1. Start up your XAMPP Control Panel and make sure all services are running.
2. From your web browser, navigate to <http://www.example.com/phpmyadmin>.



3. Type the name of the database you want to use for your Zen Cart installation into the **Create new database** field. For example, type zencart.
4. Leave the other settings at their default values and click on **Create** to create a new database.
5. After your installation completes, you should see a screen similar to the following screen shot. Notice that your newly created database is shown on the drop-down list box on the left panel.



Keep in mind what you have specified for your database name in Step 3. You can refer to Appendix C “Database Account” on page 390 for the default settings used in this book.

Enabling cURL support in PHP

cURL is a set of functions that allow programs to communicate with many different types of servers using different types of protocols. We shall not go into the technical details of how cURL functions are used by PHP but you need to know that cURL is used by certain shipping and payment modules in Zen Cart to connect to external sites to send or retrieve information.

If cURL is not enabled in your PHP configuration, Zen Cart will display a warning message complaining about the fact. To enable cURL support in your PHP configuration for your local XAMPP server, edit the file `<xampp-home>/apache/bin/php.ini` and remove the semicolon in front of the words “extension=php_curl.dll” as shown in the following code snippet. Restart the Apache service in your XAMPP Control Panel after making your changes.

```
;extension=php_curl.dll  
extension=php_curl.dll
```



Note For simplicity and consistency, this book uses the spelling “cURL” instead of “CURL” although the two words have slightly different connotations.

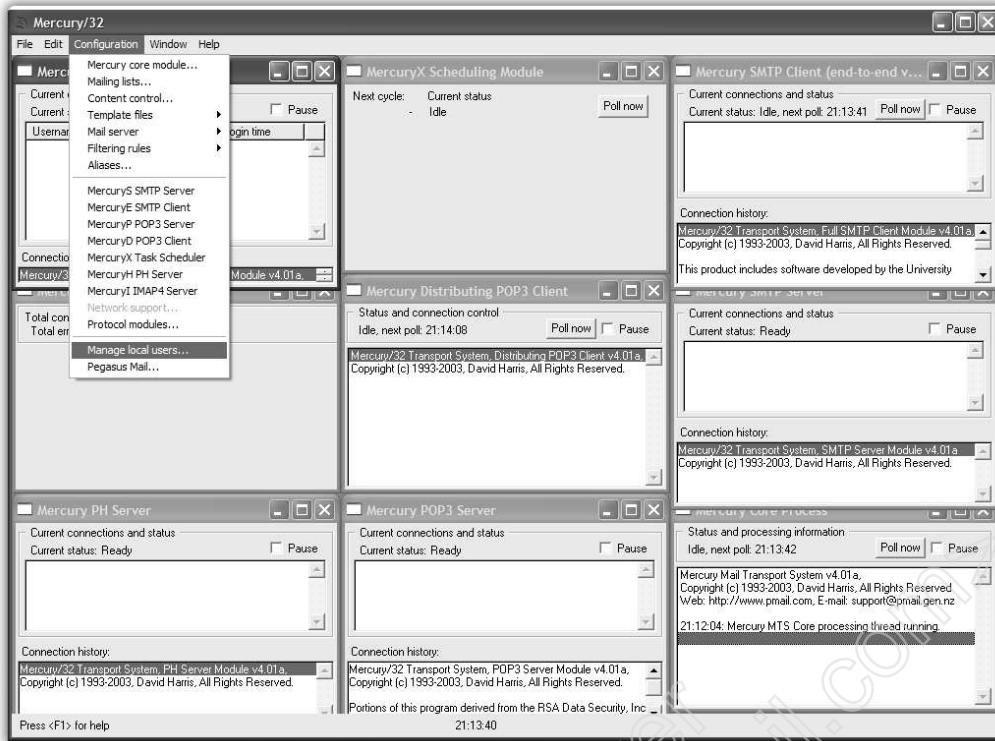
Creating Test Email Accounts

Several email accounts will now be created in our mail server. These email accounts will be used later for simulating the store owner and test customers.

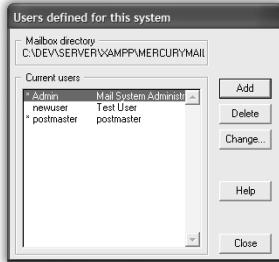
To add email accounts to your Mercury mail server:

1. Start up your XAMPP Control Panel and make sure the Mercury Mail Server service is started.
2. Click on the **Admin** button next to the **Mercury** field in your XAMPP Control Panel to bring up the Mercury mail server management window.

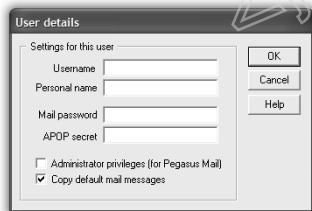
To arrange your windows nicely, click on the menu item **Window > Tile**.



3. Choose **Configuration > Manage local users** from the menu as shown in the preceding screen shot. You should be presented with a dialog box showing the current users present in your mail server.

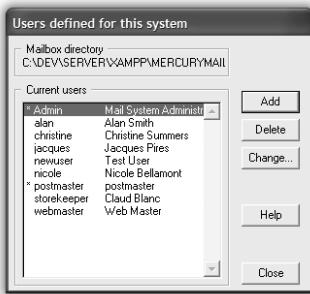


4. Click on **Add** to bring up a dialog box for you to enter the details of the email accounts you wish to create.



5. Refer to “Email Accounts” on page 389 for a list of email accounts you need to use for the examples in this book.
6. Enter information only for the fields: **Username**, **Personal name** and **Mail password** for each individual.
7. Click **OK** after adding an email account and you will be presented with the same dialog box you encountered in Step 3.

8. Repeat the process from Step 4 onwards for the other email accounts.
9. After you have completed adding all the email accounts, you should have something similar to the following screen shot.



Configuring Your Email Client

We need to configure an email client (or reader) to send and receive emails via the Mercury mail server we configured. For our example, we shall be using the open source and freely available *Mozilla Thunderbird* as our email client. It is available at <http://www.mozilla.com/thunderbird>.

The latest version of Thunderbird available at the time of printing of this book is *Thunderbird 2.0.0.6*. I'll assume you have no problems downloading, installing and starting up Thunderbird so we'll start our configuration immediately.



Note

If you intend to use another email client (e.g. Microsoft Outlook), you can quickly browse through the steps here to get an idea of how to do it.

Before you begin adding email accounts to Thunderbird, start your Mercury mail server via your XAMPP Control Panel.

To add an email account to Thunderbird:

1. Start up Thunderbird and choose **File > New > Account** from the main menu to bring up the Account Wizard dialog box.



2. Choose **Email account** from the list of account types and click **Next >** to proceed to the next screen. You should see a screen similar to the following screen shot.



3. Enter the values according to the email accounts you created in the previous section. For example:
 - **Your Name** – Claud Blanc
 - **Email Address** – storekeeper@example.com

Click on **Next >** to proceed to the next screen to enter your mail server information.



4. Leave the radio button set at POP although Mercury Mail Server is able to support IMAP as well. Enter mail.example.com for the **Incoming Server** field and un-check the field **Use Global Inbox (store mail in Local Folders)**. If this is the *first* time you are creating an account in your Thunderbird software, you will notice an **Outgoing Server** field in the Account Wizard dialog box. You can choose to enter localhost or mail.example.com for that field. Click on **Next >** to proceed to the next screen.



5. Enter the Mercury email account user name into the **Incoming User Name** field. If this is the *first* time you are creating an email account, you will also have to enter an email account for the **Outgoing User Name** field. Click on **Next >** to proceed to the next screen.



6. Enter anything you would like to identify this email account in the **Account Name** field. I would recommend you stick to the default offered by Thunderbird because it is easier to differentiate between the several email accounts you will need to create as you begin adding more test customers to your store. Click on **Next >** to proceed to the next screen.



7. Check the box **Download messages now** and click **Finish** to complete the email account creation. Thunderbird should prompt you to enter your password for the newly created email account as it needs to connect to the Mercury mail server to retrieve all email messages for the account.
8. Once your account is created, you should be able to see it on the left-panel of Thunderbird.



Repeat the above process for all other email accounts you have created in your email server.

To test whether your email accounts are configured successfully, try sending some emails between the different email accounts.



Note

For technical users, if you need to change your SMTP mail settings in Thunderbird. Click on **Tools > Account Settings** and choose **Outgoing Server (SMTP)** to make your changes.

Installing Zen Cart

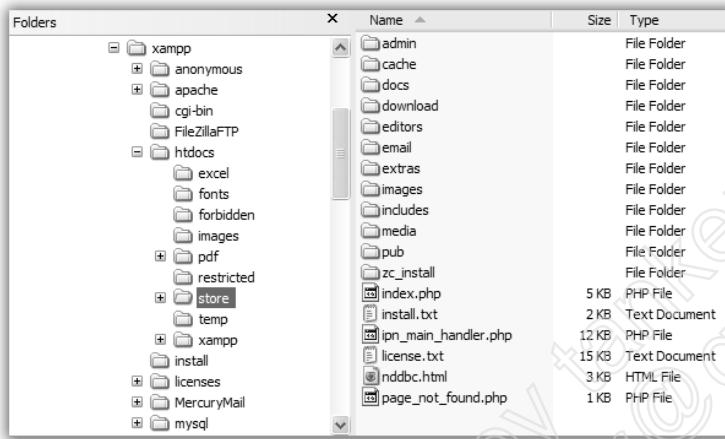
Installation of Zen Cart will be performed via a web browser.

Pre-Installation Activities

To download and prepare the Zen Cart directory for installation:

1. Go to Zen Cart's home page at <http://www.zen-cart.com>.
2. Click on the **Download NOW!** hyperlink on the right-side of the screen and you will be redirected to another website (SourceForge) to download your Zen Cart installation files.

3. Click on **zen-cart-v1.3.7.1-full-patched-07052007.zip**. Follow the instructions to begin downloading the copy of Zen Cart that is used with this book.
4. You should end up with the file, **zen-cart-v1.3.7.1-full-patched-07052007.zip**, on your machine.
5. Unpack the downloaded file to the `<xampp-home>/htdocs` directory on your machine. You should end up with the following directory `<xampp-home>/htdocs/zen-cart-v1.3.7.1-full-patched-07052007`.
6. *Rename* the directory from `zen-cart-v1.3.7.1-full-patched-07052007` to `store` or `shop`. In this way, we can use the following URL to access our store `http://www.example.com/store` or `http://www.example.com/shop`. Although you can rename the Zen Cart directory to anything, we shall assume you have used `store` for the rest of this book. You should have a directory structure similar to the following screen shot.



Note We shall use `<zc-home>` to represent the top-most directory containing all your Zen Cart files for the rest of this book i.e. `<xampp-home>/htdocs/store`.

Performing the Installation

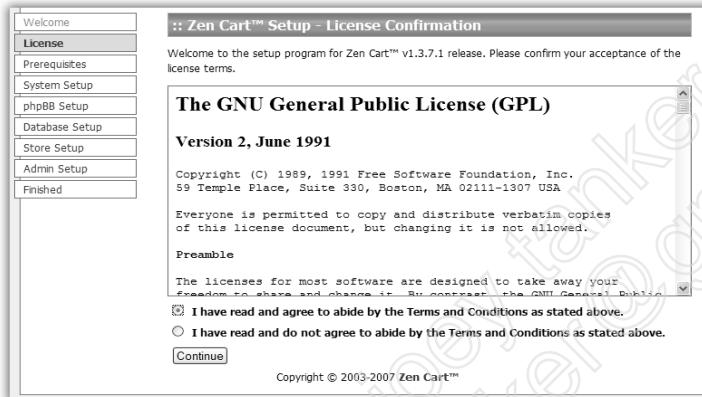
Before you begin installation, make sure you have started all your services via the XAMPP Control Panel.

To begin installation of Zen Cart:

1. From your web browser, navigate to the URL you specified in the previous section. For example – `http://www.example.com/store`. You should reach the Welcome screen of Zen Cart's installer.



2. Click on **Continue** to proceed to the License screen.



Agree to the license by clicking on the relevant radio button.

3. Click on **Continue** to proceed to the Prerequisites screen.

System Inspection Results

Webserver = Apache/2.0.54 (Win32) mod_ssl/2.0.54 OpenSSL/0.9.8 PHP/5.0.5
 PHP API = 20031117 PHP Extension = 20031117
 PHP Safe Mode = OFF
 PHP Session Support = ON
 PHP Session.AutoStart = OFF
 PHP session.use_trans_sid = OFF
 Suggested SQL Cache Folder = C:/dev/server/xampp/htdocs/store/cache
 PHP magic_quotes_runtime setting = OFF
 PHP GD Support = ON
 PHP Version = GD bundled (2.0.28 compatible)
 PHP ZLIB Compression Support = ON
 PHP OpenSSL Support = ON
 PHP cURL Support = ON
 PHP Upload Support = ON upload_max_filesize=16M; post_max_size=16M
 PHP Upload TMP dir = C:\dev\server\xampp\tmp

File and Folder Permissions

In order for many Zen Cart™ administrative and day-to-day functions to work properly, You need to mark several files/folders "Writable". The following is a list of folders which need to be "read-write", along with recommended CHMOD settings. Please correct these settings before continuing installation. Refresh this page in your browser to re-check settings.

Some hosts may not allow you to set CHMOD 777, but only 666. Start with the higher setting first, and switch to lower values if required.

Ready to Install? (This will wipe any existing data. You are NOT in Upgrade mode!!!)

View PHPINFO for your server

Install **Re-Check**

Make sure that the **PHP cURL Support** field shows up as **ON**. If this is not the case, refer to “Enabling cURL support in PHP” on page 40 to turn on cURL support in your PHP setup.

- Click on **Install** to proceed to the System Setup screen.

Server Settings

Physical Path
 Physical Path to your Zen Cart directory.
 Leave no trailing slash. [more info...](#)

Virtual HTTP Path
 Virtual Path to your Zen Cart directory.
 Leave no trailing slash. [more info...](#)

Virtual HTTPS Path
 Virtual Path to your secure Zen Cart directory.
 Leave no trailing slash. [more info...](#)

Enable SSL
 Would you like to enable Secure Sockets Layer in Customer area?
 Leave this set to NO unless you're SURE you have SSL working. [more info...](#)

Enable SSL in Admin Area
 Would you like to enable Secure Sockets Layer for Admin areas?
 Leave this set to NO unless you're SURE you have SSL working. [more info...](#)

Save System Settings **Redetect defaults for this host**

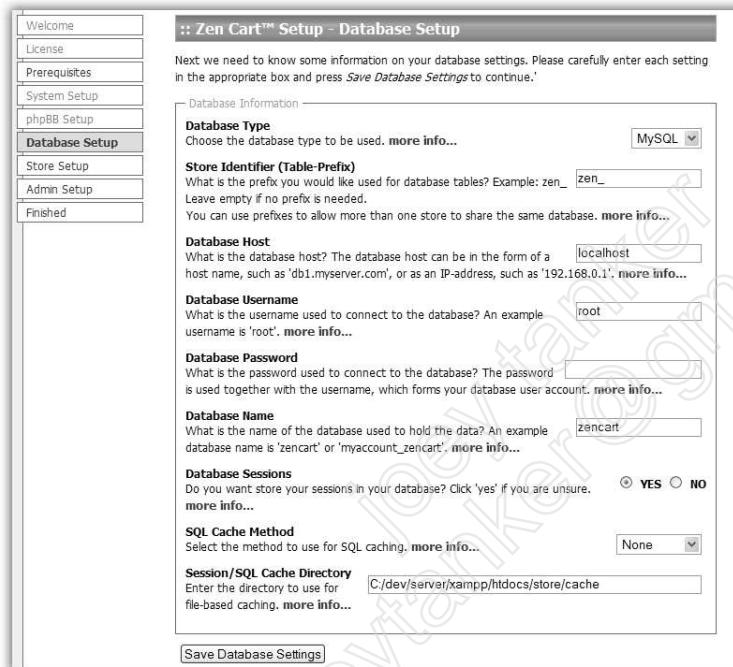
Accept the default settings as they are automatically picked up by Zen Cart.

- Click on **Save System Settings** to proceed to the phpBB Setup screen.



phpBB (<http://www.phpbb.com>) is a separate piece of software for running online bulletin boards. The software is being developed separately by another group of developers unrelated to the Zen Cart project and will not be covered in this book. Therefore, make sure the radio button is left at NO.

6. Click on **Save phpBB Settings** to proceed to the Database Setup screen.



Enter the name of the database you created in “Creating Your Store's Database” on page 39 in the **Database Name** field. Leave the **Database Username** and **Database Password** field at their default values which will coincide with that of XAMPP's MySQL settings. Optionally, specify a value for the **Store Identifier (Table Prefix)** field as shown in the screen shot.

Warning: If you are installing Zen Cart on a remote server, never leave your **Database Password** field empty!

7. Click on **Save Database Settings** and a screen will appear showing the progress of data population in your database.



8. The Store Setup screen will automatically appear after database setup completes.

The screenshot shows the 'Zen Cart™ Setup - Store Setup' page. The left sidebar has a navigation menu with the 'Store Setup' option selected. The main content area is titled 'Store Information' and includes fields for 'Store Name' (Mega Store), 'Store Owner' (Claud Blanc), 'Store Owner Email' (storekeeper@example.com), 'Store Country' (United States), 'Store Zone' (Alabama), 'Store Address' (Address, Country, Phone), 'Default Language' (English), and 'Default Currency' (US Dollar). Below this is a 'Demo Information' section with a 'Store Demo' checkbox set to 'NO'. At the bottom is a 'Save Store Settings' button.

The examples in our book uses the following values for the respective fields on the screen.

- **Store Name** - Mega Store
- **Store Owner** - Claud Blanc
- **Store Owner Email** - storekeeper@example.com
- **Store Demo** - NO

Leave the rest of the fields at their default values.

Note: Do consider installing another store with the demo data populated (**Store Demo** – Yes) after going through this book. The demo store contains many product/feature configuration possibilities, some of which may not be covered in this book.

To create another store, just rename the Zen Cart folder to something other than the one you used for creating this store. For example, use “demo” instead of “store”. Another thing is to remember to use a unique value for the **Database Identifier (Table-Prefix)** field you specified in Step 6.

9. Click on **Save Store Settings** to proceed to the Admin Setup screen.

>Welcome
License
Prerequisites
System Setup
phpBB Setup
Database Setup
Store Setup
Admin Setup
Finished

:: Zen Cart™ Setup - Administrator Account Setup

To administer settings in your Zen Cart™ shop, you need an Administrative account. Please select an administrator's name, and password, and enter an email address for reset passwords to be sent to. Enter and check the information carefully and press *Save Admin Settings* when you are done.

Administrator Information

Administrator's Username
Enter the username to be used for your Zen Cart administrator account. [more info...](#)

Administrator's Password
Enter the password to be used for your Zen Cart administrator account. [more info...](#)

Confirm Administrator's Password
Confirm the password to be used for your Zen Cart administrator account.

Administrator's Email
Enter the email address to be used for your Zen Cart administrator account. [more info...](#)

Upgrade Detection

Check for Zen Cart™ updates when logging into Admin
This will attempt to talk to the live Zen Cart™ versioning server to determine if an upgrade is available or not. If an update is available, a message will appear in admin. It will NOT automatically APPLY any upgrades.
You can override this later in Admin->Config->My Store->Check if version update is available.

Save Admin Settings

The values appearing in the Administrator Information section of the screen shot are taken from “Zen Cart Administrator Account” on page 390.

10. Click on **Save Admin Settings** to complete your installation.

>Welcome
License
Prerequisites
System Setup
phpBB Setup
Database Setup
Store Setup
Admin Setup
Finished

:: Zen Cart™ Setup - Finished

Congratulations!

You have successfully installed Zen Cart™ on your system!

NEXT STEPS

For security, you will need to reset your **configure.php** files located in the **/admin/includes/** and **/includes/** folders back to read-only mode before allowing people to access your store.

Additionally, you'll want to remove or rename the **/zc_install** folder so that someone can't re-install your shop again and wipe out your database! Warnings will appear until the folder has been removed or renamed.

CONFIGURATION

We encourage you to begin by **reading the FAQ's in our online support forums** for useful information to assist with configuring and customizing your online shop the way you wish it to look and operate.

If you have questions, this is the first place to look! If you're stumped, feel free to post a question! We have a helpful, friendly, knowledgeable community who welcomes you.

It's also **important** that you check out the **Documentation** in the **/docs** folder of your site. [Click here to view a listing.](#)

IMPORTANT READING

The most important tool you'll use when customizing your site is the **Developers Tool Kit**, which is in the **Admin area, under Tools**. You can use it to search for almost anything you might like to customize or change, especially the text displayed on your site.

The most important concept you'll want to become familiar with in order to customize your site is our **template system**. There are some very good articles on the template system in our **online FAQ** section.

ADDITIONAL READING

The Zen Cart™ Wiki is a helpful place to find tips and tricks and general use information.

In our **online forums**, there is a section called '**Downloads**'. Inside, there is a category called '**Documentation**', which contains the latest versions of manuals which cover the various aspects of managing your site.

We're glad you chose Zen Cart™ to be your e-Commerce solution!

Visit us online at www.zen-cart.com

Press the **Store** button below to test out your store or press the **Admin** button to begin customizing your store.

Click here to go to the Store | **Click here to open the Admin area**

You can click on either buttons at the bottom of the screen to visit your online store but you will receive an error from Zen Cart complaining about file permissions. Continue on to the next section to solve this problem.

Post-Installation Activities

After installation completes, you will need to do some file system clean up for security purposes.

To prevent Zen Cart from complaining about file permissions when you access your online store, you need to set the permission of the following files to *read-only*.

- <zc-home>/includes/configure.php
- <zc-home>/admin/includes/configure.php

For Windows users, just right-click on the above-mentioned files to bring up a context menu. Select Properties from the context menu and then click the Read-only check-box from the dialog box.

You also need to rename or delete the <zc-home>/zc_install directory. To prevent hackers from wiping out your store's database, *delete* the directory if your Zen Cart store is located on a "live" server.

Checking Your Installation

From your web browser, navigate to the following web address – <http://www.example.com/store>. You should see something similar to the following screen if your installation is successful.



Applying Bug Fixes

Some minor bugs have been reported since the release of version 1.3.7.1 of Zen Cart. Make sure you subscribe to the Bug Reports forum at Zen Cart's web site for more details on those bugs and the fixes you can apply.

Summary

You should now be familiar with how Zen Cart can be installed on your local machine. This will help you to troubleshoot problems when you decide to host your site on a remote server. We will be making use of the information contained in this chapter, so do remember to take note of the following points:

- Know how to start all services via the XAMPP Control Panel.
- Remember the Zen Cart administrator account settings you have configured.
- Remember the URL you should use to access your store.

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Chapter 3 Store Quick Tour

Introduction

A Zen Cart store is segmented into two different access areas. Site visitors and customers access the *Store Front* to do their shopping or manage their personal accounts. Store owners (also known as administrators) access the *Admin Console* to add products to the store's catalog and configure other business rules.

The Store Front

The Store Front acts as the *front-end* to your store and is where your customers go to perform their shopping activities. A sample customized Store Front is shown in the following screen shot.

The screenshot shows a Zen Cart store front with the following layout and content:

- Header:** Home, Log In, Enter search keyword, Search.
- Left Sidebar:**
 - powered by **zen cart** the art of e-commerce
 - Categories:** Music (2), Assorted Goods (10), Specials ..., New Products ..., Featured Products ..., All Products ...
 - Documents:** e-Magazines-> (1)
 - Information:** Shipping & Returns, Privacy Notice, Conditions of Use, Contact Us, Site Map, Gift Certificate FAQ, Discount Coupons, Newsletter Unsubscribe
 - Enter search keyword, Search button.
- Main Content:**
 - Welcome to Mega Store.** Here, you will find a great collection of goods and services at very affordable prices.
 - Icons:** Music, e-Magazines, Assorted Goods.
 - New Products For January:**
 - Encyclopedia - History of the World (Download Edition) \$200.00
 - Beginner Drum Lessons \$11.00
 - Birthday Cake \$10.00
 - Monthly Specials For January:**
 - Laptop \$2,359.00 - \$2,000.00 Save: 15% off
 - Optical Mouse \$29.00 - \$26.10 Save: 10% off
 - Upcoming Products:** These items will be in stock soon
 - Item Name: Classical Masterpieces on Violin
 - Date Expected: 01/04/2008
- Right Sidebar:**
 - Currencies:** US Dollar
 - Important Links:** Forbes Business News, MSN Money, Yahoo Finance, Press Releases - 2006
 - Languages:** English, Spanish
 - Music Genres:** Please Select, Classical, Jazz
 - Search:** Enter search keywords, Search, Advanced Search
 - Specials [more]:** Optical Mouse \$29.00 - \$26.10 Save: 10% off
- Footer:** Home :: Press Releases - 2006 :: Jan 2006 :: Feb 2006 :: Mar 2006
Your IP Address is: 127.0.0.1
Copyright © 2006 Mega Store. Powered by Zen Cart
Parse Time: 0.455 - Number of Queries: 202 - Query Time: 0.111772019806

A Typical Shopping Flow

To help you understand how Zen Cart works, we shall go through a typical set of activities that customers perform when doing their online shopping. This entire process constitutes a workflow and enables you to visualize which part of your store will be affected when you start configuring your own online store. For simplicity's sake, the illustrated workflow is shown in sequence. In actual fact, customers can opt to skip to certain pages without having to follow the sequence. Store owners can also alter the standard shopping flow to suit their business needs as we will learn in “Altering the Shopping Flow” on page 264.

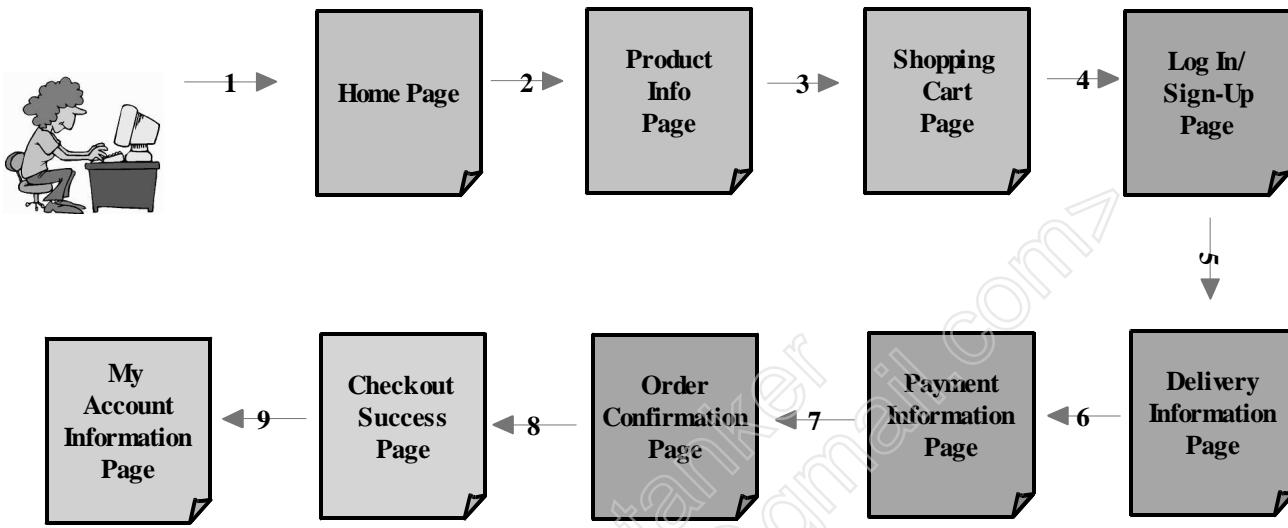


Figure 3.1: A typical shopping flow

An explanation of the different steps in the illustrated shopping flow is shown in the following table.

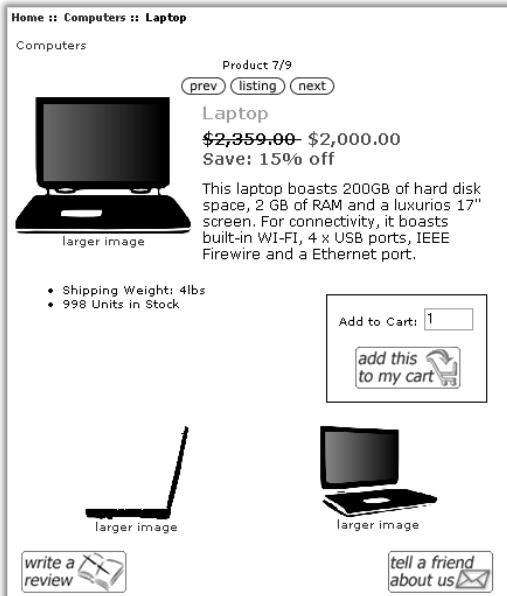
Table 3.1: Explanation of each step in the shopping flow

Step	Explanation
1	A customer learns about your site through a marketing campaign (Search Engine, Gift Certificate, etc) you have implemented. She picks up your site's web address and types it into her web browser to reach your Store Front. The first page she encounters is known as the Home Page (which is also known as the Index Page or Main Page). The customer browses through your store's products via the Categories side-box. If your store sells documents, she may see a Documents side-box as well. Optionally, she can perform a search for a product she is interested in. An example of a Home Page was shown in the first screen shot in this chapter.
2	
3	
4	
5	
6	
7	
8	
9	
10	

Table 3.1: Explanation of each step in the shopping flow (continued)

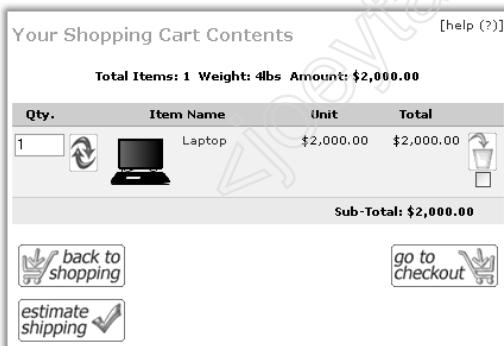
Step	Explanation
------	-------------

- 2 As the customer clicks through the list of products, she will ultimately reach the Product Info page which details the price, weight, discounts and any other information related to the product.



Once she decides to purchase the product, she enters the desired quantity into the “Add to Cart” text box and then clicks the “add this to my cart” button to proceed to the Shopping Cart page.

- 3 On the Shopping Cart page, the number of items that the customer has purchased and the price breakdown for all items will be displayed. Products can be removed and the quantity of items changed by clicking the relevant icons on the screen.



Once the customer is satisfied with her purchase, she can click the “go to checkout” button to begin the checkout process.

Table 3.1: Explanation of each step in the shopping flow (continued)

Step	Explanation
4	Before the customer enters the checkout process, she will be redirected to the Login page if she has not logged in to her account. If she does not have an account, she will need to sign up for an account at the same page.

Welcome, Please Sign In
Note: Your "Visitors Cart" contents will be merged with your "Members Cart" contents once you have logged on. [More Info]
Returning Customers: Please Log In
Email Address: _____
Password: _____
Forgot your password? [login](#)

Zen Cart is smart enough to make sure that items in the customer's shopping cart will not be lost even if she transitions from an anonymous visitor to a logged in customer.

5	Once the customer is logged in, she will automatically be redirected to the Delivery Information page.
---	--

Step 1 of 3 - Delivery Information
Shipping Information:
Bellamont Nicole
1000 Rue Troyon
Paris, 75017
Paris, France [change your address](#)
Your order will be shipped to the address at the left or you may change the shipping address by clicking the Change Address button.
Shipping Method:
Please select the preferred shipping method to use on this order.
Flat Rate
 Best Way \$5.00
Per Item
 Best Way \$5.00
Store Pickup
 Walk In \$0.00
Special Instructions or Comments About Your Order

[Continue to Step 2](#)
- choose your payment method. [continue checkout](#)

The customer will choose her desired shipping option and confirm her delivery addresses. After making her selection, she will click on the “continue checkout” button to proceed to the Payment Information page.

Table 3.1: Explanation of each step in the shopping flow (continued)

Step	Explanation
6	At the Payment Information page, the customer will choose her desired payment option and confirm her billing addresses.

Step 2 of 3 - Payment Information

Billing Address:

Bellamont Nicole
1000 Rue Troyon
Paris, 75017
Paris, France

[change your address](#)

Your billing address is shown to the left. The billing address should match the address on your credit card statement. You can change the billing address by clicking the **Change Address** button.

Your Total

Sub-Total: \$2,000.00
Flat Rate (Best Way): \$5.00
Value Added Tax (VAT) @ 10%: \$200.00
Total: \$2,205.00

Discount Coupon

Please type your coupon code into the box next to **Redemption Code**. Your coupon will be applied to the total and reflected in your cart after you click **continue**.

Please note: you may only use one coupon per order.

Redemption Code:

Gift Certificates

To use Gift Certificate funds already in your account, type the amount you wish to apply in the box that says 'Apply Amount'. You will need to choose a payment method, then click the **continue** button to apply the funds to your shopping cart.

If you are redeeming a new Gift Certificate you should type the number into the box next to **Redemption Code**. The amount redeemed will be added to your account when you click the **continue** button.

Redemption Code: Apply Amount: Available balance: \$10.00

Payment Method

We accept:

Please select a payment method for this order.

Credit Card
Card Owner's Name: Bellamont Nicole
Card Number:
Expiration Date: January 2007
CVV Number (More Info)

Paypal IPN

Special Instructions or Order Comments

Continue to Step 3
- to confirm your order.

[continue checkout](#)

The customer can also use the monetary values contained in her discount coupons or gift certificates to offset a portion of the order amount. After she is satisfied with her selection, she will click on the "continue checkout" button to proceed to the Order Confirmation page.

Table 3.1: Explanation of each step in the shopping flow (continued)

Step	Explanation
7	At the Order Confirmation page, all applicable costs (shipping charges, sales taxes, etc) for the customer's order are tallied and displayed. Previously selected values for the Delivery Information page and Payment Information page will also be displayed.

Step 3 of 3 - Order Confirmation

Billing/Payment Information

Bellamont Nicole
1000 Rue Troyon
Paris, 75017
Paris, France

edit

Delivery/Shipping Information

Bellamont Nicole
1000 Rue Troyon
Paris, 75017
Paris, France

edit

Payment Method:
Credit Card:
Credit Card: Visa
Card Owner's Name: Bellamont
Nicole
Card Number:
4111XXXXXXXXXXXX1111
Expiration Date: December, 2007
CVV Number (More Info) 123

Shipping Method:
Flat Rate (Best Way)

Special Instructions or Order Comments

None

edit

Shopping Cart Contents

Qty.	Item Name	Total
1 x	Laptop	\$2,000.00

Sub-Total: \$2,000.00
Flat Rate (Best Way): \$5.00
Value Added Tax (VAT) @ 10%: \$200.00
Total: \$2,205.00

Final Step
- continue to confirm your order. Thank you!

confirm the order

Once the customer is satisfied with the details of her order, she will click on the “confirm the order” button. After the order is processed by Zen Cart (send out order confirmation emails, set order status to Pending, save order in database, etc), the customer will be redirected to the Checkout Success page.

Table 3.1: Explanation of each step in the shopping flow (continued)

Step	Explanation
------	-------------

- 8 At the Checkout Success Page, the customer will be given an opportunity to opt-in to receive any email updates for the products she just purchased.

Thank You! We Appreciate your Business!

Your Order Number is: 57

Under normal circumstances, your order should ship within the next 2 business days. For more information on our shipping policy, please click here.

Thank you for shopping. Please click the Log Off link to ensure that your receipt and purchase information is not visible to the next person using this computer.

Gift Certificate Account

You have a balance available in your Gift Certificate account. You may spend it or send it to someone else. To send click the button below.

Your Gift Certificate balance is: \$10.00

[send a gift certificate](#)

[log off](#)

Please notify me of updates to these products

Laptop

[update](#)

You can view your order history by going to the My Account page and by clicking on "View All Orders".

Please direct any questions you have to customer service.

Thanks for shopping with us online!

If the customer has purchased gift certificates from your store or received gift certificates from her friends, the balance in her gift certificate account will also be displayed. This brings an end to the shopping flow.

Optionally, if the customer wants to view her order history, she can click the My Account hyperlink to proceed to the My Account Information page.

- 9 At the My Account Information page, the customer will be able to view her order history and check on each order status.

My Account Information

[\(show all orders\)](#)

Previous Orders

Date	No.	Ship To	Status	Total	View
01/25/2007	# 57	Bellamont Nicole France	Pending	\$2,205.00	view
01/25/2007	# 56	Bellamont Nicole France	Processing	\$2,205.00	view
01/25/2007	# 55	Bellamont Nicole France	Delivered	\$25.00	view

My Account

- View or change my account information.
- View or change entries in my address book.
- Change my account password.

Email Notifications

- Subscribe or unsubscribe from newsletters.
- View or change my product notification list.

Gift Certificate Account

You have a balance available in your Gift Certificate account. You may spend it or send it to someone else. To send click the button below.

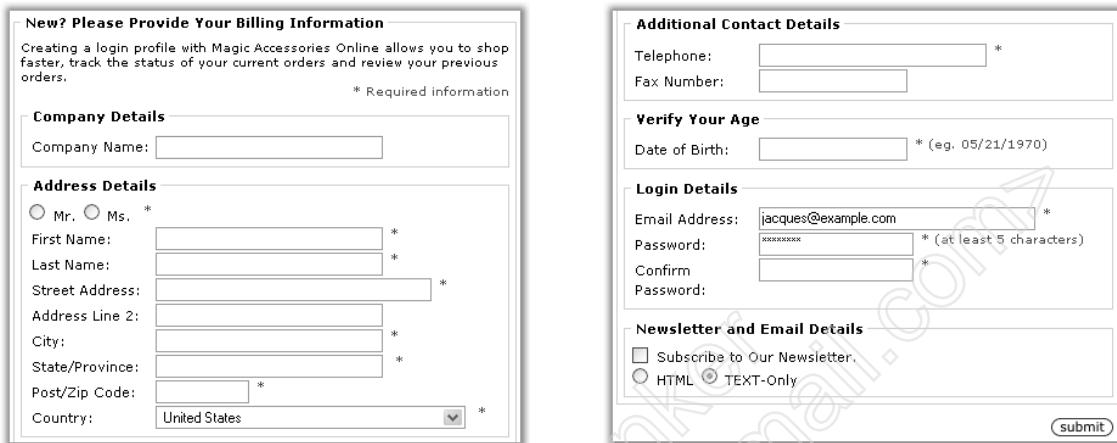
Your Gift Certificate balance is: \$10.00

[send a gift certificate](#)

Setting Up a Test Customer

We shall now set up a test customer account in your online store. With this test customer, you will be able to experience the impact of your store settings which we will learn to configure from the next chapter onwards.

1. Go to your Store Front and click on the **Log In** hyperlink at the top of the page.
2. You should be presented with a screen for you to log in or sign up for a new account. Concentrate on the sign-up portion of the screen as shown in the following screen shot.



3. Enter the values for your test customer account. You can make use of the values in the following table and leave the other fields at their default values.

Field	Value
Mr. Ms.	Mr.
First Name	Jacques
Last Name	Pires
Street Address	200, rue de Tolbiac
City	Paris
State/Province	Paris
Post/Zip Code	75015
Country	France
Telephone	(33)-01-40-80-82-11
Date of Birth	05/21/1970
Email Address	jacques@example.com
Password	abcdef
Confirm Password	abcdef

4. Click on **submit** once all the relevant data has been entered. The test customer will be created and automatically logged in to his account.



5. Click on the **Log Out** hyperlink at the top of the page to log the test customer out of his account.

If you would like to set up other test customer accounts as we go through the book, you can refer to “Zen Cart Customer Test Accounts” on page 390 for a list of account credentials which you can use.

The Admin Console

The Admin Console acts as the *back-end* to your store and is where you will spend most of your time looking through orders, adding shipping and payment options, and configuring discounts, etc.

The web address of your local Zen Cart store is <http://www.example.com/store/admin>. To log in to your Admin Console, use the values you entered for the **Administrator Username** and **Administrator's Password** fields which you entered in the Admin Setup screen on page 51.

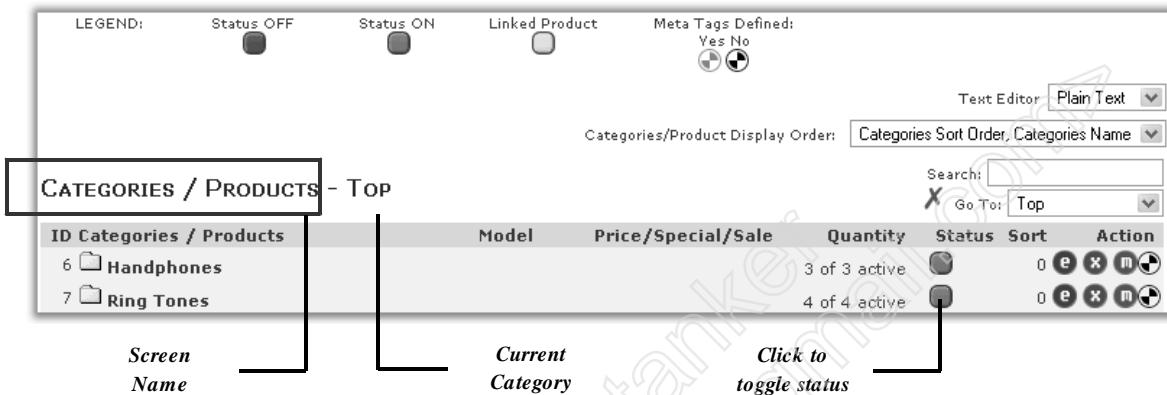
Session	Total
10/03/2006	6 - 68
10/02/2006	4 - 146
10/01/2006	2 - 57
09/30/2006	2 - 93
09/29/2006	6 - 141
09/28/2006	7 - 229
09/27/2006	4 - 119
09/26/2006	7 - 60
09/25/2006	4 - 32
09/24/2006	3 - 98

Moving Around The Admin Console

To navigate around the different areas in the Admin Console, hover over the menu entries at the top of your screen and click on a selected sub-menu entry. For example, to access the Currencies screen, click on **Localization > Currencies**.

We shall cover the various areas in the Admin Console as we work through this book. For this chapter, we shall concentrate only on the Categories/Products screen because we need to create some test products for use later.

To access the Categories/Products screen, click on **Catalog > Categories/Products** and you should see a screen similar to the following screen shot if you have products defined in your store catalog. Pay attention to the different areas highlighted as it helps you understand the screen elements better.



Icon buttons are used throughout the Admin Console. *Red* and *green* icon buttons that appear under a Status column allow you to quickly enable or disable an entry. Clicking on other icons will direct you to other screens for you to further customize the selected item.

Setting Up Test Products

We shall now set up some test products in your online store. Although you may not understand some of the fields as we start creating the products, do not worry as we will cover these fields in greater depth in a later chapter.

Before we can create any test products, we need to create a category to hold our test products. To create a test category:

1. Click on **Catalog > Categories/Products** to access the Categories/Products screen. If you have no products in your store, your screen should look like the following screen shot.



2. Click on the **new category** button to bring up the next screen where you can specify your category details. Enter the following values for the respective fields on the screen. Ignore all other fields.

Field	Value
Category Name	Test
Categories Description	To hold all test products for our testing purposes.
Sort Order	0

3. Click **save** after you have entered the relevant fields. You will be redirected back to the Categories/Products screen which will now contain your newly created category.

The screenshot shows a software interface for managing categories and products. At the top, there is a search bar and a 'Go To' dropdown set to 'Top'. Below the header, the title 'CATEGORIES / PRODUCTS - TOP' is displayed. The main content area shows a table with one row for 'Test'. The table columns are: ID, Categories / Products, Model, Price/Special/Sale, Quantity, Status, Sort, and Action. The 'Categories' column shows '1 Test'. The 'Action' column contains icons for edit, delete, and other operations. Below the table, there are buttons for 'new category' and 'new product'. A note at the bottom states: 'NOTE: Category has SubCategories Products cannot be added'.

Now that we have created our category, we shall begin adding our test products.

Normal Test Product

This product shall be used for testing multiple scenarios (shipping modules, payment modules, sales taxes, etc) in our store.

To create a Normal Test Product:

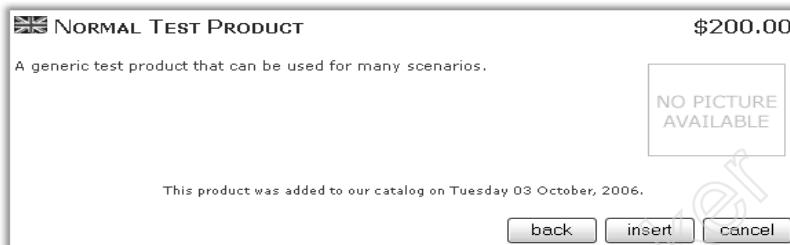
1. Click on the “Test” folder icon in your Categories/Products screen and you should see the following screen.

The screenshot shows a software interface for managing categories and products. The title 'CATEGORIES / PRODUCTS - TEST' is displayed. The main content area shows a form for creating a new product. At the top of the form, there are checkboxes for 'Status OFF' and 'Status ON', and a 'Linked Product' checkbox. Below these are buttons for 'Text Editor' (set to 'Plain Text') and 'Categories/Product Display Order' (set to 'Products Sort Order, Products Name'). The form fields include: 'ID Categories / Products' (set to 'Test'), 'Model' (empty), 'Price/Special/Sale' (empty), 'Quantity' (empty), 'Status' (empty), 'Sort' (empty), and 'Action' (empty). Below the form, there are buttons for 'back', 'new category', and 'new product'. A dropdown menu shows 'Product - General'. At the bottom, there is a 'Search' bar and a 'Go To' dropdown set to 'Test'.

2. Select Product-General from the drop-down list box and then click on the **new product** button to bring up the next screen where you can specify your product details.
3. Enter the following values for the respective fields on the screen. Ignore all other fields.

Field	Value
Products Name	Normal Test Product
Tax Class	Taxable Goods
Products Price (Net)	200.00
Products Description	A generic test product that can be used for many scenarios.
Products Quantity	1000
Products Shipping Weight	0.2
Sort Order	0

4. Click **preview** after you have entered the values for the relevant fields and you will see the following screen which shows you all the data you have previously entered.



5. Click **insert** to create your product. You will be redirected back to the “Categories/Products – Test” screen which will contain your newly created product.



Free Test Product with Free Shipping

This product is used to test a particular payment module which we will cover later. A free product in Zen Cart has to be specifically marked as “Product is Free”. If you specify the product as \$0.00, Zen Cart will not automatically recognize the product as a free product although customers do not have to pay for the product in both instances.

To create a “Free Test Product with Free Shipping” product, follow the same steps when creating the “Normal Test Product” but specify the following values instead when you reach Step 3.

Field	Value
Products Name	Free Test Product with Free Shipping
Product is Free	Yes
Tax Class	-- none --
Always Free Shipping	Yes, Always Free Shipping
Products Description	For testing the Payment Module - The Zen Cart FREE CHARGE CARD.
Products Quantity	1000
Products Shipping Weight	0.2
Sort Order	1

Ignore all warning messages when previewing your product as they only serve to ensure that you have configured your settings correctly. After your product is created, your “Categories/Products – Test” screen will contain the “Free Test Product with Free Shipping” product as shown in the following screen shot.



ID Categories / Products	Model	Price/Special/Sale	Quantity	Status	Sort	Action
1	Normal Test Product	\$200.00	1000	<input checked="" type="checkbox"/>	0	
2	Free Test Product with Free Shipping		1000	<input checked="" type="checkbox"/>	1	

Summary

You should now have a better picture of how customers perform their shopping activities and the various screens involved. With this mental picture, you should find the configurations for your store much easier to understand. The test customer account and test products that you have configured in this chapter will come in handy when you begin testing out your store configurations.

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Part 2 *Setting Up Your Store*

This section shows you how to set up the business infrastructure for your online store. It helps you define all the necessary settings you need to make before you can start adding products to your catalog and welcoming customers to your store.

This section covers the following topics:

- Email
- Location
- Store Contact Information
- Currency
- Weighting Unit
- Taxes
- Payment
- Shipping

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Chapter 4 Email

Introduction

Email is the main communication channel used by your store. It can be configured to notify customers of their order statuses, to notify you of different conditions (e.g. low stock level) in your store, and also as part of your marketing campaign (e.g. newsletters).

In this chapter, we shall:

- Learn how to set up Zen Cart to send emails.
- Specify the recipients for different email notifications.
- Cover miscellaneous email options.
- Learn how to customize your email message templates.

The Email Options Screen

All email configurations in Zen Cart, except for email templates, are configured via the E-Mail Options screen. To access the E-Mail Options screen, click on **Configuration > E-Mail Options**. A screen shot of an E-Mail Options screen is shown on the following page.

The large number of settings in the E-Mail Options screen may make the screen overwhelming at first sight. Do not worry about it as you will find that the settings can be broadly categorized as follows:

- Mail server settings.
- Message recipients.
- Other email settings.

We will be using the above categorization to explain the different fields on the screen.

E-MAIL OPTIONS		
Title	Value	Action
E-Mail Transport Method	smtp	<p>► Please make any necessary changes</p> <p>① E-Mail Transport Method</p> <p>① Defines the method for sending mail.</p> <p>① PHP is the default, and uses built-in PHP wrappers for processing.</p> <p>① Servers running on Windows and Mac OS should change this setting to SMTP.</p> <p>① SMTPAUTH should only be used if your server requires SMTP authorization to send messages.</p> <p>① You must also configure your SMTPAUTH settings in the appropriate fields in this admin section.</p> <p>① sendmail is for linux/unix hosts using the sendmail program on the server</p> <p>① "sendmail-f" is only for servers which require the use of the -f parameter to send mail. This is a security setting often used to prevent spoofing. Will cause errors if your host mailserver is not configured to use it.</p> <p>① Qmail is used for linux/unix hosts running Qmail as sendmail wrapper at /var/qmail/bin/sendmail.</p> <p>①</p> <p>① <input type="radio"/> PHP</p> <p>① <input type="radio"/> sendmail</p> <p>① <input type="radio"/> sendmail-f</p> <p>① <input checked="" type="radio"/> smtp</p> <p>① <input type="radio"/> smtpauth</p> <p>① <input type="radio"/> Qmail</p>
E-Mail Linefeeds	CRLF	
Use MIME HTML When Sending Emails	true	
Send E-Mails	true	
Verify E-Mail Addresses Through DNS	false	
Email Archiving Active?	true	
E-Mail Friendly-Errors	false	
Email Address (Displayed to Contact you)	storekeeper@example.com	
Email Address (sent FROM)	storekeeper@example.com	
Emails must send from known domain?	No	
Email Admin Format?	HTML	
Send Copy of Order Confirmation Emails To	storekeeper@example.com	
Send Copy of Create Account Emails To - Status	1	
Send Copy of Create Account Emails To	storekeeper@example.com	
Send Copy of Tell a Friend Emails To - Status	1	
Send Copy of Tell a Friend Emails To	storekeeper@example.com	
Send Copy of Customer GV Send Emails To - Status	1	
Send Copy of Customer GV Send Emails To	storekeeper@example.com	
Send Copy of Admin GV Mail Emails To - Status	1	
Send Copy of Customer Admin GV Mail Emails To	storekeeper@example.com	
Send Copy of Admin Discount Coupon Mail Emails To - Status	1	
Send Copy of Customer Admin Discount Coupon Mail Emails To	storekeeper@example.com	
Send Copy of Admin Order Status Emails To - Status	1	
Send Copy of Admin Order Status Emails To	storekeeper@example.com	
Send Notice of Pending Reviews Emails To - Status	1	
Send Notice of Pending Reviews Emails To	storekeeper@example.com	
Set "Contact Us" Email Dropdown List	Store Keeper <storekeeper@example.com>, Site Administrator <webmaster@example.com>	
Allow Guest To Tell A Friend	false	
Contact Us - Show Store Name and Address	1	
Send Low Stock Emails	1	
Send Low Stock Emails To	storekeeper@example.com	
Display "Newsletter Unsubscribe" Link?	true	
Audience-Select Count Display	true	
SMTP Email Account Mailbox		
SMTP Email Account Password		
SMTP Email Mail Host	mail.example.com	
SMTP Email Mail Server Port	25	
Convert currencies for Text emails	£,€,€	

Enabling Email Sending

Before Zen Cart can send emails, you need to enable this capability. Many people forget this important point and end up wasting a lot of time troubleshooting why their emails are not sent even though all their settings are otherwise correct.

To enable Zen Cart to send emails, make sure that the **Send E-Mails** field in the E-Mail Options screen is set to true.

Mail Server Settings

Besides enabling the sending of emails, Zen Cart needs to connect to a mail server in order to send emails. To specify the connection settings to a mail server, concentrate on the following fields on the E-Mail Options screen.

Table 4.1: Explanation of mail server settings

Title	Meaning
E-Mail Transport Method	<p>The method that is used to connect to a mail server. Check with your web host if you are unsure which method to use.</p> <p>On Windows/Mac platforms, this is usually <u>smtp</u> or <u>smtpauth</u>. On Unix/Linux platforms, this is usually <u>sendmail</u>, <u>sendmail-f</u> or <u>Qmail</u>.</p> <p>The default value <u>PHP</u> uses PHP's "mail()" function to send emails. It allows Zen Cart to use whatever mail-sending method that is already configured by your web hosting provider on the server hosting your store. In many cases, this may be the best option.</p>
SMTP Email Account Mailbox	<p>This is the user name that is used to log in to the email account on the mail server.</p> <p>Required if E-Mail Transport Method value is <u>smtpauth</u>. In some cases, may also be required if using <u>smtp</u>.</p>
SMTP Email Account Password	<p>This is the password that is used to log in to the email account on the mail server.</p> <p>Required if E-Mail Transport Method value is <u>smtpauth</u>. In some cases, may also be required if using <u>smtp</u>.</p>
SMTP Email Mail Host	<p>This is either the domain or IP address of the mail server.</p> <p>Required if E-Mail Transport Method is set to <u>smtp</u> or <u>smtpauth</u>.</p>
SMTP Email Mail Server Port	<p>This is the mail server port which Zen Cart will connect to when sending out emails. The usual value is <u>25</u>.</p> <p>Required if E-Mail Transport Method is set to <u>smtp</u> or <u>smtpauth</u>.</p>

Use the settings in the following table to specify the mail server settings for your local Zen Cart store to connect to the local Mercury mail server you created in Chapter 2.

Table 4.2: Local Mercury mail server settings

Title	Value
E-Mail Transport Method	smtp
SMTP Email Account Mailbox	<leave blank>
SMTP Email Account Password	<leave blank>
SMTP Email Mail Host	mail.example.com
SMTP Email Mail Server Port	25

To test whether your mail server settings can work with Zen Cart, send an email to the test customer you created in the previous chapter. To send an email from the Admin Console, click on **Tools > Send Email** and then fill in the details in that screen to send your test email. After the test email is sent, use your mail client (e.g. Thunderbird) to retrieve the test email from the test customer's email account.

If you encounter any problems sending emails, make sure you check that your mail server is already started before checking the rest of your mail server settings. If the problem persists or is more complicated, refer to http://www.zen-cart.com/wiki/index.php/Troubleshoot_-_Email_Problems for a discussion on the possible solutions before you post on Zen Cart's forum.

Message Recipients

Zen Cart is able to automatically send carbon copy (cc) or low stock emails to your designated recipients whenever an email is sent from your online store. Most emails are sent when a customer takes a specific action (e.g. signs up for an account) or when the system detects an extraordinary condition (e.g. a low stock level).

Note that you can set multiple recipients for each email notification by using a *comma* and a *space* as the separator for multiple email addresses as shown in the following example:

Jacques <jacques@example.com>, Nicole <nico@example.com>, Alan <alan@example.com>

To specify the recipients of different emails sent by Zen Cart, concentrate on the following fields in the E-Mail Options screen.

Table 4.3: Explanation of email notification settings

Title	Meaning
E-Mail Address (Displayed to Contact you)	Displayed in email messages that customers receive. Used as a means for customers to contact you if they have any questions. Refer to Figure 4.1 on page 77 to see the location of this field in an email.

Table 4.3: Explanation of email notification settings (continued)

Title	Meaning
E-Mail Address (sent FROM)	Displayed in email messages that customers receive so they know who sent them the relevant emails.
	Refer to Figure 4.1 on page 77 to see the location of this field in an email.
Send Copy of Order Confirmation Emails To	Specifies the CC recipient(s) for the order confirmation email that a customer receives after completing the checkout process.
Send Copy of Create Accounts Emails To – Status	Enables the sending of CC emails for the following field.
Send Copy of Create Accounts Emails To	Specifies the CC recipient(s) for the welcome email which a customer receives on signing up with your store.
Send Copy of Tell a Friend Emails To – Status	Enables the sending of CC emails for the following field.
Send Copy of Tell a Friend Emails To	Specifies the CC recipient(s) for an email which a customer sends to another person to comment about your store.
Send Copy of Customer GV Send Emails To – Status	Enables the sending of CC emails for the following field.
Send Copy of Customer GV Send Emails To	Specifies the CC recipient(s) for an email (containing the Gift Certificate amount) which a customer sends to another person.
Send Copy of Admin GV Mail Emails To – Status	Enables the sending of CC emails for the following field.
Send Copy of Customer Admin GV Mail Emails To	Specifies the CC recipient(s) for an email (containing the Gift Certificate amount) which the store owner send to his/her customers.
Send Copy of Admin Discount Coupon Mail Emails To – Status	Enables the sending of CC emails for the following field.
Send Copy of Customer Admin Discount Coupon Mail Emails To	Specifies the CC recipient(s) for an email (containing the Discount Coupon amount) which the store owner sends to his/her customers.

Table 4.3: Explanation of email notification settings (continued)

Title	Meaning
Send Copy of Admin Orders Status Emails To - Status	Enables the sending of CC emails for the following field.
Send Copy of Admin Orders Status Emails To	Specifies the CC recipient(s) that should receive a copy of the updated order status emails sent to a customer.
Send Notice of Pending Reviews Emails To - Status	Enables the sending of emails for the following field.
Send Notice of Pending Reviews Emails To	Specifies the recipient(s) for an email which indicates that a new product review by a customer is ready for moderation.
Send Low Stock Emails	Enables the sending of emails for the following field.
Send Low Stock Emails To	Specifies the recipient(s) for an email which indicates that a product's stock level has fallen below a threshold level.

A sample email that a customer receives on signing up with your store is shown in the following screen shot. It clarifies the difference between the **Email Address (Sent FROM)** field and the **Email Address (Displayed to Contact you)** field. Although the email addresses are the same in the screen shot, they can be different for your situation.

Email Address (Displayed to Contact you)

Subject: Welcome to Mega Store
From: Mega Store <storekeeper@example.com>
Reply-To: Mega Store <storekeeper@example.com>
Date: 4:14 AM
To: Jacques Pires

Dear Mr. Pires,

We wish to welcome you to Mega Store.

With your account, you can now take part in the various services we have to offer you. Some of these services include:

Permanent Cart - Any products added to your online cart remain there until you remove them, or check them out.

Address Book - We can now deliver your products to another address other than yours! This is perfect to send birthday gifts direct to the birthday-person themselves.

Order History - View your history of purchases that you have made with us.

Products Reviews - Share your opinions on products with our other customers.

For help with any of our online services, please email the store-owner:
storekeeper@example.com

Sincerely,

Claud Blanc
Store Owner

<http://www.example.com/test/>

Email Address (Sent FROM)

Figure 4.1: Sample email message received by a customer



Tip

Enable all CC emails in your store so that you have the necessary documents to back you up in case of disputes with customers.

Other Email Options

We shall now touch upon other email options that do not fall into the above two categories but are also contained in the Email Options screen. Refer to the following table for explanations of these options.

Table 4.4: Explanation of other email settings

Title	Meaning
E-Mail Linefeeds	Specifies what character(s) should be used to terminate a line in email messages. On a Windows machine, a line feed is specified via a carriage return (CR) followed by a line feed (LF) which results in a "CRLF". For a Unix/Linux machine, it is specified as a "LF". You can set this to <u>CRLF</u> if your website is running on a Windows server.

Table 4.4: Explanation of other email settings (continued)

Title	Meaning
Use MIME HTML When Sending Emails	If set to <u>false</u> , emails can only be composed in TEXT format. All customers will receive TEXT emails regardless of the email format they choose to receive from your store. If set to <u>true</u> , emails can be composed in both TEXT and HTML formats and is thus the recommended value.
Verify Email Addresses Through DNS	It checks whether the domain of outgoing email addresses actually exists before sending out emails. For example, if someone signs up with an account of “ <i>tom@dinerdelights.com</i> ”, this setting will check whether “ <i>dinerdelights.com</i> ” actually exists. This option may or may not appear in your screen as it is supposed to be hidden as of Zen Cart version 1.3.6. Set this to <u>false</u> if it appears because this feature is currently not implemented in Zen Cart.
Email Archiving Active?	Allows you to keep copies of sent emails in your store's database. You might need to set this to <u>true</u> to comply with your country's laws. However, this can take up a lot of disk space and become a performance problem. Recommended value for testing purposes is <u>true</u> .
E-Mail Friendly-Errors	If set to <u>true</u> , an easier to understand error message will be displayed when sending of emails fail. If set to <u>false</u> , PHP errors which are not easily understood will be shown instead. Do <i>not</i> rely on this setting to determine whether email messages have been sent. It is better that you CC yourself a copy of an email when you send out email messages to your customers.
Emails must send from known domain?	Some mail servers require that a valid email address from a known domain (e.g. example.com) be used for the FROM field when sending out an email. If you set this field to <u>Yes</u> , Zen Cart will disregard any other email address you use which is not from the recognized domain (e.g. experiment.org). Instead, Zen Cart will use the E-Mail Address (sent FROM) field to send the email. Note: For store owners who choose to use Gmail for the E-Mail Address (sent FROM) field, it is recommended to set this field to <u>No</u> .
Email Admin Format?	Indicates whether email messages carbon copied (cc) to store owners should be in plain-text format or HTML format.

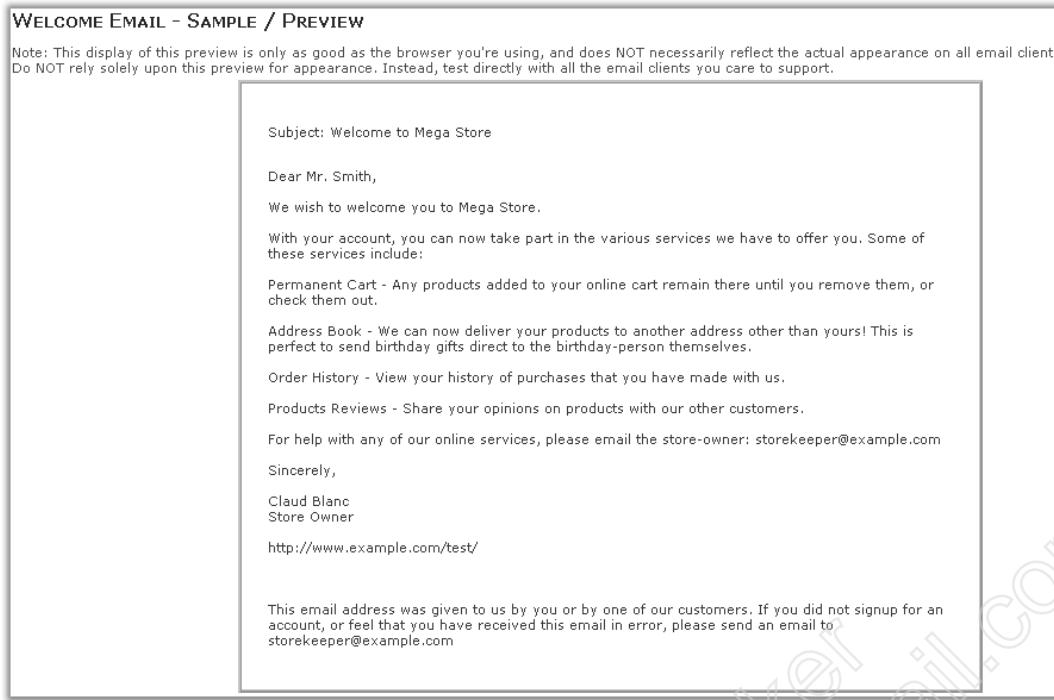
Table 4.4: Explanation of other email settings (continued)

Title	Meaning
Set "Contact Us" Email Dropdown List	If this field is left <i>blank</i> , all emails sent via the Contact Us page will be sent to the email address you configured in E-Mail Address (sent FROM) field. If this field is <i>not empty</i> , customers can direct their emails to specific parties in your store by choosing from a drop-down list box. Refer to “The Contact Us Page” on page 92 to see a screen shot of how the list of email recipients will appear if this field is not empty. When adding email addresses to this field, make sure that the angle brackets are included as well. An example value would be <u>Store Owner <storekeeper@example.com></u> . Remember to use the format shown on page 74 if you intend to specify multiple recipients for this field.
Allow Guest To Tell A Friend	Specifies whether visitors to your store are allowed to send emails to other people commenting on what they see in your store. You should go through the “Tell-a-Friend” section on page 341 if you intend to set this field to <u>true</u> .
Contact Us - Show Store Name and Address	Toggles the display of your store's contact information in the Contact Us page. Your store's contact information is taken from the Store Address and Phone field found under Configuration > My Store . Refer to “The Contact Us Page” on page 92 to see a screen shot of where this information is displayed.
Display "Newsletter Unsubscribe" Link?	If enabled, the Information side-box in your Store Front will display a Newsletter Unsubscribe hyperlink.
Audience-Select Count Display	This setting only affects the screens in the Admin Console. If enabled, the number of email recipients in each mailing group will be displayed. To see an example of the number of customers displayed in each mailing group, click on Tools > Send Email and look at the Customer field. If this setting is set to <u>true</u> , the display of admin email pages may slow down on large or poorly tuned servers due to the extra database work to calculate the relevant numbers.
Convert currencies for Text emails	When you compose TEXT emails, you are not able to specify certain currency symbols properly. For example, the English Pound (£) or the Euro (€). Zen Cart is able to help you overcome this problem by letting you use a replacement text (e.g. €) that will automatically help you do the conversion to the appropriate symbol (e.g. €).

Customizing Email Messages

To look at a sample email that customers receive when signing up for an account with your store, click on **Tools > Email Welcome**. Besides the plain-text email shown in the following screen shot, you may see an HTML email if

you have set the **Use MIME HTML When Sending Emails** field in the E-Mail Options screen to true.



You cannot make any changes to the sample email from the Admin Console. In fact, to customize the text in any emails, you should go through the “The Template Override System” section on page 270 before returning to this page because that section shows you how to utilize the Override System to edit files properly and also covers some of the terminology we shall be using in this section.

Understanding How Email Messages Are Formed

Each email sent from Zen Cart is actually constructed from several components. These components include the various “define()” statements in the many possible language files in your store, the data stored in your database, the email layout templates, etc. To visualize all these components, we shall use the preceding Welcome Email sample screen shot together with the following explanations to give you a rough idea how an email is constructed before being delivered.

The *structure* of an email is taken from one of the email template files located under the <zc-home>/email directory. For the Welcome Email, it is the file <zc-home>/email/email_template_welcome.html. If you open up that file and look at the contents, you will see something similar to the following snippet of code.

```
<div class="content">
  <div class="content-line">$EMAIL_GREETING</div>
  <div class="content-line">$EMAIL_WELCOME</div>
```

Text preceded by a dollar sign are known as template tags. The HTML source code in the file gives HTML emails their structure. The template tags are *placeholders* for static custom text taken from “define()” statements contained in various language files, database values for settings you configured for your store, and dynamic content generated by Zen Cart.

To understand how template tags act as placeholders for content, open up the file <zc-

home>/includes/languages/english/create_account.php and you should see something similar to the following snippet of code.

```
define( 'EMAIL_WELCOME' , 'We wish to welcome you to <strong>' . STORE_NAME .  
'</strong>.' );
```

Notice that the words **EMAIL_WELCOME** in the “define()” statement actually corresponds to the template tag **EMAIL_WELCOME** in the email template file. Another thing you will notice is that the words **We wish to welcome you to** corresponds exactly with the third sentence in the sample Welcome Email screen shot. The word **STORE_NAME** is a variable that holds the value for the **Store Name** field found under **Configuration > My Store**. This value is taken from the database although it is configured in the Admin Console.

We shall not talk about dynamic content generated from Zen Cart for template tags because it requires knowledge of PHP's syntax to understand the logic behind how dynamic content is generated for a particular situation. In any case, you will seldom need to change those dynamic content generation code.

So how do you get plain-text emails since only HTML email layout templates are available? Well, the answer is Zen Cart retains all the values taken from template tags and just strips away all HTML and CSS codes from an email layout template before sending out the relevant plain-text emails.

If you have Zen Cart installed on your *local* machine, you can learn more about email message templates by opening up the file <zc-home>/docs/4.readme_html_email_templates.html.

Changing Text In Emails

From our discussion in the previous section, you can see that the only thing that you are likely to customize besides the various store settings is the “define()” text found in various language files. Store settings are covered throughout the book so there is no point talking about them here. Instead, we will show you how to locate the necessary language files holding the “define()” text you want to change.

To locate and edit a “define()” text:

1. Look at a copy of an email containing some text you want to change.
2. Look at the names and contents of the various files under the <zc-home>/email directory and you should be able to identify the email layout template containing the “define()” text you need to change.
3. Identify the template tag in the email layout template that is likely to contain the “define()” text you need to change. For example, **\$EMAIL_WELCOME**.
4. Go to your Admin Console and click **Tools > Developers Tool Kit** to access the Developers Tool Kit screen. This screen allows you to look for text appearing in certain files used by Zen Cart.

DEVELOPERS TOOL KIT

Look-up CONSTANT or Language File defines

Key or Name: **Language File Look-ups:**

NOTE: CONSTANTS are written in uppercase.
Language file, functions, classes, etc. lookups are performed when nothing has been found in the database tables, if selected in dropdown

Look-up Functions or things in Function files

Key or Name: **Function File Look-ups:**

NOTE: CONSTANTS are written in uppercase.
Language file, functions, classes, etc. lookups are performed when nothing has been found in the database tables, if selected in dropdown

Look-up Classes or things in Classes files

Key or Name: **Classes File Look-ups:**

NOTE: CONSTANTS are written in uppercase.
Language file, functions, classes, etc. lookups are performed when nothing has been found in the database tables, if selected in dropdown

Look-up Template things

Key or Name: **Template File Look-ups:**

NOTE: CONSTANTS are written in uppercase.
Language file, functions, classes, etc. lookups are performed when nothing has been found in the database tables, if selected in dropdown

Look-up in all files

Key or Name: **All Files Look-ups:**

NOTE: CONSTANTS are written in uppercase.
Language file, functions, classes, etc. lookups are performed when nothing has been found in the database tables, if selected in dropdown

5. Enter the template text (without the dollar sign) you identified in Step 3 into the *first* text box under the **Key or Name** field on the screen. For example, enter EMAIL_WELCOME.
6. Experiment with the values in the adjacent drop-down list box to specify the search scope. For example, choose All Current Selected Language Files.
7. Click **search** to begin the search.
8. After some time, you screen should refresh with search results displayed on top of your screen. If something is found, you will see something like the following screen shot.

Searching 73 files ... for: EMAIL_WELCOME

```
C:/dev/server/xampp/htdocs/store/includes/languages/english/create_account.php
Line #22 : define('EMAIL_WELCOME', 'We wish to welcome you to <strong>' . STORE_NAME . '</strong>.');

Match Lines found: 1
```

9. Based on the file name and line number of the file(s) found, use the Override System to change the custom text accordingly.



Note

Email layout templates *cannot* be overridden using the Template Override System at the present time. Therefore, make sure you back up a copy of the email layout template you intend to change before performing any edits on the relevant file.

Summary

Email is the communications lifeline for any e-commerce store. Thus, we have covered the meanings of every email setting available in Zen Cart to allow you to troubleshoot most problems you might experience in your own online store. Armed with this knowledge, you should be able to set up your email preferences confidently.

Chapter 5 Location

Introduction

Location plays a very important role in the correct functioning of your store. It affects how your shipping, payment and tax rules will be applied based on the supplied geographical information from your customers and your store.

In this chapter, we shall:

- Understand how the different pieces of location information (i.e. Countries, Zones and Zone Definitions) are used together to determine the taxes, shipping and payment charges that a customer incurs.
- Configure Countries information.
- Configure Zones information.
- Configure Zone Definitions information.
- Specify your Store Location.

Understanding the Use of Location Information

In Zen Cart, location information is divided into the following categories:

- Countries
- Zones
- Zone Definitions

Countries is self-explanatory. **Zones** allow you to segregate a country into different areas. For example, you might use zones to specify *states* for America, *provinces* for China, etc. **Zone definitions**, on the other hand, allow you to segregate different geographical areas according to how you conduct business. Thus, you can have a zone definition that spans several countries or several states.

To appreciate the relationship between Countries, Zones and Zone Definitions, consider the case where you run your business in England and you have recently set up an online shop to sell vintage guitars. Since your shop is online and caters to customers from all over the world, you will have to consider the impact of taxes, shipping and payment charges that apply to each customer.

If you expect the bulk of your customers to come from the United States, you might want to provide overnight FedEx delivery only to this set of customers to entice them to buy from you. In that case, you might want to use *zones* in Zen Cart to represent the *states* in the United States. You would then set up a *shipping zone definition* which encompasses all these zones of the United States. When you configure your Shipping options, you can then choose to have the FedEx option show up only when customers are from the *shipping zone definition* you created.

Similarly, you can set up a *payment zone definition* to support customers in certain regions where you want to offer a specific Payment option. For example, you can offer a Credit Card payment option only to customers in the United Kingdom and United States. Customers who belong to other geographic locations will not be able to see this option as a result.

Finally, you can also set up a *tax zone definition* to encompass the different counties that make up the United

Kingdom so that you can apply a suitable Value Added Tax to charge customers from this region.

The above example is rather complex but it does give you an idea of how Zen Cart provides the flexibility for you to specify the settings you want. Don't worry if you do not get the full picture now because we will be going through this topic again in later chapters. For the next few sections in this chapter, we shall look at how to configure these individual pieces of location information.

Countries

By default, Zen Cart comes with a complete set of countries in your database. You will not need to add any more countries unless there are major political upheavals in certain parts of the world. However, you might want to consider removing some of the countries which you do not intend to or cannot support.

For example, if your store location is in the United States and you sell hardware with strong encryption software, you are unlikely to be allowed to export your hardware to certain countries which the United States deem to have terrorist links. In that case, you might want to remove those countries from the list of countries available in Zen Cart.

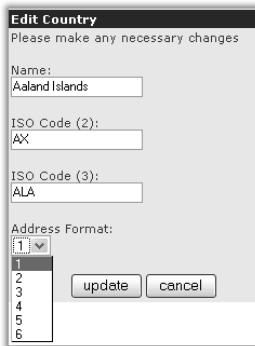
To manage the countries in your online store, click on **Location/Taxes > Countries** to access the Countries screen.

COUNTRIES			
Country	ISO Codes	Action	Aaland Islands
Aaland Islands	AX ALA	►	<input type="button" value="edit"/> <input type="button" value="delete"/>
Afghanistan	AF AFG	①	
Albania	AL ALB	①	Name: ① Aaland Islands
Algeria	DZ DZA	①	
American Samoa	AS ASM	①	ISO Code (2): AX
Andorra	AD AND	①	
Angola	AO AGO	①	ISO Code (3): ALA
Anguilla	AI AIA	①	
Antarctica	AQ ATA	①	Address Format: 1
Antigua and Barbuda	AG ATG	①	
Argentina	AR ARG	①	
Armenia	AM ARM	①	
Aruba	AW ABW	①	
Australia	AU AUS	①	
Austria	AT AUT	①	
Azerbaijan	AZ AZE	①	
Bahamas	BS BHS	①	
Bahrain	BH BHR	①	
Bangladesh	BD BGD	①	
Barbados	BB BRB	①	

The options to add, update or remove countries in your store are very obvious from the screen and also quite self-explanatory. However, you do need to take note of the following two points while making your changes.

- ISO Country Codes.
- Address Formats in Each Country.

When you click on the **edit** button next to a country in the Countries screen, you will see a side-panel similar to the following screen shot. We shall use this screen shot to discuss the above two points.



ISO Country Codes

Zen Cart uses both the **ISO Code (2)** and **ISO Code (3)** fields to represent different countries in its database as seen in the preceding screen shot. These are internationally recognized abbreviations of country codes according to the ISO-3166 standard. This standard defines both two-letter and three-letter codes for different countries in the world.

The list of country codes can be found at <http://www.unicode.org/onthedat/countries.html>. Make sure you refer to this list when adding or updating country codes in Zen Cart.

Address Formats Used in Different Countries

Each country in the world defines a fixed format for the addresses in their respective countries. This address format is available via the post office of each country.

Zen Cart comes with a default of six address formats which are used to format the addresses contained in your invoices, packing slips, etc, when you send goods to other countries.

As seen in the preceding screen shot, only the **Address Format** field is shown but not the exact pattern of the address format. Therefore, you will need to rely on the following table to understand which option to choose for the **Address Format** field. Note that the example addresses shown are purely fictitious and used only for illustration purposes.

Table 5.1: Address format patterns used in Zen Cart

Address Format	Pattern	Default Countries Affected	Address Format Examples
1	\$firstname \$lastname \$streets \$city, \$postcode \$statecomma\$country	All other countries not stated below.	James Logan 496 Victoria Street Sydney, 2010 New South Wales, Australia
2	\$firstname \$lastname \$streets \$city, \$state \$postcode \$country	United States	John Doe 123 Magnolia Street Dallas, TX 55803-0034 United States

Table 5.1: Address format patterns used in Zen Cart (continued)

Address Format	Pattern	Default Countries Affected	Address Format Examples
3	\$firstname \$lastname \$streets \$city \$postcode - \$statecomma\$country	Spain	Martina Gonzalez General Castanos, 86 Barcelona 08003 – Barcelona, Spain
			Note: Assumes both <i>city</i> and <i>state</i> are “Barcelona”. Although Spain uses the term “province” instead of “state”.
4	\$firstname \$lastname \$streets \$city (\$postcode) \$country	Singapore	John Low 16 Whampoa Drive Singapore (260042) Singapore
5	\$firstname \$lastname \$streets \$postcode \$city \$country	Austria, Germany	Heidi Kohler Lentzeallee 194 14195 Berlin Germany
6	\$firstname \$lastname \$streets \$city \$state \$postcode \$country	United Kingdom	James Watson 1 St. Georges Business Centre Portsmouth Portsmouth PO1 3AX United Kingdom
			Note: Assumes both <i>city</i> and <i>state</i> are “Portsmouth”.

Zones

In Zen Cart, Zones are defined as geographical regions within a country. Zen Cart comes with a default set of zones configured for the following countries: *Australia*, *Austria*, *Canada*, *Germany*, *Palau*, *Spain*, *Switzerland* and *United States*.

Purpose of Zones

To understand the purpose of Zones, let us first look at what happens when a customer signs up for an account with your store. We shall assume you have set the State/Province field to be displayed as a drop-down list box in your Sign Up page. For more information on how to configure the look of the State/Province field on the Sign Up page in your Store Front, refer to step 3 on page 290.

If customers come from a country that does not have any Zones configured in Zen Cart, they will have to manually enter a value in the State/Province field. On the other hand, customers who come from a country with Zones defined in Zen Cart can choose the required information from the State/Province field's drop-down list box instead.

State/Province: Please select ... *
Post/Zip Code: *
Country: United States *

State/Province: Type a choice below ... *
Post/Zip Code: *
Country: Seychelles *

State/Province is selected from a list

State/Province is entered manually

So why does Zen Cart want to enforce this rule of restricting the State/Province information for countries that have Zones configured in Zen Cart's database? The answer is because Zen Cart may need to make use of this information to allow you to *fine-tune* your shipping, payment and tax charges. For example, you can apply different sales tax rates based on whether the shipping addresses of customers fall within certain Zones.

Adding a Zone

To add a zone to a country:

1. Click on **Location/Taxes > Zones** to access the Zones screen.

Country	Zones	Code	Action
Australia	Australian Capital Territory	ACT	
Australia	New South Wales	NSW	
Australia	Northern Territory	NT	
Australia	Queensland	QLD	
Australia	South Australia	SA	
Australia	Tasmania	TAS	
Australia	Victoria	VIC	
Australia	Western Australia	WA	
Austria	Burgenland	BL	
Austria	KÄrnten	KN	
Austria	Niedersterreich	NO	
Austria	Obersterreich	OO	
Austria	Salzburg	SB	
Austria	Steiermark	ST	
Austria	Tirol	TI	
Austria	Voralberg	VB	
Austria	Wien	WI	
Canada	Alberta	AB	
Canada	British Columbia	BC	
Canada	Manitoba	MB	

Displaying 1 to 20 (of 189 zones)

new zone

2. Click on **new zone** and concentrate on the side-panel.

New Zone
Please enter the new zone with its related data

Zones Name:

Zones Code:

Country:

insert cancel

3. Enter the name of a state or province in the relevant country into the **Zone Name** field. Alternatively, if your

country does not have a state or province defined, you can use any logical grouping you can think of that will make sense to customers from that country.

4. Enter the code representing the state or province into the **Zone Code** field. For example, the United States uses “TX” to represent the state of Texas in that country. If your country does not have such a definition or you are using a logical grouping, you can use the same value as the one used for the **Zone Name** field.
5. Choose the country containing the zone you want to define from the **Country** field.
6. Click **insert** to save the zone to the database.

Zone Definitions

A Zone Definition is a *logical* grouping of zones. You may need to create separate zone definitions for payment, shipping or tax purposes. Additionally, discount coupons usage can also be restricted based on which zones your customers' billing addresses fall under.

Purpose of Zone Definitions

When you add a shipping option, payment option, sales tax rate or discount coupon in your store, you have the option of selecting a Zone Definition to link to it. This Zone Definition allows you to restrict a shipping or payment option only to customers from a specific area in the world. Similarly, you can use a Zone Definition to specify a specific tax rate for customers from a specific location in the world.

A Zone Definition is a *logical* grouping of Zones. A Zone Definition can cover a small area such as a State in a country (e.g. Paris) or several countries in a federation (e.g. European Union). It all depends on what you want to achieve with the Zone Definition.

For example, if your business operates in the European Union (EU) and your store is required to collect Value Added Tax (VAT), you may want to create a Zone Definition for all countries in the EU. This is because VAT is collected only for customers in the EU. You can then specify a tax rate that applies to all the EU countries uniformly. Similarly, you can create a Zone Definition which contains your local state only. You can then offer free shipping to those customers from your local state only.

Ultimately, you have to understand your own business needs before you can set up a zone definition.

Adding a Zone Definition

To add a zone definition:

1. Click on **Location/Taxes > Zone Definitions** to access the Zone Definitions screen.

ZONE DEFINITIONS - TAXES, PAYMENT AND SHIPPING

LEGEND: Taxes & Zones Defined Zones Defined but not Taxes Not Configured

Zone Name	Zone Description	Status	Action
European Union (EU)	Countries in the European Union	<input checked="" type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Florida	Florida local sales tax zone	<input checked="" type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
France Shipping Zone	For shipping options available only in France.	<input checked="" type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>

Displaying 1 to 3 (of 3 tax zones)

Florida

edit delete

details tax rates

Page 1 of 1 Number of Zones: 1

insert Number of Tax Rates: 1

Date Added: 11/03/2006

Description: Florida local sales tax zone

2. Click on **insert** and concentrate on the side-panel.

New Zone

Please enter the new zone information

Zone Name:

Description:

insert cancel

3. Enter the relevant information and click **insert** to save your changes to the database. You will be redirected back to the Zone Definitions screen, but with your changes shown instead.
4. Select the zone definition you created in the above step and click **details** in the side-panel to proceed to the next screen showing you all the sub-zones belonging to the selected zone definition.

ZONE DEFINITIONS - TAXES, PAYMENT AND SHIPPING

Country	Zone	Action
United States	Florida	<input type="radio"/> <input type="radio"/> <input type="radio"/>

Displaying 1 to 1 (of 1 countries)

United States

edit delete

back insert Date Added: 11/03/2006

5. Click on **insert** and concentrate on the side-panel with the heading “New Sub Zone”.

New Sub Zone

Please enter the new sub zone information

Country: All Countries

Zone: All Zones

insert cancel

6. Choose the relevant information and then click **insert** to save your changes. Note that the **Zone** field is dynamically populated with information after you have selected a particular country from the **Country** field.
7. Repeat Steps 5 and 6 to continue adding more sub-zones.
8. Click **back** after you have finished specifying all your sub-zones.

Specifying Your Store Location

We have postponed the discussion of setting your store location until now because you need to have the proper country and zone information set up in your store before you can configure this setting.

Although you have a virtual online store, you still need to provide Zen Cart with details of where you are located. This is because Zen Cart may need this information to determine how certain charges are to be calculated. For example, you can specify that shipping tax and product tax be calculated based on your store location (see “Basis for Tax Calculation” on page 108 for details).

To specify your store location, click on **Configuration > My Store** to access the My Store screen and change the following fields accordingly.

- **Country**
- **Zone**

Make sure that you specify the **Country** field first then the **Zone** field. Values in the **Zone** drop-down list box are populated based on the **Country** specified.

Summary

Location information provides the basis for you to specify shipping, payment and tax rules. Although they are easy to setup, they are not easy to understand. Therefore, you have to think through your business needs and plan properly before specifying this information.

A slight misconfiguration here and it could affect the charges that a customer should pay for your product or service; ultimately it might hurt your revenue and possibly your reputation. Make sure you test your shipping, payment and tax settings thoroughly, with test customers from *different* geographical regions.

Chapter 6 Store Contact Information

Introduction

Research has shown that customers prefer to deal with businesses that display their contact information prominently. This gives them the impression that the business is legitimate and they will have a response if something goes wrong with their orders.

In this chapter, we shall:

- Specify your store contact information.
- See how your store information is displayed in your online store.
- See how your store information is displayed in printable documents generated by your store.
- See how your store information is displayed in emails sent to customers.

Specifying Store Contact Information

To specify your store's contact information for *online* and *printed documents*:

1. Click on **Configuration > My Store** to access the My Store screen.

MY STORE	
Title	Value
Store Name	Mega Store
Store Owner	Claud Blanc
Country	United States
Zone	Alabama
Expected Sort Order	desc
Expected Sort Field	date_expected
Switch To Default Language Currency	false
Language Selector	Default
Display Cart After Adding Product	true
Default Search Operator	and
Store Address and Phone	Store Name Address Country Phone
Show Category Counts	true
Show Category Counts - Admin	true
Tax Decimal Places	0
Display Prices with Tax	false
Display Prices with Tax in Admin	false
Basis of Product Tax	Shipping
Basis of Shipping Tax	Shipping
Sales Tax Display Status	0
Store Status	0
Admin Session Time Out in Seconds	3600
Admin Set max_execution_time for processes	60
Show if version update available	true
Server Uptime	true
Missing Page Check	Page Not Found
cURL Proxy Status	False
cURL Proxy Address	
Currency Conversion Ratio	1.05
HTML Editor	NONE
Enable phpBB linkage?	false

2. Edit the **Store Address and Phone** field and concentrate on the side-panel.



The information displayed in the side-panel corresponds to the values you entered in the **Store Address** field in Step 8 of Zen Cart's installation as shown in the screen shot on page 50. Any information entered here is used purely for display purposes and has no effect on shipping options, payment options or tax calculations. The default text (as shown above) gives you an idea of the information you might want to make available to your customers. You should consider adding any pertinent information (fax numbers, pager numbers, etc) for your business here as well.

Store Contact Information Displayed Online

Your store contact information is available in the following places online:

- Contact Us page.
- Order Confirmation page if Check/Money Order payment option chosen by customer.

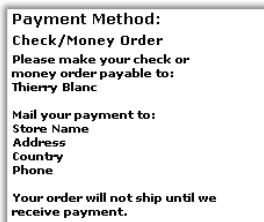
The Contact Us Page

To view your store's contact information in the Contact Us page, go to your Store Front and click on **Contact Us** from the Information side-box.

If you do not see your store's contact information displayed on the top-left corner of the screen, click on **Configuration > E-Mail Options** and check that the **Contact Us - Show Store Name and Address** field is enabled.

The Order Confirmation Page

If customers have chosen the Check/Money Order payment option when checking out their purchases, they will see your store's contact information displayed under the *Mail your payment to* section in their Order Confirmation screens.

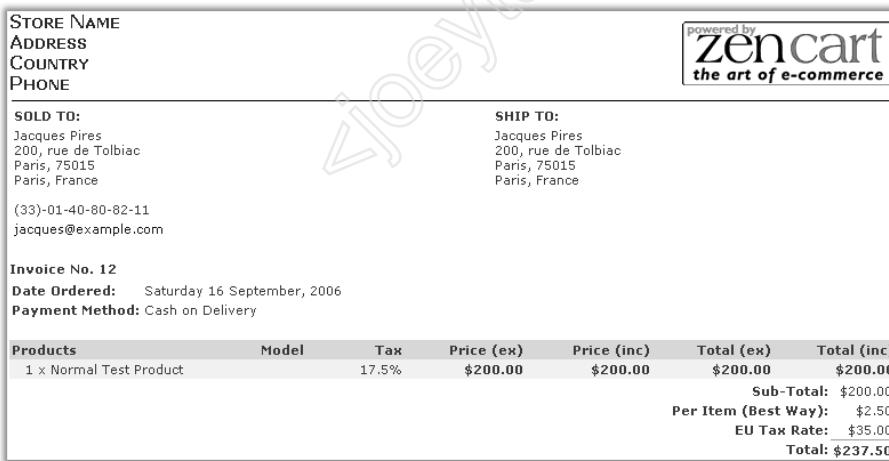


Store Contact Information Displayed in Printable Documents

Your store's contact information will also appear in the following printable documents – *invoices* and *packing slips*. These documents can then be printed and sent together with your goods when preparing your orders. More information on how to generate these documents will be covered in a later chapter . For now, just concentrate on the display of your store's contact information.

Invoices

Your store contact information will be displayed on the top-left corner of an invoice.



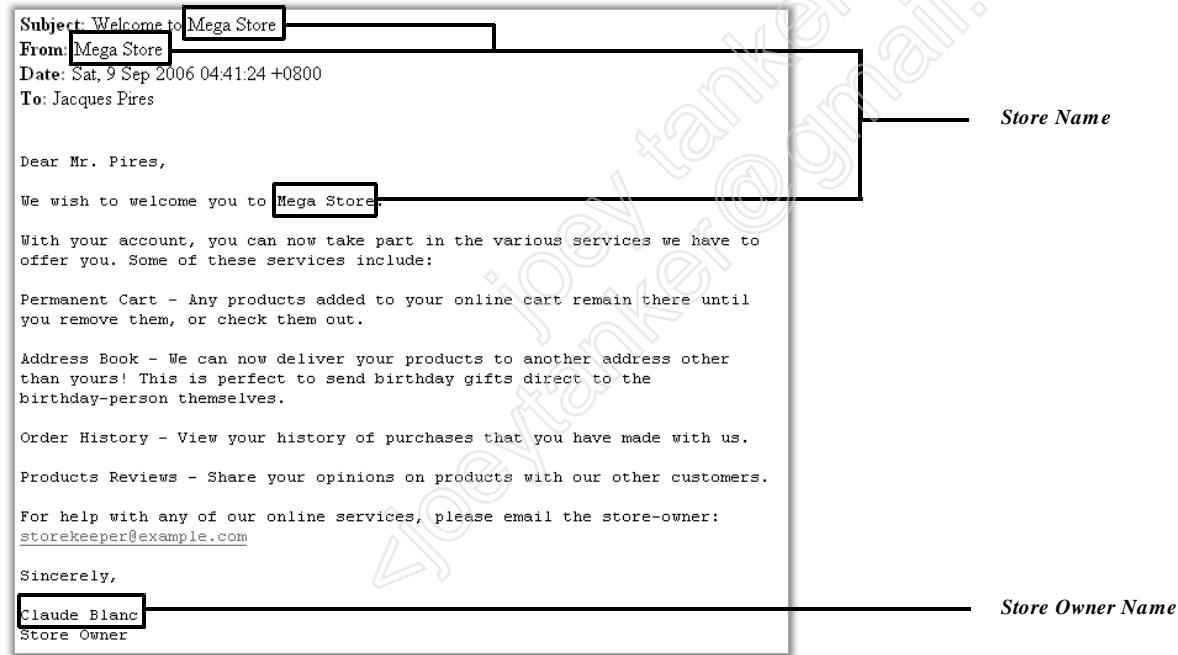
Packing Slips

Similarly, your store contact information will also be displayed on the top-left corner of a packing slip.

STORE NAME	
ADDRESS	
COUNTRY	
PHONE	
BILL TO:	
Jacques Pires 200, rue de Tolbiac Paris, 75015 Paris, France	
(33)-01-40-80-82-11 jacques@example.com	
Invoice No. 12	
Date Ordered: Saturday 16 September, 2006	
Payment Method: Cash on Delivery	
Products	Model
1 x Normal Test Product	

Store Information Appearing in Emails

Unlike the information displayed in online and printed documents, contact information presented in emails sent out from your store will only contain the *store name* and *store owner's name* as shown in the following sample screen shot.



To change the contact information displayed in emails, click on **Configuration > My Store** and edit the following fields.

- **Store Name**
- **Store Owner**

Notice that the values for the preceding fields correspond to the values you entered in the **Store Name and Store Owner** fields in Step 8 of Zen Cart's installation as shown in the screen shot on page 50.

Summary

Your contact information is available through several mediums: online store, printed documents and in emails. Always keep your contact information updated as it is important for the image and credibility of your business.

joeytanker@gmail.com

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Chapter 7 Currency

Introduction

Zen Cart provides you with the ability to configure your store to accept multiple currencies. Customers can then switch to their desired currency when they view product prices via the Currencies side-box in your Store Front.



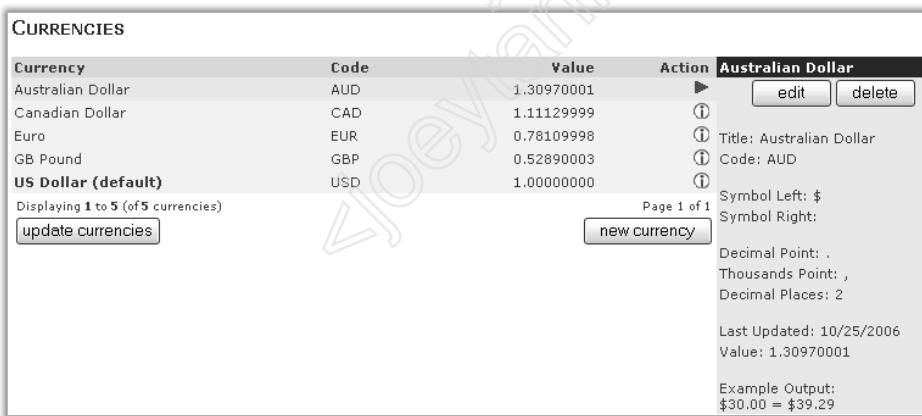
By offering customers the ability to switch to their desired currencies when viewing product prices, you aid them in their buying decisions since they do not need to perform any manual or mental exchange rate conversions.

In this chapter, we shall:

- Add new currencies to your Zen Cart store.
- Update currency exchange rates in real-time.
- Specify the default currency for your store.

The Currencies Screen

All currency configurations in Zen Cart are configured via the Currencies screen. To access this screen, click on **Localization > Currencies**.



The screenshot shows the 'CURRENCIES' screen with the following data:

Currency	Code	Value	Action
Australian Dollar	AUD	1.30970001	edit delete
Canadian Dollar	CAD	1.11129999	edit delete
Euro	EUR	0.78109998	edit delete
GB Pound	GBP	0.52890003	edit delete
US Dollar (default)	USD	1.00000000	edit delete

Details for the US Dollar:

- Displaying 1 to 5 (of 5 currencies)
- update currencies
- Page 1 of 1
- new currency
- Symbol Left: \$
- Symbol Right:
- Decimal Point: .
- Thousands Point: ,
- Decimal Places: 2
- Last Updated: 10/25/2006
- Value: 1.30970001
- Example Output:
\$30.00 = \$39.29

The default currency used in a store is the US dollar. The important point you need to take note is that the *default* currency (US dollar) has a value of 1.00000000. All other currencies will be *relative* to this currency when specifying the exchange rate.

Depending on your situation, you may not want to specify 1.00000000 as the value for your default currency. For example, if your default currency is the Indonesian Rupiah, you might want to specify 100.00000000 as the value instead.



Tip

If you intend to accept online payments via a payment gateway (e.g. PayPal, 2CheckOut, etc), check whether these payment gateways are able to accept the currency you specify in your Zen Cart store.

Adding a New Currency

To add a new currency:

1. Click on **new currency** in the Currencies screen to bring up the following side-panel.

The screenshot shows the 'New Currency' dialog box. On the left, there's a sidebar with the title 'New Currency' and a note: 'Please enter the new currency with its related data'. Below this are input fields for 'Title', 'Code', 'Symbol Left', and 'Symbol Right'. On the right, there's a panel with fields for 'Decimal Point', 'Thousands Point', 'Decimal Places', and 'Value'. At the bottom, there's a checkbox labeled 'Set as default (requires a manual update of currency values)' and two buttons: 'insert' and 'cancel'.

2. An explanation of the different fields on the screen is shown in the following table. Go through them before you start setting their values in your screen.

Property	Meaning
Title	You can assign any name you like to a currency. This should, however, be intuitive because it is displayed in the Currencies side-box in your Store Front.
Code	This represents an abbreviated code assigned to a currency. You should use a currency code that conforms to the ISO 4217 standard which is available from http://www.iso.org/iso/en/prods-services/popstds/currencycodeslist.html . If you use a currency code that is not in the ISO 4217 list, you might have problems doing a real-time update of the exchange rate later.
Symbol Left	The symbol that will appear on the left-side of a currency value. For example, in the case of US dollars, the symbol will appear as a (\$) sign on the left of the amount 17.99 as \$17.99.
Symbol Right	The symbol that appears on the right-side of a currency value. For example, in the case of Euros, the symbol would appear as a (EUR) sign on the right of the amount 17.99 as 17.99EUR. Note: You can display a Euro sign (€) in your browser by specifying <code>&euro;</code> for this field. However, the symbol might not be displayed properly in all browsers because it is still considered a relatively new currency and requires that the symbol exists on the customer's operating system.

Property	Meaning
Decimal Point	This is a separator to indicate hundredths of the currency. For example, \$100.99 has a “.” as a separator.
Thousands Point	This is a separator before each thousand. For example, \$1,000,000 has a “,” as a thousand separator.
Decimal Places	Specifies the number of decimals you want for a particular currency. For example, if a product costs ten dollars and you specify 2 decimal places for this field, then the price of that product will appear as \$10.00.
Value	Specifies the exchange rate <i>relative</i> to the default currency. If you are not sure, you can leave this field blank. You can update exchange rates in real-time after a currency is created.

3. Check the **Set as default (requires a manual update of currency values)** option if you intend to set your new currency as the default currency.
4. Click **insert** to save your changes to the database.



Warning

Setting a *default* currency for use in your store requires careful consideration. This is because when you add products to your store's catalog, you will have to specify all currencies based on this *default* currency.

If your product catalog contains hundreds of goods and you decide to change your default currency at a later date, you will need to manually adjust each product price to reflect the value of the new default currency.

Updating Exchange Rates in Real-Time

If you want your currencies to be updated with the latest exchange rates, you just need to click on the **update currencies** button in the Currencies screen. Zen Cart will immediately fetch the latest exchange rates from <http://www.oanda.com>. If this site is down or the exchange rates you specified is not available there, Zen Cart will automatically switch to another currency exchange site (<http://www.xe.com>) to retrieve the required exchange rates. Once the exchange rates are updated, messages will be displayed at the top of your screen.

Using the Currency Conversion Ratio to Achieve Realistic Exchange Rates

If you were to visit the aforementioned currency exchange sites and compare the rates displayed online with the exchange rates displayed in Zen Cart, you may notice a discrepancy between the two sets of values. This discrepancy is caused by the **Currency Conversion Ratio** field which is accessible via **Configuration > My Store**.

Currency Conversion Ratio
Please make any necessary changes

Currency Conversion Ratio
When auto-updating currencies, what "uplift" ratio should be used to calculate the exchange rate used by your store?
ie: the bank rate is obtained from the currency-exchange servers; how much extra do you want to charge in order to make up the difference between the bank rate and the consumer rate?

Default: 1.05
This will cause the published bank rate to be multiplied by 1.05 to set the currency rates in your store.
1.05

Because the actual exchange rates retrieved from the currency exchange sites assume forex transactions in very large amounts, they are not realistic for most businesses. To alleviate this situation, Zen Cart first multiplies a retrieved exchange rate with the value of the **Currency Conversion Ratio** before updating the affected currency's exchange rate in your store's database.

The default value for the **Currency Conversion Ratio** field is 1.05. This ratio may not be appropriate for your area, always check the exchange rates available at your local banks or money changers and adjust the field accordingly.



Note

Note that exchange rates which are entered *manually* (instead of updated real-time online) into the Currencies screen are not subjected to the Currency Conversion Ratio calculation.

Configuring the Displayed Default Currency

Whenever visitors arrive at your site, the *default* currency will be displayed in the Currencies side-box. If your store supports only English, the default currency displayed in the Currencies side-box in your Store Front, will be the default currency you specified in the Currencies screen of the Admin Console. However, if your store supports multiple languages, the default currency displayed in the Currencies side-box can either be the default currency specified in the Currencies screen of the Admin Console or another currency associated with the language the visitor is using to view your store.



Note

If your store does *not* support multiple languages, you can safely skip this section. For more information on making your Zen Cart store work with multiple languages, refer to "Adding a Language Pack" on page 280 for details.

Before we discuss how to specify the default currency for a store that supports multiple languages, you need to know what is the default currency associated with a language pack. We shall term the default currency associated with a language pack as the *native currency* for that language. For example, the French language pack will have a file <zc-home>/includes/languages/french.php. If you view the contents of that file, you will find the following piece of code.

```
define('LANGUAGE_CURRENCY', 'EUR');
```

This means the native currency for the French language is the Euro (EUR). This currency must be defined in the Currencies screen of your Admin Console. Similarly, other language packs will have their native currency defined in a file <zc-home>/includes/languages/<language>.php.

A store that supports multiple languages can choose to have the default currency in the Currencies side-box in your Store Front displayed in the following ways:

- Always use the default currency specified in the Currencies screen of the Admin Console regardless of the language chosen by a customer in the Store Front.

To achieve this, click on **Configuration > My Store** and set the **Switch to Default Language Currency** field to false.

- Switch to the native currency of the particular language that a customer has chosen in the Store Front.

To achieve this, click on **Configuration > My Store** and set the **Switch to Default Language Currency** field to true.

Summary

You have seen how you can easily support multiple currencies in your store. Although exchange rates can easily be updated in real-time, you need *discipline* to constantly update your currency exchange rates to reflect current market conditions. You have also learned how to properly configure the default currency to be displayed to customers viewing your store in different languages.

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Chapter 8 Weighting Unit

Introduction

An often overlooked point for most store owners when setting up their stores is the issue of which *unit of measure* to use for weight. For simplicity's sake, we shall refer to the unit of measure for weight as "weighting unit" for the rest of this book.

The *default* weighting unit in Zen Cart is the *pound* (lb). This weighting unit is used in countries that follow the Imperial system of measurements. For countries that follow the Metric system, they would be more accustomed to the *kilogram* (kg) instead. Whatever the case, Zen Cart offers much more flexibility than that to specify your weighting unit. You can use anything to identify your weighting unit. For example, carat, stone, horse, rock, etc. Why is that so? Because to Zen Cart, the weighting unit is just a "label"!

The weighting unit issue is an abstract concept for most new store owners so we will examine it closely. Whenever a weight is specified, two things need to be mentioned: weighting unit and weightage. For example, 5 kgs of flour or 10 lbs of pork. When you learn to create products in your store, you will only be asked to key in the weightage. When a product's weight is displayed, Zen Cart automatically puts the weighting unit and weightage information together so the weight makes sense to customers. That is why you can customize the weighting unit to anything you want in Zen Cart.

Note that the weighting unit you decide to use is applied *globally* throughout the store. You cannot mix multiple weighting units. For example, specifying the weighting unit of product X in kilograms and the weighting unit of product Y in grams.

Implications of Changing the Weighting Unit

Although the weighting unit is used purely as a label for display in your store, when it comes to shipping your goods you will most likely need to take into account the real weighting unit that needs to be used. Some shipping modules expect the weight to be expressed in a certain weighting unit. For example, the United States Postal Service (USPS) shipping module expect weight to be in pounds (lbs) and no other weighting unit. If you need to use the USPS or any other shipping module that expects weight to be in pounds, my advice would be *not* to customize the weighting unit.

If you already have products in your store created with pounds as the weighting unit, then changing your weighting unit may also be a concern. This is because when you specified the weightage (e.g. 20) for your products, you had the intention of using pounds (lbs). If you change the weighting later to kilogram (kgs), your products will not display weight correctly. For example, a product will now display "20 kgs" instead of "20 lbs" previously. Making the required manual changes is a simple task if you have very few products but it can be very tedious changing an entire catalog with thousands of products.

Changing the Weighting Unit

Changing the weighting unit to anything other than the default pound (lb) is not a trivial task. For readers who are new to Zen Cart, you should skip this chapter and come back to it after you have gone through the rest of the book. You would then be in a better position to decide whether you want to perform any weighting unit customizations; and if you do, you can easily change the weightage for the few example products that are in your store and also edit all affected files properly using the Override System.

There are two steps to perform in order to change the default weighting unit used in your store.

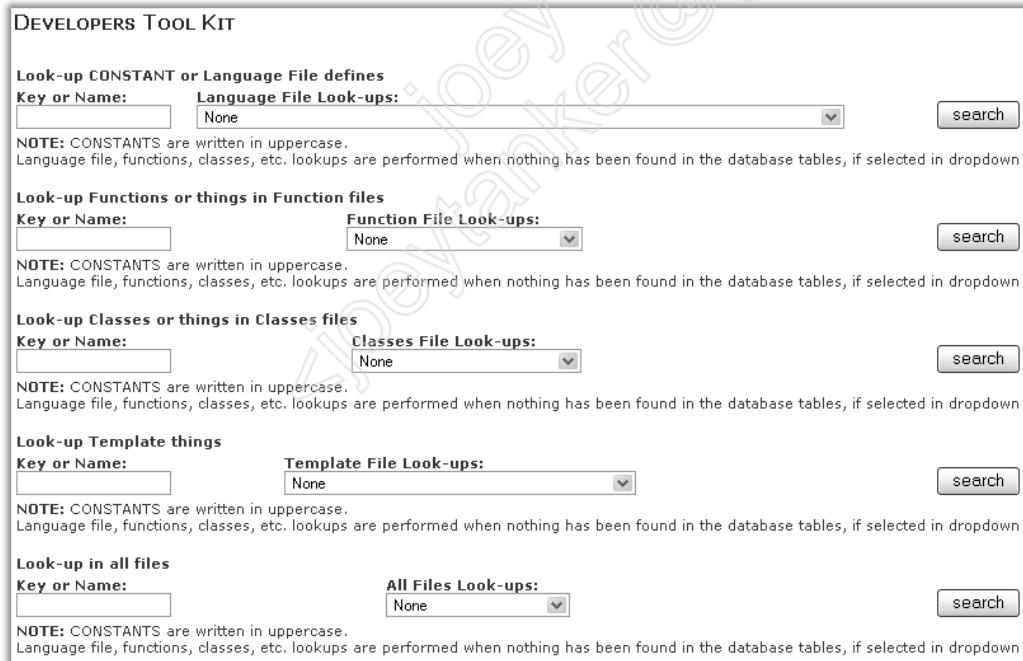
1. Search for source files that have weighting unit information contained in them
2. Apply the changes to these files.

Step 1 of 2: Search for Files to Change

As mentioned earlier, the default weighting unit in Zen Cart is the pound. This unit is represented as either “lb” or “lbs”. Therefore to change the weight unit, you will have to search for these values and replace them with your own weighting unit; e.g. “kg” or “kgs”.

To search for files containing the value “lb”, “lb(s)” or “lbs”:

1. Click on **Tools > Developers Tool Kit** to access the Developers Tool Kit screen. This screen is helpful in locating any text contained within the physical files that make up your Zen Cart store.



DEVELOPERS TOOL KIT

Look-up CONSTANT or Language File defines
Key or Name: Language File Look-ups:

NOTE: CONSTANTS are written in uppercase.
Language file, functions, classes, etc. lookups are performed when nothing has been found in the database tables, if selected in dropdown

Look-up Functions or things in Function files
Key or Name: Function File Look-ups:

NOTE: CONSTANTS are written in uppercase.
Language file, functions, classes, etc. lookups are performed when nothing has been found in the database tables, if selected in dropdown

Look-up Classes or things in Classes files
Key or Name: Classes File Look-ups:

NOTE: CONSTANTS are written in uppercase.
Language file, functions, classes, etc. lookups are performed when nothing has been found in the database tables, if selected in dropdown

Look-up Template things
Key or Name: Template File Look-ups:

NOTE: CONSTANTS are written in uppercase.
Language file, functions, classes, etc. lookups are performed when nothing has been found in the database tables, if selected in dropdown

Look-up in all files
Key or Name: All Files Look-ups:

NOTE: CONSTANTS are written in uppercase.
Language file, functions, classes, etc. lookups are performed when nothing has been found in the database tables, if selected in dropdown

2. Concentrate on the **Look-up in all files** portion of the screen.
3. Type the weighting unit which you would like to replace into the **Key or Name** field. For example, type lb.
4. Choose All Files – Catalog/Admin from the **All Files Look-ups** field to maximize your search scope.

5. Click **search** and a list of files containing the keyword you typed in Step 3 will be displayed at the top of the screen if the search was successful.
6. Take down the names of the files and their line numbers as you will need to edit these files later. Ignore those files that contain words that match your keyword but are not related to weighting unit. For example, “callback” contains the keyword “lb” but is not related to weight.
7. Repeat your search for the weighting unit you want to change with other forms of the previous keyword you typed in Step 3. For example, type lbs or lb(s).

As you can see in Step 6, it can be very tedious to single out files that contain the weighting unit you want to change. You need to be patient and thorough or else you may encounter strange problems later on. For example, a certain screen may display weight in “kgs” but another screen in your store may display the same weight in “lbs”.

Step 2 of 2: Edit the Relevant Files

After you have consolidated all the file names containing the weighting unit you want to change, you need to edit the relevant files and change the weighting unit contained in them. You have two options for changing the contents of those affected files:

- Use Zen Cart’s Override System to edit the relevant files. This is the preferred way and is covered in “The Template Override System” on page 270.
- Directly edit the relevant files. Back up those files which cannot be overridden using Zen Cart’s Override System.

Whatever option you choose, make sure you use a proper text editor when editing the contents of any file. Refer to “Text Editors” on page 379 for more information on choosing a text editor.

Since the editing of file contents only involves a straightforward search and replace for the relevant keywords, we will not discuss it further here. Just be careful not to accidentally replace keywords that may be embedded in other words.

Summary

As you have just seen, it is not easy to change the unit of measure for weight without touching a lot of files. To compound the problem, some shipping modules (e.g. USPS) require that a specific unit of measure for weight (e.g. lb) is used. Thus, you should consider carefully whether you really need to change the unit of measure for weight.

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Chapter 9 Taxes

Introduction

Taxes are a part and parcel of everyday life. If you run a business, you would most likely have to deal with sales taxes. Sales taxes are taxes levied on consumption of goods and/or services and are a form of indirect taxation which is different from income tax. In Zen Cart, sales taxes can be applied to shipping as well as to goods and/or services.

Sales taxes vary across different countries and sometimes even across states within a country. What's more, you could have different tax rates apply to different classes of goods. Sales taxes can even be compounded. That means you might have to charge an assortment of taxes on even a single item you will be selling in your store!

Indeed, the topic of taxation is a complex and wide-ranging one. Since you are planning on setting up your online store to conduct business, do check with your accountant on how taxation works for your line of business.



Warning

Tax rates used in this book are purely *fictitious* and intended only for illustration purposes.

In this chapter, we shall:

- Understand how the different elements of Zen Cart are used to configure tax rates.
- Decide on the basis of your sales tax collection.
- See the impact of different settings on the display of tax-related prices.
- Add a tax class.
- Add a tax rate.
- Understand the impact of customer zone information on tax calculation.

Understanding How Taxes are Configured

Before you start configuring taxes in Zen Cart, you need to have an overall picture of how Zen Cart implements tax calculations. Let us use an example of an online store that sells guitars and is located and registered in Australia. The tax setup for the store is shown in the following illustration and will be used to explain the concept of tax configuration in Zen Cart.

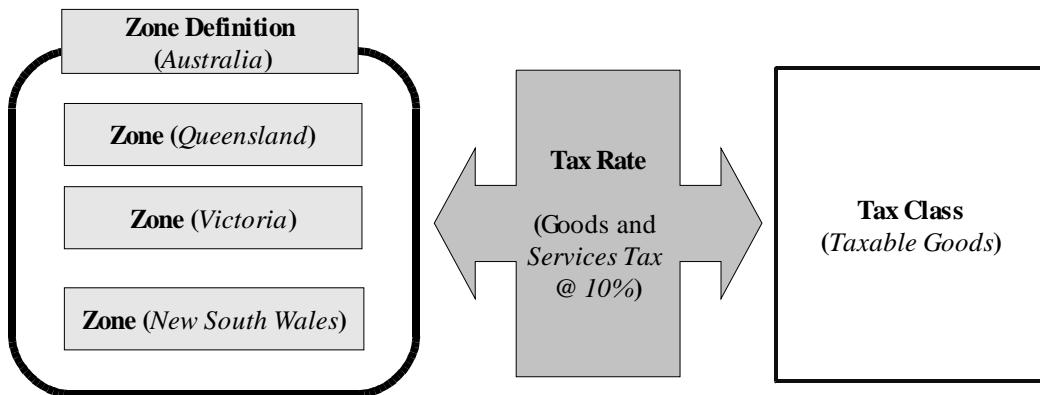


Figure 9.1: Tax configuration overview

Looking at Figure 9.1, the different components of Zen Cart (i.e. Zone, Zone Definition, Tax Class, Tax Rate) used to calculate the tax charged on goods sold by the store are shown in **bold** whereas example values for each component are shown in *italics*.

Zone Definitions and Zones are used to identify the geographical regions where a tax rate should apply.

A Tax Class allows different products to be separated into different groups so that each group can be taxed at a different rate. For example, if Item A is to be taxed at 5% while Item B is non-taxable, you can set up two different tax classes (i.e. Taxable Goods and Non-Taxable Goods) to hold each item.

A Tax Rate defines the percentage of a product's retail price or shipping charges that should be collected as sales tax. It ties together the information you have defined for a Zone Definition and a Tax Class to trigger the collection of a sales tax.

After looking at the building blocks of tax calculation above, we can now interpret the tax setup in the preceding illustration as follows: customers from the relevant Zones (i.e. Queensland, Victoria and New South Wales) in a Zone Definition (i.e. the country of Australia) who purchase goods (of Tax Class "Taxable Goods") will be liable to pay sales taxes (at a rate of 10%) on those goods.

Zen Cart gives you a lot more flexibility than the simple illustration we have just seen. For example, you could specify that the tax calculation be based on store location instead of shipping address. You can also specify whether different tax rates should be added or compounded (Federal Taxes added to State Taxes, etc). We shall cover all these different permutations in the rest of this chapter.



Tip

Store owners who need to set up sales taxes for either the United States, United Kingdom or Canada can refer to the FAQ section at Zen Cart's site for examples.

Basis for Tax Calculation

Usually, sales tax is collected based on a customer's *shipping* addresses when a purchase is made. However, there may be times where a store owner would like to have the sales tax calculated based on the store address or a customer's *billing* address instead.

To specify the basis for sales tax calculation:

1. Click on **Configuration > My Store** to access the My Store screen.
2. Set the following fields to either Shipping, Billing or Store.
 - **Basis of Product Tax**
 - **Basis of Shipping Tax**

Shipping and Billing addresses are determined by a customer during the checkout process. Store address is based on the following fields in the My Store screen.

- **Country**
- **Zone**

Display of Tax Information

Before you configure your tax information, you need to take note of a few settings that might affect whether you get to see tax calculations being displayed and how these tax calculations are derived.

All the relevant display settings can be found in the My Store screen available via clicking **Configuration > My Store**. We shall go through each of those fields in the following table.

Table 9.1: Explanation of tax settings in My Store screen

Title	Explanation
Tax Decimal Places	Specifies how many decimal places will be used to display a tax rate. Let us use the following example screen shot to illustrate its use where we assume we have already set this field to <u>0</u> .



The screenshot shows a table titled 'TAX RATES' with columns: Priority, Tax Class, Zone, Tax Rate, and Action. There are two rows: one for 'Taxable Goods' in 'Florida' with a tax rate of 7%, and another for 'Taxable Goods' in 'European Union (EU)' with a tax rate of 17.5%. The 'Action' column for the EU row contains a 'Delete Tax Rate' button with a warning message: 'Are you sure you want to delete this tax rate?'. The side-panel shows 'Taxable Goods 18%'.

Notice that we have specified a Tax Rate of 17.5% for the EU zone. When we try to delete this tax rate, the side-panel actually shows a tax rate of 18%!

Do not worry because this setting only affects the *display* of tax rates. *Actual* tax rates will still be used in any tax calculation. To avoid confusion, set this value to use the same number of decimal places as your expected tax rate.

Table 9.1: Explanation of tax settings in My Store screen (continued)

Title	Explanation
Display Prices with Tax	<p>If this field is <u>true</u>, your product prices will be displayed <i>inclusive</i> of tax. For example, if your product price is \$100 and a tax rate of 10% is applied. The product price will be displayed as \$110 instead of the usual \$100.</p> <p>There are two cases where this setting will have an effect on the display of prices in the Store Front:</p> <ul style="list-style-type: none">- Product Price- Order Total <p>When looking at product prices in the Store Front, even if you have <i>enabled</i> this field, whether you will see the price of \$110 or \$100 will depend on what you set for the Basis of Product Tax field. If the address for the Basis of Product Tax field falls within a Zone defined in the tax rate you set up, then you will see \$110, if not, you will still see \$100. Note that Zen Cart will not know your location if you have not logged in so whether you see the price with or without tax is also subjected to this scenario.</p> <p>At the final step of the check out process, customers will be presented with their order totals. Depending on the value of this field, the display of prices with tax information is different, as shown in the following screen shots.</p>

Display Prices with Tax: false.

Qty.	Item Name	Total
1 x	Normal Test Product	\$200.00
<hr/>		
	Sub-Total:	\$200.00
	Flat Rate (Best Way):	\$5.00
	Value Added Tax (VAT) @ 10%:	\$20.00
	Total:	\$225.00

Display Prices with Tax: true.

Qty.	Item Name	Total
1 x	Normal Test Product	\$220.00
<hr/>		
	Sub-Total:	\$220.00
	Flat Rate (Best Way):	\$5.00
	Value Added Tax (VAT) @ 10%:	\$20.00
	Total:	\$225.00

Note that the tax calculations in the above orders only apply to the product price and *not* to the shipping charge (Flat Rate).

Table 9.1: Explanation of tax settings in My Store screen (continued)

Title	Explanation
Display Prices with Tax in Admin	<p>This setting will affect the display of prices in <i>customer orders</i> and <i>invoices</i> generated by Zen Cart in the Admin Console. To look at an invoice generated by Zen Cart, click on Customers > Orders and choose an order. Click on invoice to see a dynamically generated invoice.</p> <p>Take note of the differences in the Price (inc) and Total (inc) columns for the two sample invoices shown in the following screen shots.</p>

Display Prices with Tax in Admin: false.

Products	Model	Tax	Price (ex)	Price (inc)	Total (ex)	Total (inc)
1 x Normal Test Product		10%	\$200.00	\$200.00	\$200.00	\$200.00
					Sub-Total:	\$220.00
					Flat Rate (Best Way):	\$5.00
					Value Added Tax (VAT) @ 10%:	\$20.00
					Total:	\$225.00

Display Prices with Tax in Admin: true.

Products	Model	Tax	Price (ex)	Price (inc)	Total (ex)	Total (inc)
1 x Normal Test Product		10%	\$200.00	\$220.00	\$200.00	\$220.00
					Sub-Total:	\$220.00
					Flat Rate (Best Way):	\$5.00
					Value Added Tax (VAT) @ 10%:	\$20.00
					Total:	\$225.00

Note that the tax calculations in the above orders only apply to the product and *not* to the shipping (Flat Rate). The number of decimals displayed is dependent on the number of decimal places you set for that particular currency.

Sales Tax Display Status	If enabled, it will force the display of sales tax even if the amount is \$0.00. It is recommended that you set this value to <u>1</u> during testing so you can check whether your tax calculations are in order.
--------------------------	--

Adding a Tax Class

A tax class allows you to classify your goods into a specific category so that tax rates can be applied. When you configure a shipping module or create a new product (which you will learn about in a later chapter), you will be given the option of specifying a tax class for that particular product or shipping module.

To add a tax class:

1. Click on **Locations/Taxes > Tax Classes** to access the Tax Classes screen.



ID	Tax Classes
1	Taxable Goods

Displaying 1 to 1 (of 1 tax classes)

Action **Taxable Goods**

edit delete

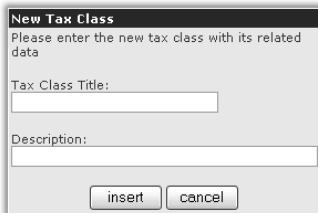
Page 1 of 1

new tax class

Date Added: 09/07/2006
Last Modified:

Description:
The following types of products are included:
non-food, services, etc

2. Click on **new tax class** to bring up the tax class detail panel.



New Tax Class
Please enter the new tax class with its related data

Tax Class Title:

Description:

insert cancel

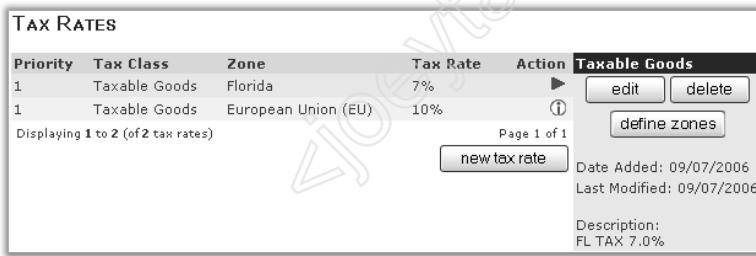
3. Enter your desired values for the **Tax Class Title** and **Description** fields.
4. Click **insert** to save your changes into the database.

Adding a Tax Rate

A tax rate specifies a percentage of a product's sales price to be added as tax. A product can incur several tax rates at once so Zen Cart gives you the option of adding or compounding the different tax rates together.

To add a tax rate:

1. Click on **Locations/Taxes > Tax Rates** to access the Tax Rates screen.



Priority	Tax Class	Zone	Tax Rate	Action	Taxable Goods
1	Taxable Goods	Florida	7%	edit	delete
1	Taxable Goods	European Union (EU)	10%	①	define zones

Displaying 1 to 2 (of 2 tax rates)

Action **Taxable Goods**

edit delete

Page 1 of 1

new tax rate

Date Added: 09/07/2006
Last Modified: 09/07/2006

Description:
FL TAX 7.0%

2. Click on **new tax rate** to bring up the New Tax Rate side-panel.

New Tax Rate
Please enter the new tax class with its related data

Tax Class Title:

Zone:

Tax Rate (%):

Description:

Tax rates at the same priority are added, others are compounded.

Priority:

3. Choose the tax class which you want to apply a tax rate to by selecting from the **Tax Class Title** field.
4. Choose a zone definition to which the tax rate should apply from the **Zone** field.
5. Specify the tax rate you want to charge in the **Tax Rate (%)** field.
6. Specify a meaningful description for the **Description** field. Preferably, state the tax rate since this field will be displayed to the customer in the Order Confirmation screen during check out. For example, Value Added Tax (VAT) @ 10%.
7. Specify how you want different tax rates to apply by entering a number into the **Priority** field. An explanation of this field is found in the “Compounding or Adding Different Tax Rates” section below.
8. Click **insert** to save your changes.

Compounding or Adding Different Tax Rates

In some cases, different tax rates need to be applied to a product. The final tax rate that applies for the product will depend on whether these tax rates are compounded or added. Zen Cart allows you to perform the compounding or addition of tax rates by way of the **Priority** field which you encountered in step 7 in the “Adding a Tax Rate” section previously. Notice that the **Priority** field states that “Tax rates at the same priority are added, others are compounded”.

We will use the following examples of a single product which has two tax rates (3% and 5%) applied to it to understand the meaning of compounding versus addition.

Example 1: “Compounded” Tax Rate

```
Net Price of Product = $100.00
Priority = 1, Tax Rate = 5%
Priority = 2, Tax Rate = 3%
Compounded Tax Rate = (1.05 x $100.00) x (1.03) = $108.15
```

Example 2: “Added” Tax Rate

```
Net Price of Product = $100.00
Priority = 1, Tax Rate = 5%
Priority = 1, Tax Rate = 3%
Added Tax Rate = (1 + 0.05 + 0.03) x $100.00 = $108.00
```

Impact of Customer Zone Information

One of the things that can cause problems when Zen Cart calculates taxes is when no State/Province information exists for a customer. This happens when they are not required to enter the **State/Province** field when they sign up for an account with your online store.

Zen Cart needs the State/Province information in order to determine which *Zone* a customer is located in so that it can decide whether the customer is liable for sales tax. If your store chooses not to collect any zone information during customer registration, then the only way to assess taxes on those customers would be to set the tax basis to Store (refer to “Basis for Tax Calculation” on page 108 for configuration details). Note that the *Zone* used when using a store-based tax basis is taken from the **Zone** field under **Configuration > My Store**.

To make sure that customers specify a state or province when they sign up for an account:

1. Click on **Configuration > Customer Details** to access the Customer Details screen.
2. Make sure the **State** field is set to true.

Summary

Configuration of sales taxes needs to be carefully done as there are many steps to perform and also several dependencies with other modules as well. The main thing before you start configuring your taxes is to have an understanding of how your business is required to handle taxation issues. Since tax rules can change overnight, you also need to stay abreast of current affairs and update your tax settings in a timely manner.

Do contact your local tax authority or consult a tax accountant to review your business needs, including taxation issues related to zones outside the jurisdiction of your local tax authority (since you can sell to anyone anywhere if you are selling online).

Chapter 10 Shipping

Introduction

Any store that deals with physical goods will likely need to ship those goods to their customers. Zen Cart provides various shipping modules to cater to the different ways in which store owners ship their goods. Each shipping module that is enabled will then appear as a shipping option to customers based on the delivery addresses they select when they check out their items.

Zen Cart comes with quite a handful of default shipping modules. However, we will not be covering the United Parcel Service (UPS) and United States Postal Service (USPS) shipping modules for the following reasons:

- If you are running Zen Cart on your home computer while reading this book, the external shipper will not be able to send any information back to you since you are not listed on the Internet.
- Most external shippers require you to have an account with them before you can start testing and a lot of technical expertise and time will usually be required to troubleshoot any problems.

In this chapter, we shall:

- Understand important shipping considerations like tare weight, shipping boxes calculation and shipping/packing details.
- Run through the common shipping screen and shipping settings.
- Go through each shipping option separately.



Note

To keep the explanation of each shipping module independent, we shall discuss how to test each shipping module immediately after learning how to configure it.

Default Shipping Modules Overview

Use the following table to help decide which shipping option you want to offer your customers. Shipping modules are classified according to the methods they employ to calculate shipping charges, such as:

- *Online* – Shipping charges are calculated in real-time by an external shipping processor and sent back to your store for display to customers.
- *Offline* – Shipping charges are calculated based on the rates a store owner sets for a particular shipping module.

Table 10.1: Default shipping options

Modules	Method	Comments
Flat Rate	Offline	Adds a fixed shipping cost to a customer's order regardless of how many items were bought.

Table 10.1: Default shipping options (continued)

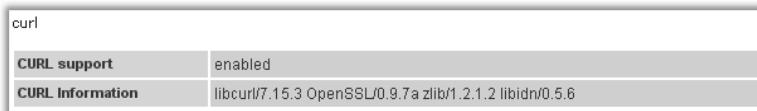
Modules	Method	Comments
Per Item	Offline	Adds a fixed shipping cost to <i>each</i> item in a customer's order.
Per Unit	Offline	A different shipping cost is applied for each item based on the item's <i>unit weight</i> and <i>quantity</i> . Note: The unit weight of an item is the weight you specified when creating a product in the store's catalog.
Store Pickup	Offline	Charges a fixed shipping cost for customers who choose to collect their goods from your store instead of having you deliver it to them.
Table Rate	Offline	Applies different shipping charges for items that fall within different bands for <i>weight</i> , <i>price</i> or <i>number of items</i> . For example, charge \$2 for orders below 5 lbs and charge \$5 for orders between 5 lbs to 10 lbs.
Zone Rates	Offline	Behaves similarly to Table Rate but has the added ability to define different table rates for different countries in different zones.
FREE SHIPPING!	Offline	Allows you to specify extra charges that should apply although free shipping is offered to customers. Note: If this module is active and shown to the customer during checkout, all other modules automatically disappear. To enable free shipping for customers and at the same time offer other shipping options to customers, use the Free Shipping Options module instead.
Free Shipping Options	Offline	Allows you to specify different conditions for a customer to qualify for free shipping. For example, when the total order exceeds a certain amount or weight, or when the total number of items bought is above a certain threshold value.
United Parcel Service	Online	Delivery information in Zen Cart is submitted to United Parcel Service where shipping charges are calculated in real-time before being displayed to customers. You need an account with United Parcel Service if you intend to use this option.
United States Postal Service	Online	Delivery information in Zen Cart is submitted to United States Postal Service where shipping charges are calculated in real-time before being displayed to customers. <i>Only works if you are shipping from the United States.</i> You need an account with United States Postal Service if you intend to use this option.

Enabling Network Access to Third-Party Sites

For some shipping modules which require access to third-party sites to acquire real-time shipping quotes, you will need to ensure that your PHP settings are properly configured to work with cURL. cURL support in PHP allows Zen Cart to communicate properly with external web sites.

To check whether cURL functionality is enabled in your server's PHP settings:

1. Click on **Tools > Server/Version Info** to access the Server Information screen.
2. Make sure that the **CURL support** field is enabled.



If your store is hosted with a web hosting provider, you may need to specify additional proxy settings in Zen Cart in order for cURL to work properly. Check with your web hosting provider if you encounter problems with network access when configuring those shipping modules which require cURL access.

To enable proxy server access for cURL to work:

1. Click on **Config > My Store** to access the My Store screen.
2. Set the **cURL Proxy Status** field to True.



3. Specify the proxy address which your web hosting provider has given you in the **cURL Proxy Address** field.



Important Shipping Considerations

Before you can start configuring any shipping module, you need to take note of several factors that will affect your shipping costs.

Tare Weight and Calculation of Shipping Boxes

What Is Tare Weight?

You might need to enclose your product within a box and maybe add some layers of foam for protection when shipping your items. The additional weight (i.e. packing box, foam, etc) added to the actual weight of your item is known as the *tare weight*. This variable should be the first thing you check when you find that the calculation for your shipping charges do not add up.

Calculating the Number of Shipping Boxes Required

Whenever you ship items, you need to pack them nicely into suitable boxes, tubes, etc. Zen Cart can help you determine the number of boxes you require based on the weight of your orders. However, the way the number of shipping boxes is calculated *can be wrong!*

The formula for the calculation of the number of shipping boxes required is:

Number of shipping boxes =
(total weight of all items in an order) / (maximum package weight)

Note: *maximum package weight* is the maximum weight that each shipping box can hold.

We shall use the following two examples to show how this formula actually works. For simplicity, both examples *assume the tare weight is zero*. Example 1 gives you an idea of how the formula works. Example 2 illustrates why you have to be very careful if you decide to use this feature to determine your shipping boxes.

Example 1: Correct shipping boxes calculated

Assume the maximum package weight is 0.4 lbs and a customer buys several items of the same product.

Product A = 0.2 lbs
Customer buys 4 units of Product A = $4 \times 0.2 = 0.8$ lbs

No. of Shipping Boxes required = $(0.8) / (0.4) = 2$

Note: Each box weighs 0.4 lbs, and contains 2 units of Product A each.

Example 2: Impractical shipping boxes calculated

Assume the maximum package weight is 2.5 lbs and a customer buys the following three products from your store.

Product A - 2 lbs
Product B - 1 lb
Product C - 2 lbs

No. of Shipping Boxes required = $(2 + 1 + 2) / (2.5) = 2$

Note: You can't ship your goods with only 2 boxes because the maximum weight for each box is 2.5 lbs! You would need 3 boxes to ship the goods properly.

Due to the potential miscalculation of shipping boxes above, it is advisable that you do not show customers any information on shipping boxes when they are checking out their items. You will see how to disable the display of this information when we discuss "display-related information" in the next section.

Shipping and Packaging Details

Before you configure your shipping modules, you should set some general settings for all your shipping-related activities. We will go through all the settings here to give you a firm grounding in how Zen Cart deals with these issues.

Click on **Configuration > Shipping/Packaging** to access the Shipping/Packaging screen.

SHIPPING/PACKAGING	
Title	Value
Country of Origin	United States
Postal Code	NONE
Enter the Maximum Package Weight you will ship	50
Package Tare Small to Medium - added percentage:weight	0:3
Larger packages - added packaging percentage:weight	10:0
Display Number of Boxes and Weight Status	3
Order Free Shipping 0 Weight Status	0
Shipping Estimator Display Settings for Shopping Cart	1

The information in this screen can be split up into several categories to help you appreciate how they impact your shipping configuration.

- Shipping Origin Information
- Weight-Related Information
- Display-Related Information

Shipping Origin

The following fields are *required* if you are shipping physical items anywhere in the world.

- **Country of Origin**
- **Postal Code**

The information collected may be used to determine your shipping rates. Online shipping modules (USPS, UPS, etc) which prepare shipping quotes in real-time will use this information to calculate the shipping charges based on the distance between your shipping origin and the shipping destination.

Weight-Related Information

The following fields are related to weight information and will affect the calculation of your shipping weights when you configure your shipping modules later.

- **Enter the Maximum Package Weight you will ship**
- **Package Tare Small to Medium - added percentage:weight**
- **Larger packages - added packaging percentage:weight**
- **Order Free Shipping 0 Weight Status**

Enter the Maximum Package Weight you will ship tells Zen Cart the maximum weight that you will allow in a shipping package – box, tube, envelope, etc. This is the maximum package weight that will be used for calculating the number of boxes to pack the items contained in a customer's order. Refer to “Calculating the Number of Shipping Boxes Required” on page 118 for calculation details.

Package Tare Small to Medium - added percentage:weight and **Larger packages - added packaging percentage:weight** both allow you to specify a tare weight in addition to the total weight of your orders. You need to pay close attention to these two options because store owners tend to forget that they affect the order weight calculations and spend a lot of time trying to figure out where the phantom weight came from.

Order Free Shipping 0 Weight Status allows you to specify whether you want to allow customers to enjoy free shipping when they purchase a product for which you did not specify a weight. If you enable this option by setting its value to 1, you will need to enable the FREE SHIPPING! module under **Modules > Shipping**.

Display-Related Information

The two fields related to display information for shipping are shown below.

- **Display Number of Boxes and Weight Status**
- **Shipping Estimator Display Settings for Shopping Cart.**

Display Number of Boxes and Weight Status allows you to choose how you want to display the number of boxes and weight when customers are prompted to choose a shipping option during the checkout process. The following example screen shot shows what is displayed if you set this option to Both Boxes and Weight.

The screenshot shows a form titled "Step 1 of 3 - Delivery Information". Under "Shipping Information", an address is listed: "Jacques Pires, 200, rue de Tolbiac, Paris, 75015, Paris, France". A "change your address" button is next to it. A note says: "Your order will be shipped to the address at the left or you may change the shipping address by clicking the Change Address button." Under "Shipping Method", it says "Please select the preferred shipping method to use on this order." A "Table Rate (2 x 0.40lbs)" is selected. The "Weight per shipping box" is \$17.00. A radio button for "Best Way" is selected.

It is recommended that you set this value to off to prevent customers from witnessing any possible impractical calculations as shown in Example 2 in the section on “Calculating the Number of Shipping Boxes Required”. You certainly do not want to confuse your customers and explain the discrepancies over and over again.

Shipping Estimator Display Settings for Shopping Cart toggles the display of the Shipping Estimator option when customers view their shopping cart details. The following example screen shots show what customers can expect to see for the values of Display as Button on Shopping Cart and Display as Listing on Shopping Cart Page respectively.

Display as Button on Shopping Cart

Display as Listing on Shopping Cart Page

[Logged In Customer]

Estimate Shipping Costs

Display as Listing on Shopping Cart Page

[Non-Logged In Customer]

Estimate Shipping Costs

Available Shipping Methods		Rates
Table Rate (2 x 0.40lbs) (Best Way)		\$17.00
Flat Rate (Best Way)		\$5.00

Common Shipping Information

Before we start adding shipping options, you need to know certain common shipping information that will help ease your configuration later.

The Shipping Modules Screen

All shipping modules in Zen Cart are configured via the Shipping Modules screen. To access this screen, click on **Modules > Shipping**.

SHIPPING MODULES			
Modules		Sort Order	Action
Flat Rate	flat	0	● ►
Free Shipping Options	freeoptions	●	ⓘ
FREE SHIPPING!	freeshipper	0	● ⓘ
Per Item	item	0	● ⓘ
Per Unit	perweightunit	●	ⓘ
Store Pickup	storepickup	●	ⓘ
Table Rate	table	0	● ⓘ
United Parcel Service	ups	●	ⓘ
United States Postal Service	usps	●	ⓘ
Zone Rates	zones	●	ⓘ

A shipping module can only be used if it is:

- Installed.
- Enabled.

Therefore, you should automatically perform the above steps if you are asked to configure a shipping module later in the chapter.

The colors of the buttons under the Sort Order column have the following meanings:

- **Red** – Shipping Module is not installed.
- **Green** – Shipping Module is installed and enabled.
- **Yellow** – Shipping Module is installed but disabled or the Shipping Zone field is enabled only for a particular zone.

Common Shipping Settings

Certain fields which are common across most of the different shipping modules are highlighted in the following table so we do not have to explain them again later.

Table 10.2: Explanation of common shipping settings

Property	Meaning
Tax Class	Assigns a tax class to the calculated shipping cost of an order. Refer to “Understanding How Taxes are Configured” on page 107 if you have forgotten how taxes work.
Tax Basis	Specifies which of the following addresses to use for calculating tax charges - <i>Shipping, Billing or Store</i> . Refer to “Basis for Tax Calculation” on page 108 for more information.
Handling Fee	Adds an extra charge to the final shipping cost. For example, if you have to buy special packaging materials for your goods, you might want to add the cost of those materials here. Note: Customers do not like dealing with stores that come up with what are perceived as hidden charges. So I'd recommend you do not add any charges here.

Table 10.2: Explanation of common shipping settings (continued)

Property	Meaning
Shipping Zone	<p>For shipping modules that have selected a particular zone definition for this field, customers will only see the corresponding shipping option if their delivery addresses fall within the selected zone definition.</p> <p>Specifying <u>none</u> for this field for a particular shipping module will make the corresponding shipping option appear to <i>all</i> customers.</p> <p>For testing purposes, set this field to <u>none</u>.</p>
Sort Order	<p>Indicates the sequence in which shipping options appear to a customer when checking out. A shipping option with a <i>lower</i> value will appear <i>above</i> a shipping option with a <i>higher</i> value.</p> <p>You can leave this field set to <u>0</u> for all shipping modules to let Zen Cart sort the shipping options automatically when customers view them.</p> <p>If you choose to specify a non-zero value for this field, make sure you also specify a non-zero value for all other shipping modules. In addition, all non-zero values must be different.</p>

Adding Shipping Options

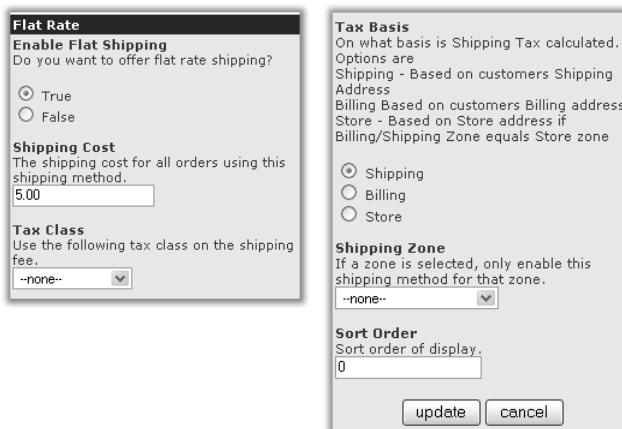
Flat Rate

This shipping option adds a fixed charge to a customer's order regardless of the number of items, total weight or total price of the order. For example, if a customer orders 5 lamps, 2 tables and 3 chairs, you still charge a flat rate of \$50 for the whole order.

This type of shipping option is a good choice for stores that sell goods which can be hand-carried by customers. In such cases, if the customers wish to have the items delivered, then the store will charge a flat rate for any deliveries. An example would be furniture shops which typically do delivery if customers buy items above a certain amount.

To configure this module:

1. Click on **Modules > Shipping** to access the Shipping Modules screen.
2. Edit the **Flat Rate** module. If required, install the module first.

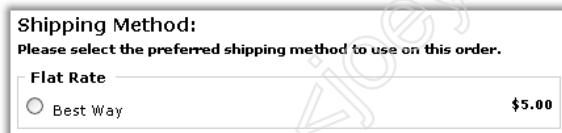


3. In the **Shipping Cost** field, specify the fixed amount you want to charge for customers who choose this shipping option.
4. Fill in the rest of the details for the module. Refer to “Common Shipping Settings” on page 122 for explanations for the rest of the fields.
5. Click **update** to save your changes into the database.

Before you begin to test this module, you need to create a product in your store. We shall use the Normal Test Product (refer to “Normal Test Product” on page 65 for details) for the purpose of our test.

To test this module:

1. Log in to your test customer account in your Store Front.
2. Add a “Normal Test Product” product to your cart and check out the item.
3. At the Delivery Information screen, you should see “Flat Rate” appear as a shipping option under the Shipping Method section.



4. Check that the amount appearing next to the **Best Way** radio button is correct based on your settings for this module.

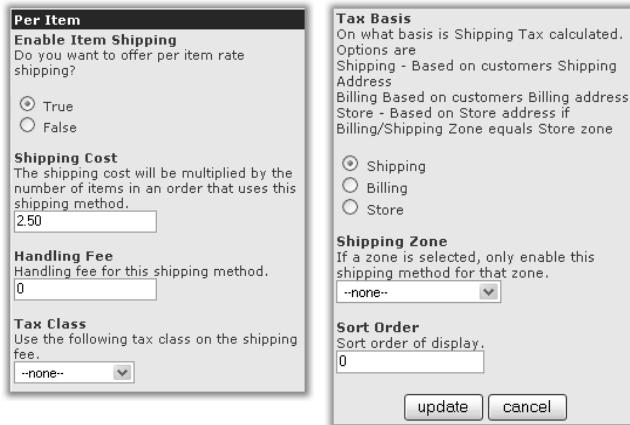
Per Item

This shipping module adds a fixed charge to *each item* in a customer's order regardless of the number of items, total weight or total price of the order. For example, if a customer orders 5 lamps, 2 tables and 3 chairs, you decide to charge a per item rate of \$10. Your total shipping cost will work out to be $(5 + 2 + 3) \times 10 = \100 .

This shipping module is a good choice for stores that sell a single item or items that have uniform shipping attributes. An example would be shops selling DVDs, CDs and books, etc.

To configure this module:

1. Click on **Modules > Shipping** to access the Shipping Modules screen.
2. Edit the **Per Item** module. If required, install the module first.

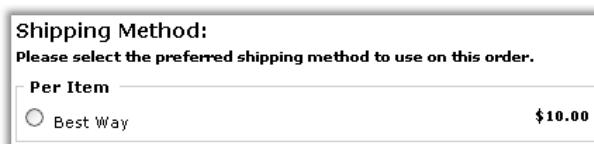


3. In the **Shipping Cost** field, specify the amount you want to charge for each item in a customer's order.
4. Fill in the rest of the details for the module. Refer to “Common Shipping Settings” on page 122 for explanations for the rest of the fields.
5. Click **update** to save your changes into the database.

Before you begin to test this module, you need to create a product in your store. We shall use the Normal Test Product (refer to Normal Test Product on page 65 for details) for the purpose of our test.

To test this module:

1. Log in to your test customer account in your Store Front.
2. Add *two* or more “Normal Test Product” products to your cart and check out the items. By adding multiple items, you can better visualize and verify the accuracy of the shipping charges calculation.
3. At the Delivery Information screen, you should see “Per Item” appear as a shipping option under the Shipping Method screen.



4. Check that the amount appearing next to the **Best Way** radio button is correct based on your settings for this module.

Per Unit

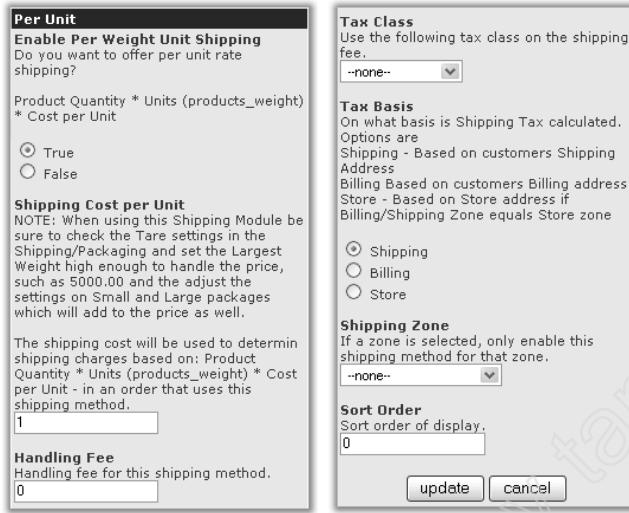
This shipping module applies a different charge to each item in a customer's order based on the item's *unit weight* and

quantity. The unit weight of an item is the weight you specified when creating a product in the catalog. Essentially, it provides you a way of specifying different shipping charges based on the products that are being shipped.

Consider this scenario: You decide to sell pots and pans which weigh 0.5 and 0.25 pounds respectively. You have further decided that the shipping cost is \$10 per pound. Therefore, if a customer orders 2 pots and 3 pans, the total shipping cost will work out to be $(2 \times 0.5 \times 10) + (3 \times 0.25 \times 10) = \17.50 .

To configure this module:

1. Click on **Modules > Shipping** to access the Shipping Modules screen.
2. Edit the **Per Unit** module. If required, install the module first.



3. In the **Shipping Cost per Unit** field, specify the amount you want to charge per unit weight for each item in a customer's order. If you have trouble understanding this field, think of it as how much you would charge per pound (\$/lb) or how much you would charge per kilogram (\$/kg), etc.
4. Fill in the rest of the details for the module. Refer to "Common Shipping Settings" on page 122 for explanations for the rest of the fields.
5. Click **update** to save your changes into the database.

Before you begin to test this module, you need to create a product in your store. We shall use the Normal Test Product (refer to "Normal Test Product" on page 65 for details) for the purpose of our test.

Before you test this module, you can turn off tare weight to simplify the interpretation of the test results. Click on **Configuration > Shipping/Packaging** and set the following fields to 0:0.

- **Package Tare Small to Medium - added percentage:weight**
- **Larger packages - added packaging percentage:weight**

To test this module:

1. Log in to your test customer account in your Store Front.
2. Add *two* or more "Normal Test Product" products to your cart and check out the items. By adding multiple items, you can better visualize and verify the accuracy of the shipping charges calculation.
3. At the Delivery Information screen, you should see "Per Unit" appear as a shipping option under the

Shipping Method section.

Shipping Method:
Please select the preferred shipping method to use on this order.

Per Unit	\$0.40
<input checked="" type="radio"/> Best Way	

4. Check that the amount appearing next to the **Best Way** radio button is correct based on your settings for this module.

Repeat the test with different values for the tare weight to better understand how shipping charges for this shipping module are calculated by Zen Cart.



Warning Do check that you have set the value of “**Enter the Maximum Package Weight you will ship**” in **Configuration > Shipping/Packaging** to a value that is *higher* than your expected *total order weight*. If not, you might find that your shipping cost is limited to the weight of the maximum package weight instead of the total weight of the order.

Store Pickup

This shipping module gives customers the benefit of picking up their items at your store instead of incurring any delivery charges. Similarly, it saves store owners the hassle of having to pack and deliver the goods. If you use this option, do consider defining a *shipping Zone Definition* that covers your local vicinity so that only customers with shipping addresses in the vicinity can see this shipping module.

To configure this module:

1. Click on **Modules > Shipping** to access the Shipping Modules screen.
2. Edit the **Store Pickup** module. If required, install the module first.

Store Pickup

Enable Store Pickup Shipping
Do you want to offer In Store rate shipping?

True
 False

Shipping Cost
The shipping cost for all orders using this shipping method.
0.00

Tax Class
Use the following tax class on the shipping fee.
--none--

Tax Basis
On what basis is Shipping Tax calculated.
Options are
Shipping - Based on customers Shipping Address
Billing Based on customers Billing address
Store - Based on Store address if Billing/Shipping Zone equals Store zone

Shipping
 Billing

Shipping Zone
If a zone is selected, only enable this shipping method for that zone.
--none--

Sort Order
Sort order of display.
0

Buttons: update, cancel

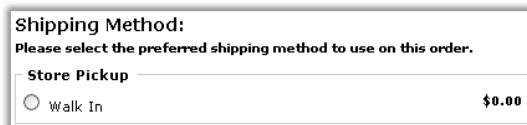
3. In the **Shipping Cost** field, specify the amount you would like to charge for customers who choose to pick up their goods from your store. Usually, this amount is left at 0.00 unless there is some warehousing costs to the store owner.

4. Fill in the rest of the details for the module. Refer to “Common Shipping Settings” on page 122 for explanations for the rest of the fields.
5. Click **update** to save your changes into the database.

Before you begin to test this shipping module, you need to create a product in your store. We shall use the Normal Test Product (refer to “Normal Test Product” on page 65 for details) for the purpose of our test.

To test this module:

1. Log in to your test customer account in your Store Front.
2. Add a “Normal Test Product” product to your cart and check out the item.
3. At the Delivery Information screen, you should see “Store Pickup” appear as a shipping option under the Shipping Method section.



4. Check that the amount appearing next to the **Walk In** radio button is correct based on your settings for this module.

Table Rates

This shipping module allows you to apply different shipping charges based on either the *weight, price or number of items* bands. For example, you can charge \$10 for orders above \$50 and \$2 for orders above \$100. Specifying table rates based on price or number of items is entirely up to how your business operates. To specify table rates by weight, you can usually obtain a copy of the shipping rates table from your local post office to help you get started.

Understanding the Shipping Table

Before we go any further, you need to understand the syntax of the **Shipping Table** field which you will encounter later.

Example 1: Table Method = Weight

In this example, you have specified that the value of the **Shipping Table** represents *weight*. Let us assume that the total weight of a customer's order is “x” and that the *default unit of measure for weight* is in “lbs”. If the value of the **Shipping Table** field is 25:8.50,50:5.50,1000:0.00, it essentially means the following:

$x \leq 25$ lbs	:	Shipping Rates = \$8.50
$25 < x \leq 50$ lbs	:	Shipping Rates = \$5.50
$50 < x \leq 1000$ lbs	:	Shipping Rates = \$0.00 i.e. Free Shipping for total weight above 50 lbs.

Example 2: Table Method = Price

In this example, you have specified that the value of the **Shipping Table** represents *price*. Let us assume that the total price of a customer's order is “y” and that the *default currency* is in “\$”. If the value of the **Shipping Table** field is

25:8.50,50:5.50,1000:0.00, it essentially means the following:

```
y ≤ $25 : Shipping Rates = $8.50
$25 < y ≤ $50 : Shipping Rates = $5.50
$50 < y ≤ $1000 : Shipping Rates = $0.00 i.e. Free Shipping for purchases above $50
```

Example 3: Table Method = Number of Items

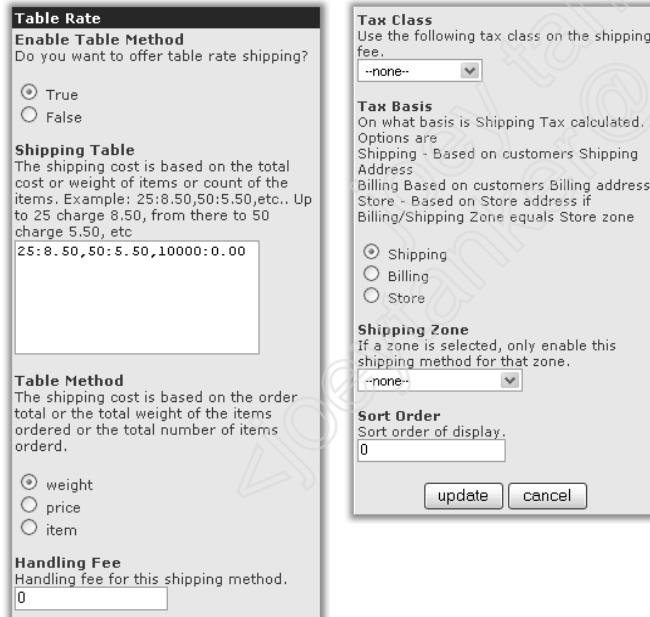
In this example, you have specified that the value of the **Shipping Table** represents *number of items*. Let us assume that the total number of items in a customer's order is "z". If the value of the **Shipping Table** field is 25:8.50,50:5.50,1000:0.00, it essentially means the following:

```
z ≤ 25 : Shipping Rates = $8.50
25 < z ≤ 50 : Shipping Rates = $5.50
50 < z ≤ 1000 : Shipping Rates = $0.00 i.e. Free Shipping for more than 50 items bought
```

Make sure you understand how the Shipping Table works before you begin configuring this shipping module.

To configure this module:

1. Click on **Modules > Shipping** to access the Shipping Modules screen.
2. Edit the **Table Rate** module. If required, install the module first.



3. Change the value of the **Shipping Table** field according to your preference and then specify what the **Shipping Table** field represents by clicking the appropriate radio button in the **Table Method** field.
4. Fill in the rest of the details for the module. Refer to "Common Shipping Settings" on page 122 for explanations for the rest of the fields.
5. Click **update** to save your changes to the database.

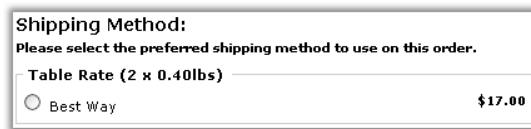
Before you begin to test this module, you need to create a product in your store. We shall use the Normal Test Product (refer to "Normal Test Product" on page 65 for details) for the purpose of our test.

The following test uses *weight* for illustration. You should substitute it with either price or number of items to suit your own needs. Before you test this module, you can turn off tare weight to simplify the interpretation of the test results. Click on **Configuration > Shipping/Packaging** and set the following fields to 0:0.

- **Package Tare Small to Medium - added percentage:weight**
- **Larger packages - added packaging percentage:weight**

To test this module:

1. Log in to your test customer account in your Store Front.
2. Add *two* or more “Normal Test Product” products to your cart and check out the items. By adding multiple items, you can better visualize and verify the accuracy of the shipping charges calculation.
3. At the Delivery Information screen, you should see “Table Rate” appear as a shipping option under the Shipping Method section.



If your table method calculation is based on weight, you will see the *number of shipping boxes* and *weight per box* fields next to the “Table Rate” heading

4. Check that the amount appearing next to the **Best Way** radio button is correct based on your settings for this module.



Warning If you use a **Table Method** of weight when configuring this shipping module, make sure you check the tare weight values you have configured in **Configuration > Shipping/Packaging** makes sense to you.

Zone Rates

Zone Rates can be considered a superset of Table Rates. Both shipping modules operate on the same underlying concept using band rates for *weight*, *price* or *number of items* in an order. Whereas the Table Rates shipping module has only one shipping table for an entire shipping zone, the Zone Rates shipping module provides different shipping tables for multiple shipping zones.

To look up the ISO country code for a particular country while configuring this module, go to <http://www.unicode.org/onlinedat/countries.html>.

To configure this module:

1. Click on **Modules > Shipping** to access the Shipping Modules screen.
2. Edit the **Zone Rates** module. If required, install the module first.

Zone Rates Enable Zones Method Do you want to offer zone rate shipping? <input checked="" type="radio"/> True <input type="radio"/> False	Skip Countries, use a comma separated list of the two character ISO country codes Disable for the following Countries: <div style="border: 1px solid black; height: 50px; width: 100%;"></div>	Zone 2 Countries Comma separated list of two character ISO country codes that are part of Zone 2. Set as 00 to indicate all two character ISO country codes that are not specifically defined. <div style="border: 1px solid black; height: 50px; width: 100%;"></div>	Zone 3 Countries Comma separated list of two character ISO country codes that are part of Zone 3. Set as 00 to indicate all two character ISO country codes that are not specifically defined. <div style="border: 1px solid black; height: 50px; width: 100%;"></div>
Calculation Method Calculate cost based on Weight, Price or Item? <input checked="" type="radio"/> Weight <input type="radio"/> Price <input type="radio"/> Item	Zone 1 Countries Comma separated list of two character ISO country codes that are part of Zone 1. Set as 00 to indicate all two character ISO country codes that are not specifically defined. <div style="border: 1px solid black; height: 50px; width: 100%;"></div>	Zone 2 Shipping Table Shipping rates to Zone 2 destinations based on a group of maximum order weights/prices. Example: 3:8.50,7:10.50,... Weight/Price less than or equal to 3 would cost 8.50 for Zone 2 destinations. <div style="border: 1px solid black; height: 50px; width: 100%;"></div>	Zone 3 Shipping Table Shipping rates to Zone 3 destinations based on a group of maximum order weights/prices. Example: 3:8.50,7:10.50,... Weight/Price less than or equal to 3 would cost 8.50 for Zone 3 destinations. <div style="border: 1px solid black; height: 50px; width: 100%;"></div>
Tax Class Use the following tax class on the shipping fee. <div style="border: 1px solid black; width: 100px; height: 20px;"></div>	Zone 1 Shipping Table Shipping rates to Zone 1 destinations based on a group of maximum order weights/prices. Example: 3:8.50,7:10.50,... Weight/Price less than or equal to 3 would cost 8.50 for Zone 1 destinations. <div style="border: 1px solid black; height: 50px; width: 100%;"></div>	Zone 2 Handling Fee Handling Fee for this shipping zone <div style="border: 1px solid black; width: 100px; height: 20px;"></div>	Zone 3 Handling Fee Handling Fee for this shipping zone <div style="border: 1px solid black; width: 100px; height: 20px;"></div>
Tax Basis On what basis is Shipping Tax calculated. Options are Shipping - Based on customers Shipping Address Billing Based on customers Billing address Store - Based on Store address if Billing/Shipping Zone equals Store zone <input checked="" type="radio"/> Shipping <input type="radio"/> Billing <input type="radio"/> Store	Zone 1 Handling Fee Handling Fee for this shipping zone <div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="text-align: right; margin-right: 10px;"> <input type="button" value="update"/> <input type="button" value="cancel"/> </div>	
Sort Order Sort order of display. <div style="border: 1px solid black; width: 100px; height: 20px;"></div>			

3. Select an appropriate value for the **Calculation Method** field.
4. If you do *not* want this shipping option to *appear* for shipping addresses in specific countries, add the necessary ISO country codes in the **Skip Countries** field.

Customers with shipping addresses in countries not specified in the **Skip Countries** field and also not specified in all the **Zone Countries** field will see a message displayed under the “Zone Rates” shipping option as shown in the following screen shot.

Shipping Method: Please select the preferred shipping method to use on this order.
Zone Rates <div style="border: 1px solid black; width: 100%; height: 40px;"></div>
No shipping available to the selected country

5. For each zone, fill in the necessary details for the **Zone Countries**, **Zone Shipping Table** and **Zone Handling Fee** fields.
6. Fill in the rest of the details for the module. Refer to “Common Shipping Settings” on page 122 for explanations for the rest of the fields.
7. Click **update** to save your changes into the database.



Tip

You can change the number of zones available to you by editing `<zc-home>/includes/modules/shipping/zones.php` and changing the value of `this->num_zones=3` to something else; e.g. `this->num_zones=5`.

We shall use the Normal Test Product (refer to “Normal Test Product” on page 65 for details) for the purpose of our test. The following test uses *weight* for illustration. You should substitute it with either price or number of items to

suit your own needs.

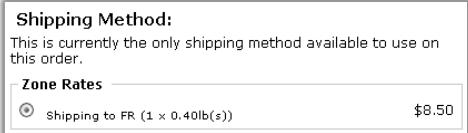
In addition, we shall use the test customer we created in “Setting Up a Test Customer” on page 62 for our test. Note that the ISO country code for the test customer's country of France is “FR”.

To simplify the interpretation of test results, you can turn off tare weight for the time being. Click on **Configuration > Shipping/Packaging** and set the following fields to 0:0.

- **Package Tare Small to Medium - added percentage:weight**
- **Larger packages - added packaging percentage:weight**

To test this module:

1. Log in to your test customer account in your Store Front.
2. Add *two* or more “Normal Test Product” products to your cart and check out the items. By adding multiple items, you can better visualize and verify the accuracy of the shipping charges calculation.
3. At the Delivery Information screen, you should see “Zone Rates” appear as a shipping option under the Shipping Method section.



4. Check that the amount appearing next to the **Shipping to** radio button is correct based on your settings for this module.



If you use a **Calculation Method** of weight when configuring this shipping module, do check the tare weight values you have configured in **Configuration > Shipping/Packaging** makes sense to you.

Free Shipping

This shipping module allows you to offer free shipping to your customers. Note that it is compulsory to enable this module if you decide to do the following:

- Offer discount coupons which are marked as free shipping. Refer to “Creating Discount Coupons” on page 313 for details
- If you have a product configured for free shipping in your store.
- If you sell downloadable products.

When this shipping option appears in the Delivery Information page during check out, all other shipping options (except Store Pickup, if enabled) will automatically disappear. To enable free shipping to appear simultaneously with other shipping options (besides Store Pickup, if enabled) in the Delivery Information page during check out, use the “Free Shipping Options” module instead.

You can choose from the following list of conditions to trigger the *appearance* of the Free Shipping option when customers check out their purchases:

- The total price of a customer's order exceeds a threshold value.
- If a product does not have any unit weight associated with it.

- If *all* products in a customer's order are configured for free shipping as follows:
 - ➔ **Product is Virtual** field is *not* set to Yes, Skip Shipping Address.
 - ➔ **Always Free Shipping** field is set to No, Normal Shipping Rules.

To trigger the appearance of the Free Shipping option when the total price of a customer's order exceeds a threshold value:

1. Click on **Modules > Order Total** to access the Order Totals Modules screen.
2. Click on **Shipping** and edit the item.
3. Specify true for the **Allow Free Shipping** field.
4. Set the threshold amount to trigger free shipping in the **Free Shipping For Orders Over** field.
5. Specify whether free shipping should apply for international or national delivery addresses in the **Provide Free Shipping For Orders Made** field. Choose both for testing purposes.

To trigger the appearance of the Free Shipping option when a product does not have any unit weight associated with it:

1. Click on **Configuration > Shipping/Packaging** to access the Shipping/Packaging screen.
2. Set the **Order Free Shipping 0 Weight Status** field to 1.



Note

I'd recommend that you do not allow free shipping to be activated based on the fact that a product does not have a weight attached to it. If you are careless and forget to input a weight for a product, you might end up having to pay yourself to ship the goods.

To trigger the appearance of the Free Shipping option when *all* products in a customer's order are configured for free shipping, you need to first make sure that you have a product that is configured to take advantage of such a scenario first. To configure such a product:

1. Click on **Catalog > Categories/Products** to access the Categories/Products screen.
2. Navigate to the the category containing the product you want to configure for free shipping. If you do not have such a product, you can create one first.
3. Edit the details of the product. Make sure the following fields are set as follows:
 - **Product is Virtual** field is *not* set to Yes, Skip Shipping Address.
 - **Always Free Shipping** field is set to No, Normal Shipping Rules.



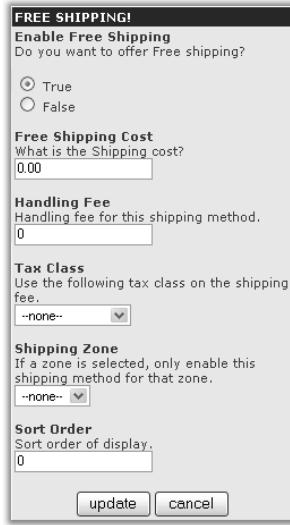
Note

If all products in a customer's order are virtual products or downloadable products, then the Delivery Information page will be *skipped* altogether. In both cases, the Free Shipping modules should still be enabled as it is used to drive the checkout process.

Now that you understand the conditions that will trigger the appearance of the Free Shipping option during check out, you can start configuring the Free Shipping module.

To configure this module:

1. Click on **Modules > Shipping** to access the Shipping Modules screen.
2. Edit the **FREE SHIPPING!** module. If required, install the module first.



3. In the **Free Shipping Cost** field, specify the amount to charge customers who choose this option. Specifying a fee here is discouraged because customers expect Free Shipping to be literally *free*!
4. Fill in the rest of the details for the module. Refer to “Common Shipping Settings” on page 122 for explanations for the rest of the fields.
5. Click **update** to save your changes to the database.

Before you begin to test this module, you need to create a product in your store. We shall use the Normal Test Product (refer to “Normal Test Product” on page 65 for details) for the purpose of our test.

We shall assume that you have chosen to trigger Free Shipping based on *price*.

To test this module:

1. Log in to your test customer account in your Store Front.
2. Add a “Normal Test Product” product to your cart and check out the item.
3. At the Delivery Information screen, you should see “Free Shipping” appear as the *only* shipping option under the Shipping Method section if your free shipping threshold value is below the order price.



4. Note that the threshold value for free shipping is shown on the screen as well.

Free Shipping Options

This shipping module allows you to offer free shipping to customers side-by-side with other shipping options. This is not possible with Free Shipping which causes all other shipping modules (except Store Pickup, if enabled) to disappear when it appears. Furthermore, you can choose to have this shipping option appear based on the *total price*, *total weight* or *total number of items* in a customer's order.

To configure this module:

1. Click on **Modules > Shipping** to access the Shipping Modules screen.
2. Edit the **Free Shipping Options** module. If required, install the module first.

The screenshot shows the configuration interface for the 'Free Shipping Options' module. It consists of three main panels:

- Enable Free Options Shipping:** Describes the module's purpose and how it interacts with other shipping modules. It includes a note about leaving settings blank and a radio button for offering per freeoptions rate shipping.
- Handling Fee:** Allows setting a handling fee for this shipping method. The 'Total >=' field is set to '0.00'.
- Tax Class:** Allows selecting a tax class for the shipping fee. The dropdown is set to '-none-'.
- Tax Basis:** Allows selecting the basis for calculating shipping tax. Options are 'Shipping - Based on customers Shipping Address' and 'Billing - Based on customers Billing address'. It also includes 'Store - Based on Store address if Billing/Shipping Zone equals Store zone'.
- Weight >=:** Allows setting a weight threshold for free shipping. The 'Weight >=' field is set to '0.00'.
- Weight <=:** Allows setting a weight threshold for free shipping. The 'Weight <=' field is set to '0.00'.
- Item Count >=:** Allows setting an item count threshold for free shipping. The 'Item Count >=' field is set to '0.00'.
- Item Count <=:** Allows setting an item count threshold for free shipping. The 'Item Count <=' field is set to '0.00'.
- Shipping Zone:** Allows enabling this shipping method for a specific zone. The dropdown is set to '-none-'.
- Sort Order:** Allows specifying the sort order of the display. The 'Sort order of display' field is set to '0'.

3. Carefully read the instructions on the side-panel before you start configuring this module.
4. Specify how Free Shipping Option should be triggered based on the corresponding **Total**, **Weight** and **Item Count** fields.
5. Avoid entering a value for the **Shipping Cost** field because customers expect Free Shipping Options to be literally *free!*
6. Fill in the rest of the details for the module. Refer to "Common Shipping Settings" on page 122 for explanations for the rest of the fields.
7. Click **update** to save your changes into the database.

Before you begin to test this module, you need to create a product in your store. We shall use the Normal Test Product (refer to "Normal Test Product" on page 65 for details) for the purpose of our test.

We shall assume that you have chosen to trigger Free Shipping based on *number of items* in an order. Thus, you should have entered 2 for the **Item Count >=** field when configuring this module.

To test this module:

1. Log in to your test customer account in your Store Front.
2. Add *three* or more “Normal Test Product” products to your cart and check out the items. By adding multiple items, you can better visualize and verify the accuracy of the shipping charges calculation.
3. At the Delivery Information screen, you should see “Free Shipping Options” displayed as a shipping option under the Shipping Method section.



4. Check that the amount appearing next to the **Free Shipping** radio button is correct based on your settings for this module.



Warning Do check the tare weight values you have configured in **Configuration > Shipping/Packaging** if you use weight as a trigger for activating this shipping module.

Summary

Shipping options are an important aspect of an online store. Finding the best option for your situation will require some planning and creative experimentation. Make sure you spend some time to understand how the module you choose actually works. It could save you a lot of embarrassing questions from customers later.

To keep things simple, we did not discuss any shipping modules that require an account with an external shipper (United States Postal Service (USPS), United Parcel Service (UPS), etc). Do consider using a third-party shipper if you require real-time shipping charges to be calculated. You can find more shipping modules catering to external shippers (DHL, FedEx, etc) in the downloads area at Zen Cart's site.

Chapter 11 Payment

Introduction

Zen Cart provides various payment modules to cater to the different ways in which store owners intend to process customer's payment information. Each payment module that is enabled will then appear as a payment option to customers based on the billing addresses they select when they check out their items.

Before offering any payment option to your customers, make sure you find out more about the legal and accounting requirements of your country. For example, in most countries, you need to ensure that customers credit card information must be transmitted over a secure channel and such credit card information must be stored securely.

Zen Cart comes with a number of default payment modules. However, we will not be covering the Authorize.net, Authorize.net (AIM) and Linkpoint/YourPay API payment modules. Instead, we will cover the PayPal IPN payment module as it is the most popular form of online payment at the moment. Once you are familiar with how the PayPal IPN module works, you should be able to adapt the concept to other payment modules that require access to a third-party payment processor.

In this chapter, we shall:

- Run through the common payment screen and payment settings.
- Go through each payment option separately.



Note

To keep the explanation of each payment module independent, we shall discuss how to test each payment module immediately after learning how to configure it.

Default Payment Modules Overview

Before you decide which payment options to offer your customers, you can consult the table below to get an idea of the various payment modules available by default in Zen Cart. These payment modules are classified according to the methods they employ to process payments, such as:

- *Online* – Processing is done in real-time with an external payment processor.
- *Offline* – Processing is done when information is collected and the store owner has to take action to complete the payment process.
- *Special* – This is a special case where no action is taken to process payment.

Table 11.1: Default payment options

Modules	Method	Comments
Cash on Delivery	Offline	Payment is received on delivery of goods. Not advisable for global e-commerce!
Check/Money Order	Offline	Customers will mail in their check or money order separately after placing their orders.
Credit Card	Offline	Customers transmit their credit card information to you and you process the payment with your bank separately.
Authorize.net	Online	Integrates with Authorize.net payment processor. See http://www.authorize.net/ for details.
Authorize.net (AIM)	Online	Same as above but uses Authorize.net's Advanced Integration Method (AIM) for integration.
Linkpoint/YourPay API	Online	Integrates to the LinkPoint payment gateway. For more information on signing up for a merchant account and using this module, go to http://www.zen-cart.com/partners/linkpoint for details.
PayPal IPN	Online	Integrates to PayPal payment processor. To sign up for a PayPal business account and obtain more information on PayPal, go to http://www.zen-cart.com/partners/paypal for details.
PayPal Express Checkout	Online	Also integrates to PayPal payment processor but has the added benefit of shortening the checkout process for customers. For more information on this payment module, turn to the PayPal Express Checkout sub-forum on Zen Cart's site.
The Zen Cart FREE CHARGE CARD	Special	Allows you to specify that customers from a specific zone are able to buy things from your store for free.

Enabling Network Access to Third-Party Sites

If you have enabled a payment module (e.g. Linkpoint/YourPay API) which requires access to a third-party site to process payments, you may need to enable cURL support on your server. Refer to “Enabling Network Access to Third-Party Sites” on page 117 for more details on this issue.

Common Payment Information

Before we start adding payment options, you need to know certain common payment information that will help ease your configuration later.

The Payment Modules Screen

All payment options in Zen Cart are configured via the Payment Modules screen. To access this screen, click on **Modules > Payment**.

PAYMENT MODULES					
Modules		Sort Order	Orders	Status	Action
Authorize.net SIM	authorizeren	●			►
Authorize.net (AIM)	authorizeren_aim	●			ⓘ
Credit Card	cc	0	●	default	ⓘ
Cash on Delivery	cod	●			ⓘ
The Zen Cart FREE CHARGE CARD	freecharger	0	●	default	ⓘ
Linkpoint/YourPay API	linkpoint_api		●		ⓘ
Check/Money Order (not configured - needs pay-to)	moneyorder	0	●	default	ⓘ
PayPal IPN	paypal	●			ⓘ
PayPal Express Checkout	paypalwpp	●			ⓘ

A payment option can only be used if it is:

- Installed.
- Enabled.

Therefore, you should automatically perform the above steps if you are asked to configure a payment option later in the chapter.

The colors of the buttons under the Sort Order column have the following meanings:

- **Red** – Payment Module is not installed.
- **Green** – Payment Module is installed and enabled.
- **Yellow** – Payment Module is installed but disabled or the Payment Zone field is enabled only for a particular zone.

Common Payment Settings

Certain fields which are common across most of the different payment options are highlighted in the following table so we do not have to explain them again later.

Table 11.2: Common payment settings

Property	Meaning
Payment Zone	For payment modules that have selected a particular zone definition for this field, customers will only see the corresponding payment option if their billing addresses fall within the selected zone definition. Specifying <u>none</u> for this field for a particular payment module will make the corresponding payment option appear to <i>all</i> customers. For testing purposes, set this field to <u>none</u> .

Table 11.2: Common payment settings (continued)

Property	Meaning
Set Order Status	<p>Specifies the status of an order after a customer has made payment. The default installation of Zen Cart comes with four order statuses defined - <i>Pending</i>, <i>Processing</i>, <i>Delivered</i>, <i>Updated</i>.</p> <p>The <u>default</u> value in the drop-down list box refers to the <i>default</i> order status defined in Localization > Orders Status. For more details on order statuses, refer to “Working with Order Statuses” on page 298.</p>
Sort Order of Display	<p>Indicates the sequence in which payment options appear to a customer when checking out. A payment option with a <i>lower</i> value will appear <i>above</i> a payment option with a <i>higher</i> value.</p> <p>You can leave this field set to <u>0</u> for all payment modules to let Zen Cart sort the payment options automatically when customers view them.</p> <p>If you choose to specify a non-zero value for this field, make sure you also specify a non-zero value for all other payment modules. In addition, all non-zero values must be different.</p>

Adding Payment Options

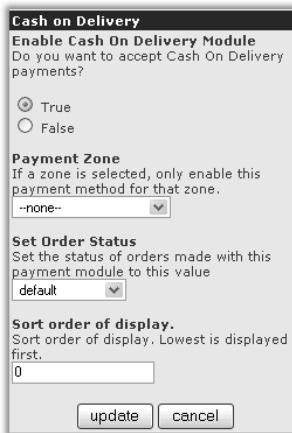
Cash on Delivery

Generally, this method is not recommended for e-commerce. However, if you are just beginning to add an online presence on top of your current brick-and-mortar shop; and you already have a base of loyal customers, then this would be an excellent option for you.

To discourage customers from choosing this payment option, you can consider charging customers an extra fee if they choose this payment option during checkout. Refer to “Cash on Delivery (COD) Fee” on page 238 for more details.

To configure this module:

1. Click on **Modules > Payment** to access the Payment Modules screen.
2. Edit the **Cash on Delivery** module. If required, install the module first.



3. Fill in the details for the module. Refer to “Common Payment Settings” on page 139 for explanations for all the fields.
4. Click **update** to save your changes into the database.

Before you begin to test this module, you need to create a product in your store. We shall use the Normal Test Product (refer to “Normal Test Product” on page 65 for details) for the purpose of our test.

To test this module:

1. Log in to your test customer account in your Store Front.
2. Add a “Normal Test Product” product to your cart and check out the item.
3. At the Delivery Information screen, choose any shipping method and click **continue checkout** to proceed to the Payment Information screen.
4. At the Payment Information screen, you should see “Cash on Delivery” appear as a payment option under the Payment Method section.



Check and Money Order

This method is not recommended for e-commerce because it takes time both for the check or money order to arrive and for them to clear with the banks. However, it is a safer means of collecting payment as it avoids online fraud. In any case, certain businesses will always need to have this means of receiving payment, so we shall discuss how this can be done in Zen Cart.

To configure this module:

1. Click on **Modules > Payment** to access the Payment Modules screen.
2. Edit the **Check/Money Order** module. If required, install the module first.

Check/Money Order (not configured - needs pay-to)

Enable Check/Money Order Module
Do you want to accept Check/Money Order payments?

True
 False

Payment Zone
If a zone is selected, only enable this payment method for that zone.
-none-

Set Order Status
Set the status of orders made with this payment module to this value
default

Sort order of display.
Sort order of display. Lowest is displayed first.
0

Make Payable to:
Who should payments be made payable to?
the Store Owner/Website

update cancel

3. Enter the name of the person or entity that should receive the check or money order in the **Make Payable to** field. Do not use the default text displayed in the text box.
4. Fill in the details for the rest of the module. Refer to “Common Payment Settings” on page 139 for explanations for the rest of the fields.
5. Click **update** to save your changes into the database.

Before you begin to test this module, you need to create a product in your store. We shall use the Normal Test Product (refer to “Normal Test Product” on page 65 for details) for the purpose of our test.

To test this module:

1. Log in to your test customer account in your Store Front.
2. Add a “Normal Test Product” product to your cart check out the item.
3. At the Delivery Information screen, choose any shipping method and click **continue checkout** to proceed to the Payment Information screen.
4. At the Payment Information screen, you should see “Check/Money Order” appear as a payment option under the Payment Method section.

Payment Method

We accept:

Please select a payment method for this order.

Check/Money Order

5. Click the radio button next to Check/Money Order and then click on **continue checkout** to proceed to the Order Confirmation screen.

Payment Method:
Check/Money Order
Please make your check or
money order payable to:
Claude Blanc _____ "Make Payable to" field

Mail your payment to:
Store Name _____
Address _____
Country _____
Phone _____ Store Contact information.
To change, click on Configuration > My Store.
Edit the field "Store Address and Phone"

Your order will not ship until we receive payment.

Free Charge Card

Unlike all other payment modules in Zen Cart, this payment module does *not* involve any monetary transaction. Its main purpose is to offer customers a smoother checkout experience. When this payment option appears, all *other* payment options will *disappear* thus speeding up the checkout process because customers do not have to spend time choosing between different payment options.

This payment option is available only to products that satisfy the following criteria:

- Product price is marked as Free.
- Product comes with Free Shipping.

Note that this payment option will only *appear* if *all items* in the customer's shopping cart satisfy the above criteria.

In addition, if an order happens to qualify for free shipping because a free shipping coupon was redeemed, then this payment option will appear as well.

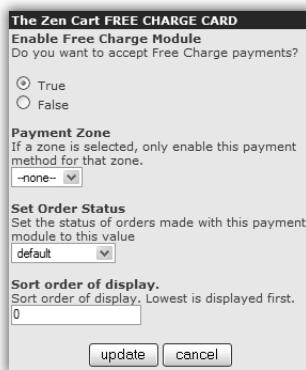
You may ask why anyone would offer a free item? Well, you could do this to gain some publicity to your site or build goodwill among your customers. For example, if your store sells hard-copy magazines; you can offer readers a free electronic download of a particular magazine's article to entice them to sign up for a subscription to that magazine. Most customers would also have a better impression of your store since you have given them a "try-before-you-buy" option.

Before you begin to configure this module, you need to enable the Free Shipping option in Zen Cart:

1. Click on **Modules > Shipping** to access the Shipping Modules screen.
2. Click on **FREE SHIPPING!** and make sure it is installed and enabled.
3. Make sure both the **Free Shipping Cost** and **Handling Fee** fields are set to 0.
4. You can specify **Tax Class**, **Shipping Zone** and **Sort Order** according to your preferences.

To configure this module:

1. Click on **Modules > Payment** to access the Payment Modules screen.
2. Edit the **The Zen Cart FREE CHARGE CARD** module. If required, install the module first.



3. Fill in the details for the module. Refer to “Common Payment Settings” on page 139 for explanations for the rest of the fields.
4. Click **update** to save your changes into the database.

Before you begin to test this module, you need to have a free product that also offers free shipping. Do take note that the product has to be marked as *Product is Free* and not just specified as having a price of \$0.00! We shall use the “Free Test Product with Free Shipping” (refer to “Free Test Product with Free Shipping” on page 66 for details) product for the purpose of our test.

To test this module:

1. Log in to your test customer account in the Store Front.
2. Add a “Free Test Product with Free Shipping” product to your cart and check out the item.
3. The Delivery Information screen will *only* appear if you have specified No, Shipping Address Required for the **Product is Virtual** field when you created your product. Only the Free Shipping and Store Pickup shipping options will be visible regardless of whether other shipping modules are available.



Choose any shipping option and click **continue checkout** to go to the Payment Information screen.

4. At the Payment Information screen, you should see “The Zen Cart FREE CHARGE CARD” appear as the only option under the Payment Method section.



It is recommended that you change the wording “The Zen Cart FREE CHARGE CARD” to avoid confusing your customers as they are unlikely to know what it means. Before doing that, make sure you go through the “The Template Override System” on page 270 to learn how to edit files in Zen Cart properly.

To change the relevant wording, look for the file

<zc-home>/includes/languages/english/modules/payment/freecharger.php and edit its contents accordingly.

Credit Card

If you select this option, you must have the means to process credit card payments yourself. In addition, you should also take note of any legal or commercial requirements as well.

Because credit card information is extremely sensitive, your credit card merchant's terms of service (TOS) will likely require that you do not store any complete credit card numbers in your database in case your store gets hacked.

To comply with the TOS of your merchant and to simplify the store owners task of processing credit card numbers, credit card numbers that are collected by this module are split into two parts. One part will contain only the *middle digits* of the credit card number and is sent to an email address of specified by a store owner. The *remaining digits* of the credit card number will be stored in the database. Store owners will then be the only ones who are able to retrieve both sets of numbers and combine them to get a complete credit card number for processing.

Before you enable the credit card processing module, you need to specify which credit cards your online store will accept. Click on **Configuration > Credit Cards** to enable the relevant credit card you want to support.

CREDIT CARDS	
Title	Value
Credit Card Enable Status - VISA	1
Credit Card Enable Status - MasterCard	1
Credit Card Enable Status - AmericanExpress	1
Credit Card Enable Status - Diners Club	0
Credit Card Enable Status - Discover Card	1
Credit Card Enable Status - JCB	0
Credit Card Enable Status - AUSTRALIAN BANKCARD	0
Credit Card Enable Status - SOLO	0
Credit Card Enable Status - Switch	0
Credit Card Enable Status - Maestro	0
Credit Card Enabled - Show on Payment	2

Take note of the **Credit Card Enabled – Show on Payment** field. It allows you to show your store's accepted credit cards at the Payment Information screen when customers check out their purchases.

To configure this module:

1. Click on **Modules > Payment** to access the Payment Modules screen.
2. Edit the **Credit Card** module. If required, install the module first.

The screenshot shows the 'Credit Card' configuration module. It includes sections for enabling the module, collecting CVV, and splitting credit card e-mail addresses. The 'Enable Credit Card Module' section has a note: 'Do you want to accept credit card payments?' with radio buttons for 'True' and 'False'. The 'Collect & store the CVV number' section has a note: 'Do you want to collect the CVV number. Note: If you do the CVV number will be stored in the database in an encoded format.' with radio buttons for 'True' and 'False'. The 'Split Credit Card E-Mail Address' section has a note: 'If an e-mail address is entered, the middle digits of the credit card number will be sent to the e-mail address (the outside digits are stored in the database with the middle digits censored)' with a text input field containing 'storekeeper@example.com'. The 'Payment Zone' section has a note: 'If a zone is selected, only enable this payment method for that zone.' with a dropdown menu showing '-none-' selected. The 'Set Order Status' section has a note: 'Set the status of orders made with this payment module to this value' with a dropdown menu showing 'default'. The 'Sort order of display' section has a note: 'Sort order of display. Lowest is displayed first.' with a text input field containing '0'. At the bottom are 'update' and 'cancel' buttons.

3. Refer to the following table before you fill in the details for the **Collect and store the CVV number** and **Split Credit Card E-mail Address** fields.

Property	Meaning
Collect and store the CVV number	<p>This option allows you to specify whether to store the CVV number in your database. The CVV number stands for “Creditcard Validation Value”. It is a 3 or 4 digit code embossed or imprinted on the reverse side of Visa, MasterCard and Discover cards and on the front of American Express cards.</p> <p>It provides an added layer of fraud prevention for stolen credit card numbers. If you specify <u>false</u> for this setting, Zen Cart will <i>not</i> prompt customers to enter a CVV number when specifying their credit card details. Recommended setting: <u>true</u>.</p>
Split Credit Card E-mail Address	<p>The email address you specify here will contain the middle 8 digits of the credit card number a customer submits.</p> <p>Note: If you do <i>not</i> specify an email here, no credit card information will be stored in the database! You will not be able to process any credit card payments and Zen Cart will send you an email warning you about this situation.</p>

4. Fill in the details for the rest of the module. Refer to “Common Payment Settings” on page 139 for explanations for the rest of the fields.
5. Click **update** to save your changes into the database.

Before you begin to test this module, you need to create a product in your store. We shall use the Normal Test Product (refer to “Normal Test Product” on page 65 for details) for the purpose of our test.

To test this module:

1. Log in to your test customer account in your Store Front.
2. Add a “Normal Test Product” product to your cart and check out the item.
3. At the Delivery Information screen, choose any shipping method and click **continue checkout** to proceed to the Payment Information screen.
4. At the Payment Information screen, you should see “Credit Card” appear as a payment option under the Payment Method section.

The screenshot shows a 'Payment Method' section with a heading 'We accept:'. Below it is a list of payment method icons, with 'My Card' appearing multiple times. A radio button labeled 'Credit Card' is selected. Below the radio button are input fields for 'Card Owner's Name' (containing 'Jacques Pires'), 'Card Number', 'Expiration Date' (set to 'January 2006'), and 'CVV Number (More Info)'.

If you would like to see the images of your store's accepted credit cards as they appear in the preceding screen shot, click on **Configuration > Credit Cards** and edit the **Credit Card Enabled - Show on Payment** field accordingly. The images of the credit cards are contained in the directory `<zchome>/includes/templates/template_default/images/icons`. Refer to "The Template Override System" on page 270 to learn how you can change the images properly.

5. Click the Credit Card radio button and use the following *test* values:
 - 5.1. Retain the value of the **Card Owner's Name** or specify a new one if you desire.
 - 5.2. Enter 4111111111111111 into the **Card Number** field. Zen Cart will recognize this as a *test* credit card number.
 - 5.3. Specify any valid *future* date in the **Expiration Date** field.
 - 5.4. Enter any number for the **CVV Number** field. This field will only appear if you have specified True for the **Collect and store the CVV number** field while configuring this module.
6. Click on **continue checkout** to proceed to the Order Confirmation screen. Notice that the middle digits of the credit card number have been replaced with a sequence of 'X's.

Payment Method:
Credit Card
Credit Card: Visa
Card Owner's Name: Jacques Pires
Card Number:
4111XXXXXXX1111
Expiration Date: January, 2007
CVV Number (More Info) 123

7. Click on **confirm the order** to complete the checkout process.

If you have specified a valid email address for the **Split Credit Card E-mail Address** field while you were configuring this module, open up your email reader and look at the email sent to the aforementioned email address. You should see the middle eight digits of the credit card number that was previously entered in Step 5.2 above.

Subject: [EXTRA CC ORDER info] #30
From: Mega Store <storekeeper@example.com>
Reply-To: Mega Store <storekeeper@example.com>
Date: 1:58 AM
To: storekeeper@example.com

Please direct this email to the Accounting department so that it may be filed along with the online order it relates to:

Order: 30
Middle Digits: 11111111

To see the rest of the credit card number, click on **Customers > Orders** to proceed to the Orders screen. Use the order number you see in the email to help you locate which order in the orders screen you should look at. Click on the **edit** button next to the order and you should be presented with the details of the order. The remaining part of the credit card number will be displayed as shown in the following screen shot.

Invoice No. 30
Date Purchased: Thursday 28 September, 2006
Payment Method: Credit Card
Credit Card Type: Visa
Credit Card Owner: Jacques Pires
Credit Card Number: 4111XXXXXXX1111
Credit Card CVV Number: 456 Delete CVV from database
Credit Card Expires: 0115



Note

After you have tested using Zen Cart's *test* credit card number, you should get hold of some *real* credit card numbers for testing. This is to ensure that the credit cards you have enabled in **Configuration > Credit Cards** are correctly identified and accepted by Zen Cart.

PayPal IPN

PayPal is one of the most popular and widely-accepted payment methods on the Internet. It charges merchants a very low fee for its transactions and comes with an excellent fraud detection service. Furthermore, it does not levy any extra charge to open an account with them.

PayPal offers several payment solutions to online merchants for these merchants to process customer payments. The PayPal IPN module that comes with Zen Cart works with PayPal's "Website Payments Standard" payment solution. As of Zen Cart version 1.3.7.1, it does not support PayPal's "Website Payments Pro" payment solution.

IPN stands for Instant Payment Notification, and it is the means by which PayPal informs your store that it has successfully processed your customer's payment. Once your store receives this information from PayPal, Zen Cart then releases the order for the customer.

Do spend some time to find out how PayPal works by visiting its web site at <http://www.paypal.com>. The following steps will assume you are setting up PayPal IPN for the first time on a *remote* host.

You should go through the rest of the book and be sufficiently familiar with Zen Cart before attempting to set up the PayPal IPN payment module in Zen Cart.



Warning

PayPal IPN payment module will *not* work with a Zen Cart store that is running on your *local* computer.

You must have your Zen Cart store hosted on the Internet in order to go through the following set up! This is because PayPal needs to send information back to your online store and if your store's URL is not available on the Internet, then PayPal is not able to send back that information.

Refer to Appendix B "Setting Up Shop on the Internet" on page 383 for more information on hosting your store on the Internet.

There are essentially three things you need to do to get PayPal working with your online store.

- Set Up PayPal IPN Support in Your Store.
- Set Up Your PayPal Business Account at PayPal's site.
- Test Your PayPal Setup.

Set Up PayPal IPN Support in Your Store

1. Go to the Admin Console of your online store.
2. Click on **Modules > Payment** to access the Payment Modules screen.
3. Click on the **PayPal IPN** module. If this module is not installed, the side-panel should look similar to the

following screen shot.

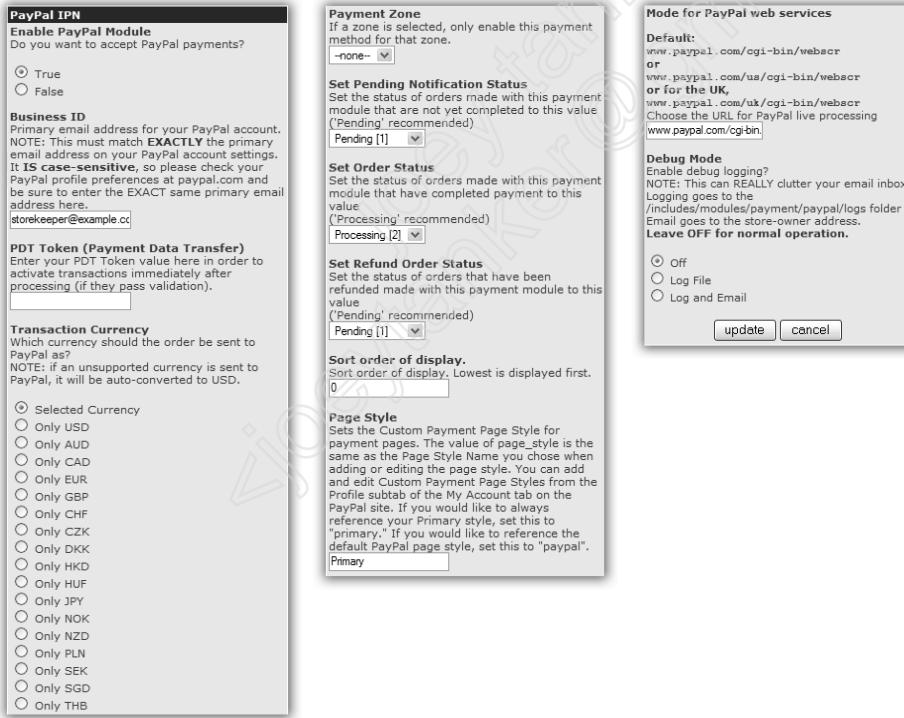


4. Take note of the following fields in the side-panel as you will need them later.

- Instant Payment Notification Preferences URL.
- Automatic Return URL

Notice that the URLs of the fields in the above screen shot are preceded by “https”. If you have not enabled SSL support for your store, the URLs will display “http” instead.

5. After you click **install**, you should see a side-panel similar to the following screen shots.



6. Make sure that **Enable PayPal Module** is set to True.
7. Specify an email address for the **Business ID** field. If you already have a PayPal account, this should be the Primary Email Address for that account. If not, enter an email address first and then set it as the Primary Email Address after registering for an account at PayPal's site.
8. Take note of the value for the **Mode for PayPal web services** field. It should match the one you see in your

PayPal account later.

9. Leave all the other fields at their *default* values while *testing* this module. Only change them later after you are more familiar with how the PayPal module works.
10. Click **update** to complete your PayPal settings in Zen Cart.

Set Up Your PayPal Business Account at PayPal's site

Before we begin, make sure you have signed up for a *PayPal Business Account* (PBA). If you have not done so, you can go to <http://www.zen-cart.com/partners/paypal> to start creating your account.

There are actually three main things you need to configure on PayPal's site.

1. Specify a *Primary Email* so that PayPal can notify you when payments are made.
2. Set up *Instant Payment Notification* so that PayPal can send payment notification back to your Zen Cart store.
3. Set up *Website Payment Preferences* to allow PayPal to redirect customers back to your site after making their payments at PayPal's site.

To begin configuring your PBA to accept payments from your store:

1. Log in to your PBA and the top of your screen should look similar to the following screen shot.



2. Click on the **Profile** tab, and then click **Email** under the **Account Information** heading. Look for an email that has its **Status** set to Primary. Make sure it is exactly the same as the email you entered previously in Step 7 of the *Set Up PayPal IPN Support in Your Store* section.

Email		Back to Profile Summary
Select Email Address		Status
<input checked="" type="radio"/>	storekeeper@example.com	Primary
<input type="radio"/>	abc@example.com	
<input type="radio"/>	xyz@example.com	
Make Primary Confirm Remove		Add

3. Click on the **Profile** tab again, and then click **Instant Payment Notification Preferences** under the **Selling Preferences** heading.

Instant Payment Notification Preferences

Activate Instant Payment Notification

Before activating Instant Payment Notification, please [read the instructions](#) to ensure that you can support the notification system.

Instant Payment Notification integrates PayPal payment notification and authentication with your website's back-end operations. Check this box to activate Instant Payment Notification, and enter the URL at which you will receive the payment notifications below.

Notification URL:
sample.com/store/ipn_main_handler.php

Save

- 3.1. Click the check-box to activate PayPal's Instant Payment Notification (IPN) feature.
- 3.2. Refer to the **Instant Payment Notification Preferences URL** you obtained in Step 4 of the *Set Up PayPal IPN Support in Your Store* section and enter it into the **Notification URL** field. Note: Change the URL to start with "https" instead of "http" if your store has SSL configured already.
4. Click **Save** to activate the IPN feature in your PayPal account.
5. Click on the **Profile** tab, and then click **Website Payment Preferences** under the **Selling Preferences** heading. Only the portion shown in the following screen shot is of interest to us.

Website Payment Preferences [Back to Profile Summary](#)

Auto Return for Website Payments
Auto Return for Website Payments brings your buyers back to your website immediately after payment completion. Auto Return applies to PayPal Website Payments, including Buy Now, Donations, Subscriptions, and Shopping Cart. [Learn More](#)

Auto Return: On Off

Return URL: Enter the URL that will be used to redirect your customers upon payment completion. This URL must meet the guidelines detailed below. [Learn More](#)

Return URL: sample.com/store/index.php?main_page=checkout_process

Return URL Requirements: The following items are required in order to set up Auto Return.

- 5.1. Set the **Auto-Return** radio button to On to activate this feature for your PayPal account.
- 5.2. Refer to the **Automatic Return URL** you obtained in Step 3 of the *Set Up PayPal IPN Support in Your Store* section and enter it into the **Return URL** field. Note: Change the URL to start with "https" instead of "http" if your store has SSL configured already.
- 5.3. Optionally, set the **PayPal Account Optional** field (not shown in the preceding screen shot) to On. By doing so, customers without PayPal accounts can still pay using their credit card information.
- 5.4. Leave the other fields at their default values for now. You can change them later when you are more comfortable with how PayPal works.
- 5.5. Click **Save** to commit all your changes.
6. You can now log out from your PayPal account.

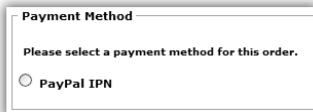
Test Your PayPal Setup

Before you begin testing your PayPal IPN module:

- Make sure you have created a product in your store with a value of \$0.01. This amount minimizes any monetary loss if unforeseen problems occur with your tests.
- Make sure you use several test customer accounts from different regions to test your PayPal settings.

To begin testing your PayPal IPN module:

1. Log in to your Store Front as a test customer and purchase your test product.
2. Choose **PayPal IPN** as your payment option in the Payment Information screen.



3. Proceed to the Order Confirmation screen and after you click **Confirm the order** in that screen, you will be redirected to PayPal's site to complete your payment details.
4. After you have completed payment at PayPal's site, you should be redirected back to your online store.
5. Log in to your Admin Console.
6. Click on **Customers > Orders** to see what your order looks like.
7. Click on **Customers > Paypal IPN** to check that your order has been processed successfully by PayPal and the customer's order information has indeed been returned to your store.
8. Log in to your PayPal Business Account.
9. You should see a payment received from your test order if everything goes well.
10. Do a refund for the test product's amount if you are satisfied with your testing.
11. Log in to your Admin Console again.
12. Click on **Customers > Paypal IPN** to check whether the order status has been updated after your order has been refunded.

Summary

Do not overwhelm your customers with too many payment options. Research has shown that customers who ponder too long on a payment option eventually end up not buying at all! Use the following criteria when deciding whether to offer a particular payment option to your customers:

- Benefit your customers and convenient for them to use.
- Suitable for your business and be easy to administer.

Besides offering your customers suitable payment options, you should also make sure your store uses Secure Sockets Layer (SSL) when processing payment details from them. Refer to “Secure Sockets Layer (SSL)” on page 368 for more information on how you can set up SSL for your store.

Part 3 Managing Your Store Catalog

This section discusses how you can add products and services to your store catalog. It also shows you how to customize your products using product attributes. You will also learn different ways to manipulate your product catalog to allow you to sell downloadable goods, list your products in multiple categories, etc.

This section covers the following topics:

- Categories, Product Types and Products
- Product Attributes
- Other Product Manipulation Techniques
- Order Totals, Surcharges and Discounts

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Chapter 12 Categories, Product Types and Products

Introduction

A store catalog enables visitors to your online store to browse the different goods and services you have for sale. The Categories side-box is the place where your main store catalog is displayed.



Notice that the store catalog groups different products into distinct categories. Categories are arranged in a tree hierarchy which allows visitors to quickly get to their desired items.

In this chapter, we shall:

- Create categories to hold your products and services.
- Understand how product types work and which one to use when creating your products and services.
- Add products and services to your catalog.

Basic Catalog Concepts

Before we discuss Categories, Product Types and Products, we need to have a big picture of how these three entities are inter-related to avoid any confusion when you need to make use of them later. Let us use a file system on your computer as an analogy to help us understand the differences between them.

Think of Categories as the directories you create to hold your files. For example, you can create a “business” and a “personal” directory to hold different files related to your work or personal life in your computer. Similarly, in an online store, you use categories to hold different products for users to browse and buy.

Next, think of Product Types as being analogous to the different file types in your computer. For example, you use “.jpg” files to represent image files and “.pdf” to represent documents you read. Similarly, in an online store, you use Product Types to represent different types of products.

Finally, think of Products as the different files that exist in your computer. Each file exists in a directory and is of a particular file type. Similarly, in an online store, a Product is of a particular product type and is held in a category.

Now that you are clear about the differences between Categories, Product Types and Products, we shall begin discussing each one separately.

Working with Categories

Categories allow you to group different sub-categories and products together. However, under normal circumstances, each category can only contain either products or sub-categories but not both at the same time. Therefore, do not place your products on the top-most level. This is because once you do that, you will not be able to create any categories!

Zen Cart provides you the flexibility of re-arranging your categories by moving them around. When you move a category to another category or sub-category, all the products under the category will be moved as well. This feature allows you to quickly come up with a rough product catalog when you begin experimenting with your store setup and then you can slowly refine it according to your business requirements.

Furthermore, to help ensure uniformity of products in a category, Zen Cart is also able to restrict products in a category to a specific product type.



Warning Note that you can break the rule of each category holding either categories or products only. This is possible when *moving* categories and also when you are in a *disabled* category. Nevertheless, do not mix products and categories under a parent category. This will cause Zen Cart to behave strangely.

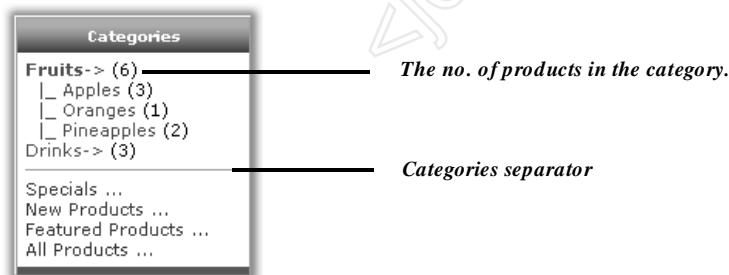
How Categories Are Displayed

Zen Cart provides several ways for you to display the categories you have created and enabled. You have the option of displaying your categories in the following manner:

- Categories side-box.
- Categories tab menu.
- Categories pictures on the main page.

The Categories Side-Box

A Categories side-box is shown in the following screen shot below.



There are several properties you can set for the Categories side-box:

- To disable the display of the number of products in each category (the numbers within the brackets), click on **Configuration > My Store** and set the field **Show Category Counts** to false.
- To change other display properties of the **Categories** side-box, click on **Configuration > Layout Settings** and experiment with the following fields:

- Categories Separator between links Status
- Categories Box - Show Specials Link
- Categories Box - Show Products New Link
- Categories Box - Show Featured Products Link
- Categories Box - Show Products All Link
- Categories Separator between the Category Name and Count
- Categories Separator between the Category Name and Sub Categories
- Categories Count Prefix
- Categories Count Suffix
- Categories SubCategories Indent
- Categories with 0 Products Status
- Categories – Always Open to Show SubCategories
- Main Page – Opens with Category

Most of the above fields are self-explanatory and you can visually inspect their impact by specifying different values for them. However, there are two fields which you might need to pay more attention to as explained below.

The meaning of **Categories - Always Open to Show SubCategories** is not immediately obvious to the eye when you first enable it. If enabled, it tells Zen Cart to show the sub-category that is holding the currently displayed product. If it is disabled, you will always see the top-most categories no matter which product you are currently viewing in a sub-category.

The purpose of **Main Page - Opens with Category** is to show products from a specific branch of your catalog to visitors that reach your site for the first time. For example, if you have a category called “Pineapples” that is under the “Fruits” category as shown in the preceding Categories side-box, you can make use of the **Main Page - Opens with Category** field to automatically display all items in the “Pineapples” category when a visitor reaches your site for the first time.

The Categories Tab Menu

The categories tab menu appears across your store header. To enable this option, click on **Configuration > Layout Settings** and set **Categories-Tabs Menu ON/OFF** to 1. The following screen shot of two example categories (i.e. Fruits, Drinks) gives you an idea of where the categories tab menu is located in your store header.



Note that only top-level categories will be shown in the tab menu.

Categories Displayed as Images on the Main Page

Categories can also be displayed as images on the main page itself. To enable this option, click on **Configuration > Layout Settings** and set **Categories - Always Show on Main Page** to 1. The following screen shot of two example categories (i.e. Fruits, Drinks) gives you an idea of where category images are located in the main page of your store.



Again, only pictures of top-level categories will be shown on the main page.

Adding a Category

To add a category to your store catalog:

1. Click on **Catalog > Categories/Products** to access the Categories/Products screen.

A screenshot of the Zen Cart 'Categories / Products - Top' screen. The top navigation bar includes 'LEGEND: Status OFF' (radio button), 'Status ON' (radio button), 'Linked Product' (checkbox), and 'Meta Tags Defined: Yes No' (checkbox). It also features 'Text Editor' (HTMLArea dropdown), 'Categories/Product Display Order' (dropdown set to 'Categories Sort Order, Categories Name'), 'Search' (input field), and 'Go To: Top' (dropdown). The main table lists categories: '1 Test', '2 Fruits', and '3 Drinks'. The table columns are 'ID', 'Categories / Products', 'Model', 'Price/Special/Sale', 'Quantity', 'Status', 'Sort', and 'Action'. A note at the bottom states: 'Categories: 3 Products: 0' and 'new category' (button). A note also says: 'NOTE: Category has SubCategories Products cannot be added'. A callout box on the right says: 'Choice of HTML or plain-text editor when writing product/category/metatag descriptions' and 'Click on it to quickly jump to any category.' with an arrow pointing to the 'Go To' dropdown.

If you click on the green tick icon (not shown in the screen shot) next to the **Go To** field, the screen will be refreshed and a drop-down list box will appear in place of the green tick icon. The drop-down list box allows you to quickly navigate to a different part of the store catalog hierarchy.

2. Click on **new category** to proceed to the category details page.

The screenshot shows a 'New Category' form. At the top, there is a 'Category Name' field containing 'UK' and a 'Categories Description' field with a WYSIWYG editor toolbar. Below these are fields for 'Path' (set to 'body > html'), 'Category Image' (with 'Browse...' and 'Upload to directory: categories' options), and 'Sort Order' (a numeric input field). At the bottom are 'save' and 'cancel' buttons.

3. Enter a name for the category in the **Category Name** field.
4. Enter a description for the category in the **Category Description** field.
5. To specify an image for the category, choose one of the following methods below:
 - The first method is to upload your image to the server via your browser.
 - ➔ Search an image file from your local computer by clicking the **Browse** button next to the **Category Image** field. For a discussion on image file sizes, refer to “Optimizing Image Sizes” on page 374 for more information.
 - ➔ Choose a directory which you want to use to store the image from the **Upload to Directory** drop-down list box. The default value of categories refers to <zc-home>/images/categories under the web server. The other values in the drop-down list box refer to sub-directories located under <zc-home>/images.
 - The second method is to upload your image via FTP to your server.
 - ➔ The image you upload via FTP should be placed in the <zc-home>/images directory or its sub-directory.
 - ➔ After your image is uploaded, type in the name of the file in the **filename** field. If the file on the server is <zc-home>/images/beverage.gif, type the value beverage.gif. If the file on the server is <zc-home>/images/drinks/beverage.gif, then type the value drinks/beverage.gif instead.

Note that you can type none into the **filename** field to remove an image you have uploaded previously. However, this method does not work with Internet Explorer.

6. Enter a number for the **Sort Order** field which specifies the sequence which this category will be displayed with respect to other categories.
7. Click **save** to save your information. Your new category will appear in the Categories/Products screen.

Restricting Categories Based on Product Types

After you have created a category, you can choose to restrict the product types that the category can hold. In this way, you reduce errors while adding products to the category.

For example, if your store sells music CDs. You will likely choose to use the Product-Music product type when creating a music CD in your store catalog because this is the only product type in Zen Cart that contains the following fields: music genre, artist and record company. By restricting the category you wish to hold the music CD to contain only products of Product-Music product type, you will not make the mistake of using another product type when creating music CDs in that category.

Note that category restrictions based on product types only affects the creation of *new* products in the affected categories. Any products created based on other product types currently in the affected categories will not be affected.

To restrict a category to allow only products of a particular Product Type:

1. Click on **Catalog > Categories/Products** to access the Categories/Products screen.
2. Click on the green “e” icon in the row containing the category which you want to set up a restriction. The category's details screen should appear.
3. Navigate to the bottom of the screen and you should see something similar to the following screen shot.



4. From the **Restrict to Product Type** drop-down list box, choose the product type you wish to restrict this category to.
5. Click on **Add include SubCategories** if you want the restriction to apply to all sub-categories under this category. Click on **Add without SubCategories** if you want the restriction to apply only to the immediate sub-category instead of subsequent sub-categories after the immediate sub-category. All additions are immediately saved in the database.

Note that sub-categories created *after* restrictions have been applied to the parent categories will not inherit the restrictions of the parent categories.

6. Repeat Steps 4 and 5 to restrict this category to other Product Types.

Note that there is no visual cue to indicate that a category contains restrictions. You should check the parent category whenever you do not see a full list of product types available to you when creating a product. Furthermore, there is no way you can tell whether a category contains restrictions via **Add include SubCategories** or **Add without SubCategories**. Therefore, it is always a good idea to write down your changes and keep a manual record.

Moving Categories

Zen Cart allows you the flexibility of moving categories around the catalog. All products and sub-categories under the particular category to be moved will also be moved automatically.

To move a category:

1. Click on **Catalog > Categories/Products** to access the Categories/Products screen.
2. Click on the purple “m” icon in the row containing the category which you want to move. You should see a screen similar to the following screen shot.



3. Choose the destination category to move to from the drop-down list box.
4. Click on **move** to move the category to the destination category.

Working with Product Types

All products created in Zen Cart belong to a particular Product Type. Product types define the default properties of a product and whether these properties are shown to a customer. Furthermore, different product types might be handled differently by Zen Cart. The main reason for the use of Product Types stems from the fact that different product types will need to be displayed differently. For example, a song is different from a car because songs need properties like artist, recording company, etc, whereas a car will be more concerned with the manufacturer and model.

Do not be confused between Product Types and Categories since products need to belong to both of them. Categories only affect how your products are arranged your store's online catalog whereas Product Types control the properties (model, manufacturer, etc) that are associated with your product.

There are currently five product types in Zen Cart:

- Product-General
- Product-Music
- Product-Free Shipping
- Document-General
- Document-Product

Editing a Product Type

Each Product Type has two sets of properties:

- Definition properties.
- Layout properties.



Note

I have coined the term “*Definition Properties*” because there is currently no literature in Zen Cart on how to differentiate between the two types of properties for a Product Type.

Editing Definition Properties

Definition properties specify the characteristics of a product type. It is of interest mainly to people who want to customize a product type or to create new product types in Zen Cart. As there is seldom any need to edit the definition properties of a Product Type unless you are a programmer, we shall only go through the meanings of the fields for those who are curious.

To edit the definition properties of a particular Product Type:

1. Click on **Catalog > Product Types** to access the Product Types screen.

PRODUCT TYPES			
Product Types	Add to Cart	Action	Product - General
Product - General	Y	►	<input type="button" value="edit"/> <input type="button" value="edit layout"/>
Product - Music	Y	①	Date Added: 09/07/2006
Document - General	N	①	Last Modified: 09/07/2006
Document - Product	Y	①	
Product - Free Shipping	Y	①	IMAGE DOES NOT EXIST

2. Choose a product type and click on **edit** to bring up a side-panel similar to the following screen shot.

Edit Product Type :: Product - General
Please make any necessary changes

Product Type Name:

Product Type Default Image:

Upload to directory:

IMAGE DOES NOT EXIST

Handler Page:

This Product can be added to cart:

This product type should be considered a sub-type of

Most of the fields are self-explanatory except the following:

- **Handler Page** - This field is used to indicate which PHP program should be used to process this particular product type. Do not edit this field unless you are very sure you know what you are doing!
- **Product Type Default Image** – If you upload an image here, Zen Cart will use this default image if you do not specify an image when creating products belonging to this Product Type. It is reserved for future use, therefore, do not specify anything here.
- **Upload to Directory** – This option is useful only if you have specified something for the **Product Type Default Image** field.
- **This Product can be added to cart** – If unchecked, it means users cannot purchase this product because they cannot add it to the shopping cart.

3. Click on **save** if you have made any changes.

Editing Layout Properties

Layout properties affect the *display* of certain product-related properties either in the Store Front or Admin Console. Different product types might even have different sets of product-related properties. For example, the Product-Music product type has a unique “recording company” property which is non-existent in other product types. The Product-General product type has a “manufacturer” property not found in the Product-Music product type.

To edit layout properties of a particular Product Type:

1. Click on **Catalog > Product Types** to access the Product Types screen.
2. Choose a product type and click on **edit layout** to access the layout properties screen. A sample screen shot of what you will see for a Product-General product type is shown below.



PRODUCT TYPE INFO PAGE LAYOUT OPTIONS :: PRODUCT - GENERAL	
Title	Value
Show Model Number	1
Show Weight	1
Show Attribute Weight	1
Show Manufacturer	1
Show Quantity in Shopping Cart	1
Show Quantity in Stock	1
Show Product Reviews Count	1
Show Product Reviews Button	1
Show Date Available	1
Show Date Added	1
Show Product URL	1
Show Starting At text on Price	1
Show Product Additional Images	1
Show Product Tell a Friend button	1
Product Free Shipping Image Status - Catalog	0
Show Metatags Title Default - Product Title	
Show Metatags Title Default - Product Name	
Show Metatags Title Default - Product Model	
Show Metatags Title Default - Product Price	
Show Metatags Title Default - Product Tagline	
Product Price Tax Class Default - When adding new products?	
Product Virtual Default Status - Skip Shipping Address - When adding new products?	
Product Free Shipping Default Status - Normal Shipping Rules - When adding new products?	
PRODUCT Attribute is Display Only - Default	
PRODUCT Attribute is Free - Default	
PRODUCT Attribute is Default - Default	
PRODUCT Attribute is Discounted - Default	
PRODUCT Attribute is Included in Base Price - Default	
PRODUCT Attribute is Required - Default	
PRODUCT Attribute Price Prefix - Default	
PRODUCT Attribute Weight Prefix - Default	

The **Product Free Shipping Image Status - Catalog** field and properties beginning with “Show” affect the display of a product's properties in the Store Front. Other properties relate to the default status of certain fields in a product when you start customizing the product in the Admin Console.

3. Select any field you wish to change and then click **edit** when the corresponding side-panel appears.
4. If you have made any changes to a field, click on **update** in the side-panel to effect your changes.

Creating Products and Services

Before you add a product to your store, you must first determine what product type you want the product to belong to. As we have discussed in Product Types, you will need to choose between the five different product types.

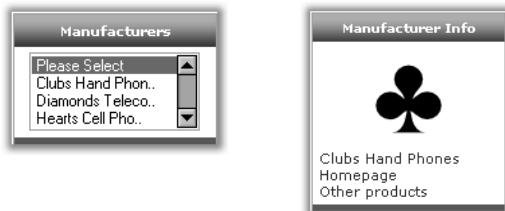
Under normal circumstances, you will usually choose to have products belong to either the Product-General, Product-Music or Document-Product product types. This is because a product that belongs to the Document-General product type cannot be added to a shopping cart and thus customers cannot buy the product. You will usually not offer free shipping for your products (Product-Free Shipping) unless they are downloadable goods because free shipping (especially international) can erase a substantial amount of your revenue.

After going through how to add products and services to your catalog in this chapter, you will find the process very tedious and repetitive if your products have similar attributes and values. You can alleviate this problem and save time for yourself by duplicating products you have created. We shall discuss the techniques to accomplish this in “Duplicating Products” on page 218 in a later chapter.

Product Manufacturers

Before we discuss how to add products of each of the product types to your store catalog, let us take a slight detour and look at the process of creating a manufacturer for a product. This is because a manufacturer needs to be created first before you can select it as a value when creating your product. A manufacturer field is available for products belonging to the following product types: Product-General, Document-Product and Product-Free Shipping.

There are two side-boxes that cater specifically to manufacturers as shown in the following screen shots.



If a product has a value specified for its manufacturer field, Zen Cart will place a Manufacturers side-box in your Store Front. By clicking a hyperlink in the Manufacturers side-box, a list of products belonging to the same manufacturer will be displayed. Thus, customers can quickly locate a product they are interested in based on information they have on the name of the manufacturer.

For example, if your store sells mobile phones and accessories, you might decide to place your products into two separate categories: Phones and Accessories. However, most people are loyal customers of a particular brand and will only purchase accessories and phones of a common brand due to interoperability issues. For these customers, getting to their choice of products is easier via the Manufacturers side-box rather than browsing the Categories side-box.

The Manufacturer Info side-box appears only when you are at the Product Info page of a product. By clicking on the **Other products** hyperlink in this side-box, you will also be shown a list of products that come from the same manufacturer.

To create manufacturers in Zen Cart:

1. Click on **Catalog > Manufacturers** to access the Manufacturers screen.



Notice that there is a number next to the words **Products** underneath the product image. This indicates the number of products that are linked to this manufacturer. If the value is zero, this manufacturer will not be shown in the **Manufacturers** side-box.

2. Click on **insert** to access the manufacturer detail screen.

New Manufacturer
Please fill out the following information for the new manufacturer

Manufacturers Name:

Manufacturers Image:

Upload to directory: manufacturers

Or, select an existing image file from server, filename:

Manufacturers URL: 

3. Enter the name of a manufacturer into the **Manufacturers Name** field.
4. To specify an image for the manufacturer, follow the same instructions as you did on page 159 when you specified an image for a category. The difference this time is the default directory where files are uploaded is **manufacturers**, which corresponds to the `<zc-home>/images/manufacturers` directory on the server.
5. Specify the web address of the manufacturer in the **Manufacturers URL** field; e.g. <http://www.clubs-handphones-technologies.com>
6. Click on **save** to save your changes.

Creating a General Product

Most products that you create will usually belong to the Product-General product type. This product type has the most number of fields and many of those fields also appear in other product types as well. Therefore, we shall make use of it to help explain and point out the differences between it and other product types.

Before you begin to create a General product:

1. Click on **Catalog > Categories/Products** to access the Categories/Products screen.
2. Navigate to the category within which you want to create your product. Create one if you have not done so.

To create a General product:

1. Click on the select box at the bottom of the screen and choose Product-General to create products of this type.

back Product - General

2. Click on **new product** to access the Product screen.

PRODUCT IN CATEGORY: "TEST"

Product Master Category: ID # 1 Test

NOTE: Master Category is used for pricing purposes where the product category affects the pricing on linked products, example: Sales

Products Status: In Stock Out of Stock

Date Available:

Products Manufacturer:

Products Name: 

Product is Free: Yes No

Product is Call for Price: Yes No

Product Priced by Attributes: Yes No

Tax Class:

Products Price (Net):

Products Price (Gross):

Product is Virtual: Yes, Skip Shipping Address No, Shipping Address Required

Always Free Shipping: Yes, Always Free Shipping No, Normal Shipping Rules
 Special, Product/Download Combo Requires a Shipping Address

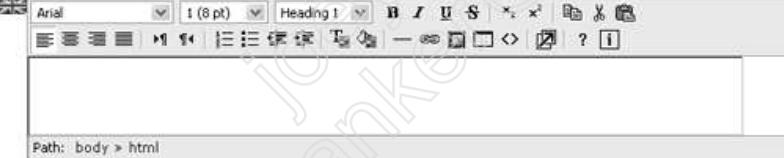
Products Quantity Box Shows: Yes, Show Quantity Box No, Do not show Quantity Box

Product Qty Minimum:

Product Qty Maximum: 0 = Unlimited, 1 = No Qty Boxes

Product Qty Units:

Product Qty Min/Unit Mix: Yes No

Products Description: 
Path: body > html

Products Quantity:

Products Model:

Products Image: Image Name: NONE

Delete Image? NOTE: Removes Image from Product, Image is NOT removed from server: No Yes

Overwrite Existing Image on Server? No Yes

Or, select an existing image file from server, filename:

Products URL: 

Products Shipping Weight:

Sort Order:

3. To correctly specify the details for your product, refer to the following table for an explanation of the different fields.
4. After you have entered your desired values, click on **preview** to upload any images and see whether there are any warnings or errors in your entries.

5. Click on **insert** to save your changes in the database.

The following table explains the meanings of all the different fields for the Product screen of a product belonging to the *Product-General* product type. Most of the fields can be used as a reference for other product types as well.

Table 12.1: Explanation of Product-General settings

Field	Comments
Products Status	<p>If a product is marked as <u>Out of Stock</u> the product will not appear in your store.</p> <p>Each time a product is sold, the value in the Products Quantity field will be decremented. When the Products Quantity field reaches zero, this field will automatically switch to <u>Out of Stock</u>.</p> <p>For further discussion on how Out of Stock settings can be customized, refer to “Configuring Stock Settings” on page 306.</p>
Date Available	<p>If the product is already in stock, leave this field empty.</p> <p>If you specify a <i>future</i> date, a customer is still able to view and purchase the product. The product will be displayed in the “Upcoming Products” list in your Store Front and the product's Product Info page will also highlight the date that the product will be in stock.</p>
Products Manufacturer	<p>Allows you to specify the manufacturer of a product; e.g. if you sell cars, you can have Ford, Toyota, etc as the manufacturers.</p> <p>You need to enter the list of manufacturers first before you can see any of your choices. Refer to “Product Manufacturers” on page 164 for details.</p>
Products Name	This is the name of the product that customers see.
Product is Free	<p>Marking <u>Yes</u> will <i>override</i> all prices and discounts you have applied for the product and cause the product to be free! The customer will <i>still see</i> whatever discounts that were applied but will not be charged anything for the product during the checkout process.</p>  <p>Try not to specify a value for Products Price (Net) field if you do not want to confuse your customers when you set this field to <u>Yes</u>. This feature is good for occasions when you want to give away product samples to customers for them to try before they buy.</p>

Table 12.1: Explanation of Product-General settings (continued)

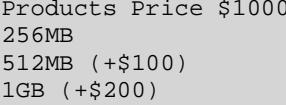
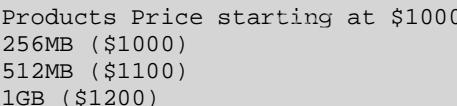
Field	Comments
Product is Call for Price	<p>Behaves similarly to “Product is Free” except that the product will have a “call for price” image instead. Customers also cannot add the product to cart.</p>  <p>Try not to specify a value for Products Price (Net) field if you do not want to confuse your customers if you set this field to <u>Yes</u>.</p>
Product Priced by Attributes	<p>You will see in the next chapter that you can add extra, self-defined <i>attributes</i> to your products. If you choose to price your products based on attributes (color, size, etc), you can make use of this field to decide how you want to display your product prices.</p> <p>Let us take the case where you sell a PC at a base price of \$1000 with a default of 256MB RAM. You want to allow your customers to be able to add extra RAM via options to have 512MB (add \$100) or 1GB (add \$200).</p> <p>If you set this option to <u>No</u>. Your product details will appear to your customers as follows.</p>  <p>If you set this option to <u>Yes</u>. Your product details will appear to your customers as follows.</p>  <p>Essentially, what this attribute does when set to <u>Yes</u> is to show the total price of a product with the prices of the attributes added; whereas if it were set to <u>No</u>, then prices are seen to be incremental. Which option you choose is entirely up to aesthetics and how you want to present your product pricing.</p>
Tax Class	<p>Allows you to automatically calculate the Products Price (Gross) value using the value you specify for the Products Price (Net) field. Refer to “Adding a Tax Class” on page 111 for details on setting up a tax class.</p> <p>The default tax class can be specified in the Product Price Tax Class Default - When adding new products? field under the layout properties of this product type in Configuration > Product Types.</p>
Products Price (Net)	This is the base price of your product. It is usually your selling price.

Table 12.1: Explanation of Product-General settings (continued)

Field	Comments
Products Price (Gross)	This is the price of your product after applying the tax rate specified in the Tax Class field. If you find that your value looks strange, check whether it has to do with multiple tax rates by referring to “Compounding or Adding Different Tax Rates” on page 113.
Product is Virtual	<p>Normally you would specify <u>No, Shipping Address Required</u> if you need to ship any physical goods to your customers. However, if your store offers professional services (accounting, law consultation, etc) to your customers and you do not need to ship any physical products, then you can specify <u>Yes, Skip Shipping Address</u>.</p> <p>If you specify <u>Yes, Skip Shipping Address</u> for this field, you are implying Always Free Shipping is marked <u>Yes, Always Free Shipping</u>, even if you set it to <u>No, Normal Shipping Rules</u>!</p> <p><u>Special, Product/Download Combo Requires a Shipping Address</u> is used only if you want to provide <i>both</i> a downloadable product and a physical product to be sent to your customers.</p> <p>The default virtual status can be specified in the Product Virtual Default Status - Skip Shipping Address - When adding new products? field under the layout properties of this product type in Configuration > Product Types.</p>
Always Free Shipping	<p>Indicates whether you want to offer Free Shipping for this product. If you set it to <u>No, Normal Shipping Rules</u>, then all the rules you specified in your shipping modules will kick in.</p> <p>Note: If you specified Product is Virtual to be <u>Yes, Skip Shipping Address</u>, then this field is automatically assumed to be <u>Yes, Always Free Shipping</u> regardless of what you specify for it.</p> <p>The default free shipping status can be specified in the Product Free Shipping Default Status - Normal Shipping Rules - When adding new products? field under the layout properties of this product type in Configuration > Product Types.</p>

Table 12.1: Explanation of Product-General settings (continued)

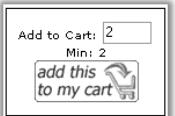
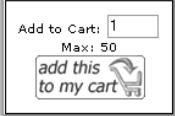
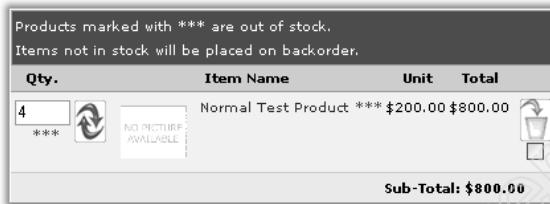
Field	Comments
Products Quantity Box	If set to <u>Yes</u> , <u>Show Quantity Box</u> , the customer sees: Shows 
	If set to <u>No</u> , <u>Do not show Quantity Box</u> , the customer sees: 
	In the second case, each customer is restricted to purchasing the quantity specified in the Product Qty Minimum field. This feature comes in handy if you offer digital downloads for sale. Customers will only need one copy of a digital download because they can easily make extra copies themselves. Thus, you can save customers the trouble of entering the number of items they want to purchase by specifying Product Qty Minimum as <u>1</u> in this case.
Product Qty Minimum	Indicates the minimum number of items of a product a customer must buy. It is also commonly known as the “minimum order quantity” in layman terms. 
	If a customer enters less than the minimum quantity allowed, the system will display an error message prompting the customer to adjust the quantity. This option is useful when you are offering an extremely low priced product which will only turn in a profit if a minimum number of items are sold.
Product Qty Maximum	Indicates the maximum number of items of a product a customer is allowed to buy. 
	If a customer enters more than the maximum quantity allowed, the system will automatically adjust the quantity to be equal to the maximum allowed quantity. This option is useful when you have products that are in high demand and you want to avoid angering your customers if one of them buys a large amount at one go thus depriving other customers of a chance to buy the product.

Table 12.1: Explanation of Product-General settings (continued)

Field	Comments
Product Qty Units	<p>This option limits customers to purchasing in <i>fixed</i> quantities. For example, if you specify the value to be 5, then customers can only order in quantities of 5, 10, 15, etc.</p> <p>The wording to potential customers may not be very intuitive though. You can see this in the screen shot below where it states “Units: 5” which limits your customers to purchasing in quantities of 5.</p>  <p>This option is useful when you have goods already packed neatly in fixed quantities. By not taking out the goods and selling separately, you can save yourself any leftover goods and maybe help your shipping costs as well.</p>
Product Qty Min/Unit Mix	<p>If you have defined custom <i>attributes</i> for a product, you can make use of this field to control what quantities of a product (based on attributes) customers are allowed to buy from your store.</p> <p>Let's say you sell canned tuna and have defined an attribute “flavor” with three possible values: curry sauce, tomato sauce and olive oil. Assume you have set up the following fields as follows:</p> <p>Product Qty Minimum = 4 Product Qty Maximum = 12 Product Qty Units = 1</p> <p>The above quantity settings mean the customers can only buy the canned tuna in quantities of: 4, 5, 6, 7, 8, 9, 10, 11 or 12.</p>  <p>If Product Qty Min/Unit Mix is <u>No</u>. Besides adhering to the above quantity settings, customers are also limited to ordering tuna packed in <i>one</i> of the flavors only.</p> <p>If Product Qty Min/Unit Mix is <u>Yes</u>. Although they still have to adhere to the above quantity settings, they are now allowed to mix-and-match the different flavors of tuna in different quantities e.g. 2 cans in curry sauce, 3 cans in tomato sauce and 7 cans in olive oil.</p>

Table 12.1: Explanation of Product-General settings (continued)

Field	Comments
Products Description	Enter the description for your product here. Use the HTMLArea to enter and format your text to make your descriptions really stand out. Use the Plain Text editor if you plan to enter raw HTML source code or you just want to enter some text without any fancy formatting.
Products Quantity	<p>Indicates the amount of <i>stock</i> you have for the particular product. If you do not specify a value, it defaults to <u>0</u>.</p> <p>If a customer places an order (e.g. 4 units) for a product that has limited stock available (e.g. 1 unit left), a warning message will be displayed in the Shopping Cart page as shown in the following screen shot.</p>

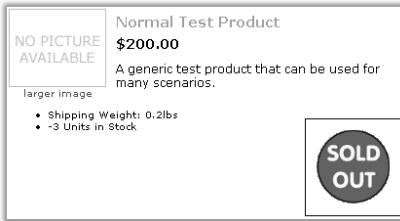


If all your units are sold, then Zen Cart automatically marks the **Product Status** as Out of Stock and *disables* the product.



The customer will not be able to see the product in your product catalog or anywhere in your Store Front if it is disabled.

If you *enable* the product by toggling the *red* button in the Categories/Products screen but still leave its **Product Status** as Out of Stock, then the customer will see a Sold Out sign instead of the usual Add to Cart button when viewing the product. An example of what the Sold Out sign looks like is shown in the following screen shot.



Either way, customers will not be able to make any purchases once a product is out of stock.

For further discussion on how Out of Stock settings can be customized, refer to “Configuring Stock Settings” on page 306.

Table 12.1: Explanation of Product-General settings (continued)

Field	Comments
Products Model	Used to specify a model for your product. Customers can perform a search in your store based on a product's model.
Products Image	To specify an image for the product, follow the same instructions as you did on page 159 when you specified an image for a category. Note the existence of two extra options for a product image compared to a category image. For the Delete Image option: <ul style="list-style-type: none">■ Set to <u>Yes</u> if you want to disassociate the current image with the product. No new product image will be uploaded.■ Set to <u>No</u> if you want to use another image with the product. For the Overwrite Existing Image on Server option: <ul style="list-style-type: none">■ Set to <u>Yes</u> if you need to upload an image which has changed but still maintain the previous name or you simply want to upload a new image after clicking the Browse button.■ Set to <u>No</u> if want to use an image which has already been uploaded via FTP to the desired directory on your server. You can type the name of the uploaded file in the filename field.
Products URL	Used to point a customer to another web site which might contain more information for the product. For example, you can type in a URL in the following form: <u>www.greatphones.com/pico.html</u> If a value is entered for this field, the following line will appear under a product in the Product Info page in your Store Front. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">For more information, please visit this product's webpage.</div> Note that the words "webpage" is a hyperlink and it points to the URL you specified for this field.
Products Weight	Allows you to specify a weight. The default weight is <u>0</u> if you leave this field blank. The default unit of measurement is pounds (lbs). If weight is <u>0</u> , you might accidentally cause shipping to be free if you have enabled Order Free Shipping 0 Weight Status under Configuration > Shipping/Packaging . Therefore, make sure you check that setting if you intend to set this field to <u>0</u> or leave it blank.
Sort Order	Specifies the sequence in which this product should be displayed. Default is <u>0</u> .

By default, all quantities specified in the Product page must be in whole units. To allow customers to buy products in fractional units, click on **Configuration > Stock** and change the **Product Quantity Decimals** field accordingly. For information on other stock settings, turn to page 306 for more details.

Creating a Music Product

Zen Cart provides explicit support for *music*-related products via the Product-Music product type. Products that are of Product-Music product type will have an additional three fields available to them.

- **Recording Artist**
- **Record Company**
- **Music Genre**

To see these three fields appearing in the Product Info page in the Store Front, make sure that the layout properties of the Product-Music type under **Catalog > Product Types** has the following fields enabled:

- **Show Artist**
- **Show Music Genre**
- **Show Record Company**

The **Record Companies** and **Music Genre** fields give rise to the following two side-boxes. The **Record Artist** field currently has no effect but a side-box might be added in future.



To specify the information for the **Record Artists**, **Record Companies** and **Music Genre** fields, look into the screens accessible by clicking the following menu entries.

- **Extras > Record Artists**
- **Extras > Record Companies**
- **Extras > Music Genre**

To create Music products, follow the same steps as you did when creating a General product. The fields you see will depend on what you have enabled on the layout properties of the Product-Music type under **Catalog > Product Types**.

Before you begin to create a Music product:

1. Specify the information you want to relate to your Music product in the respective screens below:

- **Extras > Record Artists**
- **Extras > Record Companies**
- **Extras > Music Genre**

Because the above screens are self-explanatory, we shall not go through the screen shots here.

2. Click on **Catalog > Categories/Products** to access the Categories/Products screen.
3. Navigate to the category within which you want to create your product. Create one if you have not done so.

To create a Music product:

1. Click on the select box at the bottom of the screen and choose Product-Music to create products of this type.



2. Click on **new product** to access the Product screen. The screen is exactly the same as the one you have when creating a General product. The only difference is the emergence of the music-related fields which replaces the **Manufacturer** field in the General product screen.



3. Enter the details for your product. Refer to the table under the “Creating a General Product” section for an explanation of those non-music related fields.
4. After you have entered your desired values, click on **preview** to upload any images and see whether there are any warnings or errors in your entries.
5. Click on **insert** to save your changes in the database.

If you would like to add sample clips or other materials to your Music product, you can refer to “Providing Music Samples” on page 207. If you would like to offer your Music products as downloads, refer to “Selling Downloadable Products” on page 210 for details on how to create downloadable products.

Creating a Document

To create documents in your store, you can make use of either the Document-General or Document-Product product types. Products that belong to the Document-General product type *cannot be purchased* by customers. You can use such products to offer free information to your customers: FAQs, free articles, brochures, etc. On the other hand, products that belong to the Document-Product product type act like normal products which can be sold at a price.

Only products that belong to the Document-General and Document-Product product types can be displayed in a separate Documents side-box in your Store Front. This allows your customers to easily separate normal products (displayed in the Categories side-box) from document products in your store.



Before you begin to create a Document product:

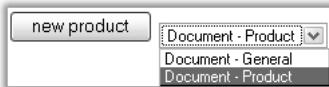
1. Check that you have enabled the **Split Categories Box** field under **Configuration > Layout Settings** to separate the display of products based on their Product Type definitions.
2. Check that the Documents side-box can be displayed by enabling the **sideboxes/document_categories.php** field via **Tools > Layout Boxes Controller**.
3. Click on **Catalog > Categories/Products** to access the Categories/Products screen.
4. Navigate to the category within which you want to create your product. Create one if you have not done so.
5. Make sure that you *restrict* the category to contain at least the following types.
 - Document-General
 - Document-Product

Only categories that contain a *restriction* on the Document-General product type will be displayed in the Documents side-box. However, products of Document-General type cannot be purchased as they cannot be added to cart. Therefore, you will also need to specify an additional Document-Product type restriction to the category so that the document products you create can be sold.

To learn how to restrict categories to contain only products that belong to specific product types, refer to “Restricting Categories Based on Product Types” on page 160 for details.

To create a Document product:

1. Click on the select box at the bottom of the screen and choose either Document-Product if you want to be able to sell your documents or choose Document-General if you only want to showcase a document (perhaps an article you find interesting).



2. Click on **new product** to access the Product screen. If you chose Document-Product when creating this product, your screen will be identical to the one you saw when creating a General product. If you chose Document-General when creating this product, you will be presented with a screen similar to the one in the following screen shot.

A screenshot of the 'Product in Category' screen for a Document product. The title bar says 'PRODUCT IN CATEGORY: "E-MAGAZINES > Books"'. The screen includes fields for Document Status (radio buttons for Available and Unavailable), Date Available (date picker), Document Name (text input with a UK flag icon), Document Contents (a rich text editor with a toolbar and a preview area showing 'Path: body > html'), Document Image (file upload fields with 'Browse...' and 'Browse' buttons, 'Image Name: NONE', and 'Upload to directory: Main Directory'), and Document URL (text input with a UK flag icon). At the bottom are 'preview' and 'cancel' buttons.

3. All the fields for the Document-General product (as seen in the preceding screen shot) are self-explanatory so we shall not discuss them further. If you have chosen Document-Product when creating this product, you can refer to “Creating a General Product” on page 165 for the steps to configure your product because the meaning of the fields are similar.
4. After you have entered your desired values, click on **preview** to upload any images and see whether there are any warnings or errors in your entries.
5. Click on **insert** to save your changes in the database.

Creating a Service

What if your store sells services (accounting, legal or insurance, etc) instead of physical products which need to be delivered? Well, one way is to treat a Service as a General product and set its **Product is Virtual** field to Yes, Always Free Shipping. If all items in a customer's shopping cart are virtual products and you have enabled the Free Shipping shipping module, Zen Cart will automatically skip the Delivery Information page and bring the customer to the Payment Information page.

Another way is to use the Product-Free Shipping product type when creating your service. By default, products that belong to this product type do not have their weights displayed in the Store Front and are set to free shipping. Most services do not require any physical delivery of goods, so you will also want to consider turning off the display of the Free Shipping icon when displaying products of this product type.

To disable the display of the Free Shipping icon in the Store Front for products of Product-Free Shipping product type:

1. Click on **Catalog > Product Types** to access the Product Types screen.
2. Click Product-Free Shipping under the **Product Types** column and concentrate on the side-panel.
3. Click the **edit layout** button on the side-panel to proceed to a screen containing definition properties for this product type.
4. Edit the **Product Free Shipping Image Status – Catalog** field and set the value to NO.
5. Click **update** to save your changes.

Summary

We have covered the basic building blocks that make up your store catalog. You have seen how categories can be created and manipulated. You have also learned about the different product types available in Zen Cart and which product type to use when creating your products or services. You should be able to easily create and manipulate items in your store catalog.

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Chapter 13 Product Attributes

Introduction

You may need to specify custom attributes when you are starting adding products to your store. For example, if your store sells shoes, you'll most likely want customers to be able to choose what *size* and *material* they want. You can even attach price and weight information to each custom attribute.

In this chapter, we shall:

- Familiarize you with the general steps to adding a product attribute.
- Learn how the Attribute Controller screen works and its different attribute flags.
- Learn about attribute images, attribute pricing and attribute weighting.
- Know how to copy/add/delete attributes affecting individual products or several products at once.
- Learn how to sort product attributes.



Note

Download attributes for products will only be discussed in the next chapter as they require several different parts of Zen Cart to be configured properly before they can be used.

Adding Attributes to a Product

Zen Cart allows you to create attributes for all Product Types. Each attribute is defined by an *option name* and several *option values*. Because the addition of other attribute properties (pricing, images, etc) can be very confusing, we shall start off with how to create a product attribute first. Once you are familiar with this step, you will be more confident in tackling the topics on attribute properties.

Before you begin adding a product attribute, make sure you have already created the product to which you want to add an attribute.

There are essentially three steps to creating an attribute for a product.

1. Create option name.
2. Create option value(s).
3. Link attribute to product.

Step 1 of 3: Create Option Name

1. Click on **Catalog > Option Name Manager** to access the Product Options screen.
2. To simplify the look of this screen, choose Display Global Features - OFF from the drop-down list box as shown in the following screen shot.



3. Concentrate on the following part of the screen to begin configuring your option name.

ID	Option Name	Option Type	Sort Order	Size	Max	Action
1	en:	Dropdown	Order:			insert

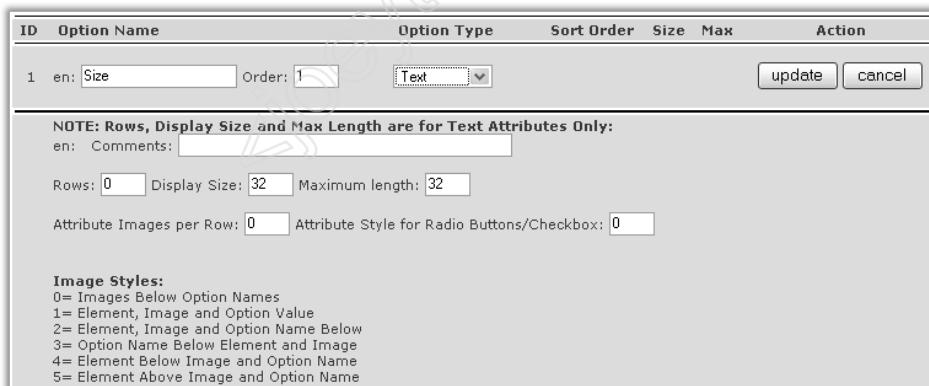
4. Specify the following details for your attribute:

- **en** – Your attribute name in English.
- **Order** – The sequence in which your attribute will be arranged next to other attributes. By default, a lower value will make your attribute appear before any attributes with a higher value.
- **Option Type** – Determines how your option values can be selected. Refer to the following table for the appearance of your option based on your selection.

Option Type	Example of how option values appear in the Store Front	Comments
Dropdown		Customers will need to choose one of the choices listed.
Text		Customers specify their own words. No choices will be provided even if they are defined. We shall use the terms “text-field” and “text-area” to refer to the two screen shots on the left. A “text-field” only allows a <i>single</i> line for text input while a “text-area” allows <i>multiple</i> lines for text input.
Radio		Note: If this attribute is compulsory and you want to force your customers to enter something before allowing them to add products to the cart, enable the Attribute Required for Text field when we talk about Attribute Flags later in this chapter.
Checkbox		Customers can choose only one of the choices listed. Note: Once a radio button is selected, none of the radio buttons can be de-selected.
		Customers can choose zero or more choices.

Option Type	Example of how option values appear in the Store Front	Comments
File		Customers can specify a file on their local computers to upload to your store. Two conditions need to be satisfied before users can have their files uploaded successfully. Click on Configuration > Maximum Values to specify these conditions. The Allowed Filename Extensions for uploading ensures that only files with the specified extensions can be uploaded. The Maximum File Upload Size places an upper limit on the file sizes users can upload. The file will be uploaded into the <code><zchome>/images/uploads</code> directory on the web server and be renamed into a number with the original file extension; <code>1.pdf</code> , <code>2.pdf</code> , <code>3.jpg</code> , <code>4.bmp</code> , etc. However, users will not notice this because the original filenames will still be presented to them in the Store Front.
Read Only		Customers can only view the available choices but they are not allowed to choose. This option is usually used to inform customers of something instead of telling them to take a specific action.

5. Click on **insert** to create your option name. The screen should be refreshed with your option name saved in the database.
6. To set additional properties for the option name you just created, click on the corresponding **edit** button.



ID Option Name **Option Type** **Sort Order** **Size** **Max** **Action**

1 en: Order:

NOTE: Rows, Display Size and Max Length are for Text Attributes Only:
 en:

Rows: Display Size: Maximum length:

Attribute Images per Row: Attribute Style for Radio Buttons/Checkbox:

Image Styles:
 0= Images Below Option Names
 1= Element, Image and Option Value
 2= Element, Image and Option Name Below
 3= Option Name Below Element and Image
 4= Element Below Image and Option Name
 5= Element Above Image and Option Name

7. If you have specified the **Option Type** to be Text, you can specify a *non-zero* value for the **Rows** field and a “text-area” will appear to the customer instead of the default “text-field”. The **Display Size** controls the number of *visible* character columns whereas the **Maximum Length** limits the amount of text a customer can enter.
8. Make any other changes you require and click on **update** to save your settings.

Step 2 of 3: Create Option Value(s)

If you have chosen File or Text for the **Option Type** field of your attribute name in the Option Names screen, you will not need to specify an option value. For all other option types, use the following steps to create your option value(s).

1. Click on **Catalog > Option Value Manager** to access the Option Values screen.
2. To simplify the look of this screen, choose Display Global Features - OFF from the drop-down list box as shown in the following screen shot.



A screenshot of a software interface showing a toolbar with 'Attribute Controller' and 'option names' buttons, and a dropdown menu labeled 'Display Global Features - OFF'. Below the toolbar is a section titled 'OPTION VALUES'.

3. Concentrate on the following part of the screen to begin configuring your option value(s).



ID	Option Name	Option Value	Default Order	Action
1	Size	en	Order: 1	<input type="button" value="insert"/>

4. Select the option name to which you want to add your option value from the drop-down list box under the **Option Name** column. Specify the option value name and sort order in the respective **Option Value** and **Default Order** columns.
5. Click on **insert** to associate the option value with the option name. Your screen should be refreshed with your option name and option value saved in the database.
6. Repeat Steps 4 and 5 if you need to add another option value to your option name.

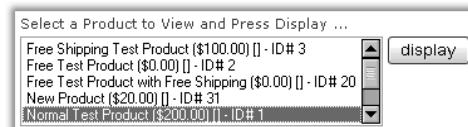
Step 3 of 3: Link Attribute with Product

1. Click on **Catalog > Attributes Controller** to access the Attributes Controller screen.
2. Select a category from the drop-down list box which contains the product to which you want to add an attribute.



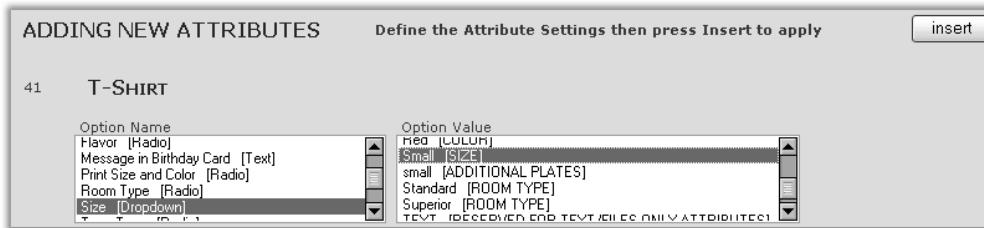
A screenshot of a software interface showing a dropdown menu labeled 'CATEGORIES: - Test'. Below the menu is a message 'Select a Category with Products ... Or move between the Products'. At the bottom are buttons for 'previous', 'Test*', and 'next'.

3. Choose your desired product from the product list and click **display**.



A screenshot of a software interface showing a list of products with a 'display' button next to each. The products listed are: Free Shipping Test Product (\$100.00) - ID# 3, Free Test Product (\$0.00) - ID# 2, Free Test Product with Free Shipping (\$0.00) - ID# 20, New Product (\$20.00) - ID# 31, and Normal Test Product (\$200.00) - ID# 1.

4. Concentrate on the portion which allows you to associate the option name you created previously with the product you want.



5. Click your choice of **Option Name** and **Option Value** to associate with the product. Note: You must choose *both* an option name and an option value. Many people make the mistake of choosing either an option name or an option value only.

If the value you selected in the **Option Name** list is of File or Text type, you should only choose TEXT [RESERVED FOR TEXT/FILES ONLY ATTRIBUTES] in the **Option Value** list.

6. Click on **insert** to save the association between the attribute and the product.
7. Repeat Steps 5 and 6 to add another attribute option names and/or option values to the product.

Understanding How Attribute Flags Work

After having gone through the Attributes Controller Screen, you may have noticed some attribute flags appearing in a multi-colored row as shown in the following screen shot. These flags control further properties of each attribute so it is important that you do not overlook them.



You can change the default values for these flags by clicking on **edit layout** for the respective product types under **Catalog > Product Types**. Using a sample layout setting from the Product-General product type, you can see that the settings match the attribute flag's default settings exactly.

PRODUCT Attribute is Display Only - Default	0
PRODUCT Attribute is Free - Default	1
PRODUCT Attribute is Default - Default	0
PRODUCT Attribute is Discounted - Default	1
PRODUCT Attribute is Included in Base Price - Default	1
PRODUCT Attribute is Required - Default	0

The meaning of the individual attribute flags are explained in the following table.

Table 13.1: Meaning of individual attribute flags

Attribute Flag	Meaning
Used for Display Purposes Only	<p>Indicates that this attribute is meant for informational purposes only.</p> <p>For example, if this attribute is part of a group of options (<i>Dropdown</i>, <i>RadioButton</i>, <i>Checkbox</i>), and its flag is set to <u>Yes</u>, when customers click on the attribute choice and then select Add to Cart, an error message will be shown indicating that the attribute cannot be chosen. Other attributes, however, can be chosen.</p> <p>If this attribute is a <i>Text</i> or <i>File</i>, then nothing should be entered into the respective fields or a similar error message will appear when attempting to add the product to a cart.</p> <p>This flag has no effect on attributes that are of <i>ReadOnly</i> type.</p>
Attribute is Free When Product is Free	<p>If you have specified a price for an attribute but marked your product as free, you can specify whether that makes the whole product free or whether you still want to charge your customers based on the price of the attributes alone.</p> <p>For example, you sell old tower clocks and you have specified that they come with attributes like gold or silver needles which each cost money. If you decide to make your old tower clocks free, you should then decide whether you should charge your customers extra if they choose the gold or silver needles.</p>
Default Attribute to be Marked Selected	<p>Applicable only if your attribute is of option type <i>Dropdown</i>, <i>Radio</i> or <i>Checkbox</i>. This will automatically set this option value as the default option selected from the list of option values.</p> <p>For example, if you have option values of “white”, “red”, “blue” and “green” for a T-shirt. You can set the option value of “white” to be the default selected attribute by setting this field to <u>Yes</u>.</p>
Apply Discounts Used by Product Special/Sale	<p>Indicates whether the same discount percentage should be applied to this attribute as it applies to a product. Refer to “Order Totals, Surcharges and Discounts” on page 225 for details on Specials and Sales.</p> <p>For example, if the price of a product is \$30 and a sale of 50% is given. That means the product costs \$15. If an attribute is originally priced at \$5, then if this flag is set to <u>Yes</u>, the attribute price after discount would be \$2.50.</p> <p>However, if this flag is set to <u>No</u>, then the attribute price will remain at \$5 although the product is at the discounted price of \$15.</p>

Table 13.1: Meaning of individual attribute flags (continued)

Attribute Flag	Meaning
Include in Base Price When Priced by Attributes	<p>This flag is only effective when a product has its Product Priced By Attributes field in the Product page of the Admin Console marked as <u>Yes</u>. Refer to page 168 for more details on that field.</p> <p>It takes the <i>smallest</i> amount in a group of option values and adds it to the product's <i>base</i> price to come up with a <i>starting</i> price which the customer sees.</p> <p>Let's use an example to illustrate how this option works when all option values have this flag set to <u>Yes</u>.</p> <p>Suppose you have a "size" attribute with three options priced at \$5, \$10, \$25 for "small", "medium" and "large" sizes respectively. The product cost price is set at \$30. Thus, a customer in the Product Info page of your Store Front will see a price tag of "Starting at \$35" instead of "\$30".</p>
Attribute Required for Text	<p>If your attribute is of option type <i>Text</i>, you can make it into a compulsory field. Users will be forced to enter some text before they are allowed to add the product or service to the cart.</p> <p>An example would be the wordings on a cake. You can force users to enter the wordings they want on the cake by setting this option to <u>Yes</u>.</p>

You should now have no problems when we discuss how you can specify additional price and weight information for your attributes later in this chapter.

Attribute Images

You can specify different images for your attributes to help your customers better visualize the end-product or service. For example, you can have a different color T-Shirt represent your T-Shirt's color attribute as shown in the following screen shot.



Note

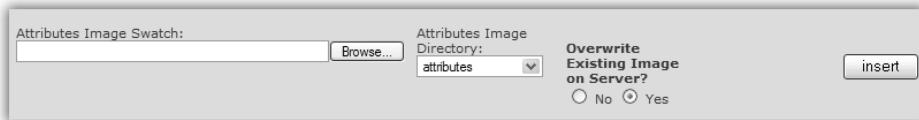
Attributes of option type *Read Only* cannot have images associated with them. Even if you have defined an image for this type of attribute, it will not be displayed.

Before you specify images to represent your product or service:

- Make sure you have created the product and its required option names and option values.
- Make sure that **Enable Attribute Images** is set to true under **Configuration > Attribute Settings**.

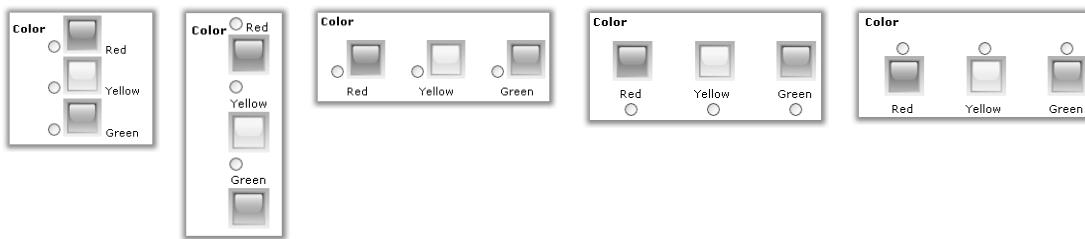
To specify an image to represent each attribute:

1. Click on **Catalog > Attributes Controller** to access the Attributes Controller screen.
2. Choose the appropriate category from the drop-down list box and your screen will be refreshed with products from the previously selected category. Note: The (*) next to certain categories in the drop-down list box indicates that they contain products.
3. Choose the appropriate product and attribute from the respective boxes and then concentrate on the following area in your screen. The fields in this portion of the screen behaves similarly to the screen used for creating a product so we shall not waste time explaining the fields again.



4. Upload the appropriate image to your store by specifying the required values and then click the **insert** button.

If you go to your Store Front and look at your product, you might not be satisfied with the way the attributes are laid out on the screen. There are several layout options open to you as well. You can take a look at a few of them in the following screen shots.

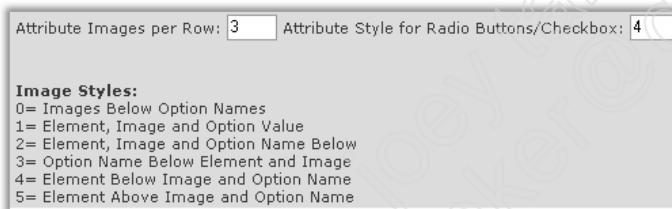


Before you change the layout of your image attributes:

1. Click on **Configuration > Product Info** to access the Product Info screen.
2. Check the value of **Product Info - Show Option Values Name Below Attributes Image**. This field will cause the text to disappear if the text appears below an image. For example, if the text "Blue" appears below the blue square, then the text "Blue" will disappear if this option is disabled.

To change the layout of the image attributes:

1. Click on **Catalog > Option Name Manager** to access the Product Options screen.
2. Click **edit** for the option name you used for your image attribute previously.
3. Concentrate on the following portion of the screen which specifies how the attribute should be laid out.



4. Edit the **Attribute Images per Row** and **Attribute Style for Radio Buttons/Checkbox** fields accordingly.
5. Click **update** to effect your changes.
6. Go to your Store Front to see whether the attribute layout suits your preference.

Attribute Pricing

Zen Cart provides you the ability to price your products by attributes. For example, if you sell computers, you can set a base price and then increment the price for each separate accessory or component that is added. If you sell T-shirts, you can specify different color options and tag a separate price for each color.

While you are going through this section, take note of the effects the following attribute flags might have on your pricing options:

- **Attribute is Free When Product is Free**
- **Apply Discounts Used by Product Special/Sale**
- **Include in Base Price When Priced by Attributes**

Also keep in mind that although we are going through the attribute properties (price, weight, etc) individually, these

attribute properties can actually be combined to yield the desired effect for your products.



All the pricing examples shown in this section assume that the **Product Priced by Attributes** field in the Product page of the Admin Console has been set to No.

This will remove unwanted confusion if your screen display differs from the one shown in the book. Refer to page 168 if you have forgotten how the field works.

By Absolute Value

The simplest way to price your attributes is to specify a price for selecting the attribute and indicating whether the price should be incremented or decremented for each product that is bought. The following example screen shot shows a hotel charging different rates based on the room type specified by a customer.

Hotel Accommodation
Starting at: \$20.00
Your choice of air-conditioned rooms with either twin or double beds. Free Internet access and complimentary breakfast are included in all packages.
• 1000 Units in Stock
Add to Cart: 1
add this to my cart
Please Choose:
Room Type Standard (+\$100.00)
 Superior (+\$200.00)
 Deluxe (+\$300.00)

Before you specify the pricing for an attribute:

- Make sure you have created the product and its required option names and option values.
- Click the **edit layout** button of the product type that is linked to this attribute and look at the **PRODUCT Attribute Price Prefix - Default** field. This field specifies whether the attribute price should be incremented or decremented by default.

To specify a price for an attribute:

1. Click on **Catalog > Attributes Controller** to access the Attributes Controller screen.
2. Choose the appropriate category from the drop-down list box and your screen will be refreshed with products from the previously selected category.
3. Choose the appropriate product and attribute from the respective boxes and then concentrate on the following area in your screen.

4. To *add* the attribute price from the product price, specify a “+” or a *blank space* in the first box under the **Price** field. To *subtract* the attribute price from the product price, specify a “-” in the box instead.
5. Enter your desired price in the empty box under the **Price** field.
6. If you want your attribute price to be charged only once regardless of how many items of the product a customer buys, enter a value in the **One Time** field.
7. Enter a number into the **Order** field. This field indicates the sequence in which the attributes will be displayed to a customer. For example, if you have three attributes X, Y, Z in their original sequence of 1, 2, 3 and you change the sequence to 3, 1, 2. Then the attributes will be displayed in this order to the customer Z, X, Y.
8. Click **insert** to save your changes to the database.

One Time Charges

The **One-Time** field which you saw in Step 6 of the previous section allows you to charge a customer only once for a product attribute when several items of a product are bought. An example is provided below to help you understand its use.

If you have a product that retails for \$20 and a single attribute that adds \$1 to the product. You have also specified that this attribute has a *one-time charge* of \$5.

Then if the customer buys a total of 3 of your products with the same attribute, the total price charged to the customer will be: $(\$20 + \$1 + \$5) + (\$20 + \$1) + (\$20 + \$1) = \68

This option is usually applied to one-time setup charges. For example, when you first sign up for a web hosting account with a web hosting provider, they usually charge you a one-time setup fee and not for subsequent renewals for the hosting plan.

By Percentage

This pricing mechanism works similarly to attribute pricing by numbers except that it is based on percentage rather than numbers. It makes use of the concept of *price factor* and *offset* to achieve a percentage-based attribute pricing scheme. Nevertheless, the attribute prices that are displayed are in absolute numbers instead of percentages. The following example screen shot shows a poster of Einstein which is priced by size and color.

Portrait of Einstein
\$20.00

A wonderful portrait of one of the greatest scientists who ever lived.

larger image

- Shipping Weight: 0.5lbs
- 1000 Units in Stock

Add to Cart: 1

add this to my cart

Please Choose:

Print Size and Color

- 8" x 10" (B/W) (+\$4.00)
- 11" x 14" (B/W) (+\$8.00)
- 16" x 20" (B/W) (+\$12.00)
- 8" x 10" (Full Color) (+\$6.00)
- 11" x 14" (Full Color) (+\$10.00)
- 16" x 20" (Full Color) (+\$14.00)

To price your attributes by percentage:

1. Click on **Catalog > Attributes Controller** to access the Attributes Controller screen.
2. Choose the appropriate category from the drop-down list box and your screen will be refreshed with products from the previously selected category.
3. Choose the appropriate product and attribute from the respective boxes and then concentrate on the following area in your screen.

Price Factor:	Offset:	One Time Factor:	Offset:
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

To understand the *meanings* and *syntax* for the above fields, refer to the section after these steps.

4. To *add* the attribute price to the product price, specify a “+” or a *blank space* in the first box under the **Price** field. To *subtract* the attribute price from the product price, specify a “-” instead.
5. To specify a *constant* price factor and offset for your attribute, enter your desired values in the *first* two boxes of the left column under the **Price Factor** and **Offset** headings.
6. To specify a *one-time* price factor and offset for your attribute, enter your desired values in the *last* two boxes of the left column under the **One Time Factor** and **Offset** headings.
7. Commit all your changes to the database by clicking the **insert** button.

Price Factor, One Time Factor and Offset

The Price Factor and Offset pricing mechanism calculates the attribute price based on a *percentage* of the product price. The formula is as follows:

Attribute Price = (Price Factor - Offset) x Product Price

The above formula can *optionally* be combined with the **Price** field as follows:

Attribute Price = Price + [(Price Factor - Offset) x Product Price]

The **Offset** field is a bit of an abstract concept and thus is not quickly understood without some explanation. We shall use an example to show why this is so. For example, you might want to add 1% (i.e. 0.01) to the price of a car if a customer chooses a custom paint attribute.

```
Car Price = $30,000
Price Factor = 0.02
Offset = 0.01

Attribute price: (0.02 - 0.01) x $30,000 = $300
```

However, you could achieve the same result using a **Price Factor** of 0.01 and **Offset** of 0. This seems to be the easier and logical way and is shown below.

```
Car Price = $30,000
Price Factor = 0.01
Offset = 0

Attribute price: (0.01) x $30,000 = $300
```

So what is the purpose of the **Offset** field when you can accomplish the same pricing strategy with or without it? Well, the answer boils down to *personal preference*. The **Offset** field is provided to certain store owners who prefer to enter their attribute pricing according to a “fixed pattern”.

For example, take the screen shot of the poster of Einstein that was shown initially in this section. If your store sells posters that come in various sizes and color, then you can implement an attribute pricing strategy based on the pattern shown below. Notice that there are two main variables that decide the pricing strategy – Print Size and Print Color.

Print Size	Price Factor	Print Color	Offset
8" x 10"	0.4	B/W	0.2
11" x 14"	0.6	Color	0.1
16" x 20"	0.8		

Now that you understand the **Price Factor** and **Offset** fields, we shall move on to discuss the **One Time Factor** field. The difference between the **Price Factor** and **One Time Factor** fields is in how the *final* product price is arrived at for product quantities greater than 1. Take a look at the following examples to understand their differences.

Quantity	Product Price	Price Factor	Attribute Price	Total Product Price
1	10	0.2	2	(10 + 2) = 12
3	10	0.2	2	(10 + 2) x 3 = 23

Quantity	Product Price	One Time Factor	Attribute Price	Total Product Price
1	10	0.2	2	(10 + 2) = 12
3	10	0.2	2	(10 x 3) + 2 = 32



Note

The justification for the **Offset** field is not easy for most people to accept, especially to those who cannot think of a need for this. If that is the case with you, just use the **Price Factor** field and ignore the **Offset** field.

By Quantity

Quantity discounts for a product attribute can also be specified in Zen Cart. Once a product attribute contains a

quantity discount, Zen Cart will show a hyperlink on the Product Info page in the Store Front. The pop-up window which appears on clicking the hyperlink allows a customer to see the bulk discounts that apply for the product. An example of an optical mouse with a bulk discount for each type of connector chosen is shown in the following screen shots.

The screenshot shows a product page for an 'Optical Mouse' priced at \$29.00. The product description states: 'Ergonomically designed optical mouse which provides precision tracking with 800 dpi resolution. No mouse pad required.' Below the description are two bullet points: 'Shipping Weight: 0.2lbs' and '997 Units in Stock'. An 'Add to Cart' button with a quantity selector (set to 1) and a 'add this to my cart' button are present. A section titled 'Please Choose:' shows two radio buttons: 'Connector Type' (selected) with options 'USB (+\$1.00)' and 'PS/2 (+\$0.75)'. A third radio button for 'Quantity Discounts Available' is also shown. An arrow points from the 'Quantity Discounts Available' button to a pop-up window titled 'Option Quantity Discounts'. The pop-up window contains two tables of discount information:

Connector Type USB			
QTY	1	2-3	4+
PRICE	\$1.00	\$0.75	\$0.50

Connector Type PS/2			
QTY	1	2-3	4+
PRICE	\$0.75	\$0.50	\$0.25

[Close Window]

Click to open pop-up window.

Before you specify bulk discounts for your attribute:

- Make sure you have created the product and its required option names and option values.
- Make sure that **Enable Qty Price Discount** is set to true under **Configuration > Attribute Settings**.

To specify bulk discounts for an attribute:

1. Click on **Catalog > Attributes Controller** to access the Attributes Controller screen.
2. Choose the appropriate category from the drop-down list box and your screen will be refreshed with products from the previously selected category.
3. Choose the appropriate product and attribute from the respective boxes and then concentrate on the following area on your screen.

The screenshot shows the 'Attributes Controller' screen with two input fields: 'Attributes Qty Price Discount:' and 'Onetime Attributes Qty Price Discount:'.

To understand the *meanings* and *syntax* for these two fields, refer to the section after these steps.

4. To specify a *constant* quantity discount for your attribute, enter your desired values in the **Attributes Qty Price Discount** field.
5. To specify a *one-time* quantity discount for your attribute, enter your desired values in the **Onetime Attributes Qty Price Discount** field.
6. Commit all your changes to the database by clicking the **insert** button.

Attributes Qty Discount and Onetime Attributes Qty Discount

The **Attributes Qty Discount** field allows you to specify bulk discounts for a particular attribute. For simplicity's sake, we shall assume that this attribute has no other prices attached to it. Consider the case where your store sells an optical mouse at a price of \$29 and a customer chooses *only* the USB Connector attribute.

You can specify the bulk discounts for the optical mice with the USB Connector option value as follows:

1:1.00,3:0.75,5:0.50

Customers at the Product Info page in your Store Front can click on a Quantity Discount hyperlink which opens a pop-up window showing a Quantity Discount Table as follows:

QTY	1	2-3	4+
PRICE	\$1.00	\$0.75	\$0.50

The above table values translate into the following scenarios based on the number of optical mice a customer buys assuming *only* the USB Connector attribute is selected.

No. of Optical Mouse bought = 1,	Total Price: $(\$29 + \$1.00) \times 1 = \$30.00$
No. of Optical Mouse bought = 2,	Total Price: $(\$29 + \$0.75) \times 2 = \$59.50$
No. of Optical Mouse bought = 3,	Total Price: $(\$29 + \$0.75) \times 3 = \$89.25$
No. of Optical Mouse bought = 4,	Total Price: $(\$29 + \$0.50) \times 4 = \$118.00$
No. of Optical Mouse bought = 5,	Total Price: $(\$29 + \$0.50) \times 5 = \$147.50$
No. of Optical Mouse bought = 6,	Total Price: $(\$29 + \$0.50) \times 6 = \$177.00$

The **Onetime Attributes Qty Discount** field allows you to specify bulk discounts for a particular attribute but the calculation is slightly different from the **Attributes Qty Discount** field. For comparison sake, we shall use the same example above but with the values entered into the **Onetime Attributes Qty Discount** field instead of the **Attributes Qty Discount** field.

Customers at the Product Info page of your Store Front can click on a Quantity Discount hyperlink which opens a pop-up window showing a Quantity Discount Table as follows:

QTY	1	3	5
PRICE	\$1.00	\$0.75	\$0.50

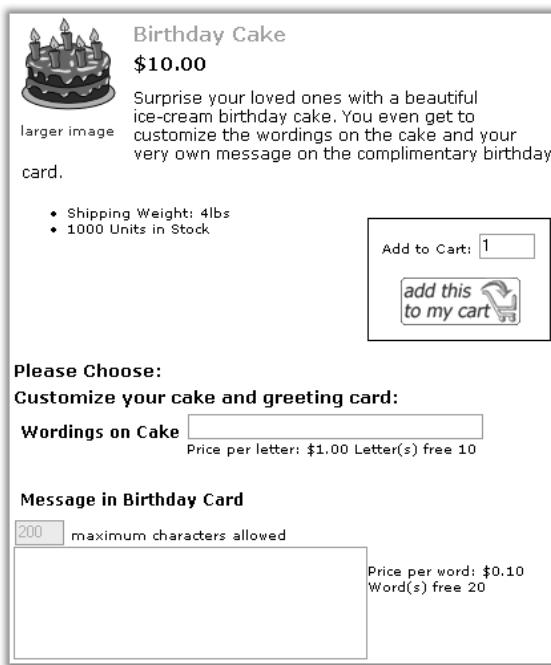
The above table values translate into the following scenarios based on the number of optical mice a customer buys, assuming the USB connector attribute is selected.

No. of Optical Mouse bought = 1,	Total Price: $(1 \times \$29) + 1.00 = \30.00
No. of Optical Mouse bought = 2,	Total Price: $(2 \times \$29) + 0.75 = \58.75
No. of Optical Mouse bought = 3,	Total Price: $(3 \times \$29) + 0.75 = \87.75
No. of Optical Mouse bought = 4,	Total Price: $(4 \times \$29) + 0.50 = \116.50
No. of Optical Mouse bought = 5,	Total Price: $(5 \times \$29) + 0.50 = \145.50
No. of Optical Mouse bought = 6,	Total Price: $(6 \times \$29) + 0.50 = \174.50

By Words or Letters

This pricing mechanism is applicable only to attributes that are of the *Text* option type. It allows you to price your text attribute according to the number of letters or words that a customer specifies. An example of a cake which allows customers to specify the wordings they want on the cake and a corresponding greeting card is shown in the

following screen shot to give you an idea of the use of this pricing mechanism.



Before you specify the pricing for words or letters in your attribute:

- Make sure you have created the product and its required option names and option values. The option name must be of option type – *Text*.
- You can restrict the Text box layout configurations by clicking on the **edit** button of the option value in the Option Values screen.
- You can also force the customer to key in the text area before adding the product to a cart by checking the **Attribute Required for Text** flag in the Attributes Controller screen.
- Make sure that **Enable Text Pricing by word or letter** and **Text Pricing - Spaces are Free** are set to true under **Configuration > Attribute Settings**.

To specify a price for the number of words or letters in each attribute:

1. Click on **Catalog > Attributes Controller** to access the Attributes Controller screen.
2. Choose the appropriate category from the drop-down list box and your screen will be refreshed with products from the previously selected category.
3. Choose the appropriate product and attribute from the respective boxes and then concentrate on the following area on your screen.



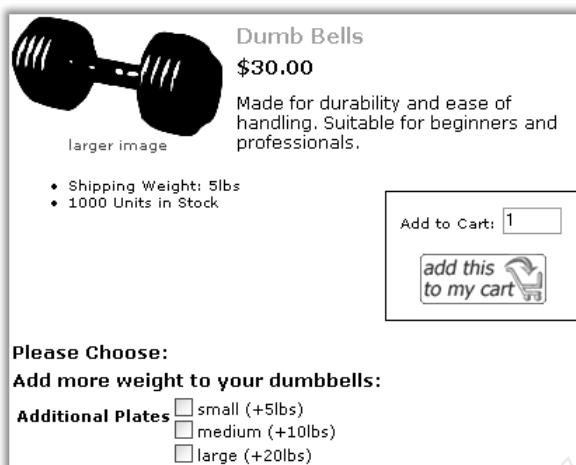
4. To price an attribute based on *words*, enter your desired values in the **Price Per Word** and **Free Words** headings.
5. To price an attribute based on *letters*, enter your desired values in the **Price Per Letter** and **Free Letters**

headings.

6. Commit all your changes to the database by clicking the **insert** button.

Attribute Weighting

If your shipping charges are affected by the weight that your product attributes introduce, you can optionally choose to increase the product weight based on the attribute instead. An example would be if your store sells gym equipment. A customer can choose to buy a set of basic dumbbells and add more weight to the dumbbells by using weight plates. This example is shown in the following screen shot.

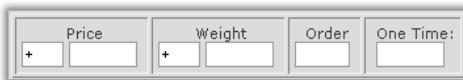


Before you specify weight to represent your product or service:

- Make sure you have created the product and its required option names and option values.
- Click the **edit layout** button of the product type that is linked to this attribute and take note of the **PRODUCT Attribute Weight Prefix - Default** field. This field specifies whether the attribute weight should be incremented or decremented by default. In addition, make sure the following fields in the screen are enabled:
 - **Show Weight**
 - **Show Attribute Weight**

To specify a weight to represent each attribute:

1. Click on **Catalog > Attributes Controller** to access the Attributes Controller screen.
2. Choose the appropriate category from the drop-down list box and your screen will be refreshed with products from the previously selected category.
3. Choose the appropriate product and attribute from the respective boxes and then concentrate on the following area in your screen.



4. To *add* the attribute weight to the product weight, specify a "+" or a *blank space* in the first box under the

Weight field. To *subtract* the attribute weight from the product weight, specify a “-” instead.

5. Type in a value for the second box under the **Weight** field to specify how much weight should be added or subtracted from the product's weight.
6. Enter a number into the **Order** field. This field indicates the sequence in which the attributes will be displayed to a customer. For example, if you have three attributes X, Y, Z in their original sequence of 1, 2, 3 and you change the sequence to 3, 1, 2. Then the attributes will be displayed in this order to the customer Z, X, Y.
7. *Optionally*, you can enter values into the **Price** and **One Time** fields if you want to specify *prices* along with your weights. Note that the **One Time** field applies only to price and not weight!
8. Commit all your changes to the database by clicking the **insert** button.

Manipulating Multiple Attributes Simultaneously

We shall now talk about how to copy attributes across different products. If you intend to perform all these operations, remember the two following principles:

- Create and price all your attributes beforehand to save you the trouble of propagating the changes afterwards.
- Back up your database to prevent accidental replacement of your data. Refer to “Database Back Up” on page 364 for details on doing this properly.

Enabling Mass Attribute Copy, Add and Delete

To copy or move attributes you have created, you need to turn on the appropriate feature in Zen Cart. You can either set this as a default for your store or on a per-page basis.

To enable copying and moving of attributes on a *default* basis:

- Click on **Configuration > Layout Settings** and set **Option Names and Values Global Add, Copy and Delete Features Status** and set the value to 1 to enable it.



Note: Although three options are explained in the side-panel, only two options are actually available. The third option, “2 = Products Model” is reserved for future use.

To enable copying and moving of attributes on a *per-page* basis:

- Go to either the Product Options screen or the Option Value Manager screen and select Display Global Features – ON from the drop-down list box near the top of the screen.

Copying Attributes to Other Products

Some situations require that you copy a set of attributes for one product across to all the products you have in a specific category. For example, suppose your shop sells children's clothing. You can set up an option name "shirt size" with the following values "small", "medium" and "large". You can then copy all these option values to another option name "cap size" easily.

As explained earlier, an attribute is made up of an option name and one or more option values. Therefore, there are two possible ways by which you can copy attributes to other products.

- Copy option values from one option name to another option name
- Copy option name with associated values from one product to other products in a category.

To copy *all* option *values* from one option name to another option name:

1. Click on **Catalog > Option Name Manager** to access the Product Options screen.
2. Concentrate on the following portion of the screen.



3. Choose the *source* option name containing the required option values to copy from the **Copy from Option Name** select box.
4. Choose the *destination* option name for the values you wish to copy to from the **Copy All Option Values to Option Name** field.
5. Click on **update** to complete the copy operation.



Note

All option values copied from one option name to another will *not* retain their original attribute pricing, weighting and image properties. You will need to set these attribute properties up again if you want them to apply to another set of attributes.

To copy *selected* option *values* to other products by *matching* "option name and value":

1. Click on **Catalog > Option Value Manager** to access the Option Values screen and concentrate on the following portion of the screen.

Copy to ALL Products where Option Name and Value ...

Select an Option Name and Value that currently exists on a product or products that you then want to copy another Option Name and Value to for all products with this existing Option Name and Value

Option Name to match: "Beginner Drum Lessons" Manual	Option Name to add: Color	Leave blank for ALL Products or enter a Category ID for Products to update
Option Value to match: "African Beats" [BUY INSTRUCTIONAL VIDEOS?]	Option Value to add: Green [COLOR]	<input checked="" type="checkbox"/> insert

Target **Source**

2. To copy to products that contain a certain *distinct* attribute option name and option value, choose the matching option name and option value from the first column of select boxes; i.e. **Option Name to match** and **Option Values to match**.
3. Select the option name and option value you wish to *copy from* by choosing from the select boxes in the second column; i.e. **Option Name to add** and **Option Value to add**.
4. In Step 3, you chose products that contain a matching attribute which will be affected by the copy operation. You can optionally specify whether these matching products should be *restricted to a certain category* by specifying the Category ID in the third column.
5. Click on **insert** to start the copy operation. A success message will appear at the top of your screen if everything is successful.

To copy *selected* option *values* to other products by *matching* “option name”:

1. Click on **Catalog > Option Value Manager** to access the Option Values screen and concentrate on the following portion of the screen.

Copy Option Name/Value to Products with existing Option Name ...

Select an Option Name and Value that currently exists on a product or products to add to all products or to only the products in the selected category that have the selected Option Name.

Example: Add Option Name: Color Option Value: Red to all Products with Option Name: Size
Example: Add Option Name: Color Option Value: Green with default values from Products ID: 34 to all Products with Option Name: Size
Example: Add Option Name: Color Option Value: Green with default values from Products ID: 34 to all Products with Option Name: Size for Categories ID: 65

Option Name to add: "Beginner Drum Lessons" Manual	Option Name to add to: Buy Instructional Videos?	Leave blank for ALL Products or enter a Category ID for Products to update
Option Value to add: "African Beats" [BUY INSTRUCTIONAL VIDEOS?]		<input type="checkbox"/> How should existing product attributes should be handled? <input checked="" type="radio"/> Update existing attributes with new settings/prices <input type="radio"/> Ignore existing attributes and add only new attributes
Default New Attribute Values from Product ID# or leave blank for no default values: <input type="text"/>		

Source **Target**

2. Select the option name and option value you wish to *copy from* by choosing from the select boxes in the first column; i.e. **Option Name to add** and **Option Value to add**.
3. *Optionally*, you can enter a Product ID into the blank text box on the left-most column for a source product which already has its default values.

For example, you may have many different products with the same attribute but one of them has its option value price and weight set to a specific value already. You can choose to have this specific product's default option value and settings copied over to the new product.

4. To copy to products that contain a certain *distinct* attribute option name only, choose the matching option name from the second column of select boxes; i.e. **Option Name to add to**.
5. In Step 4, you chose products that contain a matching attribute which will be affected by the copy operation. You can optionally specify whether these matching products should be *restricted to a certain category* by specifying the Category ID in the third column's text box.
6. If you do not want to continue adding an attribute if the target product already contains the attribute you are trying to add, you should check the **Ignore existing attributes and add only new attributes** radio button.
7. If you want to update the target attribute with the source attribute values (most likely already changed from the last time it was added), you can check the **Update existing attributes with new settings/prices option** instead. This setting will have an effect only when both the source and target attribute values are the same but the attribute pricing, weight and other settings are different.
8. Click on **insert** to start the copy operation. A success message will appear at the top of your screen if everything is successful.

Adding Attributes to Other Products

You can create an attribute and choose to have it added to other products. The target products (which must have at least one option value defined) can be restricted to the following types.

- All products.
- A single product.
- A category of products.

To access these options, click on **Catalog > Option Name Manager** and scroll to the following portion of the screen.

Add ALL Option Values to ALL products for Option Name
Update ALL existing products that have at least ONE Option Value and Add ALL Option Values in an Option Name

Select an Option Name "Beginner Drum Lessons" Manual

Add ALL Option Values to ONE products for Option Name
Update ONE product that has at least ONE Option Value and Add ALL Option Values in an Option Name

Select a Product

Beginner Drum Lessons (Model:) (\$11.00)
Birthday Cake (Model:) (\$10.00)
Canned Tuna (Model:) (\$50.00)
Dumb Bells (Model:) (\$30.00)
Encyclopedia - History of the World (Download Edition) (Model:) (\$200.00)

Add ALL Option Values to ONE Category of products for Option Name
Update ONE Category of products, when the product has at least ONE Option Value and Add ALL Option Values in an Option Name

Select a Category

Apples - ID#3
Articles - ID#8
Beverages - ID#14
Books - ID#10
Customizables - ID#11

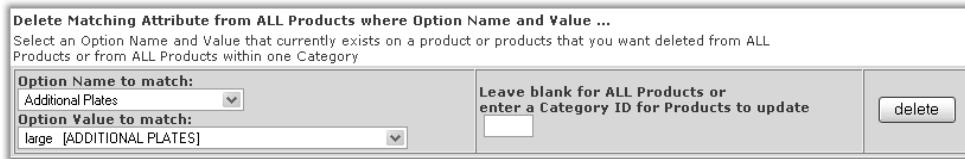
NOTE: Sort order will be set to the default Option Value Sort Order for these products

You should have no problems going about adding your own attributes to other products since the fields are self-explanatory and you have already covered how to copy attributes in the above sections.

Deleting Attributes from a Selection of Products

Zen Cart also allows you to do a mass delete of attributes from a selection of products if the need arises. All the steps taken and screen options are similar to those in the adding and copying of attributes section. Thus, we shall not be going through them.

To delete a matching option value from all products or a category of products, click on **Catalog > Option Values Manager** and manipulate the following portion of the screen.



Delete Matching Attribute from ALL Products where Option Name and Value ...
Select an Option Name and Value that currently exists on a product or products that you want deleted from ALL Products or from ALL Products within one Category

Option Name to match:
Additional Plates

Option Value to match:
large [ADDITIONAL PLATES]

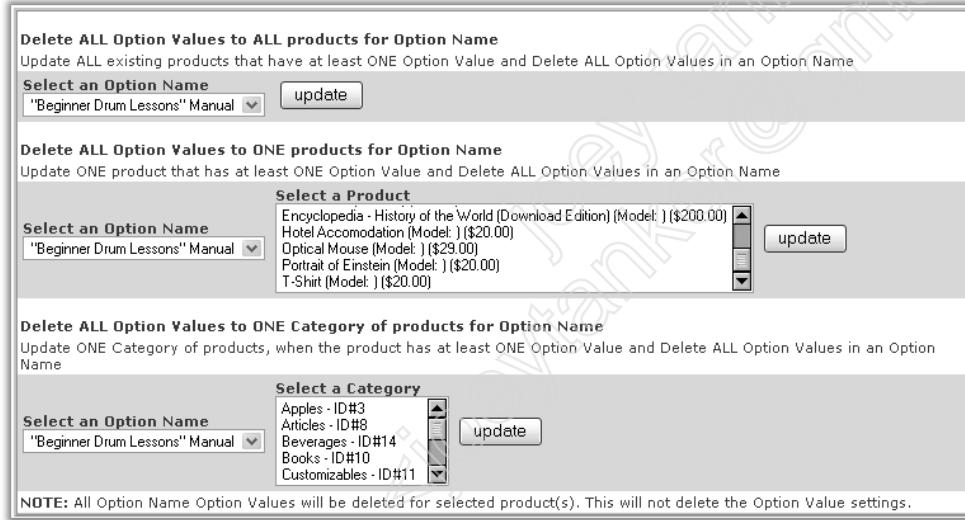
Leave blank for ALL Products or enter a Category ID for Products to update

delete

You can also choose to delete an attribute from products by matching an option name only. These products can be restricted to the following types.

- All products.
- A single product.
- A category of products.

To do so, click on **Configuration > Option Name Manager** and manipulate the following portion of the screen.



Delete ALL Option Values to ALL products for Option Name
Update ALL existing products that have at least ONE Option Value and Delete ALL Option Values in an Option Name

Select an Option Name
"Beginner Drum Lessons" Manual update

Delete ALL Option Values to ONE products for Option Name
Update ONE product that has at least ONE Option Value and Delete ALL Option Values in an Option Name

Select a Product
Encyclopedias - History of the World (Download Edition) (Model:) (\$200.00)
Hotel Accommodation (Model:) (\$20.00)
Optical Mouse (Model:) (\$29.00)
Portrait of Einstein (Model:) (\$20.00)
T-Shirt (Model:) (\$20.00)

Select an Option Name
"Beginner Drum Lessons" Manual update

Delete ALL Option Values to ONE Category of products for Option Name
Update ONE Category of products, when the product has at least ONE Option Value and Delete ALL Option Values in an Option Name

Select a Category
Apples - ID#3
Articles - ID#8
Beverages - ID#14
Books - ID#10
Customizable - ID#11

NOTE: All Option Name Option Values will be deleted for selected product(s). This will not delete the Option Value settings.

Sorting Product Attributes

Zen Cart provides several options for you to manipulate the ordering of product attributes.

To change the sorting preferences for your attributes:

1. Click on **Configuration > Product Info** to access the Product Info screen.
2. Change the sort order for your option names and values by looking at the following fields:
 - **Products Info - Products Option Name Sort Order**
 - **Products Info - Product Option Value of Attributes Sort Order**

To rearrange the sort order of option names or option values, click on **Catalog > Option Name Sorter** or **Catalog > Option Value Sorter** respectively.

Summary

After going through this chapter, you should be comfortable manipulating product attributes. Product attributes is one of the most powerful features of Zen Cart although few people utilize its flexibility or power because it requires a bit of time and effort and some experimentation to understand. Do not worry if you spend a bit more time on this chapter than the rest of the book because once you master the power of attributes, your imagination will allow you to configure almost any product the way you intended.

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Chapter 14 Other Product Manipulation Techniques

Introduction

This chapter makes use of the knowledge you have gained in the previous two chapters to further customize other aspects of your online catalog.

In this chapter, we shall:

- Specify multiple images for a single product.
- Add product samples to music products.
- Set up downloadable products for sale.
- List products across multiple categories.
- Specify the function of your online store.

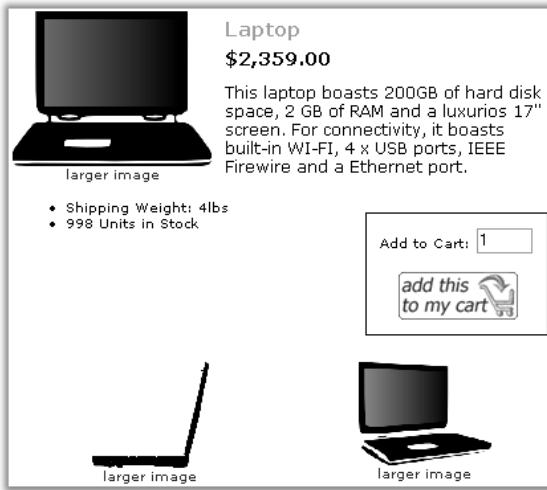
Providing Multiple Images for a Product

There are two scenarios where you might want to provide multiple images for a product:

- To showcase a single product using different images
- To use your custom-sized images instead of using Zen Cart's image auto-scaling feature.

Using Different Images for a Product

There are probably various occasions when you want to display multiple images for a product. For example, a zoom-in of a specific product detail like the neck-line of a dress or to provide several views (plan, elevation, etc) of a machine. Refer to the following screen shot to get an idea of how different images for a single product can be displayed.



Before you add any additional images to your product, you need to understand how Zen Cart recognizes and handles additional images for a product.

Understanding How Additional Images are Recognized

Zen Cart uses a *base name* to distinguish the main picture of a product from other additional pictures of the same product. For example, the main picture of a laptop will usually be the front view. The side and back views might make up the other pictures for the laptop. In this case, the image names could be named as follows:

- laptop.jpg
- laptop_backview.jpg
- laptop_sideview.jpg

Typically, an underscore is used to represent additional product images linked to a base name. You could easily have used “laptopa.jpg”, “laptop123.jpg”, “laptoplaptop.jpg”, etc. However, the latter naming schemes are difficult to comprehend and can lead to a maintenance nightmare if you have many products using images with similar names.

For simplicity's sake, we shall *assume* that all additional product images referred to in this book use the *underscore* as the separator to distinguish them from the base name of the product's main picture. Thus, from the list of sample laptop pictures listed above, the base picture is the one without an underscore (i.e. laptop.jpg). The base picture is usually uploaded when you create a new product in the Admin Console. For the other pictures, they will need to be manually sent to the server via FTP.

Before we go further, take note of a potential problem that can occur if you are not careful in naming your additional product images. Consider the following scenario where you have set up two laptops in your store catalog.

Product X: Custom Desktop Computer

Base picture: desktop.jpg
Other picture: desktop_side.jpg
Other picture: desktop_01.jpg

Product Y: NorthStar Desktop Computer

Base picture : desktop_northstar.jpg
Other picture: desktop_northstar_back.jpg
Other picture: desktop_northstar_01.jpg

If customers view Product Y, they will see it normally, with a base image and two additional images for the other views. If customers view Product X, there will be a problem because all *six* images are displayed! The problem is due to the fact that all six images have a base name of “desktop”. After this example, you should be conscious to avoid having different images with the same name.

The names of a product's additional images are sorted *alphabetically* before their corresponding images are displayed. Therefore, you should append a number or a letter behind the names of additional product images in order to display them in your desired sequence.



Warning Make sure that all the images have the same file extensions. If not, your additional images will not be displayed.

Adding Additional Images to a Product

Before you can show additional images for your products, you need to enable this feature for your particular product type:

1. Click on **Catalog > Product Types** to access the Product Types screen.
2. Choose the product type for which you want to have multiple images displayed and click on the **edit layout** button on the side-panel.
3. Make sure that the **Show Product Additional Images** field is enabled.

To add an additional image to a product:

1. Make sure your additional image contains an underscore (i.e. “_”) after the base name of the main product image you have already uploaded. For example, if a product's main image is “aaa.jpg”, then the base name is simply “aaa”. A possible name for the product's additional image might be “aaa_side.jpg”.

Recall that the underscore is the naming convention we are using for this book to identify the additional images of a product.

2. Upload the additional image via FTP to the same directory where the base product image is located on the server.

To change the layout for the additional product images of a product:

1. Click on **Configuration > Images** to access the Images screen.
2. Specify the required value in the **Product Info - Number of Additional Images per Row** field.

Providing Pre-Scaled Images for a Product

We shall now learn how you can use pre-scaled images with your products. Before we proceed, make sure you have gone through the “Understanding How Additional Images are Recognized” section on page 204 as we will be making use of some of the concepts discussed there.

Providing Companion Medium and Large Images Without Using Auto-Scaling

There are essentially three possible image sizes (small, medium and large) for product images in Zen Cart. As you probably know by now, Zen Cart automatically scales your images to the correct size if you only supply one image per product.

Auto-scaling of images can result in images with less than optimum file sizes and thus consume precious bandwidth.

To alleviate this problem, you can use your own pre-sized images to bypass the auto-scaling process to minimize wasted download capacity and improve page loading times for your customers. With pre-sized images, you also exert greater control over the exact resolution and size of the images that you want your customers to see.

Let us take a look at where you can see images of the three different sizes in your Store Front. This will give you a better idea of what you need to supply to Zen Cart for each image size. Below is a list of pages in your Store Front where different image sizes can be seen:

- Product Listing - *small* versions of your product images or rather the scaled down versions of your product images if they are quite large.
- Product Info - *medium* sized images are displayed by default.
- Product Info - *large* sized images are displayed in pop-up windows when customers click on the hyperlinked medium sized images.

Whatever the case, if you want Zen Cart to show your images with the relevant image sizes, you need to provide additional information to Zen Cart. Zen Cart recognizes the *large* and *medium* images by their suffixes of “_LRG” or “_MED” respectively.

The default suffixes can be changed in **Configuration > Images** by editing the following fields:

- **Product Info - Image Medium Suffix**
- **Product Info - Image Large Suffix**

In addition to the above file naming conventions, you need to put your custom images into the respective directories for the size desired. These directories should already be on your server and are located immediately underneath the <zc-home>/images directory with the names of **large** and **medium** respectively.

Therefore, to provide your custom medium and large size images for your base and additional images, you could name your images as follows (assuming your base and additional images are originally located under the <zc-home>/images directory):

- images/laptop.jpg
- images/laptop_sideview.jpg
- images/laptop_backview.jpg
- images/*medium*/laptop_MED.jpg
- images/*large*/laptop_LRG.jpg
- images/*large*/laptop_sideview_LRG.jpg
- images/*large*/laptop_backview_LRG.jpg

Notice that only *one* medium size image for a product (i.e. laptop_MED.jpg) is required regardless of how many additional images are used to represent a product. The name of the medium size image must also be derived from the base name of the product's main image instead of the names of any additional images.



Note If your base product image resides under <zc-home>/images/my-images, then your medium and large image directories should be <zc-home>/images/medium/my-images and <zc-home>/images/large/my-images respectively.

Adding Pre-Scaled Images to a Product

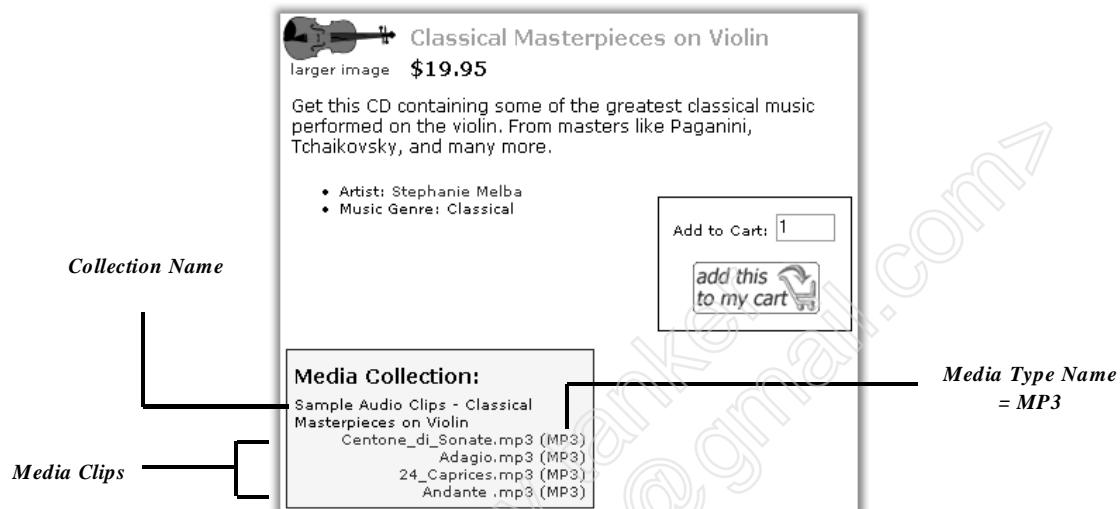
To specify medium and large images for your base and additional product images:

1. Make sure the relevant images have the correct suffix before the file extension.

2. Upload the files via FTP to their respective directories on the server. For example, <zc-home>/images/large and <zc-home>/images/medium.

Providing Music Samples

For products of Product-Music product type, Zen Cart allows you to specify music samples for free download to users. For example, if your store sells music CDs, you can provide sample music clips for each song in the CD. An example screen shot of a music CD with sample song clips is shown below for you to visualize how sample clips can appear with a product. The comments on the screen shot will be obvious when you learn to configure product samples later in this section.



Music product samples are implemented using the concepts of *media type* and *media manager*. A media type specifies the file type that a product sample belongs to. For example, media types of music clips can be in *mp3* or *wma* file formats while media types of song lyrics can be in *txt* or *pdf* file formats. A media manager contains several files of possibly different media types, that are assigned to a particular product. For example, you can create a media collection of song clips and lyrics and assign the media collection to a music CD in your online store.

The general steps to configuring product samples can be summarized below:

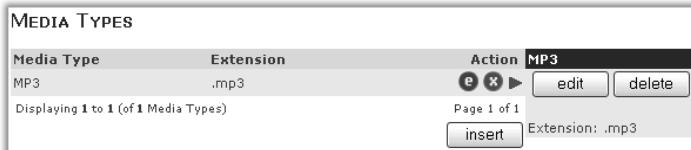
1. Configure Media Type for Product Sample.
2. Create a Media Collection to Hold Product Samples.
3. Assign the Media Collection to a Music Product.

Let us now go through the above steps in greater detail.

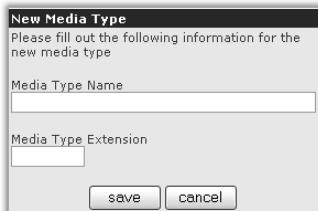
Step 1 of 3: Configure Media Type for Product Sample

To define the media types for your product samples:

1. Click on **Extras > Media Types** to access the Media Types screen.



2. Click on **insert** to begin creating a media type for your product sample.



3. Specify a name whose meaning will be obvious to your customers in the **Media Type Name** field. This field is displayed to your visitors telling them the file format of the sample.
4. Specify a file extension in the **Media Type Extension** field which corresponds to the product sample file you will be uploading later. Examples include wma, pdf, mp4 etc.
5. Click on **save** to create the media type in your database.

Step 2 of 3: Create a Media Collection to Hold Product Samples

To create a media collection of product samples:

1. Click on **Extras > Media Manager** to access the Media Manager screen.



2. Click on **insert** to begin creating a new media collection.



3. Type a suitable name into the **Media Collection Name** field and click **save** to save this media collection into the database. Your Media Manager screen will be refreshed.
4. Select the media collection you just created and click on **edit** to begin specifying the different files that you wish to associate with the media collection.



Media Collection Name
Sample Audio Clips - Classical Masterpieces on Violin

save cancel

Use the section above to change the Media Collection Name, then clicking on the save button.

Use the selection below to add or remove media clips from the media collection.

Add Media Clip

Upload to Media Directory Main Directory

Media Clip Type MP3 (.mp3)

Add

delete Centone_di_Sonate.mp3

delete Adagio.mp3

delete 24_Caprices.mp3

delete Andante.mp3

5. If you wish to change the name of the media collection you just created, edit the **Media Collection Name** field and click **save**.
6. For each file that you wish to associate with this media collection, click the **Browse** button next to the **Add Media Clip** field and select a file from your local computer's hard drive. This file should end with a file extension which you have defined in the **Extras > Media Types** screen.
7. Choose a directory from the **Upload to Media Directory** drop-down list box to indicate where you want your uploaded file to be placed on the server. The default value of Main Directory points to the <zc-home>/media directory on the server.

Avoid uploading files with special characters (quotes, exclamation marks, etc) or spaces in their file names to avoid download problems for your customers. These problems can arise due to how different web browsers work.

8. Choose the appropriate file extension from the **Media Clip Type** field for the product sample file you intend to upload. The file extension for the file you upload must *match* a file extension defined in the Media Types screen. If both file extensions do not match, Zen Cart will just ignore the product sample you uploaded and thus not display the product sample in the media collection of the product.
9. Click **Add** to upload and associate the sample file to your media collection.
10. Repeat from Step 4 to add another product sample to the media collection.

Step 3 of 3: Assign the Media Collection to a Music Product

To assign the media collection you have created to a music product:

1. Click on **Extras > Media Manager** to access the Media Manager screen.
2. Choose the required media collection and click on **assign to product** to begin assigning the media collection to your desired music products.



3. Choose the product *category* from the *top* drop-down list box and the *product* from the *bottom* drop-down list box for the product that should be assigned the media collection.
4. Click **Add** to assign the required media collection to the product.
5. Repeat from Step 3 to add the same media collection to another product.

Selling Downloadable Products

Digital downloads are one of the hottest ways of doing business on the Internet nowadays. There is no inventory to hold and customers get to enjoy their products sooner.

Zen Cart allows you to easily set up downloadable products for sale in your online store via the use of product attributes. For example, you can sell individual songs contained in a song album by using a product attribute to represent each song. Customers can then choose which songs they want to buy and pay only for those songs.

Deciding How Download Options Are Structured

The steps to creating a downloadable product are fairly straightforward. The difficult part is in deciding how you want to “structure” your download options as shown in the following screen shots.

 **Encyclopedia - History of the World (Download Edition)**
\$200.00

Get the most authoritative encyclopedia covering the history of the world in digital format now! No shelf space to set aside and all contents indexed to allow for quick search.

• 1000 Units in Stock

add this to my cart

Please Choose:
ALL volumes available for download upon purchase.

Vol 1 of 4: Asia

Vol 2 of 4: Africa

Vol 3 of 4: America

Vol 4 of 4: Europe

 **Beginner Drum Lessons**
Starting at: \$11.00

Learn to play drums by following the exercises in the [downloadable manual](#). Both sheet music and tablature are available.

Instructional videos on how to play each song featured in the manual can also be *separately downloaded*.

NOTE: All instructional videos are in ".avi" format.

• 997 Units in Stock

Add to Cart: 1

add this to my cart

Please Choose:
"Beginner Drum Lessons" Manual

Buy Instructional Videos?

"African Beats" (+\$1.00)
 "Dance Beats" (+\$1.00)
 "Jungle Beats" (+\$1.00)
 "Metal Beats" (+\$1.00)

The figure on the *left* shows an encyclopedia with several downloadable parts. All the downloadable parts are presented as radio buttons which have already been *pre-selected*. Therefore, when customers buy the encyclopedia, they will be able to download all four parts of the encyclopedia separately. Breaking up large files into smaller parts for download allow users with limited bandwidth to schedule their downloads according to their own free time.

All three download attributes are implemented using a pair of option name and option value. All option values also have their **Default Attribute to be Marked Selected** attribute flag in the Attributes Controller screen set to Yes. By doing so, customers do not have to explicitly click on each radio button to indicate they want to purchase that particular download.

The figure on the *right* shows an instructional manual and the corresponding training videos for download. Here, customers are given a choice of what they want to download. For the Video attribute, they can choose from any of the four videos. For the Manual attribute, they will need to choose between the PDF or Word file format. In either case, each option name has more than one option value attached to it. The price of the final purchase will also depend on the number of downloads that a customer chooses.

Having seen two examples of how download attributes can be structured, you should be able to utilize the concept when creating your own downloadable products.

Configuring a Downloadable Product

The general steps to configuring your downloadable product properly can be summarized below:

1. Enable Download Functionality in Zen Cart.
2. FTP Downloadable Files to the Server.
3. Configure Download Attributes.
4. Specify When Downloads Are Made Available.
5. Test Your Product Download Configuration.

Before you begin to configure your downloadable product:

- Create a product based on the product type that best matches the downloadable product you want to sell. Due to the nature of downloadable products, you should pay careful attention to the fields in the following table when creating your product.

Property	Recommended Setting and Explanation
Product is Virtual	Set to <u>No</u> , <u>Shipping Address Required</u> . Zen Cart will <i>not</i> reduce the stock level automatically in this case; which is logical for a downloadable product.
Always Free Shipping	Set to <u>No</u> , <u>Normal Shipping Rules</u> if your product is offered purely as a downloadable file. Zen Cart automatically skips the Shipping Information page if all items in a customer's shopping cart are downloadable files. Set to <u>Special</u> , <u>Product /Download Combo Requires a Shipping Address</u> if your product is offered both as a downloadable file and a physical good to be delivered to customers.

Property	Recommended Setting and Explanation
Products Quantity Box Shows	Set to <u>No</u> , <u>Do not show Quantity Box</u> and set the Product Qty Minimum field to <u>1</u> if your product is offered purely as a downloadable file. This setting makes sense for products offered purely as download files because customers only need one copy of the product and can easily duplicate multiple copies themselves.

Refer to Table 12.1 under the “Creating a General Product” section on page 165 if you need to refresh your memory on the meanings of the other fields in the Product screen.

- Prepare the files you want customers to download. Try to zip your downloadable files into a compressed format to save space and speed up the download. For compressed files, most web browsers will open up a dialog box prompting users to save the files to their local computers.

If your downloadable files are uncompressed and happen to belong to the type that can automatically be "opened" by a web browser (.jpg, .gif, .pdf, etc), your customers will not have a chance to choose where they want to save the files and may even have trouble opening the files properly. Therefore, save yourself the trouble of having to answer support calls by compressing your downloadable files.

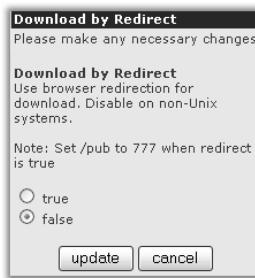
To configure your downloadable product, follow the steps outlined below:

Step 1 of 5: Enable Download Functionality in Zen Cart

1. Click on **Configuration > Attribute Settings** to access the Attribute Settings screen.

ATTRIBUTE SETTINGS	
Title	Value
Enable Downloads	true
Download by Redirect	false
Download by streaming	true
Download Expiration (Number of Days)	7
Number of Downloads Allowed - Per Product	5
Downloads Controller Update Status Value	4
Downloads Controller Order Status Value >= lower value	2
Downloads Controller Order Status Value <= upper value	4
Enable Price Factor	true
Enable Qty Price Discount	true
Enable Attribute Images	true
Enable Text Pricing by word or letter	true
Text Pricing - Spaces are Free	1
Read Only option type - Ignore for Add to Cart	1

2. Ensure that the **Enable Downloads** field has a value of true. This will allow Zen Cart to process downloads.
3. Edit the **Download by Redirect** field to bring up the following side-panel. Choose true if your Zen Cart is running on a Unix/Linux/Mac operating system. Choose false if your Zen Cart is running on a Windows operating system. Click **update** to save your changes.



4. The **Download by streaming** field allows your customers to download their files in smaller chunks from the server. This is helpful if you have set **Download by Redirect** to false and the PHP memory limit on your server has been set to 8MB or less.



Remember to make sure the <zc-home>/pub directory on your server has the correct file permission (i.e. chmod 755) if you have specified true for the **Download by Redirect** field and your Zen Cart store is hosted on a Unix/Linux operating system. If your Zen Cart store is running on a Windows server, you can ignore the <zc-home>/pub directory as it is not used.

Step 2 of 5: FTP Downloadable Files to the Server

Now we need to FTP some files to the server which we want users to be able to download.

1. Start your FTP client software and connect to the server hosting your Zen Cart store.
2. Make sure that the <zc-home>/download directory exists on the server. If you do not see the directory, check the following line in your <zc-home>/includes/configure.php file to see which directory your downloadable file should be located in.

```
define('DIR_FS_DOWNLOAD', DIR_FS_CATALOG . 'download/');
```

3. Upload the required file to the <zc-home>/download directory or the directory specified in the previously mentioned configure.php file. Note that you *cannot* upload to a *sub-directory* of this directory!



Note

Avoid using spaces, special characters, extra periods, quote marks, etc, for your filenames as they can cause strange problems to occur. Also note that filenames are case-sensitive.

Step 3 of 5: Configure Download Attributes

Different file formats are required for different types of product downloads. For example, if you sell e-books, your download format might be “.pdf” or “.doc”. If you sell music, your download format might be “.mp3” or “.wma”. Whatever the case may be, you need to tell Zen Cart what the attribute used for download is.

Before you begin to configure your download attribute:

- Create the attribute you want for a product to allow a specific download. For example, if you are offering e-books as downloadable files, you can create an attribute with an option name of “File Format” and option values of “pdf” and “doc” respectively.
- Choose either one of the following values for the **Option Type** field when creating your download attribute's option name:
 - ➔ Radio
 - ➔ Dropdown

To configure your download attribute:

1. Click on **Catalog > Attributes Controller** to access the Attributes Controller screen.
2. Navigate to the product which you want to associate a download attribute with.
3. Choose the option name and option value to be associated with a specific download file. Concentrate on the following portion of the screen.

Downloadable products:	Filename:	Expiry days: (0 = unlimited)	Maximum download count:
	<input type="text" value="filename"/>	<input type="text" value="7"/>	<input type="text" value="5"/>

4. In the **Filename** field, type the name of the file which you have transferred to the server via FTP. Note that the file name is case-sensitive!
5. Enter a value for the **Expiry days** field to specify the download validity period for the download. You can change the *default* value for this field by clicking on **Configuration > Attribute Settings** and changing the value of the **Download Expiration (Number of Days)** field.
6. Enter a value for the **Maximum download count** field to specify a limit on how many times a customer can download the same file. You can change the *default* value for this field by clicking on **Configuration > Attribute Settings** and changing the value of the **Number of Downloads Allowed - Per Product** field.
7. Click on **insert** to link the downloadable file with the product attribute.
8. Repeat from Step 3 if you want to associate another attribute with another file download.

Step 4 of 5: Specify When Downloads Are Made Available

Finally, you need to tell Zen Cart whether the customer is entitled to an *immediate* download or a *delayed* download. This decision is based on the *order status* of the customer purchase. The default order statuses available in Zen Cart are as follows:

- Pending [1]
- Processing [2]
- Delivered [3]
- Update [4]

Refer to “Working with Order Statuses” on page 298 if you want to find out more about order statuses.

Click on **Configuration > Attribute Settings** and concentrate on the following fields which dictate what order statuses will affect *when* your products are available for download.

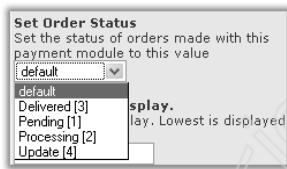
- **Downloads Controller Update Status Value** – The order status value here *resets* the download days and maximum download counts for a particular download. This is helpful if your customer's download period has expired and you want to enable them to re-download a particular file. The default value is 4 which represents an order status of “Update [4]”.
- **Downloads Controller Order Status Value >= lower value** – The lower bound of order statuses that will make a download available to customers. The default value is 2, which represents an order status of “Processing [2]”.
- **Downloads Controller Order Status Value <= upper value** – The upper bound of order statuses that will make a download available to customers. The default value is 4, which represents an order status of “Update [4]”.

Based on the above three fields in the Attribute Settings screen, we can conclude that an order that has an order status of “Processing [2]” or “Delivered [3]” will mean that file(s) are available for download. An order of “Pending [1]” will mean that file(s) are not available for download yet. An order of “Update [4]” not only makes a download available, it resets the download days and maximum download counts too.

Now that you understand how order statuses affect the availability of your downloads to customers, you will need to specify when you want files to be available for download to customers after they have paid up.

To configure *when* customers can download a particular file after paying for your goods:

1. Click on **Modules > Payment** to access the Payment Modules screen.
2. Choose and edit a payment option available to your customers and concentrate on the following portion of the screen.



3. Choose a value for your **Set Order Status** field as discussed earlier on this page:
 - For *delayed* downloads, you need to set the order status to Pending [1].
 - For *immediate* downloads, you need to set order status to Processing [2] or Delivered [3].

Step 5 of 5: Test Your Product Download Configuration

Using a test customer account, go to your Store Front and purchase the downloadable product which you have just created. Make sure you choose a payment option that allows you to check whether it allows *immediate* or *delayed* download.

If a file is available for immediate download, the test customer will be able to see and download the files immediately on the Checkout Success page as shown in the following screen shot.

Optionally, you can log in to the test customer account to check whether files are available for download. To give you an idea of how files that are available for download will appear in a test customer's account, you can refer to the following sample screen shots.

Previous Orders

Date	No.	Ship To	Status	Total	View
09/26/2006 # 26	Jacques Pires France		Processing	\$200.00	View
09/21/2006 # 23	Jacques Pires France		Pending	\$2,408.75	View
09/18/2006 # 19	Jacques Pires France		Pending	\$230.00	View

*Status is "Processing"
i.e. Download available.*

Order Information - Order #26

Qty.	Products	Total
1 ea.	Encyclopedia - History of the World (Download Edition)	
	• Vol 1 of 4: - Asia	
	• Vol 2 of 4: - Africa	
	• Vol 3 of 4: - America	
	• Vol 4 of 4: - Europe	
		\$200.00
		Sub-Total: \$200.00
		Free Shipping: \$0.00
		Sales Tax: \$0.00
		Total: \$200.00

To download your files click the download button and choose "Save to Disk" from the popup menu.

Item Name	File Size	Filename	Link Expires	Remaining	Download
Encyclopedia - History of the World (Download Edition)	0.05 MB	encyclopedia-part1.zip	10/03/2006	5	download
Encyclopedia - History of the World (Download Edition)	0.05 MB	encyclopedia-part2.zip	10/03/2006	5	download
Encyclopedia - History of the World (Download Edition)	0.05 MB	encyclopedia-part3.zip	10/03/2006	5	download
Encyclopedia - History of the World (Download Edition)	0.05 MB	encyclopedia-part4.zip	10/03/2006	5	download

Checking and Changing Download Statuses

After a purchase is made by a customer, you can check the availability of your downloadable products to that customer. This allows you to check on customer complaints regarding download failures or simply to manually reactivate the downloads of a particular customer's order.

To check and/or change the download status of your customer orders:

1. Click on **Customers > Orders** to access the Orders screen.
2. Choose the order which contains purchased downloads and click the **edit** button on the side-panel. Concentrate on the following portion of the screen.

Order Download Status			
Status	Filename	Days	Count
<input checked="" type="button"/>	encyclopedia-part1.zip	7	5
<input checked="" type="button"/>	encyclopedia-part2.zip	7	5
<input checked="" type="button"/>	encyclopedia-part3.zip	7	5
<input checked="" type="button"/>	encyclopedia-part4.zip	7	5

Date Added	Customer Notified	Status	Comments
09/26/2006 01:18:05	<input checked="" type="checkbox"/>	Pending	

Comments

Status: Notify Customer: Append Comments:

3. To change the download status of a particular file, click on the respective button under the Status column.
4. To change the status of an order so as to control *when* files are available for download, choose a suitable order status from the **Status** drop-down list box and click the **update** button.

Managing Downloadable Products Centrally

You can easily lose track of which attributes are tied to which downloadable files if your online store sells a lot of downloadable products. To alleviate this problem, Zen Cart provides a screen which allows you to manage all your download-specific information from one place. This screen is available via **Catalog > Downloads Manager** as shown in the following sample screen shot.

DOWNLOADS MANAGER									
<input type="checkbox"/> Missing filename <input type="checkbox"/> Valid filename									
Attr ID	Prod ID	Product Name	Model Option Name	Option Value Name	Filename	Days	Count	30 song_African.zip <input type="button" value="edit"/> <input type="button" value="Attribute Controller"/>	
30	17	Beginner Drum Lessons	Buy Instructional Videos?	"African Beats"	<input type="checkbox"/> song_African.zip	7	5	<input type="button" value="edit"/> <input type="button" value="Attribute Controller"/>	
31	17	Beginner Drum Lessons	Buy Instructional Videos?	"Dance Beats"	<input type="checkbox"/> song_Dance.zip	7	5	<input type="button" value="edit"/> <input type="button" value="Attribute Controller"/>	
32	17	Beginner Drum Lessons	Buy Instructional Videos?	"Jungle Beats"	<input type="checkbox"/> song_Jungle.zip	7	5	<input type="button" value="edit"/> <input type="button" value="Attribute Controller"/>	
33	17	Beginner Drum Lessons	Buy Instructional Videos?	"Metal Beats"	<input type="checkbox"/> song_Metal.zip	7	5	<input type="button" value="edit"/> <input type="button" value="Attribute Controller"/>	
37	17	Beginner Drum Lessons	"Beginner Drum Lessons" Manual	MS Word Format	<input type="checkbox"/> song_Beginner_Drum_Lessons_MSWord.zip	7	5	<input type="button" value="edit"/> <input type="button" value="Attribute Controller"/>	
36	17	Beginner Drum Lessons	"Beginner Drum Lessons" Manual	PDF Format	<input type="checkbox"/> song_Beginner_Drum_Lessons_PDF.zip	7	5	<input type="button" value="edit"/> <input type="button" value="Attribute Controller"/>	
26	18	Encyclopedia - History of the World (Download Edition)	Vol 1 of 4:	Asia	<input type="checkbox"/> song_Asia.zip	7	5	<input type="button" value="edit"/> <input type="button" value="Attribute Controller"/>	
27	18	Encyclopedia - History of the World (Download Edition)	Vol 2 of 4:	Africa	<input type="checkbox"/> song_Africa.zip	7	5	<input type="button" value="edit"/> <input type="button" value="Attribute Controller"/>	
28	18	Encyclopedia - History of the World (Download Edition)	Vol 3 of 4:	America	<input type="checkbox"/> song_America.zip	7	5	<input type="button" value="edit"/> <input type="button" value="Attribute Controller"/>	
29	18	Encyclopedia - History of the World (Download Edition)	Vol 4 of 4:	Europe	<input type="checkbox"/> song_Europe.zip	7	5	<input type="button" value="edit"/> <input type="button" value="Attribute Controller"/>	

EDITING DOWNLOAD INFORMATION

Product: Beginner Drum Lessons
Model:

File: song_African.zip
Max Days: 7
Max Downloads: 5

Click "edit" to change to this side-panel.

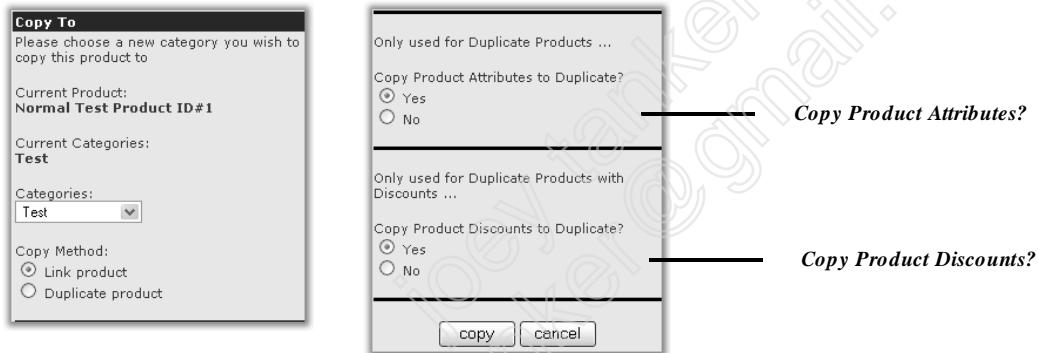
Duplicating Products

By duplicating your products, you save time and effort because you only need to customize selected portions of the copied product instead of having to create a new product each time. Duplicating products work best when your products have fairly generic properties with few differences.

For example, T-shirts have a limited selection of sizes and mostly differ in terms of color, pictures and wordings. Therefore, you can easily create a skeletal product of your T-shirt with some generic attributes like color and size attached to it. By duplicating this skeletal product within the same category or to other categories, and customizing only those properties (description, images, etc) that change, you can save yourself a lot of time and repetitive effort.

To duplicate a product within a category or to another category:

1. Click on **Catalog > Categories/Products** to access the Categories/Products screen.
2. Click on the blue “C” button next to the product you wish to duplicate. This product shall be referred to as the *source* product because it is used to create other duplicated products.
3. A side-panel should appear as shown in the following screen shot.



4. Choose the target category you want the duplicated product to reside in from the **Categories** drop-down box.
5. Choose Duplicate product for the **Copy Method** field.
6. Choose Yes for the **Copy Product Attributes to Duplicate** field if you have product attributes which you wish to copy to the duplicated product. This field only appears if your source product has attributes attached to it.
7. Choose Yes for the **Copy Product Discounts to Duplicate** field if you have any discounts tied to this product that you wish to copy to the duplicated product. This field only appears if your source product has discounts attached to it.
8. Click on **copy** to begin duplicating the product. You should be redirected to the target category you specified in Step 4 once product duplication completes.
9. By default, your duplicated product is *disabled* to allow you to make changes. This is shown by a red button icon appearing under the Status column of the duplicated product in the Categories/Products screen.
10. Make any required changes to your duplicated product and then *enable* it so that it is available for sale in your online catalog.

Listing Products in Multiple Categories

Product linking allows you display a product in multiple categories. You also get the benefit of greater product exposure with only a single copy to maintain. For example, if you have a medicinal pill that has the ability to act as a sleeping pill and a pain killer, you can list that pill under both the “sleeping pills” and “pain killers” categories.

The important thing to remember about linked products is this: Although they appear in multiple categories, there is always only *one* product. This is a great maintenance advantage because you only have to make changes to your linked product in one place and all the changes will appear concurrently in all the categories it is displayed in.

Linked products are easily identified in the Categories/Products screen via a *yellow* button icon (on the right of the green icon) under the Status column as shown in the following sample screen shot.

ID	Categories / Products	Model	Price/Special/Sale	Quantity	Status
43	Simple Linked Test Product		\$200.00	1000	<input checked="" type="checkbox"/> <input type="checkbox"/>

This yellow button icon also appears next to any *categories* that contain linked products. For example, if your product originally resides in Category A and is then linked to Category B, you should see the yellow button icons appearing next to both Category A and Category B in the Categories/Products listing screen.

Master Category

Whenever you deal with products that are linked, you will come across the term *Master Category*. The purpose of a Master Category is to allow your product to take advantage of any *pricing* mechanisms you have tied to a *category*.

For example, if you have created a 10% sale for all products in the Christmas Sale category. By linking a Product X under another category to the “Christmas Sale” category and making the “Christmas Sale” category the Master Category, Product X will automatically be subjected to a 10% discount as well.

So how do you know what Master Category a linked product belongs to? Well, you can edit any linked product which has the yellow button icon next to it in the Categories/Products page. You will notice a **Product Master Category** field appearing on top of the Product page as shown in the sample screen shot below.

PRODUCT IN CATEGORY: "TEST"

Product Master Category: Computers ID# 11

NOTE: Master Category is used for pricing purposes where the product category affects the pricing on linked products, example: Sales

Notice from the preceding screen shot that the Master Category of the product is the “Computers” category but we are viewing the product from within the “Test” category.

In essence, when a product is linked, take note of the following points:

- Only *one* copy of the product actually exists in the database regardless of how many categories the linked product appears under.
- Only *one* Master Category exists for a linked product regardless of how many categories the linked product appears under.

There are two ways to configure product linking in Zen Cart:

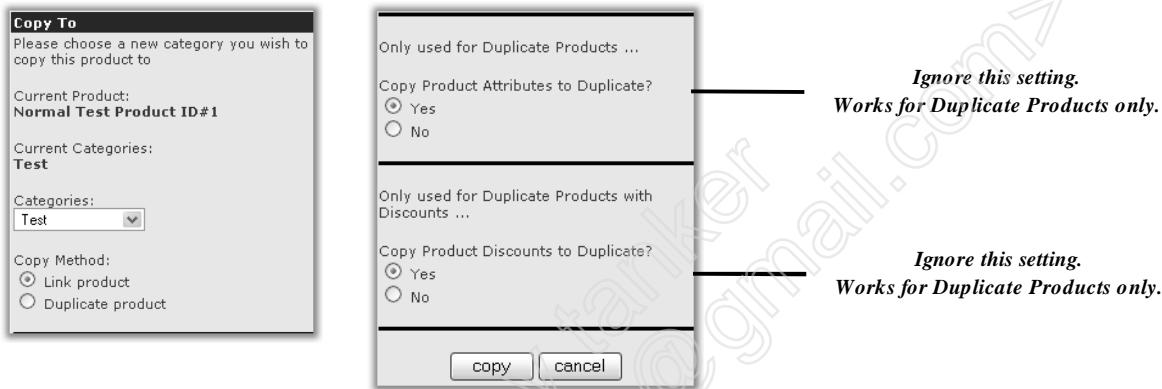
- Simple product linking – only one category can be linked to at any time.

- Advanced product linking – many categories can be linked to at any time, bulk copy/delete operations, etc, can be performed from a single location

Simple Product Linking

To list a product under different categories by using the simple product linking approach:

1. Click on **Catalog > Categories/Products** to access the Categories/Products screen.
2. Click on the blue “C” button next to the product you wish to link from. This product shall be referred to as the *master* product because it is under the master category.
3. A side-panel should appear as shown in the following screen shot.



4. Choose the *target* category you wish to link to from the **Categories** drop-down list box. This category must be *different* from the current product's category.
5. Choose Link product for the **Copy Method** field.
6. *Ignore* the **Copy Product Attributes to Duplicate** field if it appears.
7. *Ignore* the **Copy Product Discounts to Duplicate** field if it appears.
8. Click on **copy** to create a linked product. You should be redirected to the target category you specified in Step 4 once product linking completes.
9. If you go to both the target category and the master category, you will notice both a *green* button icon and a *yellow* button icon appearing next to your linked product. Furthermore, any category that contains a linked product will also have the green and yellow button icons displayed next to them.

Advanced Product Linking

Besides the simple linking you have just seen in the above section, you can employ another technique that is even faster and more powerful using the Multiple Categories Link Manager screen. This screen allows you to immediately link a product to multiple categories and perform bulk manipulation of linked products across categories.

Note that the Multiple Categories Link Manager screen is not immediately accessible via any menu options in the Admin Console. You can only reach the screen via the following two methods:

- Click on the **Multiple Categories Link Manager** button that appears at the bottom of a Copy To side-panel of a product when you click on the blue “C” button of a product in the Categories/Products screen.
- Click on the **Multiple Categories Link Manager** hyperlink appearing near the top of any Attributes Controller screen of a product.

There is a lot of information contained in the Multiple Categories Link Manager screen. To help you understand this screen and simplify your configuration approach, think of the screen as being broken up into the following sections:

- Product Selection
- Product Linking
- Mass Operation

Product Selection

Products to Multiple Categories Link Manager ... - Test
Select a Category with Products ... Or move between the Products
Products: 7/9

previous Test* next

Select a Product to View and Press Display ...

\$20.00

Free Test Product with Free Shipping (\$0.00) [] - ID# 20
New Product (\$20.00) [] - ID# 31
Normal Test Product (\$200.00) [] - ID# 1
Normal Test Product Clone with Attribute and Discount (\$200.00) [] - ID# 43
T-Shirt (\$20.00) [] - ID# 9

display

This portion of the screen allows you to navigate to the product which you want to link to several categories. You should be familiar with how this portion of the screen works since it behaves similarly to what you saw in the Attributes Controller screen.

Product Linking

PRODUCTS TO MULTIPLE CATEGORIES LINK MANAGER ...
PRODUCT ID# 9 T-SHIRT

The Products to Categories Linker is designed to quickly link the current Product to one or to many Categories. You may also Link all of the Products in a Category to another Category or Remove Linked Products from a Category that are in another Category. (See below for additional instructions)

Product Master Category: Customizables ID# 11 Current Number of Linked Categories: 2

CATEGORIES WITH PRODUCTS THAT ARE AVAILABLE FOR LINKING ...

ID#	Categories Name	ID#	Categories Name	ID#	Categories Name
3	<input type="checkbox"/> Apples	8	<input type="checkbox"/> Articles	14	<input type="checkbox"/> Beverages
10	<input type="checkbox"/> Books	11	<input checked="" type="checkbox"/> Customizables	12	<input type="checkbox"/> Gift Certificates
6	<input type="checkbox"/> Handphones	7	<input type="checkbox"/> Music	4	<input type="checkbox"/> Oranges
5	<input type="checkbox"/> Pineapples	1	<input checked="" type="checkbox"/> Test		

9 T-Shirt

Product: T-Shirt
Model:
Price: \$20.00

For pricing purposes, each Product requires a Master Category, regardless of how many Categories it may be linked. This can be set via the Master Category Dropdown.

The Product is currently linked to the Category or Categories that are checked above. To add a new Category or Categories simply check the checkbox next to the Category name. To remove an existing linked Category or Categories, simply uncheck the checkbox next to the Category name.

When you have checked all of the Categories that you want this Product to be linked to, press the Update Category Links

This portion of the screen allows you to change the Master Category of a linked product by choosing from the **Product Master Category** drop-down list box. You can also link a product to multiple categories simultaneously by selecting the desired check-boxes and then clicking the **Update Category Links** button.

Mass Operation

For pricing purposes, each Product requires a Master Category, regardless of how many Categories it may be linked. This can be set via the Master Category Dropdown. The Product is currently linked to the Category or Categories that are checked above. To add a new Category or Categories simply check the checkbox next to the Category name. To remove an existing linked Category or Categories, simply uncheck the checkbox next to the Category name. When you have checked all of the Categories that you want this Product to be linked to, press the Update Category Links

GLOBAL CATEGORY LINK CHANGES AND MASTER CATEGORY ID RESET

Copy ALL Products in a Category as LINKED Products to another Category ...
Example: Using 8 and 22 would Link ALL Products in Category 8 to Category 22

Select All Products in Category: Link to Category: Copy Products as Linked

Remove ALL Products in a Category that are LINKED Products to another Category ...
Example: Using 8 and 22 would Unlink ALL Products in Category 8 from Category 22

Select All Products in Category: Remove from being Linked to Category: Remove Products as Linked

Reset ALL Products in the selected Category to use the selected Category as the new Master Categories ID ...
Example: Resetting Category 22 would set ALL Products in Category 22 to use Category 22 as the Master Category ID

Reset the Master Categories ID for All Products in Category: Reset Master Categories ID

This portion of the screen allows you to perform bulk copying/deleting/resetting for product linking purposes. Instructions on how to perform these operations are displayed prominently on the screen. Make sure you read and understand them before performing any operations as these operations can affect many products simultaneously.

Limiting Catalog Information and Store Function

After configuring your products, you can decide how your store should behave with regards to customer shopping. For example, do you only want your store to showcase products and not show any price or do you want it to run as a normal online store where customers can browse and purchase your goods.

There are three ways to control the shopping functions in your store:

- Store-Wide shopping function.
- Customer Login-based shopping function.
- Customer Authorization-based shopping function.

Based on Store Status

To specify the shopping function of your store on a store-wide basis:

1. Click on **Configuration > My Store** to access the My Store screen.
2. Edit the **Store Status** field and concentrate on the side-panel.

Store Status
Please make any necessary changes

Store Status
What is your Store Status
0= Normal Store
1= Showcase no prices
2= Showcase with prices

0
 1
 2

3. Explanations for the different values are as follows:
 - Under normal circumstances, you will choose the value 0. This means your store functions as a normal online store where users can browse and purchase your goods.
 - If you choose option 1, your store will function as a product showcase. Visitors to your site will only see your products without the prices and not be able to make any purchase. Only a Contact Us hyperlink which leads to the Contact Us page is shown in place of a Add to Cart button. Visitors will also not be able to create an account with your store because the log in hyperlink at the top of the Store Front will not be displayed.
 - If you choose option 2, your store will function as if you chose option 1. The only difference being that prices are displayed to visitors in this case.

Based on Customer Logged In Status

To control your store shopping function based on the login status of your customers:

1. Click on **Configuration > Customer Details** to access the Customer Details screen.
2. Edit the **Customer Shop Status - View Shop and Prices** field and concentrate on the side-panel.

Customer Shop Status - View Shop and Prices
Please make any necessary changes

Customer Shop Status - View Shop and Prices
Customer must be approved to shop
0= Not required
1= Must login to browse
2= May browse but no prices unless logged in
3= Showroom Only

It is recommended that Option 2 be used for the purposes of Spiders if you wish customers to login to see prices.

0
 1
 2
 3

update cancel

3. Explanation for the different values are as follows:
 - Not required – The store functions normally. Users are able to view products and their prices and also to make purchases.
 - Must login to browse – Visitors to your site who are not logged in will only see the Log In screen with both side columns disabled. Upon log in, the store functions normally.
 - May browse but no prices unless logged in – Visitors to your store who are not logged in will still see your products. However, no prices will be displayed and a “Login for price” message will be displayed in place of the Add to Cart button. Upon login, the store functions normally.
 - Showroom Only – Regardless of the login status of customers, a “Show Room Only” message will be displayed in place of the Add to Cart button. Customers will still be able to see the products and prices in your store but will not be able to make any purchases.
4. Click on **update** to if you have made any changes.

Based on Customer Authorization Status

Customers to your store can have different authorization statuses assigned to them as we shall see when we discuss this in “Individual Customer Settings” on page 292. To control your store shopping function based on the authorization status of your customers:

1. Click on **Configuration > Customer Details** to access the Customer Details screen.
2. Edit the **Customer Approval Status - Authorization Pending** field and concentrate on the side-panel.

Customer Approval Status - Authorization Pending
Please make any necessary changes

Customer Approval Status - Authorization Pending
Customer must be Authorized to shop
0= Not required
1= Must be Authorized to Browse
2= May browse but no prices unless Authorized
3= Customer May Browse and May see Prices but Must be Authorized to Buy
It is recommended that Option 2 or 3 be used for the purposes of Spiders

0
 1
 2
 3

update **cancel**

3. The effects of the above fields in the side-panel are similar to Customer Login-Based Shopping Function. The difference being that one depends on the *login* status while the other depends on the *authorization* status.
4. Click on **update** if you have made any changes.

Summary

This chapter has covered the less commonly used operations in product and catalog manipulation. By making use of catalog manipulation techniques like linking and copying, you will save time and effort creating products, discounts and product attributes. You have learned the different ways of showcasing your products using multiple images and sample clips to aid your customers in purchasing your products. Finally, you also learned how to restrict the display of your product catalog based on either the store status or a specific customer status.

Chapter 15 Order Totals, Surcharges and Discounts

Introduction

An array of pricing mechanisms exist in Zen Cart to help store owners meet their business objectives. Discounts allow excess stock to be cleared or to increase revenue by enticing customers to buy in greater volume. On the other hand, surcharges allow businesses to control their costs by charging customers more for extra services. Finally, order totals allow a store owner to specify how the final price of an order should be derived during the checkout process.

As you go through the chapter, do take note of the *difference* between *product* pricing and *order* pricing. *Product pricing* only affects products; e.g. discounts. *Order pricing* affects the total amount of the order which includes the prices of the products; taxes, surcharges, discounts, etc.

In this chapter, we shall:

- Configure how customer order prices are calculated via the Order Totals modules.
- Add surcharges to customer orders.
- Implement different discounts schemes.

Understanding Order Totals

The final price charged to customers is known as the *order total* in Zen Cart. This amount appears in the final step of the checkout process as shown in the following sample screen shot.

Shopping Cart Contents		
Qty.	Item Name	Total
1 x	Normal Test Product	\$200.00
<hr/>		
	Sub-Total:	\$200.00
	Flat Rate (Best Way):	\$5.00
	Value Added Tax (VAT) @ 10%:	\$20.00
	Total:	\$225.00

Notice from the sample screen shot that a series of calculations are performed before the final order total (\$225.00) is displayed to a customer. Zen Cart gives you the flexibility to configure the *sequence* in which these calculations are performed and also some of the *logic* within each step of a calculation.

The Order Total Modules Screen

The Order Total Modules screen allows you to configure how different modules work together to affect an order total. To access the Order Total Modules screen, click on **Modules > Order Total**.

ORDER TOTAL MODULES			
Modules		Sort Order	Action
COD Fee	ot_cod_fee	●	▶
Discount Coupon	ot_coupon	280 ●	ⓘ
Group Discount	ot_group_pricing	290 ●	ⓘ
Gift Certificates	ot_gv	840 ●	ⓘ
Low Order Fee	ot_loworderfee	●	ⓘ
Shipping	ot_shipping	200 ●	ⓘ
Sub-Total	ot_subtotal	100 ●	ⓘ
Tax	ot_tax	300 ●	ⓘ
Total	ot_total	999 ●	ⓘ

There are two important things to note about this screen:

- Each module under the **Modules** column is used to apply a *particular* business logic to a calculation. For example, the Tax module is used to determine whether a customer is liable for tax; and then to apply that tax to the order if the customer is liable for tax.
- Each value under **Sort Order** column is used to determine the *sequence* in which the corresponding module is applied to a calculation. The smallest number being the one which is applied first. If nothing appears under the **Sort Order** column, it means the module has been disabled and will not have an effect on an order's pricing.

The value which appears under the **Sort Order** column is especially important and can have unexpected results on an order total's amount. Look at the following two examples which show the difference in order total amounts just by switching the sequence in which the Shipping and Tax modules are applied in their calculations.

Example 1: Sort Order: Sub-Total, Shipping, Tax, Total = 1, 2, 3, 4

Product A	= \$ 5.00
Product B	= \$15.00
Sub-Total	= \$(5 + 15) = \$20.00
Add Shipping (@ Flat Rate of \$10)	= \$(20 + 10) = \$30.00
Add Tax (@ 5%)	= (5% x 30) + 30 = \$31.50
Total	= \$31.50

Example 2: Sort Order: Sub-Total, Shipping, Tax, Total = 1, 3, 2, 4

Product A	= \$ 5.00
Product B	= \$15.00
Sub-Total	= \$(5 + 15) = \$20.00
Add Tax (@ 5%)	= (5% x 20) + 20 = \$21.00
Add Shipping (@ Flat Rate of \$10)	= \$(21 + 10) = \$31.00
Total	= \$31.00

One important point to remember when testing your order total settings is to use *multiple items* in your shopping cart. This method aids in your understanding of different order total modules by allowing you to scrutinize their calculations more closely.

Core Modules

Although any order total module can be uninstalled, you should leave some of the “core” modules as always installed. If you uninstall these “core” modules, order total calculations may not make sense and the orders might not even be processed by Zen Cart after payment is made!

Modules which are optional (Gift Certificates, Discount Coupons, etc) will be discussed in their respective sections later in the book.



Tip

Because taxes have a nasty way of affecting how the prices in your order totals will work out, enable the **Sales Tax Display Status** field under **Configuration > My Store**.

This will force the display of sales tax information in your order totals even if no sales tax is applicable for a customer.

Before we go on, let us arrange all the modules in their *default* order assuming they were all *enabled*. This gives you a better idea of how the core modules act together to impact the prices of your order total.

Table 15.1: Default sort order of each order total module

Order	Modules	Core Modules
100	Sub-Total	Yes
200	Shipping	Yes
280	Discount Coupon	No
290	Group Discount	No
300	Tax	Yes
400	Low Order Fee	No
840	Gift Certificates	No
950	COD Fee	No
999	Total	Yes

Explanations of the core modules are as follows:

Sub-Total – Calculates the total prices of all items in a customer's shopping cart.

Shipping – Applies a shipping charge to a customer's order based on the shipping module that the customer has selected when performing the checkout process.

Tax – Adds up all the taxes that apply to the items in a customer's shopping cart. Whether a product is liable for tax depends on your tax configuration and also whether you have specified a tax class when creating that product.

Total – Displays the total amount of the order. If you disable this module, customer orders will *not* be processed by Zen Cart.

For a discussion on the rest of the non-core order total modules, refer to the following sections:

- “Discount Coupons” on page 311.

- “Customer Group Discounts” on page 235.
- “Cash on Delivery (COD) Fee” on page 238.
- “Gift Certificates” on page 322.
- “Low Order Fee” on page 237.

Giving Discounts

Discounts are a widely-used technique employed by retail businesses to increase sales or to clear unwanted stock. When a product has a discount applied to it, the discounted price of the product will be shown in *red* while the original price will be crossed out in the Store Front.



To change the way your discounts are displayed in the Store Front, click on **Configuration > Product Info** and edit the following fields:

- **Product Info - Show Sales Discount Savings Status**
- **Product Info - Show Sales Discount Savings Dollars or Percentage**
- **Product Info - Show Sales Discount Savings Percentage Decimals**

Choosing a Discount Type

Before we discuss how to configure the various discount techniques, take a look at the following table to help you decide on which discount type you want to apply for your store.

Table 15.2: Comparison of different discount types

Discount Type	Entitlement	Comments
Product Specials	Single Product	Applies a percentage or fixed <i>price</i> discount to a product. Optionally, an expiry date can be specified.
Product Quantity Discounts	Single Product	Applies a <i>price</i> discount based on the <i>quantity</i> of a <i>product</i> bought.
Product Sale	Multiple Products	Applies product <i>price</i> discounts to the entire store or to specific categories of products.
Attribute Quantity Discounts	Per Product Attribute	Discount on attribute price based on quantity of a product bought. Refer to “By Quantity” on page 191 for more details.

Table 15.2: Comparison of different discount types (continued)

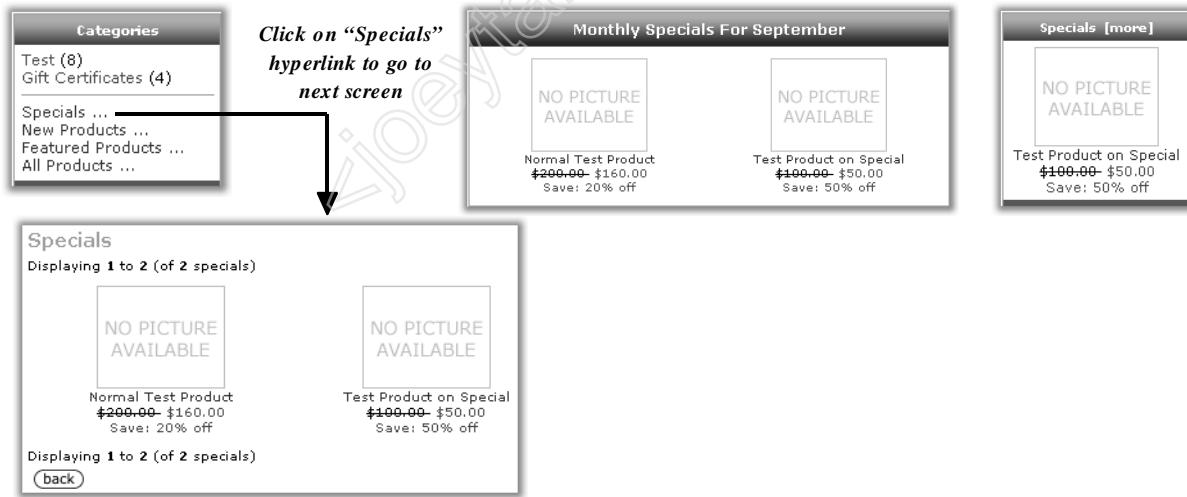
Discount Type	Entitlement	Comments
Customer Group Discounts	Multiple Customers	Entitles selected customers to an <i>order total</i> discount.
Discount Coupons	Single/Multiple Customers and Single/Multiple Products	<p>Discount coupons can be applied <i>both</i> to an order total or a selection of products.</p> <p>Refer to “Discount Coupons” on page 311 for further details on how discount coupons work.</p>

The important thing to note is that Group Discount calculations are applied to *order totals* instead of products. On the other hand, Discount Coupon calculations can be applied to both order totals and certain selected products depending on how the order total module is configured. Make sure you are very clear on the *difference* between order total discounts and product price discounts before choosing a discount type you want to configure.

Order total discounts apply to the charges (i.e. sub-total, taxes, shipping, etc) that a customer incurs during the checkout process. *Product price discounts* apply only to product prices that are configured during the product creation process.

Product Specials

Specials allow you to specify a product discount either by percentage or by an exact price. You also have the option of specifying an expiry date for the discount. When a product is on Special, Zen Cart will increase the exposure of the product via the various layout components in the Store Front as shown in the following screen shots.



Note that the product which appears in the Specials side-box is chosen randomly by Zen Cart. You can control the number of products that are randomly displayed by editing the **Random Products On Special For Box** field via **Configuration > Maximum Values**.

To put a product on Special:

1. Click on **Catalog > Specials** to access the Specials screen.

SPECIALS							
NOTE: status is auto enabled/disabled when dates are set							
ID#	Products	Model	Products	Price/Special/Sale	Available	Expires	Status
1	Normal Test Product			\$200.00- \$160.00 Save: 20% off	09/21/2006	--none--	<input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
27	Test Product on Special			\$100.00- \$50.00 Save: 50% off	--none--	--none--	<input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>

2. Click on **new product** to bring up the Specials details screen.

SPECIALS

NOTE: status is auto enabled/disabled when dates are set

Search:

Product:
Free Test Product (\$0.00) - ID# 2
Free Test Product with Free Shipping (\$0.00) - ID# 20
Hotel Accomodation (\$20.00) - ID# 10
Laptop (\$2,359.00) - ID# 16

Special Price:

Available Date:

Expiry Date:

Specials Notes:

- You can enter a percentage to deduct in the Specials Price field, for example: **20%**
- If you enter a new price, the decimal separator must be a '.' (decimal-point), example: **49.99**
- Leave the expiry date empty for no expiration

3. Choose the product you want to place on Special from the **Product** field.
4. Enter a *percentage* (e.g. 10%) to discount from the product or an *absolute number* for the new price of the product (e.g. 10 . 00) for the **Special Price** field.
5. Optionally, choose a date for the **Available Date** field by clicking on the dark icon next to the field to bring up a pop-up calendar. If no value is specified in the field, the discount takes effect immediately after creation. If a future date is specified, the product will automatically appear as a Special in the Store Front when the future date arrives.
6. Optionally, choose a value for the **Expiry Date** field by clicking on the dark icon next to the field to bring up a pop-up calendar. The discount will run indefinitely unless a value is specified for the **Expiry Date** field.
7. Click **insert** to place the product on Special.

To view statistics for products that are on Special, click on **Admin Home** on the navigation menu to reach your home page. Look at the **Specials Expired** and **Specials Active** fields under the **Statistics** table as shown in the following screen shot.

Specials Expired	1
Specials Active	1

Product Quantity Discounts

Quantity discounts allow store owners to give discounts for bulk purchases of a product. A product that has a quantity discount attached to it will be displayed with a discount table in the Product Info page of the Store Front as shown in the following screen shot.

The screenshot shows a product detail page for 'Normal Test Product'. The product image is labeled 'NO PICTURE AVAILABLE'. The price is listed as '\$200.00'. A description states: 'A generic test product that can be used for many scenarios.' Below the description, shipping details are listed: 'Shipping Weight: 0.2lbs' and '1000 Units in Stock'. An 'Add to Cart' button is present with a quantity input field set to '1'. Below the cart button is a link 'add this to my cart'. At the bottom of the page is a 'Qty Discounts New Price' table:

Qty	Discounts	New Price
1-3		\$200.00
4-9		\$180.00
10+		\$160.00

To customize how the discount table is displayed, click on **Configuration > Layout Settings** and edit the **Product Discount Quantities - Display how many per row?** field accordingly.

To create a quantity discount for a product:

1. Click on **Catalog > Products Price Manager** to access the Products Price Manager screen. There is a lot of information contained in the screen. To help you understand and manipulate the settings on the screen more confidently, we shall only show the relevant portions of the screen as we go through the configuration steps.
2. Choose a product to which you want to apply a quantity discount by referring to the following portion of the screen.

The screenshot shows the 'Products Price Manager - Test' screen. It displays a list of products with their names and IDs. The products listed are: 'Free Shipping Test Product (\$100.00) - ID# 3', 'Free Test Product (\$0.00) - ID# 2', 'Free Test Product with Free Shipping (\$0.00) - ID# 20', 'New Product (\$20.00) - ID# 31', and 'Normal Test Product (\$200.00) - ID# 1'. Below the list are buttons for 'details', 'edit product', and 'Attribute Controller'. At the bottom of the screen are buttons for 'VIEW DETAILS', 'EDIT PRODUCT', and 'EDIT ATTRIBUTES', along with a 'Multiple Categories Link Manager' link.

- 2.1. From the drop-down list box between the **previous** and **next** buttons, choose a category that contains your desired product.
- 2.2. After your screen refreshes, select your desired product from the list box beside the **display** button.
- 2.3. Click **display** and the details of your desired product will be displayed in the following portion of your screen.

PRODUCT INFO: #1 NORMAL TEST PRODUCT MODEL:

PREVIEW ONLY ... CURRENT PRICE STATUS ... PREVIEW ONLY

Tax Class:	<input type="button" value="Taxable Goods"/>																								
Product Price Info:	<table border="1"><tr><td>Price</td><td>200.0000</td><td>Available Date:</td><td>09/04/2006</td><td><input type="radio"/> In Stock</td><td><input type="radio"/> Out of Stock</td></tr><tr><td>Qty Min:</td><td>1</td><td>Qty Units:</td><td>1</td><td>Qty Max: Qty Min/Unit Mix:</td><td><input type="radio"/> 0 <input type="radio"/> Yes <input type="radio"/> No</td></tr><tr><td colspan="3"></td><td colspan="3">0= Unlimited 1= No Qty Box/Max Value Priced by Attributes:</td></tr><tr><td>Product is Free:</td><td><input type="radio"/> Yes <input checked="" type="radio"/> No</td><td>Call for Price:</td><td><input type="radio"/> Yes <input checked="" type="radio"/> No</td><td><input type="radio"/> Yes <input checked="" type="radio"/> No</td><td></td></tr></table>	Price	200.0000	Available Date:	09/04/2006	<input type="radio"/> In Stock	<input type="radio"/> Out of Stock	Qty Min:	1	Qty Units:	1	Qty Max: Qty Min/Unit Mix:	<input type="radio"/> 0 <input type="radio"/> Yes <input type="radio"/> No				0= Unlimited 1= No Qty Box/Max Value Priced by Attributes:			Product is Free:	<input type="radio"/> Yes <input checked="" type="radio"/> No	Call for Price:	<input type="radio"/> Yes <input checked="" type="radio"/> No	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Price	200.0000	Available Date:	09/04/2006	<input type="radio"/> In Stock	<input type="radio"/> Out of Stock																				
Qty Min:	1	Qty Units:	1	Qty Max: Qty Min/Unit Mix:	<input type="radio"/> 0 <input type="radio"/> Yes <input type="radio"/> No																				
			0= Unlimited 1= No Qty Box/Max Value Priced by Attributes:																						
Product is Free:	<input type="radio"/> Yes <input checked="" type="radio"/> No	Call for Price:	<input type="radio"/> Yes <input checked="" type="radio"/> No	<input type="radio"/> Yes <input checked="" type="radio"/> No																					
Special Price Info:	<input type="button" value="+ install"/>																								
Featured Product Info:	<input type="button" value="+ install"/>																								

3. To apply a quantity discount to the product you have chosen:

3.1. Click on **any** of the two **edit** buttons on the Products Price manager screen. After your screen is refreshed, concentrate on the following portion of the screen.

Add 5 Blank Qty Discounts:

All 0 Quantity Discounts will be removed when Updated

3.2. Click on **add blank discounts** and you should see a discount table as shown in the following screen shot.

Discount Qty Applies to Mixed Attributes Yes No

Add 5 Blank Qty Discounts:

All 0 Quantity Discounts will be removed when Updated

Product Discount Info	Discount Type:	None	Discount Priced from:	Price
Discount Levels	Minimum Qty	Discount Value	Calculate Price:	Extended Price:
Discount 1	0	0.0000	\$0.00	x 0 = \$0.00
Discount 2	0	0.0000	\$0.00	x 0 = \$0.00
Discount 3	0	0.0000	\$0.00	x 0 = \$0.00
Discount 4	0	0.0000	\$0.00	x 0 = \$0.00
Discount 5	0	0.0000	\$0.00	x 0 = \$0.00

To change the default number of blank discounts displayed whenever the **add blank discounts** button is clicked, click on **Configuration > Layout Settings** and edit the **Product Discount Quantities - Add how many blank discounts?** field.

3.3. If your product has attributes defined, select how you want your quantity discount to be applied via the **Discount Qty Applies to Mixed Attributes** field. If you choose Yes, product attributes will be ignored and only the number of products bought will be used to trigger a quantity discount. If you choose No, *all* product attributes must *match* (e.g. T-shirt with color attribute “Blue” and size attribute “Large”) before the total number of the products will be used to trigger a discount.

3.4. Do *not* click the **add blank discounts** button again unless you wish to create an additional 5 blank discounts.

3.5. Select how you want your discount to be applied for the product by choosing a value from the **Discount Type** drop-down list box. Explanations for the various possible values are as follows:

- Percentage – Applies a percentage discount.

- Actual Price – Specifying a new price
- Amount Off – Subtracting an amount from the product price

- 3.6. Select the price basis from which your new product price should be derived from the **Discounted Price from** field. Choose Price if you want the discount to be applied to the product price. Choose Special if you want the discount to be applied to an already discounted price of a product on Special.
- 3.7. Enter the quantity of products bought that will qualify for a bulk discount together with the corresponding discount rates into the respective **Minimum Qty** and **Discount Value** fields.
4. Click on **update** once you are satisfied with your settings. Your screen will refresh and Zen Cart will display the automatically calculated discounted prices in a table as shown in the following screen shot.

Discount Qty Applies to Mixed Attributes <input checked="" type="radio"/> Yes <input type="radio"/> No				
Preview Only ... Current Price Status ... Preview Only				
Product Discount Info	Discount Type: <input type="button" value="Percentage"/>	Discount Priced from: <input type="button" value="Price"/>		
Discount Levels	Minimum Qty	Discount Value	Calculate Price:	Extended Price:
Discount 1	5	10.0000	\$180.00	$\times 5 = \$900.00$
Discount 2	10	20.0000	\$160.00	$\times 10 = \$1,600.00$



Note

To delete the quantity discounts you have created, you need to edit the product again; but this time, you need to specify all the fields in the Discount Table as 0 and then click **update**.

Product Sale

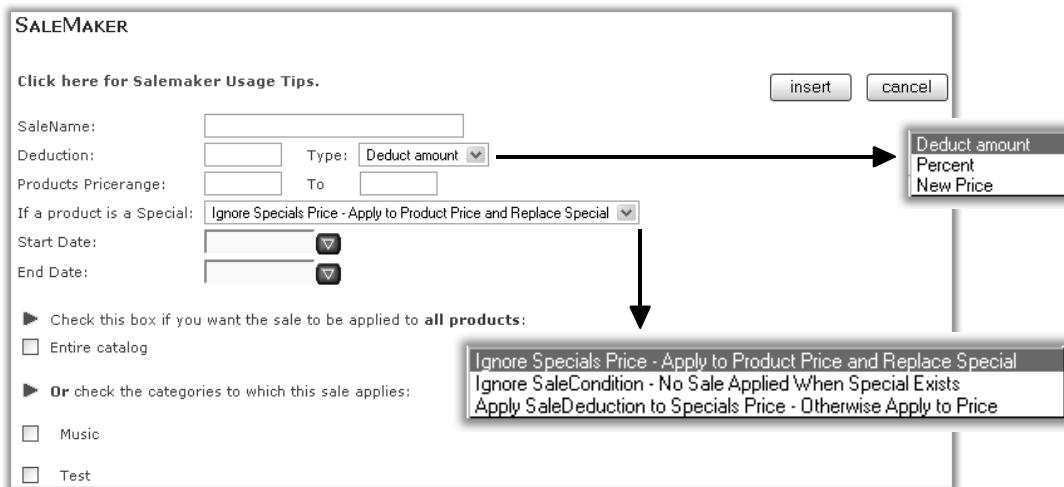
Zen Cart uses the concept of a “sale” to apply discounts to an entire store catalog or to certain product categories. Unlike products on Special and products with quantity discounts, Zen Cart does not display the discounted products with other visual cues other than showing the discounted price in red.

To create a discount for the entire store catalog or to specific product categories:

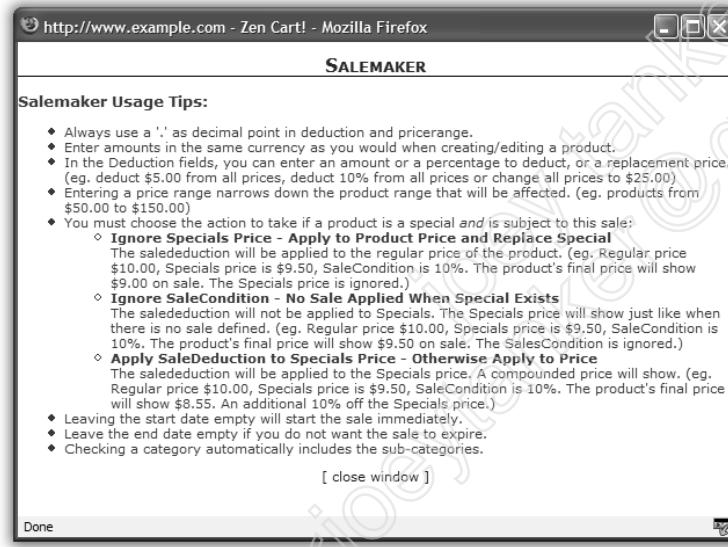
1. Click on **Catalog > SaleMaker** to access the SaleMaker screen.

SALEMAKER					
SaleName	Deduction	Startdate	Enddate	Status	Action
10% Store-wide Xmas Sale	10.0000	Percent	12/11/2006	12/18/2006	<input checked="" type="radio"/>
5% Sale on Music items	5.0000	Percent	Immediately	Never	<input type="radio"/>
Displaying 1 to 2 (of 2 sales)					Page 1 of 1
					<input type="button" value="new sale"/>

2. Click on **new sale** to access the SaleMaker details screen.



3. Before you configure anything, click on the **Click here for Salemaker Usage Tips** hyperlink near the top of the screen. A pop-up window (as shown in the following screen shot) appears with instructions on how to configure Salemaker properly.



4. Enter the name you want to assign to this sale in the **SaleName** field.
5. Enter a positive number into the **Deduction** field.
6. Select how you want your new discounted price to be derived from the **Type** field.
7. If you want discounts to be applied only to products within a certain price range. Enter your desired values in the **Products Pricerange** and **To** fields.
8. If your product is already on Special, you can decide how your new sale price will be affected by choosing a value from the **If a product is a Special** field.
9. If you want the sale to take place *immediately*, leave the **Start Date** field *empty*. If your sale should be automatically activated on a future date, choose a suitable date from the dark icon next to the **Start Date** field.

10. If you do not want your sale to expire, leave the **End Date** field empty. If your sale should automatically expire on a future date, choose a suitable date from the dark icon next to the **End Date** field.
11. Choose whether you want your discount to be applied to the entire catalog *or* to selected categories by checking the relevant check-boxes. If you check *both* the **Entire catalog** field and any other categories, the sale will still be applied to the entire catalog!
12. Click on **insert** to create your new sale.
13. After your screen is refreshed, your new sale will be displayed. Note that your sale will only be active if the button in the **Status** column is green.

To view statistics for products that are on Sale, click on **Admin Home** on the navigation menu to reach your home page. Look at the **Sales Expired** and **Sales Active** fields under the **Statistics** table:

Sales Expired	1
Sales Active	1

Customer Group Discounts

Sometimes, you may want to offer discounts only to a selected group of customers. For example, if you have a group of loyal customers who are your main purchasers, you can opt to give them a group discount to recognize their loyalty and to encourage them to continue doing business with you.

Customer group discounts are only applicable to *order totals* in Zen Cart. They cannot be restricted to apply only to certain products in your store. Furthermore, customers will *not* see any discounted prices based on their discount groups while *shopping*. Group discounts are only shown during the *checkout* process.

The following screen shot shows the details of a shopping cart with a 10% Group Discount applied.

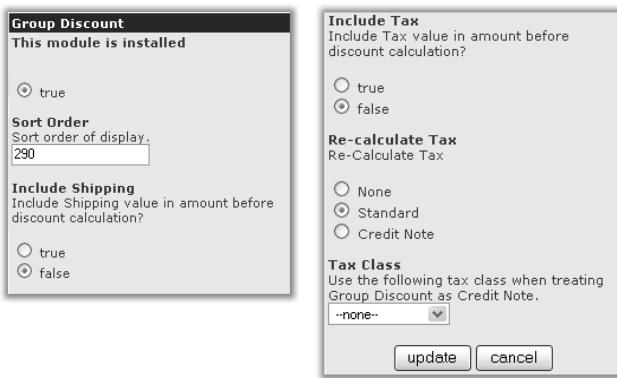
The screenshot shows a shopping cart with one item: 'Normal Test Product' (Qty: 1). The total is \$200.00. Below the cart table, a summary of discounts and taxes is shown:

Sub-Total:	\$200.00
Flat Rate (Best Way):	\$5.00
Group Discount:	-\$20.00
Value-Added Tax (VAT) @ 5%:	\$9.00
Total:	\$194.00

At the bottom, a 'Final Step' message says: '- continue to confirm your order. Thank you!' and there is a checkbox labeled 'confirm the order'.

Before you can create customer group discounts, you need to enable and configure the necessary order total module.

1. Click on **Modules > Order Total** to access the Order Total Modules screen.
2. Edit the **Group Discount** module. Install it if required. The following side-panel will appear.



3. Enter a suitable value for the **Sort Order** field. Refer to “The Order Total Modules Screen” on page 226 if you have forgotten the purpose of this field.
4. Specify true for the **Include Shipping** field if you want shipping charges to be covered by a customer group discount.
5. Specify true for the **Include Tax** field if you want taxes to be covered by a customer group discount.
6. Choose a suitable value for the **Re-calculate Tax** field. Usually, you should leave this as none. If you choose Standard or Credit Note, you will need to play around with different test orders to see whether they suit your needs.
7. If you have chosen Credit Note for the **Re-calculate Tax** field, you should choose a suitable option from the **Tax Class** drop-down list box.
8. Click **update** to finish configuration of your Group Discount order total module.

You should play around with the **Sort Order** field for all the order total modules if you encounter erroneous or illogical calculations. If that does not help, your last resort is to refer to the PHP code contained in the `<zc-home>/includes/modules/order_total/ot_group_pricing.php` file.

We shall now look at how we can create group discounts for your customers. There are two main steps to creating discounts for customers:

- Create a discount group specifying the discount value.
- Specify which customers belong to a specific discount group.

To create a discount group:

1. Click on **Customers > Group Pricing** to access the Group Pricing screen.

GROUP PRICING			
ID	Group Name	% Discount	Action
1	Loyal Customer Group	10.00	
Displaying 1 to 1 (of 1 pricing groups)			
Page 1 of 1			
<input type="button" value="insert"/>			

2. Click on **insert** and concentrate on the side-panel.



New Pricing Group
Please fill out the following information for the new group

Group Name:

Percentage Discount:

save **cancel**

3. Enter a name for the group discount you want to create in the **Group Name** field.
4. Enter a positive value into the **Percentage Discount** field.
5. Click **save** to create the discount group.

To attach a discount group to a customer:

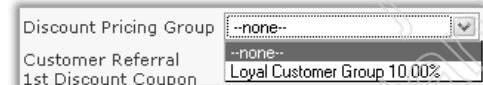
1. Click on **Customers > Customers** to access the Customers screen. Note that the **orders** button will only appear if the customer has purchased a product from your store before.



CUSTOMERS										Search: <input type="text"/>	
ID#	Last Name	First Name	Company	Account Created	Last Login	Pricing Group	Authorized	Action	ID#	Jacques Pires	
	Asc	Desc	Asc	Desc	Asc	Desc	Asc	Desc	ID#	edit	delete
2	Smith	Alan		09/15/2006		--none--	<input checked="" type="radio"/>		1		
1	Pires	Jacques		09/09/2006	09/15/2006	--none--	<input checked="" type="radio"/>				

Displaying 1 to 2 (of 2 customers) Page 1 of 1 Account Created: 09/09/2006

2. Choose a customer to whom you want to assign a discount group and click **edit**.
3. Select the discount pricing you want to apply to the customer from the **Discount Pricing Group** drop-down list box as shown in the following screen shot.



Discount Pricing Group: **--none--**
Customer Referral: **--none--**
1st Discount Coupon: **Loyal Customer Group 10.00%**

4. Click **update** to assign the customer to the Discount Group.

Adding Surcharges

Surcharges allow you to add an additional fee to the *order total* prices. Zen Cart allows you to impose surcharges for orders that are below a certain amount or when customers choose the Cash-On-Delivery payment method.

Low Order Fee

A Low Order Fee allows you to charge customers an extra amount of money for orders that are below a certain threshold amount. This feature is helpful for stores that sell products with very narrow profit margins.

Shopping Cart Contents

Qty.	Item Name	Total
1 x	Normal Test Product	\$20.00

Sub-Total: \$20.00
Flat Rate (Best Way): \$5.00
Value-Added Tax (VAT) @ 5%: \$1.00
Low Order Fee: \$5.00
Total: \$31.00

Final Step
- continue to confirm your order. Thank you!

confirm the order

If you intend to set up a low order fee for your store, try to display a message clearly in your Store Front informing customers about this policy. As the low order fee will only be shown in the final step of the checkout process, customers might feel your business is out to cheat them and discontinue visiting your store.

To add a surcharge for orders falling below a certain threshold amount:

1. Click on **Modules > Order Total** to access the Order Total Modules screen.
2. Edit the **Low Order Fee** module. Install it if required.

Low Order Fee
This module is installed

true

Sort Order
Sort order of display:
400

Allow Low Order Fee
Do you want to allow low order fees?
 true
 false

Order Fee For Orders Under
Add the low order fee to orders under this amount.
50

Order Fee
For Percentage Calculation - include a % Example: 10%
For a flat amount just enter the amount - Example: 5 for \$5.00
5

Attach Low Order Fee On Orders Made
Attach low order fee for orders sent to the set destination.
 national
 international
 both

Tax Class
Use the following tax class on the low order fee.
-none-

No Low Order Fee on Virtual Products
Do not charge Low Order Fee when cart is Virtual Products Only
 true
 false

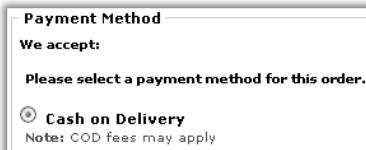
No Low Order Fee on Gift Vouchers
Do not charge Low Order Fee when cart is Gift Vouchers Only
 true
 false

3. Make sure the **Allow Low Order Fee** field is set to true.
4. All fields are self-explanatory so we shall not go through them here.
5. Click on **update** to save your changes to the database.

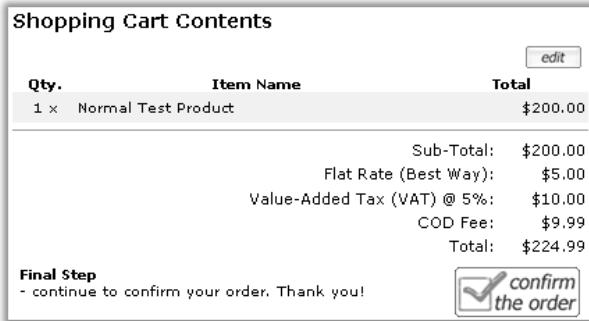
Cash on Delivery (COD) Fee

The Cash On Delivery (COD) payment method is not encouraged for online business. This is because there is a higher risk that you might not get the payment you want. Customers can always regret their purchases and refuse to pay when you show up at the door or deny the transaction ever took place.

Therefore, to discourage customers from choosing this option and to provide yourself some insurance, you can impose a charge on customer orders if they choose to pay via the COD payment method in Step 2 of the checkout process. Note that the wording in red (i.e. COD Fees may apply) will only appear if the COD fees order total module has been enabled.



COD Fees that are applicable will only be shown in the final step of the checkout process as shown in the screen show below.



To impose surcharges for customers who choose to pay via the COD payment method:

1. Click on **Modules > Order Total** to access the Order Total Modules screen.
2. Edit the **COD Fee** module and concentrate on the side-panel.

3. Make sure the **Display COD** field is set to true.
4. As you can see, you can specify different COD fees for different shipping modules. As all the fields are self-explanatory, we shall not discuss them further.
5. Click on **update** to save your changes to the database.

Summary

In this chapter, you have learned to manipulate your product prices and order prices by using the different discounts and surcharges available in Zen Cart. You have also taken a look at how your order totals can impact the final order price that is charged to customers.

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Part 4 Customizing Your Store

Unlike the previous sections which teach you how to configure the business logic in your store, this section deals mainly with how to customize the look-and-feel of your store. You will learn the different layout elements that make up a Zen Cart store, how to make your store support multiple languages, etc.

This section covers the following topics:

- Simple Customization
- Advanced Customization

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Chapter 16 Simple Customization

Introduction

Most of the customizations in this chapter are related to the visual elements of your Store Front and can be performed from within your Admin Console alone. Thus, it is suitable for everyone, regardless of whether you are well-versed in different web technologies like HTML, CSS, Javascript, PHP, etc.

In this chapter, we shall:

- Understand the different layout components.
- Learn how to customize product-related layout components and pages.
- Learn to create your own custom web pages.
- Enable the display of shipping and privacy information to adhere to local regulations.
- Learn where to change default maximum and minimum values for your settings.

Common Layout Elements

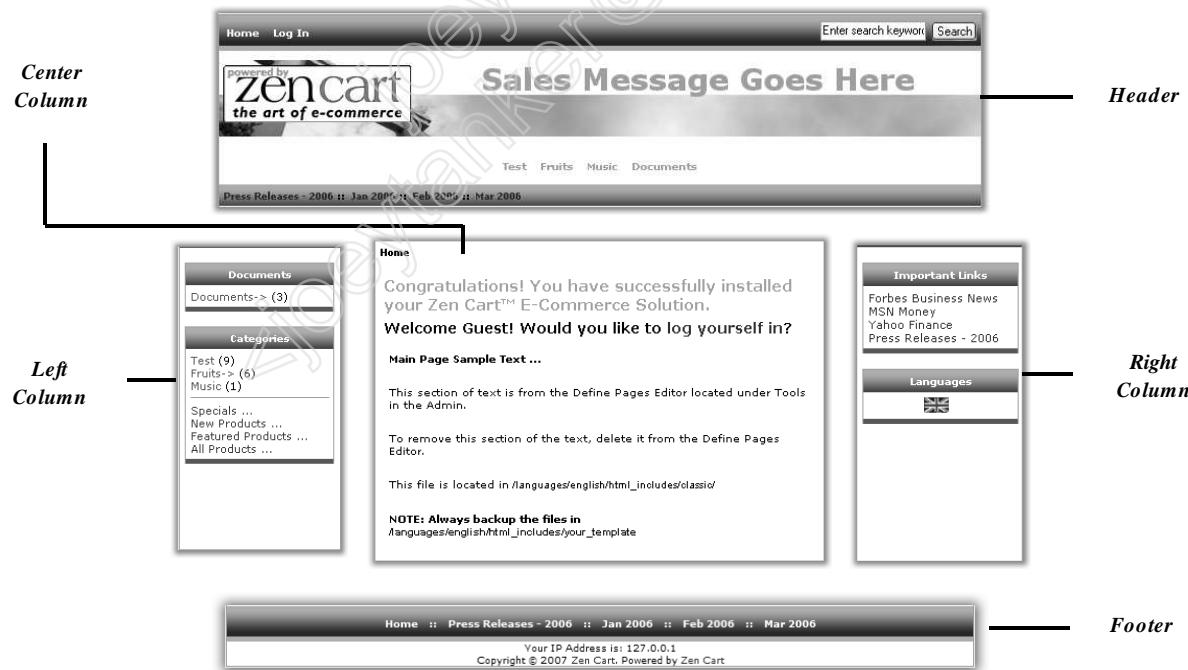


Figure 16.1: Structural Layout Elements

From Figure 16.1, you can see that a typical screen in your Store Front is actually broken up into five major display blocks. Each major display block acts as a container for other layout elements (side-boxes, center-boxes, template

text, etc). These child layout elements each hold a specific piece of information. This modular design of layout elements allows you to quickly and easily manage the display of information by turning on/off or editing certain settings within the Admin Console.

Header



From the preceding screen shot, you can see that the Header can be divided into four main areas:

- Navigation Bar – Provides links for users to perform functions like log in, check out, manage account etc.
- Header Main Bar – Usually the place to locate your company logo and put across your sales message.
- EZ-Pages Header Bar – For placing links to EZ-Pages. EZ-Pages are custom web pages you create for specific purposes; company press releases, news articles, etc. We will touch on them in the later part of this chapter.
- Categories Tabs Menu Bar – For placing your top-level category entries.

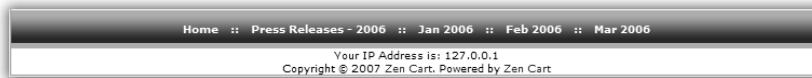
The Header can only be turned off from the Admin Console under special conditions (e.g. during web site maintenance). However, the display status of the elements contained within the Header can be altered easily from the Admin Console.

To turn off the Search box on the Navigation Bar, click on **Tools > Layout Boxes Controller** and edit the **sideboxes/search_header.php** field. Make sure you set both the **Left/Right Column Status** and **Single Column Status** fields to OFF.

To turn off the Categories Tabs Menu Bar, click on **Configuration > Layout Settings** and set the **Categories-Tabs Menu ON/OFF** field to 0.

To turn off the EZ-Pages Header Bar, click on **Configuration > EZ-Pages Settings** and set the **EZ-Pages Display Status – HeaderBar** field to 0.

Footer



The Footer contains the following elements:

- The top half contains the Home hyperlink and possibly some hyperlinks to the EZ-Pages you have created.
- The bottom half contains the IP address of a site visitor accessing your store and the copyright message from Zen Cart.

To turn off the display of EZ-Pages hyperlinks, click on **Configuration > EZ-Pages Settings** and set the **EZ-Pages Display Status – FooterBar** field to 0.

To turn off the display of IP address of your site visitor, click on **Configuration > Layout Settings** and set the **Footer - Show IP Address status** field to 0.

The copyright text cannot be turned off in the Admin Console. To alter the copyright text, open up the `<zc-home>/includes/languages/english.php` file and edit the text next to the “FOOTER_TEXT_BODY” field. Remember to perform the edit using the override system which is covered in “The Template Override System” on page 270.

Columns

As you have seen when we discussed structural layout elements, there are three columns defined for each screen in Zen Cart. These columns are referred to as the *left* column, *right* column and *center* column.

The *center* column is always visible and *cannot* be turned off. Neither can its display properties be edited from the Admin Console alone. It is used to hold important pieces of information in the form of template text, product information, search results, etc. The *left* and *right* columns act purely as containers for side-boxes and they do allow their display properties to be set via the Admin Console.

To change the properties of the left and right columns:

1. Click on **Configuration > Layout Settings** to access the Layout Settings screen.



LAYOUT SETTINGS	
Title	Value
Column Width - Left Boxes	150px
Column Width - Right Boxes	150px
Bread Crumbs Navigation Separator	 ;
Define Breadcrumb Status	1
Bestsellers - Number Padding	
Bestsellers - Truncate Product Names	35
Bestsellers - Truncate Product Names followed by ...	true
Categories Box - Show Specials Link	true
Categories Box - Show Products New Link	true
Shopping Cart Box Status	1
Categories Box - Show Featured Products Link	true
Categories Box - Show Products All Link	true
Column Left Status - Global	1
Column Right Status - Global	1
Column Width - Left	150px
Column Width - Right	150px
Categories Separator between links Status	1
Categories Separator between the Category Name and Count	>;
Categories Separator between the Category Name and Sub Categories	_
Categories Count Prefix	 {
Categories Count Suffix)
Categories SubCategories Indent	
Categories with 0 Products Status	0
Split Categories Box	True
Shopping Cart - Show Totals	1
Customer Greeting - Show on Index Page	1
Categories - Always Show on Main Page	0
Main Page - Opens with Category	0
Categories - Always Open to Show SubCategories	1
Banner Display Groups - Header Position 1	
Banner Display Groups - Header Position 2	
Banner Display Groups - Header Position 3	
Banner Display Groups - Footer Position 1	
Banner Display Groups - Footer Position 2	
Banner Display Groups - Footer Position 3	
Banner Display Groups - Side Box banner_box	
Banner Display Groups - Side Box banner_box2	
Banner Display Group - Side Box banner_box_all	
Footer - Show IP Address status	1
Product Discount Quantities - Add how many blank discounts?	5
Product Discount Quantities - Display how many per row?	5
Categories/Products Display Sort Order	0
Option Names and Values Global Add, Copy and Delete Features Status	1
Categories-Tabs Menu ON/OFF	1
Site Map - include My Account Links?	No
Skip 1-prod Categories	True
Use split-login page	False
CSS Buttons	No

2. To turn off the relevant columns, set the value of the following fields to 0:

- **Column Left Status – Global**
- **Column Right Status – Global**

3. To alter the width of the relevant columns, edit the following fields:

- **Column Width – Left**
- **Column Width – Right**

Breadcrumbs

Home :: Test :: Normal Test Product

Breadcrumbs are navigational links that provide customers with a visual cue as to their current location in your store. They are located on the top-left corner of the center column.

To alter the appearance of the breadcrumb:

1. Click on **Configuration > Layout Settings** to access the Layout Settings screen.
2. Edit the the following fields accordingly:
 - **Define Breadcrumb Status**
 - **Bread Crumbs Navigation Separator**

While editing the **Bread Crumbs Navigation Separator**, you might encounter the character sequence “ ”. This character sequence represents a *white space* in HTML. It is required because HTML interprets *any number* of normal white spaces which you type as a *single* white space.

For example, if you type “Thank You” with five white spaces in between the words in an HTML document, you will only see “Thank You” with only one white space between the words in your browser. To force the five spaces to appear in a web browser, you need to type as follows: “Thank You”.

Side-Boxes

Side-boxes are rectangular blocks that appear on the left and right columns of your Store Front. Each side-box provides a specific functionality. For example, the **Categories** side-box functions as an online catalog for visitors to browse your products. The **Currencies** side-box allows your site visitors to view your products in a currency of their choice.

To change the width of *all* side-boxes:

1. Click on **Configuration > Layout Settings** to access the Layout Settings screen.
2. To specify the width of the relevant side-boxes, edit the following fields:
 - **Column Width – Left Boxes**
 - **Column Width – Right Boxes**

To change the display properties (excluding width) of *individual* side-boxes:

1. Click on **Tools > Layout Boxes Controller** to access the Column Boxes *Classic* screen. The text “Classic” is the name of a template. You will learn more about templates in the next chapter.

COLUMN BOXES CLASSIC

Boxes Path: C:/dev/server/xampp/htdocs/store/includes/modules/ ...

Box File Name	LEFT/RIGHT COLUMN Status	LEFT or RIGHT COLUMN	LEFT/RIGHT COLUMN Sort Order	SINGLE COLUMN Sort Order	SINGLE COLUMN Status	Action
sideboxes/search_header.php	OFF	LEFT	0	0	ON	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input style="font-size: 1.5em; vertical-align: middle;" type="button" value="▶"/>
sideboxes/document_categories.php	ON	LEFT	0	0	OFF	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF
sideboxes/categories.php	ON	LEFT	10	10	ON	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="LEFT"/> LEFT <input type="radio" value="RIGHT"/> RIGHT
sideboxes/whats_new.php	ON	LEFT	20	0	OFF	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="LEFT"/> LEFT <input type="radio" value="RIGHT"/> RIGHT
sideboxes/manufacturers.php	ON	LEFT	30	20	ON	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="LEFT"/> LEFT <input type="radio" value="RIGHT"/> RIGHT
sideboxes/reviews.php	ON	LEFT	40	0	OFF	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="LEFT"/> LEFT <input type="radio" value="RIGHT"/> RIGHT
sideboxes/featured.php	ON	LEFT	45	0	OFF	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="LEFT"/> LEFT <input type="radio" value="RIGHT"/> RIGHT
sideboxes/information.php	ON	LEFT	50	40	ON	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="LEFT"/> LEFT <input type="radio" value="RIGHT"/> RIGHT
sideboxes/more_information.php	ON	LEFT	200	200	ON	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="LEFT"/> LEFT <input type="radio" value="RIGHT"/> RIGHT
sideboxes/banner_box.php	ON	LEFT	300	1	OFF	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="LEFT"/> LEFT <input type="radio" value="RIGHT"/> RIGHT
sideboxes/ezpages.php	ON	RIGHT	-1	2	ON	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF
sideboxes/order_history.php	ON	RIGHT	0	0	OFF	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF
sideboxes/record_companies.php	ON	RIGHT	0	0	OFF	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF
sideboxes/music_genres.php	ON	RIGHT	0	0	OFF	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF
sideboxes/banner_box_all.php	ON	RIGHT	5	0	OFF	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF
sideboxes/search.php	ON	RIGHT	10	0	OFF	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF
sideboxes/banner_box2.php	ON	RIGHT	15	1	OFF	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF
sideboxes/shopping_cart.php	ON	RIGHT	20	30	ON	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF
sideboxes/best_sellers.php	ON	RIGHT	30	70	ON	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF
sideboxes/manufacturer_info.php	ON	RIGHT	35	95	ON	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF
sideboxes/specials.php	ON	RIGHT	45	0	OFF	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF
sideboxes/product_notifications.php	ON	RIGHT	55	85	ON	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF
sideboxes/tell_a_friend.php	ON	RIGHT	65	0	OFF	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF
sideboxes/languages.php	ON	RIGHT	70	50	ON	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF
sideboxes/currencies.php	ON	RIGHT	80	60	ON	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF
sideboxes/whos_online.php	ON	RIGHT	200	200	ON	<input style="color: green; font-size: 1.5em; vertical-align: middle;" type="button" value="e"/> <input checked="" type="radio" value="ON"/> ON <input type="radio" value="OFF"/> OFF

Reset All Box Sort Order to match DEFAULT Sort Order for Template: **classic**
 This does not remove any of the boxes. It will only reset the current sort order

Edit Box
 Please make any necessary changes
 Box Name: search_header.php
 ON OFF
 LEFT RIGHT
 0
 Left/Right Column Sort Order:

 0
 Single Column Sort Order:

 0
 Single Column Status:
 ON OFF

Notice that the list of side-boxes in the screen is split into two halves. The top-half represents side-boxes that are located on the *left* column of your Store Front whereas the bottom-half represents side-boxes that are located on the *right* column.

2. To edit the display properties of any side-box, click on its adjacent green “e” icon and concentrate on the corresponding side-panel.
3. To turn on/off the display of a side-box, edit the **Left/Right Column Status** field.
4. The **Single Column Status** field is ignored by Zen Cart except for the Search box setting mentioned in the “Header” section on page 244.
5. To *place* a side-box either on the right or left column, edit the **Location: (Single Column ignores this setting)** field.
6. To specify the *order* in which side-boxes should appear next to each other in a column, edit the **Left/Right Column Sort Order** field.
7. Note that the **Single Column Sort Order** field is currently ignored by Zen Cart. Do not waste time setting any values for it.

Banners

Banners usually appear in the form of advertising blocks that appear at various locations in your Store Front (side-boxes, headers and footers). They will be covered fully in “Banners” on page 344.

Multi-Product Layout Elements

How products are displayed plays an important role in the buying decisions of customers. Therefore, we need to look closely at the different product layout elements that can appear in your Store Front. To help you with your CSS customizations (which you will learn in the next chapter), the product layout elements we are about to discuss will be grouped according to their *appearance*.

Before we begin, take note that most of the product layout elements we will discuss require that some of your products meet certain conditions (Featured Product, Specials, etc) before you will see them in your Store Front:

- Featured Products will be discussed in “Featured Products” on page 357.
- Product Specials were discussed in “Product Specials” on page 229.
- New Products will be shown depending on the elapsed time since they were added to your catalog. You can configure the elapsed time setting by editing the **New Product Listing - Limited to** field under **Configuration > Maximum Values**.
- Upcoming Products are products that have their **Date Available** fields in their respective Product screens set to a future date.

New, All and Featured Product Listings

Depending on whether your products meet certain conditions, you may find the following hyperlinks at the bottom of the **Categories** side-box.

- New Products.
- Featured Products.
- All Products.



On clicking each of the hyperlinks in the above list, you will be redirected to product listings similar to the following screen shots.

New Products

Sort by: Date Added - New to Old

Displaying 1 to 2 (of 2 new products)

	Product Y Model: Price: \$20.00 Weight: 0.2lbs In Stock: 1000 <input type="button" value="Add: 0"/>
New product aimed at the Men's market.	

	Product X Model: Price: \$20.00 Weight: 0.2lbs In Stock: 1000 <input type="button" value="Add: 0"/>
New product aimed at the Women's market.	

Featured Products

Sort by: Product Name

Displaying 1 to 4 (of 4 featured products)

	Beginner Drum Lessons Model: Price: \$11.00 Weight: 0lbs Date Added: Tuesday 12 September, 2006 In Stock: 997 <input type="button" value="Add: 0"/>
<small>... more info</small>	
<small>Learn to play drums by following the exercises in the downloadable manual. Both sheet music and tablature are available. Instructional videos on how ... more info</small>	

	Birthday Cake Model: Price: \$10.00 Weight: 4lbs Date Added: Tuesday 12 September, 2006 In Stock: 1000 <input type="button" value="Add: 0"/>
<small>... more info</small>	
<small>Surprise your loved ones with a beautiful ice-cream birthday cake. You even get to customize the wordings on the cake and your very own message on ... more info</small>	

All Products

Sort by: Product Name

Displaying 1 to 2 (of 2 products)

	Free Test Product with Free Shipping Model: Price: FREE! FREE Shipping! In Stock: 999 <input type="button" value="Add: 0"/>
<small>Date Added: Friday 15 September, 2006</small>	

	Normal Test Product Model: Price: \$200.00 Weight: 0.2lbs Date Added: Saturday 09 September, 2006 In Stock: 997 <input type="button" value="Add: 0"/>
<small>A generic test product that can be used for many scenarios.</small>	

To turn off any of the aforementioned links in the Categories side-box, click on **Configuration > Layout Settings** and turn off the relevant fields:

- **Categories Box - Show Products New Link**
- **Categories Box - Show Featured Products Link**
- **Categories Box - Show Products All Link**

To limit the number of products appearing in any of the above product listings:

1. Click on **Configuration > Maximum Values** to access the Maximum Values screen.
2. Edit the relevant field for your desired product listing:
 - **New Products Listing- Number Per Page**
 - **Maximum Display of Featured Products Page**
 - **Maximum Display of Products All Page**

To configure the appearance of individual product listings, you can do the following:

- For New Products listing, click on **Configuration > New Listing**.
- For Featured Products listing, click on **Configuration > Featured Listing**.
- For All Products listing, click on **Configuration > All Listing**.

We have chosen to discuss these three product listings together because their configuration fields are the same although they are located in different screens in the Admin Console. The meanings of the fields are mostly self-explanatory but their syntax can be quite confusing. To help you understand the syntax better, we shall use the **Display Product Name** field under **Configuration > All Listing** as an example.

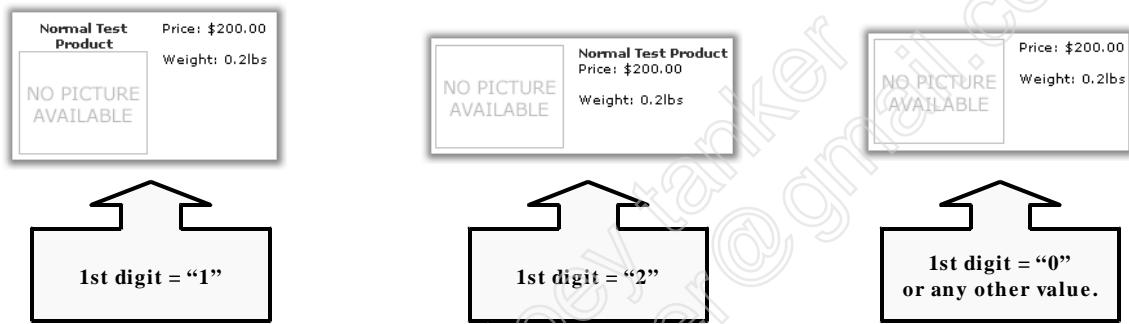
Book available for purchase from <http://www.cucumbermedia.com>

The screenshot shows the Zen Cart admin interface. On the left, a table titled 'ALL LISTING' displays various product display settings with their corresponding values. An arrow points from the value '2101' for 'Display Product Name' to a configuration dialog box on the right. The dialog box has a title 'Display Product Name' and a sub-instruction 'Please make any necessary changes'. It contains a question 'Do you want to display the Product Name?' and a detailed explanation of the digit locations: '0= off', '1st digit Left or Right', '2nd and 3rd digit Sort Order', and '4th digit number of breaks after'. The value '2101' is entered in the input field. At the bottom are 'update' and 'cancel' buttons.

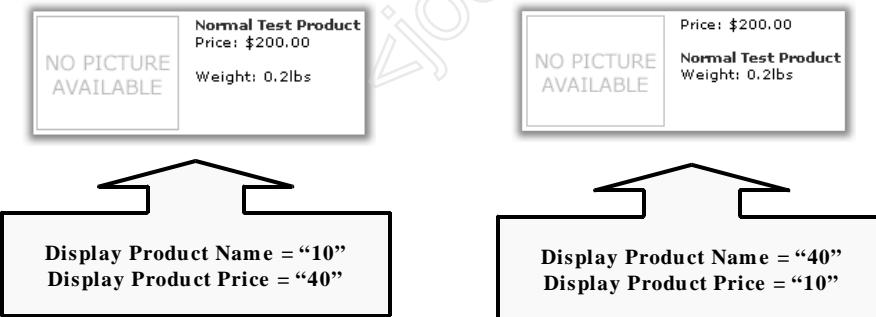
Title	Value
Display Product Image	1102
Display Product Quantity	1202
Display Product Buy Now Button	1300
Display Product Name	<u>2101</u>
Display Product Model	2201
Display Product Manufacturer Name	2302
Display Product Price	2402
Display Product Weight	2502
Display Product Date Added	2601
Display Product Description	1
Display Product Display - Default Sort Order	1
Default Products All Group ID	23
Display Multiple Products Qty Box Status and Set Button Location	3

From the preceding screen shot, the default value for **Display Product Name** has 4 digits and is shown as 2101. The explanation for the individual digits is shown below:

The *first* digit specifies the *location* of the product name as shown in the following illustrations. Notice that the product name will only be displayed if you specified either “1” or “2” as the value for the first digit.



The *second* and *third* digits are taken together to represent the *order* in which different pieces of information are displayed next to each other. Let us take a look at the second and third digits of **Display Product Price** (middle 2 digits = “40”) and **Display Product Name** (middle 2 digits = “10”) and see what happens if we *swap* the values as shown in the following illustrations.



The *fourth* digit indicates how much “clearance” or white space will separate one displayed field from another displayed field. Look at the following illustrations to better appreciate the visual impact of this setting.



Note

If you have turned off the display of images for a product listing, you might find that images with the words “NO PICTURE AVAILABLE” are still displayed for products with no associated pictures. To solve this problem, click on **Configuration > Images** and set **Product Image - No Image Status** field to 0.

Search and Category Product Listings

A Search product listing appears when a customer performs a search in any of the search boxes in your store. A Category product listing appears under the following conditions:

- When a *category* or *sub-category* with several products is chosen from the **Categories** side-box.
- When a customer is on a Product Info page and clicks on the **listing** button which is between the **previous** and **next** buttons.

Both Search and Category product listings are shown in the following screen shots.

Product Image	Item Name	Price
NO PICTURE AVAILABLE	Normal Test Product A generic test product that can be used for many scenarios.	\$200.00
NO PICTURE AVAILABLE	Free Test Product with Free Shipping For testing the Payment Module - The Zen Cart FREE CHARGE CARD.	\$200.00

The main difference between the Search and Category product listings is the lack of category information in the Search product listings. The drop-down list box for manufacturers will only appear for the Category product listing if there are two or more manufacturers associated with the entire list of products in the category.

Nevertheless, the configuration for the appearance of *both* these product listings (other than the above differences) are done via the *same* screen in the Admin Console. Therefore, we have chosen to group them together in our discussion.

To change the display of both the Search and Category product listings simultaneously:

1. Click on **Configuration > Product Listing** to access the Product Listing screen.

PRODUCT LISTING	
Title	Value
Display Product Image	1
Display Product Manufacturer Name	0
Display Product Model	0
Display Product Name	2
Display Product Price/Add to Cart	3
Display Product Quantity	0
Display Product Weight	0
Display Product Price/Add to Cart Column Width	125
Display Category/Manufacturer Filter (0=off; 1=on)	1
Prev/Next Split Page Navigation (1=top, 2=bottom, 3=both)	3
Display Product Listing Default Sort Order	
Display Product Add to Cart Button (0=off; 1=on; 2=on with Qty Box per Product)	1
Display Multiple Products Qty Box Status and Set Button Location	3
Display Product Description	150
Product Listing Ascending Sort Order	+
Product Listing Descending Sort Order	-
Include Product Listing Alpha Sorter Dropdown	true
Include Product Listing Sub Categories Image	true
Include Product Listing Top Categories Image	true
Show SubCategories on Main Page while navigating	1

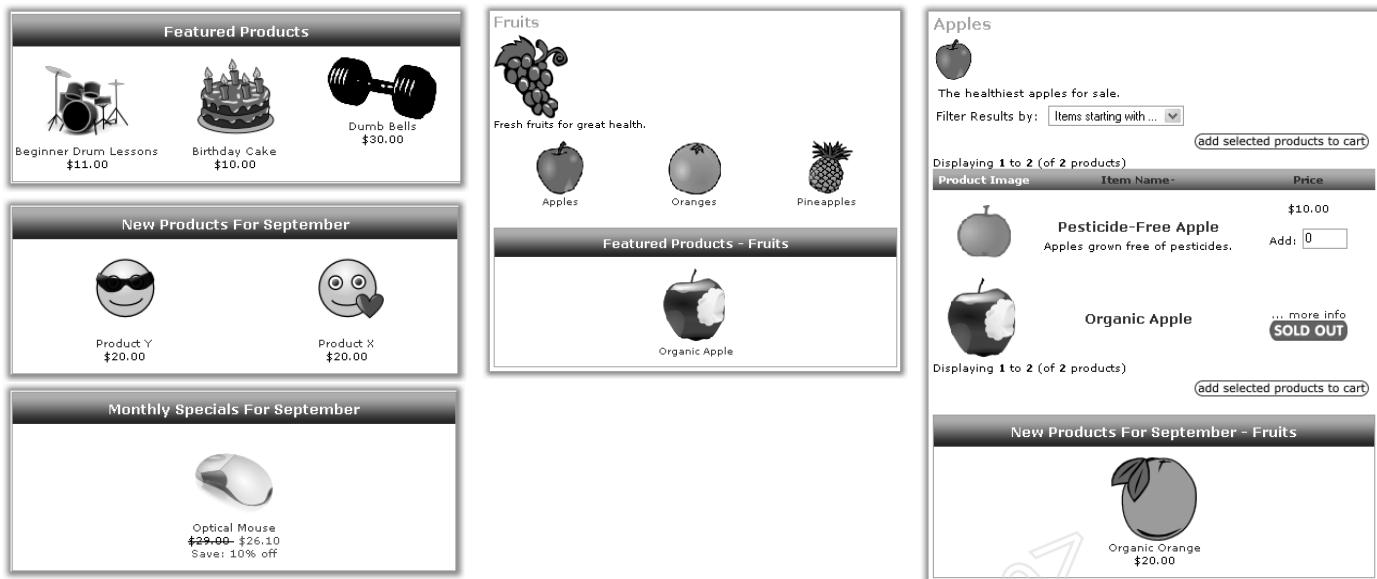
2. Click on a field you would like to change and follow the instruction in the corresponding side-panel to make your changes.
3. If you have edited any property, click on **update** to save your changes.

To change the number of items to display in the Category product listing:

1. Click on **Configuration > Maximum Values** to access the Maximum Values screen.
2. Edit the **Products Listing- Number Per Page** field and click **update** to save your changes.

Product Center-Boxes

Product center-boxes have the ability to appear across several places in your Store Front as shown in the following screen shots.



The screen shots on the left are product center-boxes that appear in the Home page of your Store. The middle screen shot shows a product center-box appearing in a category with child categories defined while the one on the right shows a product center-box appearing under a Product Listing. There is also an Also Purchased product center-box but we will discuss that in a later chapter.

Note that there is another center-box which contains upcoming products to your store. We will cover that center-box in the “Upcoming Products Summary-List” section on page 256 because it looks totally different from the center-boxes you see in the preceding screen shots.

The following table summarizes some general characteristics of product center-boxes.

Table 16.1: Characteristics of different product center-boxes

Location in Store Front	Type of Center-Box	Products Displayed
Home page (also known as Index page or Main page)	New Products, Featured Products, Specials	All eligible products in the store can be displayed here.
Category page with sub-categories.	New Products, Featured Products, Specials	Only eligible products from sub-categories will be displayed.
Product Listing page	New Products, Featured Products, Specials	All eligible products within the parent category.
Product Info page	Also Purchased Products	Will be discussed in “Also Purchased Products” on page 355.

With the exception of the Product Info page which will be discussed in another chapter, we shall now discuss how we can configure the different product center-boxes in your store.

To turn on/off or specify the sort order of a particular product center-box in your *Home* page:

1. Click on **Configuration > Layout Settings** to access the Layout Settings screen.
2. Note down the value of the **Categories - Always Show on Main Page** field. This field is primarily used to control whether category images should be displayed in your main page or not. However, its value can affect the configuration of product center-boxes in your Home page as well.
3. Click on **Configuration > Index Listing** to access the Index Listing screen.

INDEX LISTING	
Title	Value
Show New Products on Main Page	0
Show Featured Products on Main Page	0
Show Special Products on Main Page	3
Show Upcoming Products on Main Page	4
Show New Products on Main Page - Category with SubCategories	1
Show Featured Products on Main Page - Category with SubCategories	0
Show Special Products on Main Page - Category with SubCategories	3
Show Upcoming Products on Main Page - Category with SubCategories	4
Show New Products on Main Page - Errors and Missing Products Page	1
Show Featured Products on Main Page - Errors and Missing Products Page	2
Show Special Products on Main Page - Errors and Missing Products Page	3
Show Upcoming Products on Main Page - Errors and Missing Products Page	4
Show New Products - below Product Listing	1
Show Featured Products - below Product Listing	2
Show Special Products - below Product Listing	3
Show Upcoming Products - below Product Listing	4
New Products Columns per Row	3
Featured Products Columns per Row	3
Special Products Columns per Row	3
Filter Product Listing for Current Top Level Category When Enabled	1

4. If the value you obtained in Step 2 is 1, then edit the following fields accordingly.
 - **Show New Products on Main Page - Category with SubCategories**
 - **Show Featured Products on Main Page - Category with SubCategories**
 - **Show Special Products on Main Page - Category with SubCategories**
5. If the value you obtained in Step 2 is 0, then edit the following fields accordingly.
 - **Show New Products on Main Page**
 - **Show Featured Products on Main Page**
 - **Show Special Products on Main Page**

To turn on/off or specify the sort order of a particular product center-box in your *Category with sub-categories* page:

1. Click on **Configuration > Index Listing** to access the Index Listing screen.
2. Edit the respective field for your desired product center-box:
 - **Show New Products on Main Page - Category with SubCategories**
 - **Show Featured Products on Main Page - Category with SubCategories**
 - **Show Special Products on Main Page - Category with SubCategories**

To turn on/off or specify the sort order of a particular product center-box in a *Product Listing* page:

1. Click on **Configuration > Index Listing** to access the Index Listing screen.

2. Edit the respective field for your desired product center-box:
 - **Show New Products - below Product Listing**
 - **Show Featured Products - below Product Listing**
 - **Show Special Products - below Product Listing**

To simultaneously control the number of *products* appearing in each product center-box for *all* pages:

1. Click on **Configuration > Maximum Values** to access the Maximum Values settings screen.
2. Specify the number of products you wish to display for a particular product center-box by editing the relevant fields.
 - **New Products Module**
 - **Maximum Display of Featured Products - Main Page**
 - **Maximum Display of Specials Products - Main Page**

Note: The **Maximum Display of Featured Products Page** field applies to Product Listings and not product center-boxes.

To control the number of *columns* appearing in each product center-box for *all* pages:

1. Click on **Configuration > Index Listing** to access the Index Listing screen.
2. Edit the respective field for your desired product center-box:
 - **New Products Columns per Row**
 - **Featured Products Columns per Row**
 - **Special Products Columns per Row**

Note: The **Special Products Columns per Row** setting also affects the Product Specials Grid, which we shall talk about in the next section.

Product Specials Grid



Besides appearing in product center-boxes, products on Special can also appear in a grid layout as shown in the preceding screen shot. We shall refer to this layout as the Product Specials Grid. The Product Specials Grid only appears when a customer clicks on **Specials** in the **Categories** side-box.

To control the number of products appearing in the Product Specials Grid:

1. Click on **Configuration > Maximum Values** to access the Maximum Values screen
2. Edit the **Products on Special** field.

Note: Do not confuse this setting with the one in the Specials product center-box.

To change the number of columns for the Product Specials Grid:

1. Click on **Configuration > Index Listing** to access the Index Listing screen.
2. Specify a value for the **Special Products Columns per Row** field.

Note: The **Special Products Columns per Row** setting also affects the Specials product center-box.

Upcoming Products Summary-List

Upcoming Products	
These items will be in stock soon	
Item Name	Date Expected
Normal Test Product	12/31/2007
Product X	09/30/2006
Product Y	09/30/2006

Whenever the **Date Available** field in a Product page is set to the future, the affected product will be displayed in the Upcoming Products summary-list in Zen Cart.

Although the appearance of the Upcoming Products summary-list is different from that of the product center-boxes, its configuration is similar to that of the product center-boxes. Therefore, refer to “Product Center-Boxes” on page 252 for details on how to configure your Upcoming Products summary-list.

Important Shopping Pages

The Product Info and the Shopping Cart pages both play an integral part in a customer's shopping experience. As such, store owners usually want to customize these pages to enhance their customers' shopping experience.

The Product Info Page

The screenshot shows the Product Info page for a 'Normal Test Product'. At the top, it says 'Home :: Test :: Normal Test Product'. Below that is the product name 'Normal Test Product' and the price '\$200.00'. A description follows: 'A generic test product that can be used for many scenarios.' To the left, there's a 'NO PICTURE AVAILABLE' placeholder and a link to 'larger image'. On the right, there's an 'Add to Cart' button with a quantity input field set to '1' and a 'add this to my cart' button. At the bottom, there are links for 'read the reviews' (with a count of '1') and 'tell a friend about us'. A note at the very bottom states: 'This product will be in stock on Monday 31 December, 2007.'

This is the most important page in your entire store because it contains *detailed* product information; and customers usually base their purchasing decisions on it. Therefore, most store owners would want to customize this page to highlight relevant information to their customers.

To alter the display of certain fields in the Product Info page:

1. Click on **Catalog > Product Types** to access the Product Types screen.
2. Select the Product Type that the product belongs to and click **edit layout** to access a list of product details for the Product Type.
3. Choose a field you wish to change and click **edit** to bring up the relevant side-panel.
4. After making your changes, click **update** to save your changes. Note that this change affects all products belonging to the same product type.

To alter other visual aspects of the Product Info screen:

1. Click on **Configuration > Product Info** to access the Product Info screen.

PRODUCT INFO	
Title	Value
Previous Next - Button and Image Status	0
Previous Next - Navigation Includes Category Position	1
Previous Next - Navigation Includes Category Name and Image Status	1
Previous Next - Navigation Bar Position	1
Previous Next - Button and Image Settings	0
Previous Next - Sort Order	1
Previous Next - Image Width?	50
Previous Next - Image Height?	40
Products Info - Products Option Name Sort Order	0
Products Info - Product Option Value of Attributes Sort Order	0
Product Info - Show Option Values Name Below Attributes Image	1
Product Info - Show Sales Discount Savings Status	1
Product Info - Show Sales Discount Savings Dollars or Percentage	1
Product Info - Show Sales Discount Savings Percentage Decimals	0
Product Info - Price is Free Image or Text Status	1
Product Info - Price is Call for Price Image or Text Status	1
Product Quantity Box Status - Adding New Products	1
Product Reviews Require Approval	1
Meta Tags - Include Product Model in Title	1
Meta Tags - Include Product Price in Title	1
Meta Tags Generated Description Maximum Length?	50
Also Purchased Products Columns per Row	3

2. Experiment with the settings on this screen. Ignore the last four fields for now because we will touch on them in a later chapter. The rest of the fields are self-explanatory so we shall not discuss them further.

The Shopping Cart Page

Your Shopping Cart Contents [help (??)]

You may want to add some instructions for using the shopping cart here. (defined in includes/languages/english/shopping_cart.php)

Total Items: 2 Weight: 4.2lbs Amount: \$2,026.85

Qty.	Item Name	Unit	Total
1	Laptop	\$2,000.00	\$2,000.00
1	Optical Mouse	\$26.85	\$26.85

• Connector Type - PS/2

Sub-Total: \$2,026.85

[back to shopping](#) [go to checkout](#) [estimate shipping](#)

The Shopping Cart page displays all the items that a customer intends to purchase. Prices are added to allow customers to decide whether they should proceed to check out or whether they should alter their shopping list to meet their budget constraints.

To turn edit the template text appearing under the words “Your Shopping Cart Contents”, edit the <zc-home>/includes/languages/english/shopping_cart.php file. Make sure you use the Override System to perform your edit. The Override System is covered in “The Template Override System” on page 270.

To customize the display of the update and delete buttons on the page:

1. Click on **Configuration > Stock** to access the Stock screen.
2. Edit the following fields accordingly:
 - **Show Shopping Cart - Delete Checkboxes or Delete Button**
 - **Show Shopping Cart - Update Cart Button Location**

To customize how the item count, weight and amount at the top of the table are displayed:

1. Click on **Configuration > Layout Settings** to access the Layout Settings screen.
2. Edit the **Shopping Cart - Show Totals** field accordingly.

To customize the look of the product images displayed on the page:

1. Click on **Configuration > Images** to access the Images screen.
2. Edit the following fields accordingly:
 - **Image - Shopping Cart Status**
 - **Image - Shopping Cart Width**
 - **Image - Shopping Cart Height**

To change the display of the shipping estimator button:

1. Click on **Configuration > Shipping/Packaging** to access the Shipping/Packaging screen.

2. Edit the **Shipping Estimator Display Settings for Shopping Cart** field accordingly. To see the effects of changing this setting, refer to the screen shots on page 120.

Creating Custom Web Pages

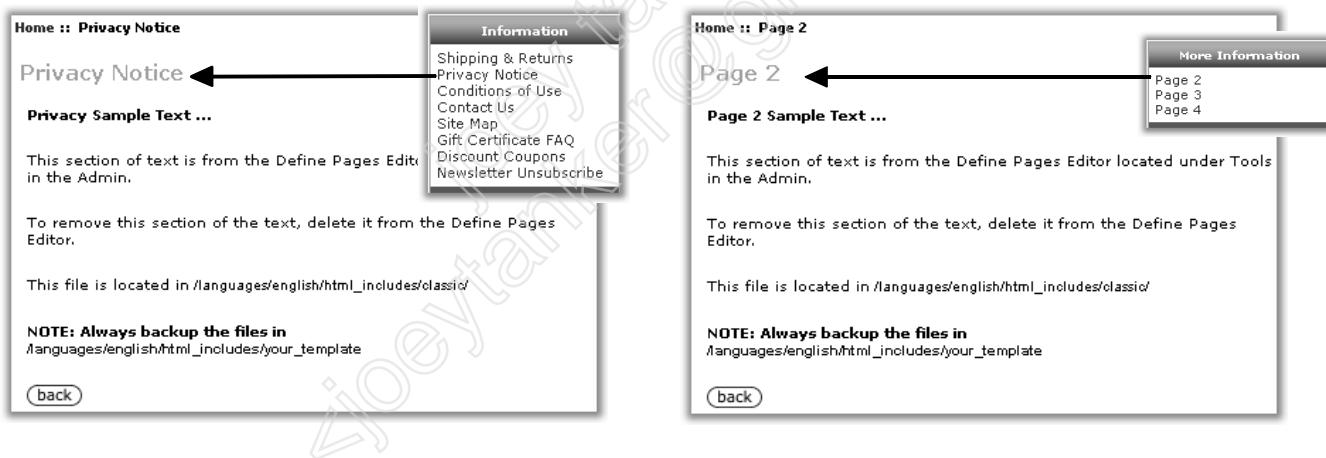
Besides the standard web pages you have seen in the Store Front, you can also create entirely new custom web pages to suit your particular needs. For example, if you want to display your company financial statements in a separate part your store or you want to add a page to explain to customers how your company ensures product quality by going through a rigorous manufacturing process, etc.

There are essentially two methods you can use to create your custom web pages.

- Define Pages
- EZ-Pages

Define Pages is good for creating a few simple web pages which do not necessarily have any relationships between them. They are located at specific locations in your online store. EZ-Pages is better suited for situations which require a greater number of custom web pages. Furthermore, EZ-Pages allow you to define relationships between pages and gives you greater control over how and where you want to place them in your store.

Define Pages



A Define Page refers to the *template text* on a screen which store owners may want to override or turn off. Define Pages are accessed via hyperlinks in the Information and More Information side-boxes as shown in the preceding screen shots.

To turn on/off a portion or an entire Define Page:

1. Click on **Configuration > Define Page Status** to access the Define Page Status screen.

DEFINE PAGE STATUS			
Title	Value	Action	Define Main Page Status
Define Main Page Status	1	► Please make any necessary changes	
Define Contact Us Status	1	① Define Main Page Status	
Define Privacy Status	1	① Enable the Defined Main Page Link/Text?	
Define Shipping & Returns	1	① 0= Link ON, Define Text OFF	
Define Conditions of Use	1	① 1= Link ON, Define Text ON	
Define Checkout Success	1	① 2= Link OFF, Define Text ON	
Define Discount Coupon	1	① 3= Link OFF, Define Text OFF	
Define Site Map Status	1	①	
Define Page-Not-Found Status	1	① ○ 0	
Define Page 2	1	① ⚡ 1	
Define Page 3	1	① ○ 2	
Define Page 4	1	① ○ 3	

Notice that the names of the different Define Pages are mapped to the hyperlinks in the Information and More Information side-boxes in your Store Front.

2. Edit any field and you will see a side-panel similar to the preceding screen shot. Choose your desired choice out of the four possible combinations of Link and Define Text options.

The meaning of the Link and Define Text options are as follows:

- The display of a hyperlink in the relevant side-box is controlled by setting Link to either ON or OFF.
- The display of template text in a Define Page is controlled by setting Define Text to either ON or OFF.

3. Click **update** if you have made changes to a field.

To change the template text displayed in a Define Page:

1. Click on **Tools > Define Pages Editor** to access the Define Pages Editor screen.
2. Select the Define Page you wish to change from the **ENGLISH** drop-down list box and choose an appropriate value for the **TEXT EDITOR** field as shown in the following screen shot.

3. Make your desired changes to the template text in the text-area.

4. Click on **save** to save all your changes.

If you have enabled and changed the text for your **Define Page 2**, **Define Page 3** and **Define Page 4** pages, you will want to change the title of those pages and how their hyperlinks appear in the **More Information** side-box as well. For example, you might have replaced the previous pages with About Us, User Agreement and Product Guarantee pages in your store instead.

To change the title of the *hyperlinks* in the More Information side-box for the Define Page 2, Define Page 3 and Define Page 4 pages, edit the following contents in your <zc-home>/includes/languages/english.php file.

```
define( 'BOX_HEADING_MORE_INFORMATION', 'More Information' );
define( 'BOX_INFORMATION_PAGE_2', 'Page 2' );
define( 'BOX_INFORMATION_PAGE_3', 'Page 3' );
define( 'BOX_INFORMATION_PAGE_4', 'Page 4' );
```

To change the titles appearing on the top-left corner of the Define Page 2, Define Page 3 and Define Page 4 pages, edit the following files instead.

- <zc-home>/includes/languages/english/2.php
- <zc-home>/includes/languages/english/3.php
- <zc-home>/includes/languages/english/4.php

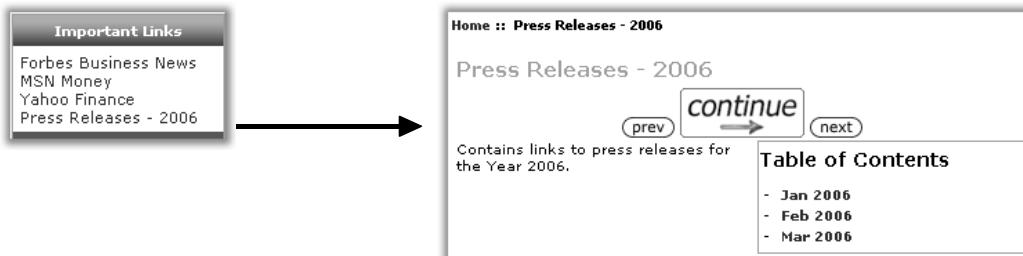
Although it is extremely easy to edit the contents of Define Pages from the Admin Console, you might want to wait till you learn more about the Override System in the next chapter before doing so. Refer to “Changing Static Text” on page 275 if you want to steal a quick peek.

EZ-Pages

EZ-Pages allows you to create additional pages from within the Admin Console alone. There is no need to manually edit, create or edit any files. Instead, the contents of all EZ-Pages you author are stored in the database. EZ-Pages boasts the following features:

- Links to EZ-Pages can be displayed in any of the following areas:
 - ➔ In the EZ-Pages hyperlinks bar of the Header. Refer to the screen shot on page 244.
 - ➔ As part of the hyperlinks lining the Footer. Refer to the screen shot on page 244.
 - ➔ In the Important Links side-box.
- You can specify the HTML content yourself, link to an external site (<http://www.yahoo.com>) or link to an internal page (Privacy Notice page).
- You can define relationships between EZ-Pages by separating them into groups and organizing them into a hierarchical structure; e.g. a top page containing links to sub-pages.

The following illustration should give you an idea how EZ-pages can be structured. It shows three EZ-Pages hyperlinks (Forbes Business News, MSN Money and Yahoo Finance) in the Important Links side-box that, when clicked, will redirect users to third-party sites. The remaining hyperlink at the bottom of the side-box points to a collection of EZ-Pages that are part of the store. In this case, the EZ-Pages are structured as part of a collection of related pages. However, you can choose to have EZ-Pages presented as separate pages.

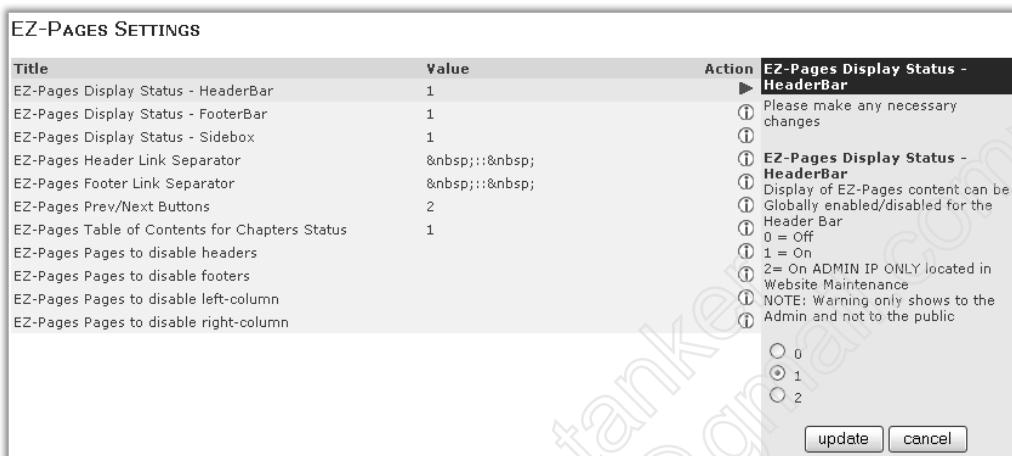


To enable the display of the Important Links side-box (which holds your EZ-Pages hyperlinks):

1. Click on **Tools > Layout Controller Boxes** to access the Column Boxes screen.
2. Edit the **sideboxes/ezpages.php** field accordingly.
3. Also check that the **EZ-Pages Display Status – Sidebox** field under **Configuration > EZ-Pages Settings** is enabled.

To control other display properties of EZ-Pages in your Store Front:

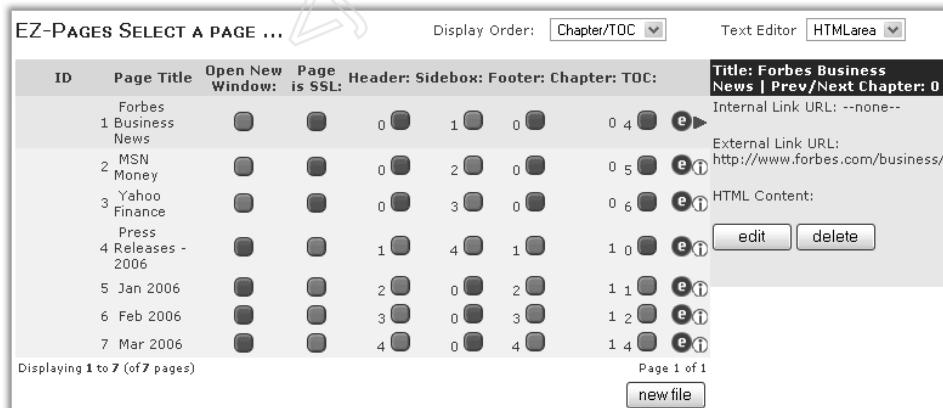
1. Click on **Configuration > EZ-Pages Settings** to access the EZ-Pages Settings screen.



2. Click on a setting you want to change and read the instructions on the side-panel before making any changes. All settings are self-explanatory so we shall not go through them here.
3. After you finish editing a setting, click on **update** to save your changes.

To create and edit your EZ-Pages:

1. Click on **Tools > EZ Pages** to access the EZ-Pages screen.



Note: The default number of EZ-Pages you see listed on your screen can be changed. Click on **Configuration > Maximum Values** and edit the **Maximum Display EZ-Pages** field.

2. Familiarize yourself with the meanings of the column headers in the preceding screen shot by referring to the following table.

Table Header	Meaning
ID	A unique number automatically generated by Zen Cart for every EZ-Page created.
Page Title	This is the title of the page you want to use for your EZ-Page. It is also the name of the hyperlink that customers will see in your Store Front.
Open New Window	With this field set to <u>Yes</u> , a customer who clicks on an EZ-Page hyperlink will see a new browser window open to display the contents of the EZ-Page.
Page is SSL	With this field set to <u>Yes</u> , an EZ-Page will be displayed to a customer with an “https” instead of an “http” in the web browser’s URL. It is useful for cases where your EZ-Page contains sensitive information and you want customers to view the contents securely. This setting does not apply to pages which are external links.
Header	Specifies the <i>sequence</i> that different EZ-Pages will appear in the <i>header</i> of your Store Front. To appear in the header, the corresponding Order field in the EZ-Page detail screen must be set to a value greater than <u>0</u> and the button must be “green”.
Sidebox	Similar to preceding Header discussion, but applies to the hyperlinks in the Important Links side-box instead.
Footer	Similar to preceding Header discussion, but applies to the <i>footer</i> of your Store Front instead.
Chapter	Allows you to group related EZ-Pages together. A Table of Contents will automatically be generated for related pages and navigational links will then appear on the selected EZ-Pages in the group. To group EZ-Pages together, make sure they have the <i>same</i> Chapter number. Note: This setting has no effect on external EZ-Pages links.
TOC	Used in conjunction with Chapters to specify the order within a grouping of EZ-Pages.

3. Click on **new file** to access the EZ-Page detail screen.

EZ-PAGES SELECT A PAGE ...

Insert **cancel**

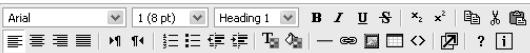
Page Title: * Required

Open New Window: **Page is SSL:**

Yes Yes
 No No

Header: Yes No **Order:**
Sidebox: Yes No **Order:**
Footer: Yes No **Order:**
Chapter: **TOC:** Yes No **Order:**

Header Sort Order used while generating pages in single row for the header; Sort order should be greater than zero to enable this page in the row type listing
Sidebox Sort order is used when pages are listed in vertical links; Sort order should be greater than zero to enable it in vertical listing, else it will be considered as HTML text for special purposes
Footer Sort Order used while generating pages in single row footer; Sort order should be greater than zero to enable this page in the row type listing
TOC (Table of Contents) Sort Order used while generating pages that are customized as either a single row (header/footer, etc) or vertically, based on individual needs;
Sort order should be greater than zero to enable this page in the listing
Chapters are used with TOC (Table of Contents) Sort Order for the display on Previous/Next. Links in the TOC will consist of pages matching the chapter number, and will be displayed in the TOC Sort Order

HTML Content:


Path: body > html

Internal Link URL:
If specified, the page content will be ignored and this INTERNAL alternate URL will be used to make the link
Example to Reviews: index.php?main_page=reviews
Example to My Account: index.php?main_page=account and mark as SSL

External Link URL:
If specified, the page content will be ignored and this EXTERNAL alternate URL will be used to make the link
Example to external link: http://www.sashbox.net

Insert **cancel**

4. Note that specifying a *blank* or 0 in any of the **Order** fields will cause the EZ-Page hyperlink *not* to appear in your Store Front.
5. To specify the contents of an EZ-Page, you can only choose *either* one of these three fields:
 - **HTML Content** – Type something in this field if you are specifying your own content to display to your users. For example, if you are writing your own press release.
 - **Internal Link URL** – Type the portion of the URL that links to a page that currently exists in your online store. For example, you would like the Privacy Notice page to be displayed when users click on this EZ-Page hyperlink in your Store Front.
 - **External Link URL** – Type the URL of an external hyperlink which a customer will be redirected to once they click this EZ-Page hyperlink. For example, if you sell Samsung handphones, you could display Samsung's online registration site to users when they click on this EZ-Page hyperlink in your Store Front.
6. Fill in the rest of the details by referring to the table in Step 2.
7. Click on **insert** to save your changes and you will be redirected back to the EZ-Pages management screen.

As you can see, this module is very powerful due to its flexibility. You can create articles, news releases, external site references, etc. The only drawback in EZ-Pages currently is the lack of support for content rendered in *multiple* languages unless the language pack supports this feature. This drawback will be clearer to you when you learn how to add additional language support to your Zen Cart store.

Altering the Shopping Flow

The standard shopping flow that comes with Zen Cart can be altered to help you meet with local regulatory requirements or to suit your store's display preferences.

Complying with Local Regulations

In certain countries, customers need to explicitly agree to privacy statements before they sign up for an account with your online store. In other instances, it is also a legal requirement that customers be shown the shipping regulations before they are directed to buy any product from you.

Both the above scenarios are not the default way Zen Cart is configured to work. Implementing the above scenarios can be done by simply enabling the relevant fields in the Regulations screen which you can access by clicking on **Configuration > Regulations**.

REGULATIONS	
Title	Value
Confirm Terms and Conditions During Checkout Procedure	false
Confirm Privacy Notice During Account Creation Procedure	false

Delaying the Display of the Shopping Cart

The standard shopping flow in Zen Cart displays the shopping cart whenever an item is added to it. Sometimes, this may not be the behavior you want. For example, you have already customized your site to display that information in another part of the store.

You can change the standard behavior by making Zen Cart display a success message instead of showing the shopping cart's contents whenever an item is added to the shopping cart.

To *disable* the display of the shopping cart after an item is added to it:

1. Click on **Configuration > My Store** to access the My Store screen.
2. Set the **Display Cart After Adding Product** field to false.

Display Cart After Adding Product
Please make any necessary changes

Display Cart After Adding Product
Display the shopping cart after adding a product (or return back to their origin)

true
 false

update **cancel**

If you choose not to display the contents of the shopping cart after customers add items to them, you should plan to enable the Shopping Cart side-box. The Shopping Cart side-box displays the items currently in the customer's shopping cart and also the total amount for all the items. Clicking on the "Shopping Cart [more]" hyperlink will bring customers to the Shopping Cart page.

Shopping Cart [more]	
2ea.- Normal Test Product	
4ea.- Free Test Product with Free Shipping	
	\$400.00

To enable the display of the Shopping Cart side-box:

1. Click on **Tools > Layout Boxes Controller** to access the Column Boxes screen.
2. Edit the **sideboxes/shopping_cart.php** field accordingly.

Besides enabling the Shopping Cart side-box, you may want to decide *when* it should appear. To configure when the Shopping Cart side-box should appear:

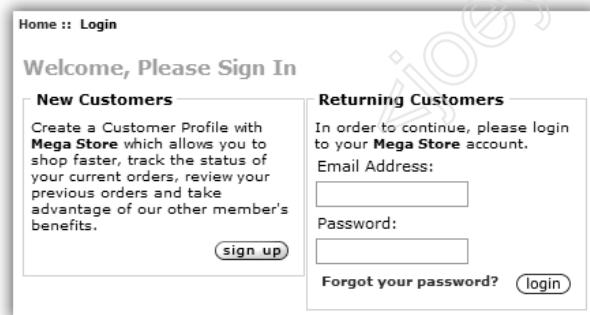
1. Click on **Configuration > Layout Settings** to access your Layout Settings screen.
2. Edit the **Shopping Cart Box Status** field accordingly.



Using Split Login/Sign-Up Screens

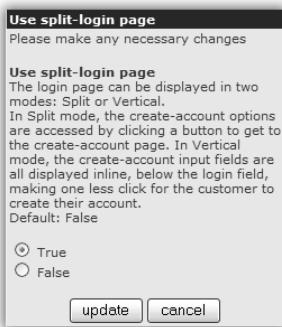
The default screen that is displayed when a customer clicks the Log In hyperlink in your Store Front allows the customer to either sign up for an account or to log in to his or her own account using that screen alone. You should be familiar with that screen since you have already set up several test customer accounts already.

If you prefer to split the sign-up and login information of that screen into two screens instead, you can do so via a switch in the Admin Console. After enabling the display of sign-up and login information in different screens, customers who click the Log In hyperlink in your Store Front will encounter the following screen instead.



To split the display of sign-up and login information into different screens:

1. Click on **Configuration > Layout Settings** to access the Layout Settings screen.
2. Set the **Use split-login page** field to True.



Adjusting Maximum and Minimum Values

An often overlooked feature of Zen Cart is the ability for you to specify different maximum and minimum values for various fields in your Admin Console or Store Front. For example, you can specify the minimum length of a company name that a customer should enter when creating an account with your store or the maximum number of products that should be displayed in a product center-box.

You can change the maximum or minimum values of most fields in Zen Cart by clicking on **Configuration > Maximum Values** and **Configuration > Minimum Values** and editing the respective settings. You should be familiar with some of those settings as we have mentioned them previously.

Managing Images Centrally

Although images are scattered throughout your store, you can manage their dimensions and other aspects centrally within the Images screen by clicking on **Configuration > Images**.

IMAGES	
Title	Value
Small Image Width	100
Small Image Height	80
Heading Image Width - Admin	57
Heading Image Height - Admin	40
Subcategory Image Width	100
Subcategory Image Height	57
Calculate Image Size	true
Image Required	true
Image - Shopping Cart Status	1
Image - Shopping Cart Width	50
Image - Shopping Cart Height	40
Category Icon Image Width - Product Info Pages	57
Category Icon Image Height - Product Info Pages	40
Top Subcategory Image Width	150
Top Subcategory Image Height	85

Product Info - Image Width	150
Product Info - Image Height	120
Product Info - Image Medium Suffix	_MED
Product Info - Image Large Suffix	_LRG
Product Info - Number of Additional Images per Row	3
Image - Product Listing Width	100
Image - Product Listing Height	80
Image - Product New Listing Width	100
Image - Product New Listing Height	80
Image - New Products Width	100
Image - New Products Height	80
Image - Featured Products Width	100
Image - Featured Products Height	80
Image - Product All Listing Width	100
Image - Product All Listing Height	80
Product Image - No Image Status	1
Product Image - No Image picture	no_picture.gif
Image - Use Proportional Images on Products and Categories	1

You should be familiar with some of these settings since we have gone through them when configuring our products. Most of the other fields are self-explanatory so we shall not touch on them further.

Summary

In this chapter, you have gone through the various settings in the Admin Console that can help you customize the layout elements in Zen Cart. The vast number of options available for configuration makes it impractical to cover every single setting in this chapter. Nevertheless, you can refer to the screen shots to browse through the available settings.

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Chapter 17 Advanced Customization

Introduction

We shall now go into the guts of Zen Cart to learn how to properly customize your store's look and functionality with minimum impact on future upgrades. This will mean having to deal with HTML, CSS and a little bit of PHP along the way.

Do not be disheartened if you do not have the necessary knowledge. Online tutorials on HTML and CSS are freely and easily available on the Internet. PHP and Javascript knowledge take more time to master but are usually not required unless you need to overhaul a large part of the business logic in a certain module.

In this chapter, we shall:

- Go over some characters that have special meaning to HTML and PHP.
- Understand the Template Override System.
- Customize your store using CSS, HTML, Javascript, etc.
- Add support for multiple languages using language packs.

Characters with Special Meanings in HTML and PHP

For readers who are unfamiliar with HTML or PHP, there are several characters you need to pay attention to while editing some of the files mentioned in the rest of this chapter.

Handling Special Characters in HTML Code

For HTML code, some characters need to be escaped with HTML character entities to prevent browsers from failing to display the affected web pages properly.

As an example, take a look at the snippet of HTML code that appears in `<zc-home>/includes/languages/english/html_includes/define_contact_us.php`. The code prints the header of the Contact Us page as **Contact Us Sample Text ...**.

```
<p><strong>Contact Us Sample Text ...</strong></p>
```

To change the text to **Contact John & Jerry**, the code would look like the following snippet instead. Notice that the HTML character entity (`&`) character is used to replace the ampersand sign (`&`) instead.

```
<p><strong>Contact John & Jerry</strong></p>
```

A collection of commonly used HTML character entities is shown in the following table. For a detailed list of HTML character entities, refer to http://www.w3schools.com/tags/ref_entities.asp.

Table 17.1: Commonly used HTML character entities

Character	HTML Character Entities
<	<
>	>
&	&
"	"

Handling Special Characters in PHP Code

For PHP code, text with a single quote (') or double quotes ("") that appear *between* other quotes may need to be escaped with a preceding backslash (\) character. The rules governing the use of these special characters can be quite complex so interested readers are advised to turn to <http://www.php.net/types.string> for more information.

To simplify our discussion, we shall only look at how to escape single and double quotes (either ' or "") that appear between single quotes (') because this is the most common scenario you will encounter when editing PHP files in Zen Cart.

As an example, take a look at the snippet of PHP code that appears in <zc-home>/includes/languages/english/contact_us.php. The code prints the title of the Contact Us page as **Contact Us**.

```
define('HEADING_TITLE', 'Contact Us');
```

To change the title to **Shop's Contact**, the code would look like the following snippet instead. Notice that a backslash (\) character precedes the single quote which will be displayed to your customers.

```
define('HEADING_TITLE', 'Shop\'s Contact');
```

To change the title to **"Contact Us"**, the code would look like the following snippet instead. Notice that the double quotes are replaced with the HTML character entity (") instead of a backslash character (\).

```
define('HEADING_TITLE', '&quot;Contact Us&quot;');
```

The Template Override System

Zen Cart provides a mechanism called a Template Override System which serves the following purposes:

- Use templates to control the look and functionality of your store.
- Ease maintenance and upgrading efforts by not touching user-defined template files.

The Template Override System consists of three parts:

- Database settings.

- Automatically included files.
- Override System.

We shall only discuss the Override System and how it relates to the look-and-feel of your store. The other two topics are too technical and are more suited for developers looking to enhance Zen Cart's functionality.

How the Override System Works

The Override System allows you to modify the look-and-feel, and specify new language interpretations for your store in a way that does not require you to make direct changes to the default core files in Zen Cart. This system greatly eases any future Zen Cart upgrade woes because you only need to back up the template override directories you created.

The Override System can only be applied to directories that contain either of the following sub-directories:

- `classic`
- `template_default`



Note

The template override system currently does not work for the Admin Console module.

The “`template_default`” directory contains all the files related to your store’s look-and-feel.

The “`classic`” directory serves 3 purposes.

- It is the *default* template used by Zen Cart.
- This template modifies the look-and-feel of your store by *altering* the functionality of certain files in the “`template_default`” directory.
- It is used as an *indicator* that a folder can be *overridden*.

The Override System works by looking at files in a specific sub-directory that have been earmarked as a template via the Admin Console. When Zen Cart encounters a file residing in an *override* directory, it will read that file instead of the *default* file that it usually reads; thus changing the store’s functionality or look-and-feel.

A *brief* outline of how a template directory is created is shown below:

1. To determine whether files in a directory can be overridden, look for a directory which contains either `template_default` or `classic`.
2. Create your override directory according to the following rules.
 - 2.1. Your override directory name should preferably not contain any spaces or strange characters to avoid experiencing conflicts in different operating systems.
 - 2.2. If a directory contains a `template_default` sub-directory, your override directory should be at the *same-level* as the file you want to override. An example is shown below.

```
Default path:  
<zc-home>/includes/templates/template_default/sideboxes/tpl_languages.php  
Override path:  
<zc-home>/includes/templates/<your-template-name>/sideboxes/tpl_languages.php
```

If a directory contains *only* the `classic` sub-directory, your override directory should be *one-level below* the

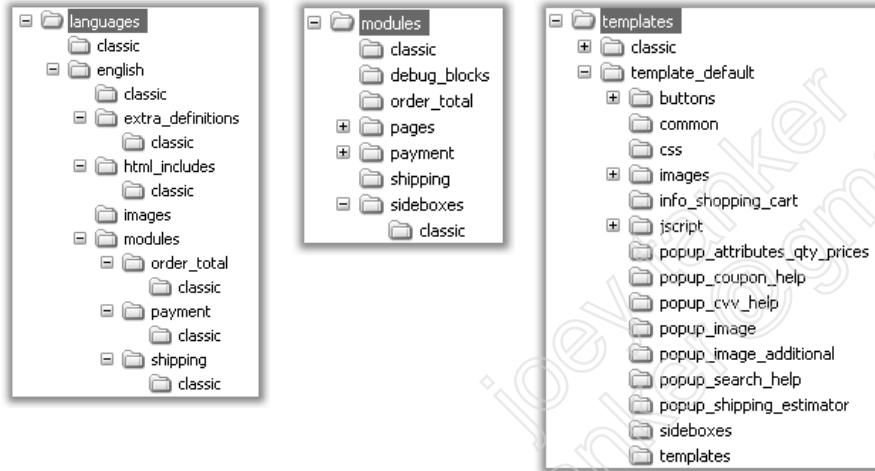
files you want to override as shown in the following example.

```
Default path:  
<zc-home>/includes/languages/english/header.php  
Override path:  
<zc-home>/includes/languages/english/<your-template-name>/header.php
```

3. Copy any *sub-folder* or *file* you wish to override from the default path to your override path.
4. Make any changes you require to the file in your override path.

The above steps give you a general idea of how a template directory is created and the rules you need to follow. The next section will show you how to actually implement a proper override system.

Identifying Directories to Override



Before we can start our customization, we need to first understand what the different directories do in Zen Cart. There are three main directories located under the `<zc-home>` directory that will help you decide what you need to override.

- **includes/templates** – To change the colors, fonts and images used on your site. For example, the color of your side-boxes.
- **includes/languages** – To change the text that is displayed in your web pages. For example, the title of your side-boxes
- **includes/modules** – To change the logic or display structure of certain modules. Currently, you *cannot* override logic that is included in the sub-directories: `order_total`, `pages`, `payment`, `shipping` and `debug_blocks`.

Specifying Template Information

In order for Zen Cart to recognize your override directory as a template, you need to provide details of your template in a specific file under a particular directory.



Note

The rest of this chapter assumes that you are using the name “magic” for your override directory. This is also the template name used for switching templates.

To provide details of your template to Zen Cart:

1. Copy and rename the `includes/templates/classic` directory to `includes/templates/magic`.

Note: We can also create our `magic` override directory by copying the same files from the `template_default` directory individually. However, copying everything from the `classic` directory saves time and effort since we won’t need to alter *all* the files contained in the `template_default` directory.

2. Edit the file `template_info.php` under the `magic` directory. You can use the sample code below for testing purposes.

```
<?php
$template_name = 'Magic Template';
$template_version = 'Version 1.0';
$template_author = 'Store Owner - Claude Blanc';
$template_description = 'Custom template for testing purposes.';
$template_screenshot = 'scr_template_default.jpg';
?>
```

Note that the “`$template_screenshot`” field refers to a file which should preferably be a screen shot of how your store looks with the new look-and-feel implemented by the new template. This file should be placed in your override directory’s `images` sub-directory; i.e. `includes/templates/magic/images`. Since we have not finished creating our new look-and-feel for the store, we leave it pointing to the old image.

Switching Templates

For Zen Cart to make use of the files contained in an override directory, you will need to tell Zen Cart to switch to your desired template as follows:

1. Click on **Tools > Template Selection** to access the Template Selection screen.

TEMPLATE SELECTION					
Template Language	Template Name	Template Directory	Action	Classic Contemporary Green	
Default>All	Classic Contemporary Green	classic	<input type="button" value="edit"/>	Page 1 of 1	Template Author : Zen Cart Team (c) 2006
Displaying 1 to 1 (of 1 template associations)					
<input type="button" value="new language"/>					
Template Version : Version 1.3.5					
Template Description This template set is designed to be easily modified using only the style sheet to change colors, fonts, and the store logo. Three images are required: logo.jpg, header_bg.jpg, and tile_back.gif.					
Templates Installed					
<input type="button" value="preview"/> Classic Contemporary Green					
<input type="button" value="preview"/> Magic Template					

2. If you want your custom template to be applied for *all* languages used in the store, click the row with **Template Language** set as Default (All).

3. If you want your custom template to be used only for a *particular* language, click on **new language**.



- 3.1. Choose your custom template from the **Template Name** drop-down list box and associate it with your desired language by choosing from the **Language Name** drop-down list box.
- 3.2. Click **insert** to save your changes.
4. Click on **edit** to access the template details page if you have chosen Step 2 instead of Step 3 above.



- 4.1. Choose your desired template from the **Template Name** drop-down list.
- 4.2. Click on **update** to save your changes.

Now that we understand how to create and select a new template in Zen Cart, we can safely begin our customizations. Anytime you are unhappy with your new modifications or feel you have overridden something wrongly, just switch back to the “Classic” template which is the default template used by Zen Cart.

Changing How Your Store Looks

There are many possible ways to customize your store's look-and-feel. However, most customizations can be accomplished by just editing the following two entities in Zen Cart:

- Stylesheets that control the colors, borders and placement of HTML elements.
- Language files that define all the words you see in your Store Front; “Login”, “My Account”, etc.

Modifying Stylesheets

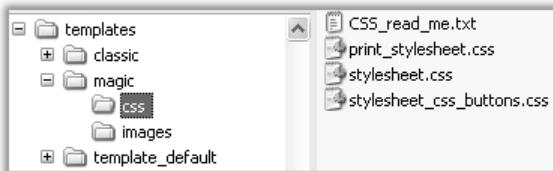
Zen Cart employs the power of Cascading Style Sheets (CSS) to specify the properties of fonts, colors and images for the different elements in your online store. This approach gives your store a consistent look and allows changes to be easily implemented.

Furthermore, different stylesheets can be specified on a *site-wide*, *page-specific* and/or *language-specific* scale. We shall only discuss the site-wide approach in this book because once you get the hang of it, you can easily move on to the other approaches.

Before we begin, it is assumed that you have already created and switched to your custom template with the template name of “magic”.

To change your store's look-and-feel using CSS:

1. Navigate to your `magic/css` directory.



2. If you are interested in performing *language-specific* and *page-specific* overrides, read the `CSS_read_me.txt` file.
3. To give you an idea of how stylesheets can change your store's look, edit the `stylesheet.css` file and change the following lines accordingly:

```
BODY {  
background-color: #e5edf5;  
background-color: #000000;
```

```
.leftBoxHeading, .centerBoxHeading, .rightBoxHeading {  
margin: 0em;  
background-color: #abbbd3;  
background-color: #000000;  
background-image: url(../images/tile_back.gif);  
padding: 0.5em 0.2em;  
}
```

The above stylesheet changes transforms your store's *background* color and *side-box header* colors to black.

4. Go to your Store Front and *refresh* your page to see the effects of your changes to the `stylesheet.css` file.

Now that you have seen the ease with which you can change your store's look-and-feel, you can easily implement your own changes by modifying the relevant stylesheets accordingly. If you are altering the CSS setting for a specific multi-product layout element, you should refer to the various screen shots in the "Multi-Product Layout Elements" section starting from page 248 to assess the impact of your change on other similar multi-product layout elements.



Tip

For advanced users familiar with CSS, you can click on **Configuration > Layout Settings** and enable the **CSS Buttons** field.

Once enabled, CSS will be used to define the look of buttons in your store instead of the usual GIF images; thus saving bandwidth and maintenance effort.

Changing Static Text

A common task many store owners need to perform is to change the text appearing in different parts of a store. For example, changing the the title of the Categories side-box from "Categories" to "Store Catalog". This task is easily performed in Zen Cart by looking for the required file containing the original text to change and then using the Override System to edit its contents.

Before we begin, it is *assumed* that you have already created and switched to your custom template with a template name of “magic”.

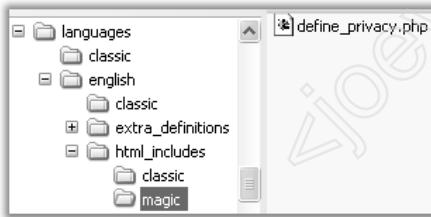
To override any text in your Zen Cart store:

1. Determine the language in which the text is displayed. We shall *assume* you are using the default “english” language.
2. Proceed to the `includes/languages` directory.
 - 2.1. The `english.php` file that resides directly under the `includes/languages` directory contains most of the text that appears across *many pages* in your store and also some of the emails sent from your store.
 - 2.2. If you want to change some text belonging to a *specific* page, you will have to traverse down the `includes/languages/english` directory to look for the particular page where the text appears. For example, the text that appears in your Store Front after installation: “*Congratulations! You have successfully installed your Zen Cart™ E-Commerce Solution.*” appears in the `includes/languages/english/index.php` file.
3. Find the file with the text you want to change and copy it to your override directory. For example, if you want to override some text in the `english.php` file, copy it to the `includes/languages/magic` directory.
4. Make your changes in the overriding file and reload your page in your Store Front to see the effect of your changes.

In the previous chapter, you learned how to change the text in a Define Page using the Define Pages Editor in your Admin Console. We shall now use the Override System to perform the changes instead.

To change the text in a Define Page:

1. Copy the relevant file from `includes/languages/html_includes` to the respective sub-directory under your override directory (e.g. `includes/languages/html_includes/magic`).



2. Change the text in the file under your override sub-directory. The following example shows the contents of the `define_privacy.php` file being changed.

```
<p><strong>Privacy Sample Text ...</strong></p>
<p><strong>Our Store Privacy Policy</strong></p>
```

3. Go to your Store Front and proceed to your Privacy Policy page. A comparison of the text in that page before and after modification is shown in the following illustration.



You can easily apply the above technique to change any text appearing in other languages you may have added to your store.



Tip

You can search for a specific word appearing in your Store Front that you would like to change by using the Admin Console.

Click on **Tools > Developers Tool Kit** and perform your search using the **Look-up CONSTANT or Language File defines** section.

Supporting Multiple Languages

Although Zen Cart is written in English, it has the capability to support additional languages. This is accomplished through the help of language packs which can be downloaded from Zen Cart's site.

If you do not find the language you require, you can even create your own language pack. However, this is not an easy task because you would need to be familiar with all the words that need to be translated. To learn how you can create your own language pack, you can refer to Zen Cart's site for instructions.

The handful of language packs currently available vary in terms of their coverage for different areas of your store. Some language packs cover both the Store Front and Admin Console whereas other language packs may only cover the Store Front or Admin Console. As these language packs are developed by volunteers and not Zen Cart's developers, the quality of each translation will vary. If you spot any mistakes, just let the maintainers (i.e. volunteers) of those language packs know.



Warning

Your operating system needs to have the necessary fonts installed in order for your web browser to display the “foreign” text properly.

Understanding ISO Language Codes and Language Encodings

Before you begin adding a language pack, you need to know about language codes and language encodings. These two topics allow you to configure Zen Cart to support additional languages and also for your web browser to display other languages properly.

A *language code* is a 2-letter ISO 639-1 code or 3-letter ISO 639-2 code used to represent a language name. Zen Cart only supports the 2-letter ISO 639-1 at the time of writing of this book. For example, “ja” is used to represent Japanese and “en” is used to represent English. You can access a list of codes for your language from the following website - http://www.loc.gov/standards/iso639-2/php/code_list.php.

A *language encoding* is a binary representation of a language's character set. A character set is a grouping of several characters that represent a language. For example, you can think of the English alphabet as a character set consisting

of 52 upper and lower-case letters. A language encoding allows a computer program to translate a set of bytes into the correct character. However, to display the character properly on a system, the appropriate fonts must also be installed.

Web Browser Language Preferences

Most modern graphical web browsers have the ability to let users configure the languages used to display web pages. It is important to know where this setting is if you intend to test a new language that you have added to Zen Cart.

We shall use the free and open source Mozilla Firefox web browser in our examples to show you how to go about configuring your browser languages. There are two ways to specify language preferences in Firefox and we shall highlight both ways.

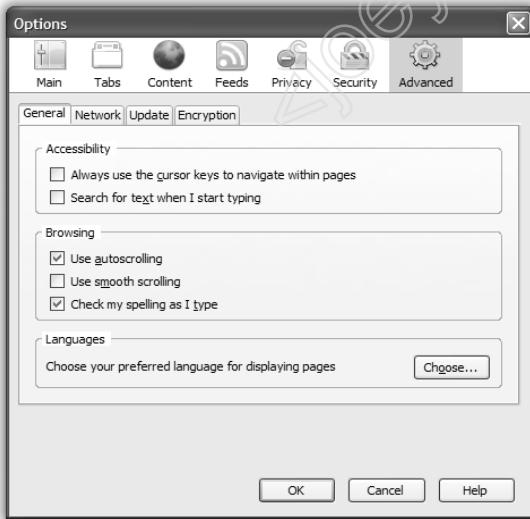
- *Static Language Preferences* – This configuration lists the languages that are supported by a web browser. The list of supported languages can automatically be detected by programs like PHP, Java, CGI etc. Zen Cart is written in PHP so it uses this setting to determine a customer's default language preferences.
- *Dynamic Language Preferences* – This configuration allows a user to change the web browser language currently being used to render a web page. If you see gibberish being displayed in your web browser when viewing web pages authored in foreign languages, you should experiment with this configuration.

Static Language Preferences

This configuration provides programs running on web servers with a way of automatically detecting what languages are supported by a user's web browser.

To edit the language preferences of your web browser:

1. Start up Mozilla Firefox if you have it installed on your system.
2. Click on **Tools > Options** to bring up a dialog box and navigate to the specified area as shown in the following screen shot.



3. Click on **Choose** and you will be able to add any language preferences in the ensuing dialog box.



Note: The “us” behind the language “en-us” is referred to as a *language variant*. It is used to represent differences in how a language is used in different locations. For example, “color” in the United States is spelled as “colour” in the United Kingdom.

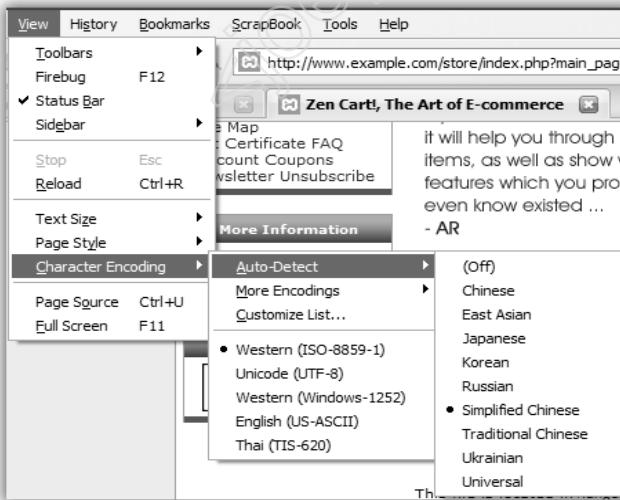
4. To add a language that your browser supports, choose one from the drop-down list box, then click **Add**.
5. To specify your default language, make sure it is the top-most entry in the **Languages in order of preference** list box.
6. Click on **OK** to confirm your changes.

Dynamic Language Preferences

This configuration changes the language encoding of a web page currently being displayed in your web browser. Unlike the configuration mentioned in the “Static Language Preferences” section, this setting changes how your web browser interprets a web page already sent by a web server. It does not send this setting to the web server.

To change the current language used by your web browser to render a web page:

1. Start up Mozilla Firefox if you have it installed on your system.
2. On the main menu bar, click on **View > Character Encoding > Auto-Detect** to display a list of languages.



3. Choose and click a language you wish to use to render a page you are currently viewing.

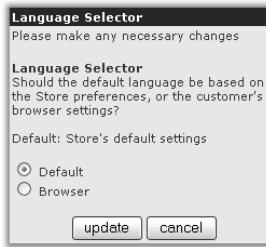
You can now view any web page dynamically with your desired language encoding instead of the static default language which *might* be read by web applications and rendered to you.

Adding a Language Pack

A language pack is a collection of files that contain translations of different fields in Zen Cart in a specific language (French, Spanish, etc). The language pack can either be for the Store Front only, Admin Console only, or for both interfaces.

Before you begin adding a language pack:

1. Click on **Configuration > My Store** and edit the **Language Selector** field to specify how your browser will switch to another language.



- **Default** - Indicates that a visitor will see a site rendered according to the language you set for your store. For testing purposes, you might like to set this as the option first.
- **Browser** - Indicates that your store will *automatically* switch to a language based on the language preferences in a visitor's browser. Refer to "Static Language Preferences" on page 278 for an example showing how supported languages are configured in a web browser.

2. Click on **Configuration > Maximum Values** and edit the **Maximum Display of Language Flags in Language Side Box** field. As the name implies, this field specifies the number of languages (represented by flags) to display in your Languages side-box in your Store Front.

We shall use the example of a Simplified Chinese Language Pack for Zen Cart version 1.3.7.1 as an example on how to add a language pack to Zen Cart. You can then modify the steps to install your own language pack.

Download and Install a New Language Pack

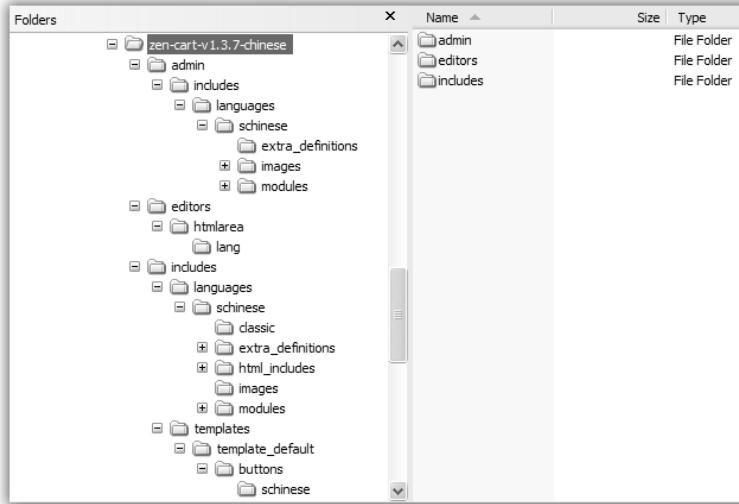
Before you begin adding your language pack, make sure you back up your <zc-home> directory. Refer to "File System Back Up" on page 364 for details on how to back up this directory properly.

To begin installing a language pack:

1. Obtain a language pack:
 - 1.1. Go to Zen Cart's home page and click the **downloads** hyperlink on the top menu.
 - 1.2. Click on the **Language Packs** hyperlink to see a list of language packs available for Zen Cart.
 - 1.3. Check the *version* of Zen Cart that is supported for the desired language pack.
 - 1.4. Download the required language pack to your machine. For our example, this file is named "simplified_chinese_language_pack_1.3.7.zip"

Note: If a language pack you want is not available in the **downloads** section, click on the **International Support** hyperlink located near the bottom of Zen Cart's web site. This will lead you to other Zen Cart sites which might contain the language pack you need.

2. Expand your language pack into a separate folder and you should see the directory structure of a decompressed Chinese language pack as shown in the following screen shot.



Note that this language pack does not contain any documentation. Other language packs may have additional documentation which teaches you how to use or install their language packs properly.

3. Copy the relevant files and directories under the uncompressed language pack directory into the corresponding directories under your <zc-home> directory.
4. Log in to your Admin Console.
5. Click on **Localization > Languages** to bring up the Languages screen.
6. Click on **new language** to provide details of your new language pack to Zen Cart. The following screen shot shows the details we will specify for our example Chinese language pack.

New Language
Please enter the new language with its related data

Name:	Simplified Chinese
Code:	cn
Image:	icon.gif
Directory:	schinese
Sort Order:	1
<input type="checkbox"/> Set as default	
<input type="button" value="insert"/> <input type="button" value="cancel"/>	

7. Enter a name for your language pack in the **Name** field. E.g. Simplified Chinese.
8. Enter the two-letter ISO 639-1 code which represents the language in the **Code** field. Although Simplified Chinese is used in both Mainland China and Singapore, it is customary to use China as the country code to represent Simplified Chinese. Therefore, enter the country code for China as cn.

9. The default icon.gif in the **Image** field is an image that is provided by your language pack. Most likely, it is the flag of a specific country synonymous with that language; e.g. the flag of China to represent the Simplified Chinese language.
10. Enter the directory which holds all your language-specific files in the **Directory** field. You should be able to derive this value via the following directory path of your language pack - <language-pack-directory>/includes/languages/<directory-path>. If you refer to the figure in Step 2, you will understand how we obtained the value of schinese for our language pack.
11. Optionally, check the **Set as Default** check box if you intend to make this the default language that your store uses. For testing purposes, do not set this field for now.
12. Optionally, if you would like to associate a specific template to this language.
 - 12.1. Click on **Tools > Template Selection** to bring up the Template Selection screen.
 - 12.2. Click on **new language** to specify what template should be used for your new language.
 - 12.3. Specify the necessary details and click **insert**.

While testing, it is best to leave the template set to the default Classic Template. This helps to confirm your language pack is installed properly first before you do additional tweaking to your language settings.



Note

After you have added a language pack, you can go to your individual products and categories to add descriptions and names in the newly added language.

Associate Currency in New Language Pack with a Currency in the Currencies Screen

Depending on your language pack, you may need to add the currency code associated with your language pack to Zen Cart after your language pack is installed. If you do not perform this step, your order totals will not add up when switching you switch the store to use the newly installed language.

Since we are using the Chinese language pack for our example, we will need to add a new currency (Chinese Yuan) to your store as it is not in the list of currencies that comes with a default installation of Zen Cart.

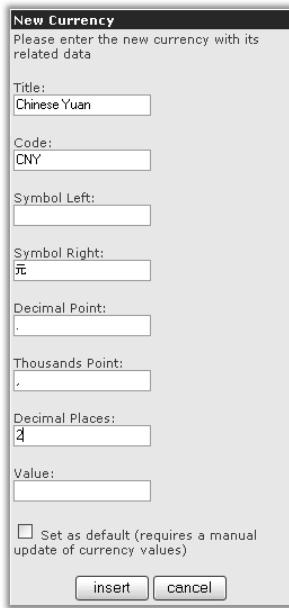
To add the new currency associated with the new language pack:

1. Open up the <zc-home>/includes/languages/<your_language>.php file and check the field containing the words "LANGUAGE_CURRENCY". For the Chinese language pack, you should see something as follows.

```
define('LANGUAGE_CURRENCY', 'CNY');
```

2. Log in to your Admin Console.
3. Click on **Localization > Currencies** to access the Currencies screen.
4. Click on **new currency** and concentrate on the side-panel.
5. Use the currency code you saw in Step 1 and enter into the **Code** field for the currency. For example, enter CNY for the **Code** field if you are using the Chinese language pack.
6. For the rest of the fields, enter the values according to those shown on the following screen shot if you are

using the Chinese language pack. If you have a problem entering the Chinese character for the **Symbol Right** field, enter instead.



7. Click on **insert** to save your changes.

To learn more about default currency display in Zen Cart, refer to “Configuring the Displayed Default Currency” on page 100 for more details.

Test the New Language Pack Integration

Before you begin testing, we shall assume you have set the **Language Selector** field to Default under **Configuration > My Store**. The test shall be performed for both the Store Front and the Admin Console separately.

To test whether your language pack is working for your Store Front:

1. Start your web browser and proceed to your Store Front.
2. From the Languages side-box, click on the relevant flag representing the language you want to view the store in.



3. Your screen should be refreshed and displayed in the chosen language. Adjust your browser language setting *dynamically* if you see gibberish. Refer to “Dynamic Language Preferences” on page 279 for details if you have forgotten how to set your browser’s language dynamically.

An example screen shot of your store displayed in Chinese is shown in the following screen shot.



Make sure you test out all the necessary screens by entering an order in your system to check whether all the *functionality* and *calculations* are correct! The following screen shot of a shopping cart with order calculations displayed is to help remind you to perform these checks.



To test whether your language pack is working for your Admin Console (Note: Works only if your language pack has support for Admin Console):

1. Start your web browser and log in to your Admin Console.
2. You should be able to switch your language according to the drop-down list box located underneath the Zen Cart logo as shown in the following screen shot.



3. Choose your desired language from the drop-down list box and your entire Admin Console will now be rendered in your selected language. The following example screen shot shows the home page of the Admin Console rendered in Simplified Chinese.

商品统计	
点击开始日期:	2006/09/07
点击计数:	3350
客户:	4
商品:	28
未激活商品:	21
顾客评论:	4
等待审批的评论:	2
电子商情订阅:	2
过期特价商品	5
特价商品	3
过期推荐商品	5
推荐商品	2
过期促销商品	3
促销商品	0

订单状态	
Update:	1
Delivered:	2
Processing:	9
Pending:	36

新客户:	
Bellamont Nicole	
2006/09/19	
Christine Summers	
2006/09/17	
Alan Smith	
2006/09/15	
Jacques Pires	
2006/09/09	

新订单:	
Jacques Pires	
\$15.00	2006/12/01
Jacques Pires	
\$4,400.00	2006/12/01
Jacques Pires	
\$0.00	2006/12/01
Jacques Pires	
\$990.00	2006/12/01
Jacques Pires	
\$200.00	2006/11/29

最近10天的计数 Session - 总计	
2006/12/02	2 - 33
2006/12/01	2 - 100
2006/11/30	1 - 2
2006/11/29	1 - 66
2006/11/28	1 - 19
2006/11/27	2 - 56
2006/11/25	2 - 74
2006/11/14	1 - 52
2006/11/10	1 - 21
2006/11/09	2 - 14

With our example of adding a Chinese language pack as a reference, you should now be able to easily add your own language pack. Different language packs require different settings and may require you to perform certain manual steps. Therefore, always read the instructions (if available) that come with each language pack before you begin installing it.

Provide Translations for Different Parts of Your Store

After you are sure your new language pack is installed properly, you can begin updating all your product and category details in the new language. Also do not forget to update all your define pages like Shipping and Returns Policy page, Privacy Notice pages, etc.

Third-Party Contributions

Although Zen Cart is already very powerful, it can never fully anticipate the changes or requirements of the business world. To cater for unique scenarios and requirements, Zen Cart allows volunteers to contribute code (side-boxes, payment modules, shipping modules, etc) for use by the community.

To access the list of contributions from volunteers, go to Zen Cart's site and click on **downloads** at the top of the page. If you do not find what you are looking for, try asking around in the forums.

Before downloading and testing out a new contribution, check that the contribution is actually suitable for the

version of Zen Cart you are currently running. Since each contribution is different in purpose and configuration, read the accompanying instructions contained within the files after downloading the files. It is also wise to test contributions on a test copy of your site and never on your 'live' site.

Summary

In this chapter, you have learned how to make use of the Override System to modify your files to simplify any Zen Cart upgrades you need to perform in future. This should be the approach you use whenever you need to make changes to your store. You have also seen how language packs and changes in CSS files can drastically change the look-and-feel of your store. Although it is fun and exciting to change things around, try to write down your changes in case you make a mistake in your configuration and need to roll back your store's look-and-feel to a previous state.

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Part 5 Managing Your Store

This section discusses the activities you need to carry out once your store goes 'live' and starts accepting customer purchases. You will learn to manage customers, configure stock settings and process orders. Different marketing techniques are also presented to help you attract customers, boost sales and maintain rapport. Finally, you will learn to deal with system administration duties to make sure your store runs smoothly.

This section covers the following topics:

- Managing Customers
- Managing Orders
- Managing Stock
- Marketing
- System Administration

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Chapter 18 Managing Customers

Introduction

Zen Cart provides a simple customer management interface for you to keep track of customer orders and to email them if necessary. You also have the ability to specify a custom authorization status for customers, restricting their purchasing actions in your store.

In this chapter, we shall:

- Manage common customer details.
- Manage individual customer details.
- Understand the impact of deleting customers.
- View the total number of customers in your store.

Common Customer Settings

Common customer settings affect *all* customers. It is closely related to the sign-up screen of your online store as we shall see later.

To edit settings common to all customers:

1. Click on **Configuration > Customer Details** to access the common Customer Details screen.

Customer Details		
Title	Value	Action
Email Salutation	true	►
Date of Birth	true	ⓘ
Company	true	ⓘ
Address Line 2	true	ⓘ
State	true	ⓘ
State - Always display as pulldown?	false	ⓘ
Create Account Default Country ID	United States	ⓘ
Fax Number	true	ⓘ
Show Newsletter Checkbox	1	ⓘ
Customer Default Email Preference	0	ⓘ
Customer Product Notification Status	1	ⓘ
Customer Shop Status - View Shop and Prices	0	ⓘ
Customer Approval Status - Authorization Pending	0	ⓘ
Customer Authorization: filename	customers_authorization	ⓘ
Customer Authorization: Hide Header	false	ⓘ
Customer Authorization: Hide Column Left	false	ⓘ
Customer Authorization: Hide Column Right	false	ⓘ
Customer Authorization: Hide Footer	false	ⓘ
Customer Authorization: Hide Prices	false	ⓘ
Customers Referral Status	0	ⓘ

Many of the fields in the above screen are related to the sign-up portion of the Log In screen in your Store Front as shown in the following screen shot.

New? Please Provide Your Billing Information
Creating a login profile with Mega Store allows you to shop faster, track the status of your current orders and review your previous orders.
* Required information

Company Details
Company Name:

Address Details
Mr. Ms. *
First Name: *
Last Name: *
Street Address: *
Address Line 2: *
City: *
State/Province: *
Post/Zip Code: *
Country: United States

Additional Contact Details
Telephone: *
Fax Number:

Verify Your Age
Date of Birth: * (eg. 05/21/1970)

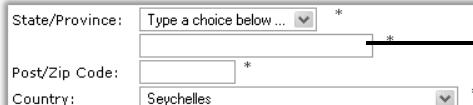
Login Details
Email Address: *
Password: * (at least 5 characters)
Confirm Password: *

Newsletter and Email Details
 Subscribe to Our Newsletter.
 HTML TEXT-Only

Note that you can also specify the minimum length of the fields appearing in the sign-up portion of your Log In screen. To do this, click on **Configuration > Minimum Values** and edit the relevant fields.

2. Comparing the preceding two screens, you will find that you can easily enable/disable the display of certain fields in the sign-up portion of the Log In screen by editing the following fields in the Customer Details screen:
 - **Email Salutation**
 - **Date of Birth**
 - **Company**
 - **Address Line 2**
 - **State**
 - **Create Account Default Country ID**
 - **Fax Number**
 - **Show Newsletter Checkbox**
 - **Customer Default Email Preference**
3. The **State - Always display as pulldown?** field alters how the State/Province field in the Log In screen of your Store Front works. When set to true, a drop-down list box will be displayed for the State/Province field instead of an input box. The entries in the drop-down list box are populated based on the currently selected entry in the corresponding Country field of the Log In screen.

The entries in the State/Province field are actually taken from the settings you have configured via **Locations/Taxes > Zones** in the Admin Console. Various possible appearances of the State/Province field in the Store Front can be seen in the following screen shots.

<i>State – Always display as pulldown? = false.</i>		<i>Text box disabled if State/Province contains entries.</i>
<i>State – Always display as pulldown? = true.</i>		
<i>State – Always display as pulldown? = true.</i>		<i>Text box enabled if State/Province does not contain any entries.</i>

4. If you do not want customers to see a product notification prompt after the checkout process as shown in the following screen shot, disable the **Customer Product Notification Status** field.



5. The **Customer Shop Status - View Shop and Prices** and **Customer Approval Status - Authorization Pending** fields are related to the shopping functions of your store. Refer to “Limiting Catalog Information and Store Function” on Page 222 for details.
6. Do not edit the **Customer Authorization: filename** unless you are absolutely sure you know what you are doing! This field specifies the name of the PHP file in Zen Cart that controls how customer authorization works.
7. Other fields related to how you want your store to be displayed, depending on the *approval* status of your customers, are shown below:
- **Customer Authorization: Hide Header**
 - **Customer Authorization: Hide Column Left**
 - **Customer Authorization: Hide Column Right**
 - **Customer Authorization: Hide Footer**
 - **Customer Authorization: Hide Prices**
8. The **Customers Referral Status** field is related to how you want to use Discount Coupons to set up a referral system in Zen Cart. Refer to “Implementing a Customer Referral Scheme via Discount Coupons” on page 318 for details on implementing a customer referral scheme.



Warning

Do not set the **State** field which you encountered in the Customer Details screen to false unless you understand the impact it has on tax calculations. Refer to “Impact of Customer Zone Information” on page 114 for details on this issue.

Another thing worth mentioning is to specify whether you want to receive a notification email if a new customer creates an account with your store. If you would like to receive an email when a new customer signs up, you can click on **Configuration > E-Mail Options** and set the following fields accordingly.

- **Send Copy of Create Account Emails To - Status**
- **Send Copy of Create Account Emails To**

Individual Customer Settings

The Customers Screen

The selection of individual customers and their respective configuration and functions are accomplished through the Customers screen by clicking on **Customers > Customers**.

ID#	Last Name	First Name	Company	Account Created	Last Login	Pricing Group	Authorized	Action
Asc Desc	Asc Desc	Asc Desc	Asc Desc	Asc Desc	Asc Desc	Asc Desc	Asc Desc	
2	Smith	Alan		09/15/2006	--none--			<input type="button" value="edit"/> <input type="button" value="delete"/> <input type="button" value="orders"/> <input type="button" value="email"/>
1	Pires	Jacques		09/09/2006	09/15/2006	--none--		

Displaying 1 to 2 (of 2 customers) Page 1 of 1

"orders" button will only appear if the customer has ordered something before.

Account Created: 09/09/2006
Last Modified:
Last Logon: 09/15/2006
Number of Logons: 6
Number of Orders: 7
Last Order: 09/15/2006
Total: \$237.50
Country: France
Number of Reviews: 0
Customer Referral
1st Discount Coupon



Note To change the number of customers appearing in the Customers screen, click on **Configuration > Maximum Values** and edit the **Maximum Display of Customers on Customers Page** field.

Editing a Customer's Details

To edit individual customer details:

1. Select a customer from the Customers screen and concentrate on the side-panel.
2. Click on **edit** to access the customer's details screen.

The screenshot shows a 'CUSTOMERS' edit screen with the following sections:

- Personal:** Gender (Male selected), Customers Authorization (Approved), First Name (Jacques), Last Name (Pires), Date of Birth (05/21/1970), E-Mail (jacques@example.com), and Address (Required).
- Address:** Street (200, rue de Tolbiac), Suburb (Required), Post Code (75015), City (Paris), State (Paris), and Country (France).
- Contact:** Telephone Number (33)01-40-80-82-11 (Required) and Fax Number (Required).
- Options:** Email Format Pref (TEXT-Only selected), Newsletter (Subscribed), Discount Pricing Group (-none-), Customer Referral (1st Discount Coupon), and buttons for update and cancel.

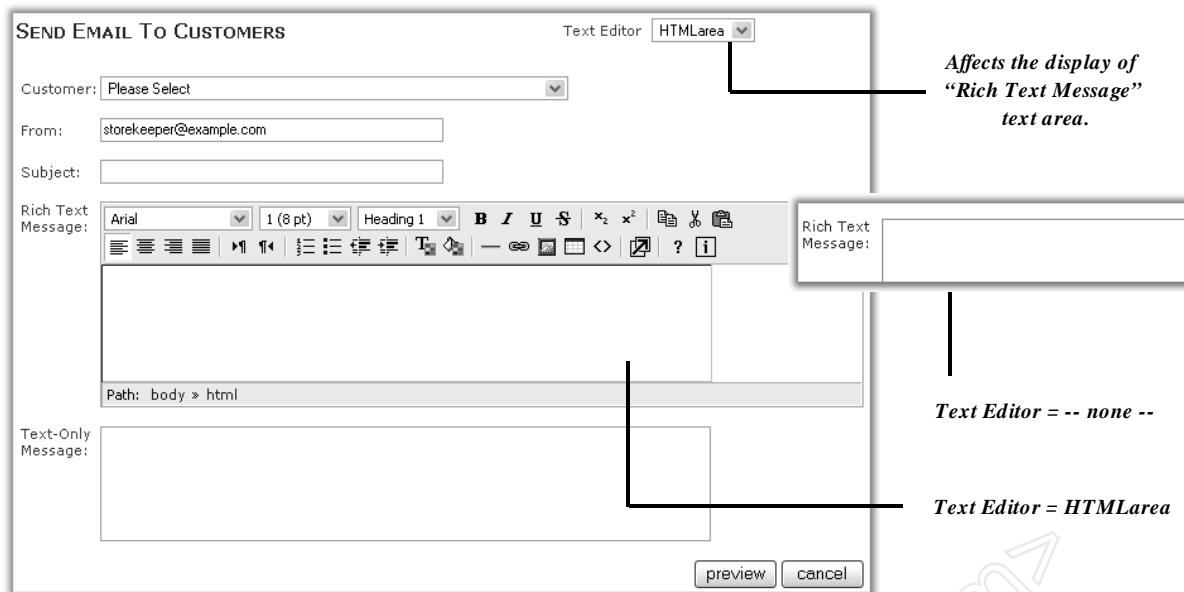
Most fields contain information captured when the customer signed up for an account with your store so we shall not discuss them further. You will probably not need to make any changes to these fields because customers can change their personal information anytime by logging into their own accounts.

3. The **Customer Authorization Status** allows you to control how the shopping function in your store should appear to a particular customer. Refer to “Limiting Catalog Information and Store Function” on page 222 for various options on how your store's shopping function can be configured.
4. The **Discount Pricing Group** field allows you to assign a discount group to a customer. This field was discussed when we talked about “Customer Group Discounts” on page 235.
5. The **Customer Referral 1st Discount Coupon** field will be discussed later when we talk about “Implementing a Customer Referral Scheme via Discount Coupons” on page 318.

Sending Emails to Selected Customers

To send emails to selected customers:

1. Select a customer from the Customers screen and concentrate on the side-panel.
2. Click on **email** to access the screen for you to start composing your email message.



The **Rich Text Message** text area allows you to send HTML-formatted email messages to your customers. It will only *appear* if you set **Use MIME HTML When Sending Emails** to true when you click on **Configuration > E-Mail Options**. The layout of the **Rich Text Message** text area will in turn depend on the setting of the **Text Editor** field as shown in the preceding screen shot.

3. Choose your customer or customers from the drop-down list box in the **Customer** field. There is a wide choice of customers you can choose from as detailed below:

- All customers.
- All newsletters subscribers.
- Customers who have been dormant for more than 3 months and are also newsletter subscribers.
- Active customers in the past 3 months who are also newsletter subscribers.
- Active customers in the past 3 months regardless of whether they are newsletter subscribers.
- Any individual customer, regardless of subscription status.

4. The **From** field for sending out emails is automatically populated.

To change to another email address to automatically appear next time, click on **Configuration > E-Mail Options** and change the value of the **Email Address (sent FROM)** field. However, this is *not* recommended because it affects *all* emails sent from your store.

5. Enter the subject line for your email message in the **Subject** field.
6. Enter your message in the **Rich Text Message** field for customers who prefer to receive HTML formatted emails.
7. Enter your message in the **Text-Only Message** field for customers who prefer to receive their emails in plain text.
8. Click on **preview** to proceed to the next screen to preview your email message.
9. Click on **send mail** to begin sending your email.
10. A success message will appear at the top of the screen if the email was sent successfully.

Viewing a Customer's Order History

This function is available only to customers who have purchased products from your store.

To manage individual customer orders:

1. Select a customer from the Customers screen and concentrate on the side-panel.
2. Click on **order** to access the Orders screen showing a list of orders previously made by the selected customer.

ID	Payment	Shipping	Customers	Order Total	Date Purchased	Status	Action
7	cc	item	Jacques Pires	\$237.50	09/15/2006 01:42:33	Pending	edit delete
6	moneyorder	free	Jacques Pires	\$12.00	09/12/2006 23:26:54	Processing	edit info
5	moneyorder	free	Jacques Pires	\$200.00	09/12/2006 21:53:19	Processing	edit info
4	cc	item	Jacques Pires	\$202.50	09/10/2006 04:15:46	Pending	edit info
3	freecashier	freeshipper	Jacques Pires	\$0.00	09/10/2006 04:02:44	Processing	edit info
2	moneyorder	item	Jacques Pires	\$202.50	09/10/2006 03:28:02	Pending	edit info
1	cod	item	Jacques Pires	\$202.50	09/10/2006 03:25:46	Pending	edit info

3. We will discuss the individual functions available in the Orders screen in the following chapter.

Deleting Customers

To delete a customer, go to the Customers screen and click the **delete** button in the side-panel next to the selected customer. Before you do that, take note of the following point.



Note

Deleted customers will still have their *orders* preserved in Zen Cart. This is to comply with most regulations which require that records of order transactions be kept to prevent accounting fraud.

Therefore, instead of deleting customers, you might want to set the **Customers Authorization Status** of the customer to one of the pending statuses instead.

Determining How Many Customers You Have

To view the total number of customers you have, click on **Admin Home** on the navigation menu to reach your home page. Look at the Customers field under the **Statistics** table.

Statistics	
Hit Counter Started:	09/07/2006
Hit Counter:	888
Customers:	5

Sometimes, the above figure may not be what you want because you have disabled several accounts by setting their authorization status to one of the Pending Approval statuses. In that case, you should subtract the number of non-approved customers from the above statistic to get a true view of the number of customers you have.

To check the number of non-approved customers you have:

1. Click on **Customers > Customers** to access the Customers screen.
2. Click on the **Asc** or **Desc** hyperlink under the **Authorized** table column to sort customers via their approval status. Note that non-approved customers are represented by a red button icon in the **Authorized** table column.
3. Count the number of non-approved customers based on the number of red button icons in the **Authorized** column.

Summary

In this chapter, you have learned how to manage both common and individual customer settings in Zen Cart. Mainly, you were shown how to manage customer details, send email to customers and also to view an individual customer's order history.

Chapter 19 Managing Orders

Introduction

Once a customer purchases goods from your store, orders are generated and saved into Zen Cart's database. Based on these orders, statistics can be generated which allow you to gain an insight into how your store sales are faring. With each order, you will also be able to generate the corresponding invoices and packing slips which will be attached to your goods shipment for delivery to customers.

In this chapter, we shall:

- Understand the different order statuses.
- Go through order statistics.
- Look at invoices and packing slips auto-generated by Zen Cart.
- Learn how to reset order IDs.

The Orders Screen

Most functions pertaining to order management in Zen Cart are performed in the Orders screen. The two ways you can access the Orders screen are as follows:

- To access the Orders screen for *all* customers, click on **Customers > Orders**.
- To access the Orders screen for *individual* customers, click on **Customers > Customers** and then click on **orders**.

The following sample screen shot shows an Orders screen for *all* customers.

ORDERS							
LEGEND: ● Billing and Shipping does not match							
ID	Payment	Shipping	Customers	Order Total	Date Purchased	Status	Action
9	cod item		Alan Smith	\$32.50	09/16/2006 03:21:07	Pending	edit delete
8	cod item		Alan Smith	\$405.00	09/16/2006 03:20:23	Pending	edit (i)
7	cc item		Jacques Pires	\$237.50	09/15/2006 01:42:33	Pending	edit (i)
6	moneyorder free		Jacques Pires	\$12.00	09/12/2006 23:26:54	Processing	edit (i)
5	moneyorder free		Jacques Pires	\$200.00	09/12/2006 21:53:19	Processing	edit (i)
4	cc item		Jacques Pires	\$202.50	09/10/2006 04:15:46	Pending	edit (i)
3	frecharger freeshipper		Jacques Pires	\$0.00	09/10/2006 04:02:44	Processing	edit (i)
2	moneyorder item		Jacques Pires	\$202.50	09/10/2006 03:28:02	Pending	edit (i)
1	cod item		Jacques Pires	\$202.50	09/10/2006 03:25:48	Pending	edit (i)

A subtle difference that exists between the Orders screens for *individual* customers and *all* customers is the existence of a **reset** button on the *individual* customer Orders screen. By clicking on that button in the individual customer Orders screen, your screen will refresh to show an Orders screen for *all* customers.



Note To change the number of orders that appears in each Orders screen, click on **Configuration > Maximum Values** and edit the **Maximum Display of Orders on Orders Page** field.

Make a mental note of the Orders screen as we shall be referring to it throughout this chapter.

Working with Order Statuses

Each stage of the order fulfillment process can be reflected using an order status. Customers who log in to their accounts can then track their orders themselves without having to call you. The following two screen shots show the different order statuses appearing in different pages of a customer's account.

The image shows two screenshots of a Zen Cart customer account. The left screenshot shows the 'My Account' screen with 'My Account Information' and a table of 'Previous Orders'. The right screenshot shows the 'My Order History' screen with a list of four orders, each with details like Order Number, Order Date, Status, Products, and Order Cost. An arrow points from the 'View' link in the 'Previous Orders' table on the left to the 'My Order History' screen on the right.

Click to go to the the Order History screen

Date	No.	Ship To	Status	Total	View
09/16/2006	# 11	Alan Smith United States	Pending	\$100.00	view
09/16/2006	# 10	Alan Smith United States	Processing	\$22.50	view
09/16/2006	# 9	Alan Smith United States	Delivered	\$32.50	view

Home :: My Account :: History

My Order History

Order Number: 11

Order Status: Pending

Order Date: Saturday 16 September, 2006 Products: 1
Shipped To: Alan Smith Order Cost: \$100.00 [view](#)

Order Number: 10

Order Status: Processing

Order Date: Saturday 16 September, 2006 Products: 1
Shipped To: Alan Smith Order Cost: \$22.50 [view](#)

Order Number: 9

Order Status: Delivered

Order Date: Saturday 16 September, 2006 Products: 1
Shipped To: Alan Smith Order Cost: \$32.50 [view](#)

Order Number: 8

Order Status: Update

Order Date: Saturday 16 September, 2006 Products: 1
Shipped To: Alan Smith Order Cost: \$405.00 [view](#)

Displaying 1 to 4 (of 4 orders) [back](#)

Another use for order statuses is to control whether digital downloads purchased from your store are entitled to immediate or delayed downloads. Refer to “Selling Downloadable Products” on page 210 if you have forgotten how downloads are configured.



Note To change the number of orders displayed in the My Order History page of the customer's account, click on **Configuration > Maximum Values** and edit the **Customer Order History List Per Page** field.

Order Statuses and Their Meanings

By default, there are four order statuses defined in Zen Cart. These four statuses and their meanings are shown in the following table.

Table 19.1: Meaning of different order statuses

Status	Meaning
Pending	The default status defined in Zen Cart to assign to an order after a customer completes the checkout process. Note: You can re-assign the default status to another order status.
Processing	<p>You acknowledge the receipt of an order and inform customers that you are currently looking into their orders and taking the necessary steps to prepare the goods before delivering to them.</p> <p>This usually denotes that payment has been received and is therefore the status typically used for payment modules which process credit card payments in <i>real-time</i>. Note that the default Credit Card payment module in Zen Cart does <i>not</i> process credit card payments in real-time.</p>
Delivered	Indicates that goods which customers have ordered have been shipped. This step usually signals that the order fulfillment process has been completed.
Update	<p>Usually used only for exceptional cases in the order fulfillment process. For example, customers receive their goods but complain that the goods are faulty. You can then set the order status to “Update” for you to conduct further investigation into the matter before deciding whether to grant a full or partial refund to the customer.</p> <p>Another special case is the resetting of download properties for downloadable products in a customer's order as mentioned on page 215.</p>

The above order statuses and their meanings are based on the common order management work flow of most online businesses. There is no “hard-wiring” of order statuses to meanings and so you can alter their meanings to suit your business needs.

For example, if your online store sells rental space for a block of flats, you have nothing to deliver, so the Delivered status becomes meaningless. Instead, you can think of the Delivered status as a Rented status. We shall take a look at how to create new order statuses or edit them later in the chapter.

Updating Customer Order Statuses

Each time you perform a task in your order fulfillment process, you can update the status of an order. Order statuses which have been updated will be reflected when customers log in to their accounts to view their order history. Optionally, you can choose to send an email to customers upon updating their order statuses.

To update a customer order status:

1. Go to the Orders screen.
2. Choose an order from the screen and click **edit** to reach the orders detail screen.

ORDERS

Customer: Jacques Pires
200, rue de Tolbiac
Paris, 75015
Paris, France

Shipping Address: Jacques Pires
200, rue de
Tolbiac
Paris, 75015
Paris, France

Billing Address: Jacques Pires
200, rue de
Tolbiac
Paris, 75015
Paris, France

Telephone Number: (33)-01-40-80-82-11

E-Mail Address: jacques@example.com

IP Address: 127.0.0.1 - 127.0.0.1

Invoice No. 12

Date Purchased: Saturday 16 September, 2006

Payment Method: Cash on Delivery

Products	Model	Tax	Price (ex)	Price (inc)	Total (ex)	Total (inc)
1 x Normal Test Product		17.5%	\$200.00	\$200.00	\$200.00	\$200.00
Sub-Total: \$200.00						
Per Item (Best Way): \$2.50						
EU Tax Rate: \$35.00						
Total: \$237.50						

Date Added Customer Notified Status Comments

09/16/2006 18:36:42	✓	Pending	
---------------------	---	---------	--

Comments

Status: Pending [1] **update**

Notify Customer: **Append Comments:**

invoice **packing slip** **orders**

3. Add any remarks you have regarding the updated order status in the **Comments** field.
4. Choose the new order status from the **Status** drop-down list box.
5. Check the **Notify Customer** check-box if you want an email to be sent to the customer informing the customer of the change in order status.
6. Check the **Append Comments** field if you want the remarks you entered in the **Comments** field to be included in the email sent to the customer.
7. Click on **update** to confirm the change in order status.

A sample plain-text email sent to a customer is shown in the following screen shot.

Subject: Order Update #4
From: Mega Store
Date: Sat, 16 Sep 2006 18:50:32 +0800
To: Jacques Pires

Mega Store

Order Number: 4

Detailed Invoice:
https://www.example.com/store/index.php?main_page=account_history_info&order_id=4

Date Ordered: Sunday 10 September, 2006

The comments for your order are: Your order has been delivered. Do call us if you do not receive your package within 14 days.

Your order has been updated to the following status:
New status: Delivered

Please reply to this email if you have any questions.

If you want to receive copies of the order confirmation emails sent to customers, click on **Configuration > E-Mail Options** and set the relevant email addresses in the **Send Copy of Order Confirmation Emails To** field.

Customizing Order Statuses

As mentioned previously, your business needs might require that you have additional order statuses to cater for your order fulfillment work flow. For example, if your store offers refunds for faulty goods shipped to customers, you can choose to create an additional “Pending Goods Return” status to indicate you are waiting for your customer to return the faulty goods before refunding them the amount for the purchase.

To customize your order statuses, click on **Localization > Orders Status** to access your Orders Status screen.



- To change the name of an order status or to set it as the default order status, choose the order status and then click on **edit**.
- To create an additional order status, click on **insert**.
- To remove an existing order status, click on **delete**. You should only do this for order statuses that you have created. Avoid deleting the default order statuses that come with Zen Cart as they are used in several parts of your store. For example, when configuring whether customers are entitled to immediate or delayed product downloads.

Viewing Order Statistics

Zen Cart provides an easy way for you to view the following statistics for your orders:

- Total number of orders for each order status.
- Quick view of new orders received.

To access your order statistics:

1. Click on the **Admin Home** hyperlink near the top of your Admin Console.
2. Statistics relating to your customer orders are found in the **New orders** and **Orders** tables.

The 'New orders' table lists the following data:

New orders:	
Jacques Pires	\$237.50 09/16/2006
Alan Smith	\$100.00 09/16/2006
Alan Smith	\$22.50 09/16/2006
Alan Smith	\$32.50 09/16/2006
Alan Smith	\$405.00 09/16/2006

The 'Orders' table lists the following statistics:

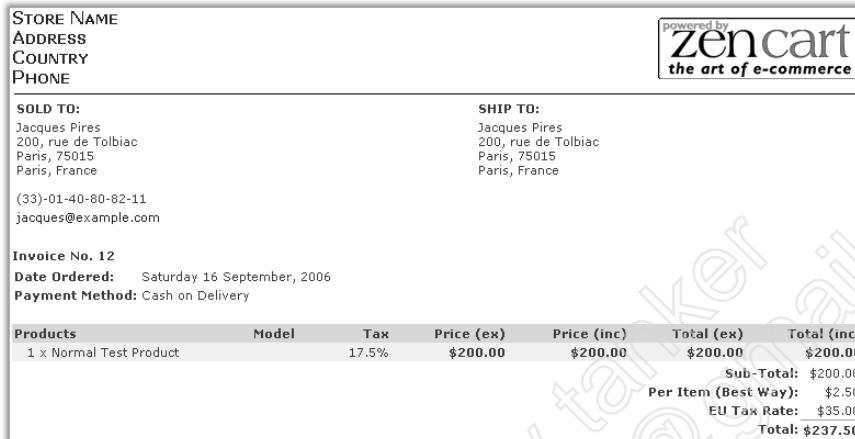
Order Status	Count
Pending	4
Processing	5
Delivered	2
Update	1

Generating Invoices from Orders

Whenever you deliver a product to a customer, you will need an invoice to accompany the delivery. Zen Cart simplifies this process for you by allowing you to generate an invoice directly from an order.

To generate an invoice from an order:

1. Go to the Orders screen.
2. Choose an order from the screen and click the **invoice** button.
3. A new window appears showing the invoice generated by Zen Cart.



4. Examine the information contained in the invoice carefully. If your invoice includes *tax* information, the prices displayed may be different. Refer to “Display of Tax Information” on page 109 for more information on how taxes are displayed.

To change the store information displayed on the top-left corner of the invoice, click on **Configuration > My Store** and edit the **Store Address and Phone** field.

You can use the following methods to change the image on the top-right corner of the invoice:

- Replace the image <zc-home>/admin/images/logo.gif with another image of the same name and dimension.
- Adjust the following settings in the <zc-home>/admin/includes/languages/english.php file to suit the dimensions and name of your custom image.

```
define('HEADER_LOGO_WIDTH', '200px');
define('HEADER_LOGO_HEIGHT', '70px');
define('HEADER_LOGO_IMAGE', 'logo.gif');
```

Note that the same image is also used in the top-left corner of the Admin Console and any packing slips generated by Zen Cart.

Generating Packing Slips from Orders

If you need to ship physical goods to your customers, you will likely need to have a packing slip accompany the shipment. Again, you can generate a packing slip directly from an order.

To generate a packing slip from an order:

1. Go to the Orders screen.
2. Choose an order from the screen and click the **packing slip** button.
3. A new window appears showing the packing slip generated by Zen Cart.



STORE NAME
ADDRESS
COUNTRY
PHONE

BILL TO:
Jacques Pires
200, rue de Tolbiac
Paris, 75015
Paris, France

SHIP TO:
Jacques Pires
200, rue de Tolbiac
Paris, 75015
Paris, France

Invoice No. 12
Date Ordered: Saturday 16 September, 2006
Payment Method: Cash on Delivery

Products **Model**

1 x Normal Test Product

4. Examine the information contained in the packing slip carefully. Unlike an invoice, there is no payment information associated with a packing slip.

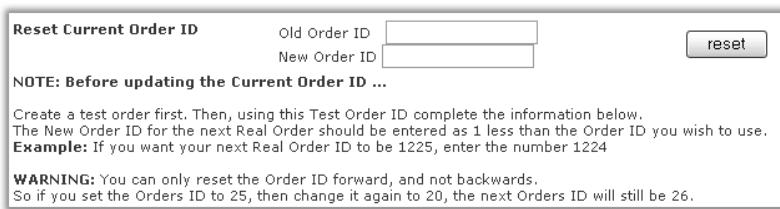
To change the store information or image displayed on the packing slip, follow the instructions on page 302.

Resetting Order IDs

If you have been testing your store setup, you will have undoubtedly created several test orders. Before your Zen Cart goes 'live' and starts accepting real customer orders, you might want to reset the order ID. For example, if your test orders end at the order ID of "123". You might want to reset the order ID to "1000" instead. This helps you differentiate your *test* orders from your *real* orders.

To reset your order IDs:

1. Click on **Tools > Store Manager** to access the Store Manager screen.
2. Concentrate on the portion of the screen as shown in the following screen shot.



Reset Current Order ID

Old Order ID
New Order ID **reset**

NOTE: Before updating the Current Order ID ...

Create a test order first. Then, using this Test Order ID complete the information below.
The New Order ID for the next Real Order should be entered as 1 less than the Order ID you wish to use.
Example: If you want your next Real Order ID to be 1225, enter the number 1224

WARNING: You can only reset the Order ID forward, and not backwards.
So if you set the Orders ID to 25, then change it again to 20, the next Orders ID will still be 26.

3. Read the instructions displayed below the **Reset Current Order ID** field carefully.
4. Follow the instructions on the screen and update the **Old Order ID** and **New Order ID** fields accordingly.
5. Click the **reset** button next to the **Reset Current Order ID** field to use the new order ID on the next customer order.

Summary

In this chapter, you have learned about the characteristics of different order statuses and how to define your own custom order statuses. You have also gone through the different order-related statistics which can help you assess how well your business is doing. To help with goods delivery, you also learned to generate packing slips and invoices directly from individual orders. Finally, you saw how you can reset your order IDs before accepting real-world orders.

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Chapter 20 Managing Stock

Introduction

The proper management of stock levels plays an important part in any business. Zen Cart currently provides a basic stock management system for you to view different stock-related information and to help you meet customer demand for your goods.

In this chapter, we shall:

- View stock information.
- Configure stock settings.
- Specify low stock email notification.

Checking Stock Information

Stock information allows you to quickly see which products need replenishment or which products have yet to reach your store for sale.

Current Stock Levels

To check current stock levels:

1. Click on **Reports > Products Low Stock** to access the Product Stock Report screen.

PRODUCT STOCK REPORT		
ID #	Products	Quantity
1	Normal Test Product	10
2	Free Test Product	50
3	Free Shipping Test Product	100

Notice that products with the *lowest* stock levels are listed *first*.

2. The figures displayed under the **Quantity** column are taken from the **Products Quantity** fields of the corresponding products in their respective Product screens. Products that have their **Products Status** field marked as Out of Stock in their respective Product screens will still be displayed in this screen.

To control the number of products that are displayed in each page of the Product Stock Report screen, click on **Configuration > Maximum Values** and edit the **Maximum Display of Products on Reports** field.

Future Stock Expected

Another report of interest to you when assessing your stock level is the products that you have ordered but have yet to arrive in your store. Currently, this report only displays the names of the products and not the quantity.

To check the products that have yet to arrive:

1. Click on **Catalog > Products Expected** to access the Products Expected screen.

PRODUCTS EXPECTED			
Products	Date Expected	Action	Normal Test Product
Normal Test Product	12/31/2007	►	
Free Test Product	11/01/2007	①	<input type="button" value="edit"/>
Displaying 1 to 2 (of 2 products expected)			Page 1 of 1
			Date Expected: 12/31/2007

2. The dates displayed under the **Date Expected** column are taken from the **Date Available** fields of the corresponding products in their respective Product screens.
3. To view or change the product's details including its availability date and quantity, click on **edit** to access the product's Product screen.

Configuring Stock Settings

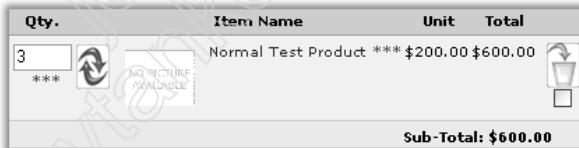
Besides generating reports on stock-related information, Zen Cart allows you to configure how your stock levels are controlled and how you want your stock-related information to be displayed to customers.

To configure your stock settings:

1. Click on **Configuration > Stock** to access your Stock screen.

STOCK	
Title	Value
Check stock level	true
Subtract stock	true
Allow Checkout	true
Mark product out of stock	***
Stock Re-order level	5
Products status in Catalog when out of stock should be set to	0
Show Sold Out Image in place of Add to Cart	1
Product Quantity Decimals	0
Show Shopping Cart - Delete Checkboxes or Delete Button	3
Show Shopping Cart - Update Cart Button Location	3
Show New Products on empty Shopping Cart Page	1
Show Featured Products on empty Shopping Cart Page	2
Show Special Products on empty Shopping Cart Page	3
Show Upcoming Products on empty Shopping Cart Page	4

2. Refer to the following table to learn how you can configure the various stock-related fields in the Stock screen.

Field	Comments
Check stock level	<p>Indicates whether a warning message will be displayed when the number of items for a particular product added to a shopping cart exceeds the actual quantity of the product. Consider the case when you set this field to <u>true</u>.</p> <p>If you have specified that the quantity of a product is “1” and a customer adds “3” items of the same product to the shopping cart, an error message will be displayed indicating there is insufficient stock for the customer to purchase.</p>
Subtract Stock	<p>Indicates whether to automatically decrease the stock level by an amount equivalent to that which the customer purchased. Consider the case when you set this field to <u>true</u>.</p> <p>If you have specified that the quantity of a product is “10” and a customer adds “4” items of the same product to the shopping cart. The quantity of the product in your store will automatically be set to “6” after the customer completes the checkout process.</p>
Allow Checkout	<p>Indicates whether to prompt a customer to change the number of items in the shopping cart if the number of items exceed the product quantity.</p> <p>If you set this value to <u>true</u>, you run the risk of over-selling and if your suppliers cannot meet your sudden demand, your reputation with customers will suffer. Therefore, the recommended value is <u>false</u>.</p>
Mark product out of stock	<p>Sets the display characters that should be displayed to indicate that a product is out of stock. An example screen shot of the default value “***” appearing in a shopping cart is shown below.</p> 
Stock re-order level	<p>Specifies the level of stock that you want to use as an indicator for you to begin ordering more supplies.</p> <p>This field will come in handy if you intend to receive email alerts for products that are out of stock.</p>
Products status in Catalog when out of stock should be set to	<p>If you have set the Subtract Stock field to <u>true</u>; when the stock level reaches zero or a negative number, the Products Status field of the product in the Product page will be updated according to the setting in this field.</p> <p>If this field is set to <u>0</u>, the Products Status field in the product's Product page will be set to <u>Out of Stock</u> and the product will not be displayed in the Store Front. If this field is set to <u>1</u>, the Products Status field will be set to <u>In Stock</u> instead.</p>

Field	Comments
Show Sold Out Image in place of Add to Cart	If this value is set to <u>1</u> , an image with the words “Sold Out” will be displayed on the Product Info page in the Store Front instead of the usual “Add This To My Cart” button and the check box to specify the number of items to order.
Product Quantity Decimals	Allows you to sell products that do not come in whole units. For example, if you sell fabric by the yard, customers can enter 1.25 yards when adding the product to the cart. Remember to adjust the product's <i>quantity-related</i> fields in the Product screen if you intend to support fractional quantity values in your store.

3. The remaining fields on the Stock screen (as listed below) relate more to the display of the customer's shopping cart contents in the Store Front than to stock-related information. Thus, we will not discuss them here.
 - **Show Shopping Cart - Delete Checkboxes or Delete Button**
 - **Show Shopping Cart - Update Cart Button Location**
 - **Show New Products on empty Shopping Cart Page**
 - **Show Featured Products on empty Shopping Cart Page**
 - **Show Special Products on empty Shopping Cart Page**
 - **Show Upcoming Products on empty Shopping Cart Page**

Receiving Low Stock Email Notifications

Zen Cart has the ability to send email alerts to you when the stock reaches the re-order level you specified in the preceding Stock screen.

Note that an email alert will *not* be sent if you *manually* alter the product quantity to reach a level below the re-order level. Only re-order levels that have been reached via the system subtracting the product's quantity by an equivalent number of purchased items will trigger the email alert.

To receive emails for stocks that have reached the re-order level:

1. Click on **Configuration > E-Mail Options** to access your Email-Options screen.
2. Edit the following fields accordingly:
 - **Send Low Stock Emails**
 - **Send Low Stock Emails to**

Summary

In this chapter, you have learned to view stock-related information and how to configure your desired stock settings. You have also seen how you can configure email alerts for products that have reached a predetermined low stock level, thus eliminating the need for you to constantly log in to your store to check your stock levels.

Chapter 21 Marketing

Introduction

Besides having great products and services, one of the keys to profitability is how you market your online store and products. The marketing aims you can achieve with the techniques presented in this chapter are as follows:

- Direct customers to visit your store.
- Build long-term relationships with your customers in order to increase the likelihood of repeat sales.
- Promote other products which customers may not be looking to buy when they visit your store.

In this chapter, to help you achieve the above marketing aims, we shall:

- View statistics which will help you in your marketing decisions.
- Go through the following marketing techniques:
 - ➔ Discount Coupons
 - ➔ Gift Certificates
 - ➔ Featured Products
 - ➔ Newsletters
 - ➔ Product Reviews
 - ➔ Tell-a-Friend
 - ➔ Banners
 - ➔ Search Engines
 - ➔ Other Product Promotion Features

Note that you can also use the sales techniques presented in “Giving Discounts” on page 228 to achieve some of the marketing aims.

Be warned that this chapter is very long. So if you are short of time, you should just read the following section, “Gathering Useful Statistics”, and then jump to any marketing technique you want to use.

Gathering Useful Statistics

Before deciding on a marketing technique to use, you should gather some statistics to understand current customer spending and viewing behavior in your store. You can then measure the effectiveness of each marketing technique by comparing the before and after results of these statistics. These statistics can also be used to target high-value customers because repeat business from these customers will have a higher impact on your profits.

Products Viewed and Products Purchased

Statistics generated from products viewed and products purchased from your store allow you to tailor your marketing campaign in a *product-centric* manner. For example, if you realize a product is commonly viewed but not usually purchased by customers, you can create and send a newsletter to your customers telling them the benefits of the product thus creating the impetus for them to buy.

To view statistics for products *viewed*, click on **Reports > Products Viewed** to access the Best Viewed Products screen.

BEST VIEWED PRODUCTS		
ID#	Products	Viewed
1	Normal Test Product (English)	17
13	Optical Mouse (English)	10
16	Laptop (English)	9
Displaying 1 to 3 (of 49 products)		
<< Page 1 of 17 >>		

To view statistics for products *purchased*, click on **Reports > Products Purchased** to access the Best Products Purchased screen.

BEST PRODUCTS PURCHASED		
ID#	Products	Purchased
1	Normal Test Product	5
20	Free Test Product with Free Shipping	3
16	Laptop	2
Displaying 1 to 3 (of 4 products)		
<< Page 1 of 2 >>		

You may want to reset the statistics for the above screens if you wish to begin a new marketing campaign. In this way, the effectiveness of your marketing campaign will be more easily determined, as you do not have to take into account any old values when viewing the statistics.

To reset the statistics for the preceding screens:

1. Click on **Tools > Store Manager** and concentrate on the following portion of the screen.

Reset ALL Products Viewed	Reset Product Viewed Counts to 0: <input type="button" value="reset"/>
Reset ALL Products Ordered	Reset Product Ordered Counts to 0: <input type="button" value="reset"/>

2. To reset the statistics for the Best Viewed Products screen, click on the **reset** button next to the **Reset ALL Products Viewed** field.
3. To reset the statistics for the Best Products Purchased screen, click on the **reset** button next to the **Reset ALL Products Ordered** field



Note To control the number of products that are displayed in each page of the Best Viewed Products and Best Products Purchased screens, click on **Configuration > Maximum Values** and edit the **Maximum Display of Products on Reports** field.

Total Order Values Per Customer

Statistics generated from the relationship between customers and their total order values allow you to tailor your marketing campaign in a *customer-centric* manner. For example, you can use this information to identify high-value customers and use Discount Coupons or Gift Certificates to reward them and breed long-term customer loyalty.

To view statistics relating customers to total order values, click on **Reports > Customer Orders-Total** to access the Best Customer Orders-Total screen.

BEST CUSTOMER ORDERS-TOTAL		
ID #	Customers	Total Purchased
1	Jacques Pires	\$1,212.00
2	Alan Smith	\$550.00
Displaying 1 to 2 (of 2 customers)		
Page 1 of 1		

Discount Coupons

Discount coupons are used by customers to purchase products at a discounted value. The discounted value can either be a percentage off a product's price or an absolute dollar amount. Discount coupons can also be applied to customer orders to give free shipping if a minimum order value is reached.

They have proven to be very popular with customers and can be used as a low-cost way of introducing your product or service to the marketplace. For example, you can give out discount coupons to loyal customers to try your new products at a discounted rate. Over time, your products will gain the recognition of customers as they keep coming back to buy more products from you.

As discount coupons can eat into your profits, you should exercise discretion when using them. Zen Cart can help you in this aspect by restricting the use of discount coupons to certain categories of products only.

How Discount Coupons Work

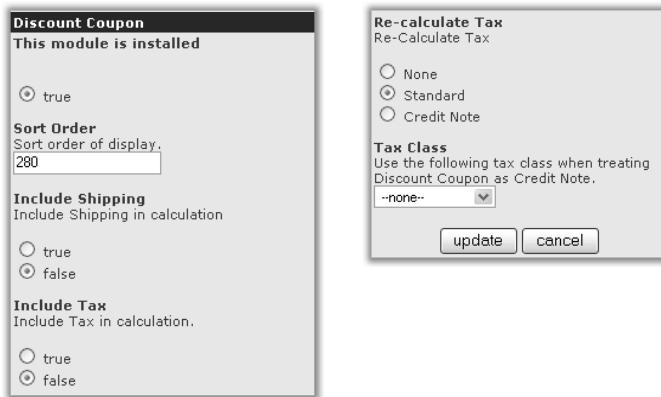
The way Discount Coupons work is outlined below:

1. Discount coupons are created by store owners and sent to customers either during account creation or selectively via email from the Admin Console. Alternatively, discount coupon codes can be advertised in newspapers and magazines or disseminated through salespersons if you want to implement a customer referral scheme.
2. Store owners can choose to restrict the usage of discount coupons to certain categories and products. Coupon usage can also be restricted based on the billing addresses of customers.
3. Customers can make use of their discount coupons when they are prompted to enter a discount coupon code on the Payment Information screen during the checkout process.

Configuring the Discount Coupon Module

Before you can start using Discount Coupons in your store, you need to enable and configure the Discount Coupon order total module as follows:

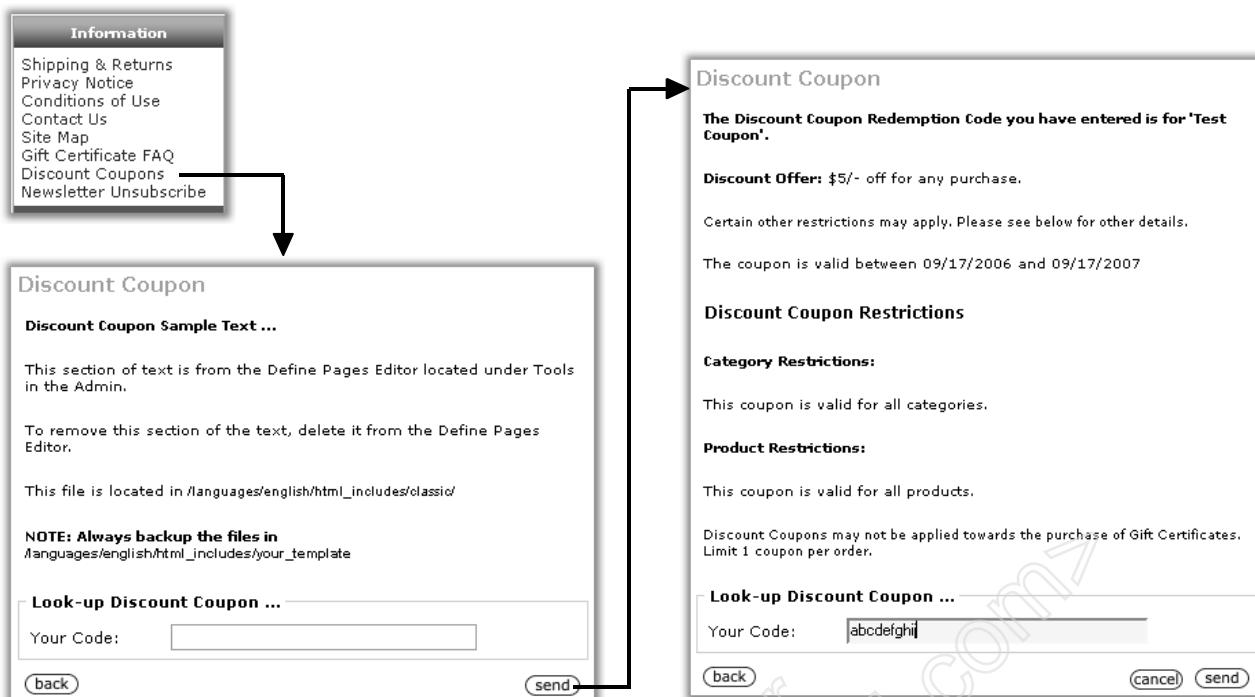
1. Click on **Modules > Order Total** to access the Order Total Modules screen.
2. Edit the **Discount Coupon** module. Install it if required.



3. Enter a suitable value for the **Sort Order** field. Refer to “The Order Total Modules Screen” on page 226 if you have forgotten the purpose of this field.
4. Specify true for the **Include Shipping** field if you want shipping charges to be covered by a discount coupon.
5. Specify true for the **Include Tax** field if you want taxes to be covered by a discount coupon.
6. Choose a suitable value for the **Re-calculate Tax** field. Usually, you should leave this as none. If you choose Standard or Credit Note, you will need to play around with different test orders to see whether they suit your needs.
7. If you have chosen Credit Note for the **Re-calculate Tax** field, you should choose a suitable option from the **Tax Class** drop-down list box.
8. Click **update** to finish configuration of your Discount Coupon order total module.

You should play around with the **Sort Order** field for all the order total modules if you encounter erroneous or illogical calculations. If that does not help, your last resort is to refer to the PHP code contained in the `<zc-home>/includes/modules/order_total/ot_coupon.php` file.

After a Discount Coupon module is enabled, a Discount Coupons hyperlink will appear in the Information side-box. Upon clicking this hyperlink, visitors can type in a discount code to view the details associated with that particular discount code. The following screen shots illustrate the process.



Creating Discount Coupons

To create a discount coupon:

1. Click on **Gift Certificates/Coupons > Coupon Admin** to access the Discount Coupons screen.

DISCOUNT COUPONS						Status : Active Coupons	Text Editor	Plain Text
Coupon Name	Coupon Amount	Coupon Code	Status	Starts	Expires	Action	[2] abcdefgij	
Test Coupon	\$5.00	abcdefgij	Y	09/17/2006	09/17/2007	<input type="button" value="insert"/>	Coupon Name :: Test Coupon	Coupon Amount :: \$5.00
10% Test Coupon	10.0000%	756121796b	Y	09/17/2006	09/17/2007	<input type="button" value="insert"/>	Start Date :: 09/17/2006	End Date :: 09/17/2007
Free Shipping Coupon	Free Shipping	033f276a85	Y	11/27/2006	11/27/2007	<input type="button" value="insert"/>	Uses per Coupon :: Unlimited	Uses per Customer :: 1

2. Click on **insert** to access the coupon details screen.

DISCOUNT COUPONS

Coupon Name	<input type="text"/> 	A short name for the coupon
Coupon Description (Customer can see)	<input type="text"/>	A description of the coupon for the customer
		
Coupon Amount	<input type="text"/>	The value of the discount for the coupon, either fixed or add a % on the end for a percentage discount.
Coupon Minimum Order	<input type="text"/>	The minimum order value before the coupon is valid
Free Shipping	<input type="checkbox"/>	The coupon gives free shipping on an order. Note. This overrides the coupon_amount figure but respects the minimum order value
Coupon Code	<input type="text"/>	You can enter your own code here, or leave blank for an auto generated one.
Uses per Coupon	<input type="text"/>	The maximum number of times the coupon can be used, leave blank if you want no limit.
Uses per Customer	<input type="text" value="1"/>	Number of times a user can use the coupon, leave blank for no limit.
Start Date	<input type="text" value="28"/> <input type="text" value="November"/> <input type="text" value="2006"/>	The date the coupon will be valid from
End Date	<input type="text" value="28"/> <input type="text" value="November"/> <input type="text" value="2007"/>	The date the coupon expires
Coupon Zone Restriction:	<input type="text" value="--none--"/>	Coupon Zone Restriction are optional.
<input type="button" value="preview"/> <input type="button" value="cancel"/>		

3. All fields on the screen have corresponding explanations next to them so you should not have any problems entering the correct values. However, before entering the relevant details into the screen, take note of the following points:

- **Coupon Amount** and **Free Shipping** are mutually exclusive! You should only specify one or the other; but not both at the same time. The system will not show any errors but you will have problems later when customers start using their coupons. Also make sure the Free Shipping module is enabled if you enable the **Free Shipping** check-box.
- It is a good idea to leave the **Coupon Code** field empty to allow Zen Cart to generate a *unique* code for you. This is because humans tend to specify coupon numbers in *sequence* and clever customers might just make use of this loophole to use the coupon codes of other customers!
- What you specify for the **Uses per Coupon** field will depend on how you structure your coupon marketing campaign. The following two scenarios should help you decide what value to enter for the field:
 - If you advertise a 10% discount coupon in the newspapers for a laptop your store sells, you are limited to a single discount coupon code for that advertisement. Thus, you would have to leave the **Uses per Coupon** field blank because you want as many people as possible to use the same discount code to purchase the laptop from your store.
 - If you send unique discount coupons to customers on their birthdays, then you might want to restrict them to use the coupon for one time purchases only. In this case, you should specify 1 for the **Uses per Coupon** field.

- The **Uses per Customer** field allows you to limit the use of a discount coupon on a per-customer basis.

There might be some confusion with the **Uses per Coupon** field if you happen to specify both at the same time.

For example, if you specified **Uses per Coupon** to be 50 and **Uses per Customer** to be 1, then how many times can each customer use a particular coupon? The answer is each customer can use a particular coupon only once. However, if the same coupon is given to another 60 customers, then only the next 49 customers can use the same coupon code and each of those 49 customers can use the coupon once also.

- You are strongly advised to set the **Start Date** and **End Date** fields to limit the validity period for your discount vouchers. There are two benefits to this approach:
 - ➔ Customers will tend to make their purchase decisions faster with a looming expiry deadline for their discount coupons.
 - ➔ It limits the possibilities of customers turning up with old discount coupons with rates you offered long ago, which are no longer profitable for you to continue offering now.
 - You can restrict coupon usage to only be eligible if customers billing addresses falls within the specified zone definition in the **Coupon Zone Restriction** drop-down list box.
4. After entering all the relevant coupon details, click **preview** to proceed to the next screen to have a look at your changes.
 5. Once you are satisfied with your changes, click **confirm** to create the coupon.

Restricting Coupon Usage by Category or Product

It is a good idea to restrict the use of your coupons to certain categories of products in your store. This allows you to better control the cost of running your discount coupon campaign as you can work out which products you can afford to offer at discount, and with what percentage or value, without eating into your profits significantly.

To limit the use of discount coupons to certain categories or products:

1. Select the discount coupon to which you want to apply a restriction from the Discount Coupons screen.
2. Click on **restrictions** to bring up a screen for you to restrict the use of the discount coupon to certain categories and/or products.

DISCOUNT COUPONS PRODUCT/CATEGORY RESTRICTIONS						
CATEGORY RESTRICTIONS						
Coupon ID	Coupon Name	Category ID	Category Name	Allow	Deny	Remove
Displaying 0 to 0 (of 0 categories)						
Category Name		Top		Allow		Add
Page 0 of 0						

PRODUCT RESTRICTIONS						
Coupon ID	Coupon Name	Product ID	Product Name	Allow	Deny	Remove
Displaying 0 to 0 (of 0 products)						
Category Name		Top	Product Name	Allow	Deny	Add
Page 0 of 0						

3. To restrict your coupon usage to specific *categories*, choose from the relevant drop-down list boxes under the **Category Restrictions** heading. After making your choice, click **Add** to confirm the restriction. Repeat this step for all other categories you wish to restrict.
4. To restrict your coupon usage to specific *products*, choose from the relevant drop-down list boxes under the **Product Restrictions** heading. Choose the different products you want to allow or deny and click **Add**. Repeat this step for all other products you wish to restrict.

- Once you are satisfied with your choice, click **back** to return to the Discount Coupons screen.

The use of your discount coupon should now be limited only to the specific categories and/or products you have allowed or denied. If you face problems configuring your *product* restrictions, try setting Deny on the Top *category* before setting Allow on individual *products*.

Delivering Discount Coupons to Customers Electronically

There are two ways which discount coupons can be sent to customers electronically:

- Selectively email discount coupons to customers *manually* via the Admin Console.
- Send discount coupons *automatically* to customers upon account creation.

Manually Email Discount Coupons to Customers

To receive copies of discount coupon emails sent manually via the Admin Console, click on **Configuration > E-Mail Options** and enable the following fields:

- **Send Copy of Admin Discount Coupon Mail Emails To – Status**
- **Send Copy of Customer Admin Discount Coupon Mail Emails To**

To send discount coupons to customers directly via the Admin Console:

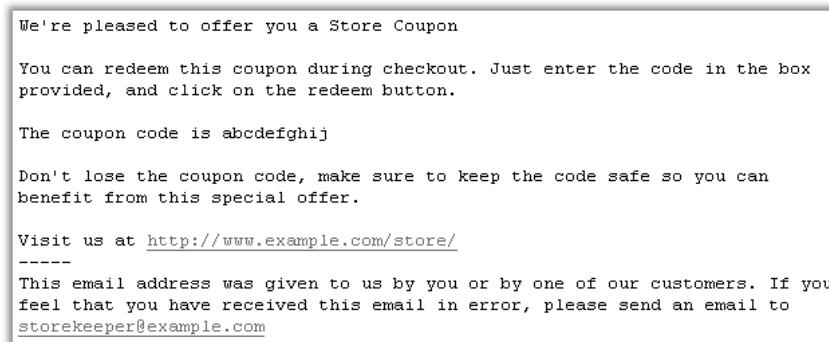
1. Click on **Gift Certificate/Coupons > Coupon Admin** to access the Discount Coupons screen.
2. If you want a HTML toolbar to help you compose HTML email messages, choose HTMLarea from the **Text Editor** field.
3. Select the discount coupon you want to mail to your customers and click **email** on the side-panel to bring up the email details page.

You will see two text areas for you to enter your email message if you have enabled **Use MIME HTML When Sending Emails** in **Configuration > E-Mail Options**.

The screenshot shows the 'DISCOUNT COUPONS' page in the Zen Cart Admin interface. The coupon is named 'Test Coupon'. The 'Customer' dropdown is set to 'Please Select'. The 'From' field contains 'storekeeper@example.com'. The 'Subject' field is empty. The 'Rich-Text Message' area contains a toolbar and the text 'We're pleased to offer you a Store Coupon'. The 'Message' area at the bottom also contains the same text. The bottom right of the form has 'cancel' and 'send mail' buttons.

4. Enter the relevant details and click **send mail** to bring up another screen for you to preview your email message.
5. Click on **send mail** in that screen to send your discount coupons to the relevant parties.

A sample discount coupon plain-text email sent to a customer via the Admin Console is shown in the following screen shot.



We're pleased to offer you a Store Coupon

You can redeem this coupon during checkout. Just enter the code in the box provided, and click on the redeem button.

The coupon code is abcdefghij

Don't lose the coupon code, make sure to keep the code safe so you can benefit from this special offer.

Visit us at <http://www.example.com/store/>

This email address was given to us by you or by one of our customers. If you feel that you have received this email in error, please send an email to storekeeper@example.com

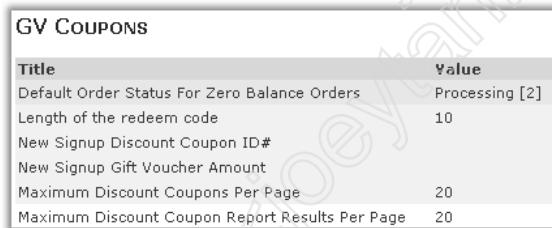
Automatically Send a Discount Coupon on Account Creation

To receive copies of discount coupon emails sent automatically to customers on account creation, click on **Configuration > E-Mail Options** and enable the following fields:

- **Send Copy of Create Account Emails To – Status**
- **Send Copy of Create Account Emails To**

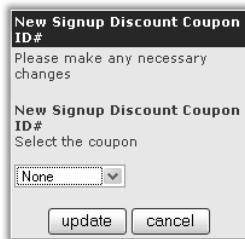
To enable selected discount coupons to be sent on account creation:

1. Click on **Configuration > GV Coupons** to access the GV Coupons screen.



GV COUPONS	
Title	Value
Default Order Status For Zero Balance Orders	Processing [2]
Length of the redeem code	10
New Signup Discount Coupon ID#	
New Signup Gift Voucher Amount	
Maximum Discount Coupons Per Page	20
Maximum Discount Coupon Report Results Per Page	20

2. Click on **New Signup Discount Coupon ID#** and concentrate on the side-panel.

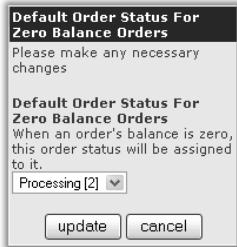


3. Choose a discount coupon you have previously created from the drop-down list box and click **update**. The selected discount coupon will be sent to the next customer who signs up for an account with your store.
4. If you want to change the generated discount coupon code length, edit the **Length of the redeem code** field.

For example, if you specify this length to be 10, then the redeem code generated by Zen Cart may look like 9e47daba3b.

If you had previously specified your own value instead of leaving the code generation to Zen Cart for the **Coupon Code** field when creating the discount coupon, then this field will have *no* effect. Furthermore, note that a change to this field will also affect the length of the redeem codes for gift certificates!

5. If you want to change the order status for an order total balance of *zero* after applying your discount coupon, you can edit the **Default Order Status For Zero Balance Orders** field.



A sample discount coupon plain-text email received by a customer on account sign-up is shown in the following screen shot.

Dear Ms. Summers,

We wish to welcome you to Mega Store. Congratulations! To make your next visit to our online shop a more rewarding experience, listed below are details for a Discount Coupon created just for you!

\$5/- off for any purchase.

To use the Discount Coupon, enter the Redemption Code code during checkout:
abcdefgij

With your account, you can now take part in the various services we have to offer you. Some of these services include:

Permanent Cart - Any products added to your online cart remain there until you remove them, or check them out.

Address Book - We can now deliver your products to another address other than yours! This is perfect to send birthday gifts direct to the birthday-person themselves.

Order History - View your history of purchases that you have made with us.

Products Reviews - Share your opinions on products with our other customers.

For help with any of our online services, please email the store-owner:
storekeeper@example.com

Sincerely,

Joey Robinson
Store Owner

<http://www.example.com/store/>

Implementing a Customer Referral Scheme via Discount Coupons

A Customer Referral scheme allows you to expand your customer base and assess how effective your marketing campaign is by tracking how effective your different channels of marketing (salespersons, advertisements, etc) are performing.

For example, if you have a team of salespersons, you can give each of them a unique discount code. Your

salespersons will give out their individual discount codes to each new customer they find for your business. When these new customers sign up for an account with your store, they will use the unique discount code of the salesperson who introduced them to your business. In this way, you can track the performance of each salesperson by looking at the number of new customers who sign up with your store using the unique discount code of a salesperson.

How Customer Referrals Work

The term *referral code* appears constantly when discussing referrals. It is actually a discount coupon code which has been “tagged” to specific customers to identify how they arrive at your store. It can only be used *once per customer* and is used to find out how customers come to know about your site.

For example, when a customer signs up with your store using a discount code they acquired from a magazine, radio or TV advertisement. That discount code is then known as a *referral code* because that customer was “referred” to your store by that magazine advertisement.

Here is how referrals works in Zen Cart:

1. Discount coupons are created.
2. Discount coupons are then disseminated through different channels accordingly; salespersons, advertisements, parties, etc.
3. Customers learn of your online store through one of your referrers (salespersons, advertisements, etc).
4. Customers sign up with your store using the discount code you handed out in Step 2. Optionally, customers can enter the discount code handed out in Step 2 when they check out their purchases.
5. Zen Cart associates each discount code with the referrer and calls it a referral code.
6. Store owner views a report of how the different referrers and referral schemes have performed.

Track Customer Referrals

There are two methods to track customers who were referred to your site:

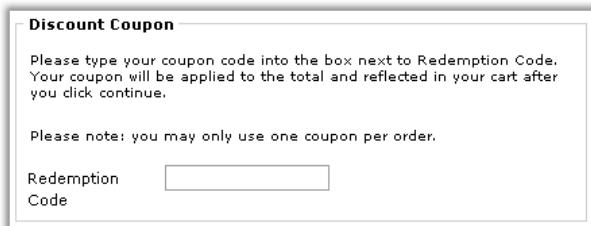
- When customers sign up for a new account, they can enter the referral discount coupon code on the sign-up form of the Log In screen.



The image shows a screenshot of a web form. At the top, there is a section titled "Newsletter and Email Details" with two checkboxes: "Subscribe to Our Newsletter." (unchecked) and "HTML" (unchecked, with a radio button next to it). Below this is a section titled "Were You Referred to Us?" with a label "Referral Code:" followed by an empty input field. At the bottom right of the form is a "submit" button.

In this case, Zen Cart is able to determine the referrer immediately after the account creation process completes successfully.

- When customers enter their referral discount coupons in the Payment Information screen during checkout.

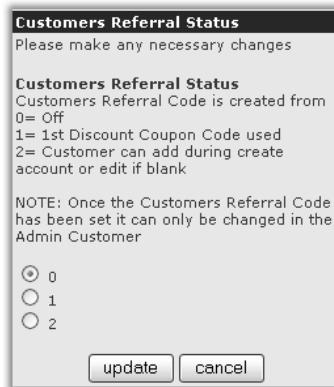


The screenshot shows a 'Discount Coupon' input field. The text inside the field reads: 'Please type your coupon code into the box next to Redemption Code. Your coupon will be applied to the total and reflected in your cart after you click continue.' Below this, a note says: 'Please note: you may only use one coupon per order.' There is a 'Redemption Code' label and a text input field.

In this case, Zen Cart stores the first discount coupon code used by the customer during checkout in order to identify the referral source.

To configure which method you would like to use to track customer referrals:

1. Click on **Configuration > Customer Details** to access the Customer Details screen.
2. Click on **Customer's Referral Status** field and concentrate on the side-panel.



The screenshot shows the 'Customer's Referral Status' configuration screen. It includes a note: 'Please make any necessary changes'. Below this is a 'Customers Referral Status' section with a note: 'Customers Referral Code is created from 0= off 1= 1st Discount Coupon Code used 2= Customer can add during create account or edit if blank'. A note below says: 'NOTE: Once the Customers Referral Code has been set it can only be changed in the Admin Customer'. There are three radio buttons: 0 (selected), 1, and 2. At the bottom are 'update' and 'cancel' buttons.

- Choose 0 if you do not want to use the Customer Referral feature.
 - Choose 1 if you want to track customers by noting the first time a discount coupon is redeemed by them.
 - Choose 2 if you want to track customers by asking them how they were referred to your store from the sign-up portion of the Log In screen or when customers edit the referral source in their My Account area if the referral source has not already been set.
3. Click on **update** to effect your changes.

Once a referral code has been attached to a customer, only the store owner can change the referral code. To see where the referral code for a customer is stored:

1. Click on **Customers > Customers** to access the Customers screen.
2. Select your desired customer and click the **edit** button on the side-panel.
3. The referral code for a customer is shown in the **Customer Referral 1st Discount Coupon** field as shown in the following screen shot.

Options

Email Format Pref:	<input type="radio"/> HTML <input checked="" type="radio"/> TEXT-Only
Newsletter:	Unsubscribed <input type="button" value="▼"/>
Discount Pricing Group	--none-- <input type="button" value="▼"/>
Customer Referral	
1st Discount Coupon	3b86fbad4f

View Report on Customer Referrals

To view the performance of your referrers and referral schemes:

1. Click on **Reports > Customers Referral** to access the Customers Referral Report screen.

CUSTOMERS REFERRAL REPORT

Select a Referral/Coupon Code	Unknown <input type="button" value="▼"/>			
Start Date (m-d-y)	09-17-2006	End Date (m-d-y)	09-17-2006	<input type="button" value="display"/>

2. Choose a referral coupon code from the drop-down list box at the top of the screen.
3. Specify which period of the report you would like to view by entering the appropriate dates into the **Start Date** and **End Date** fields.
4. Click **display** and a list of orders using the particular referral coupon you specified in Step 2 will be displayed. A sample screen shot is shown below.

CUSTOMERS REFERRAL REPORT

Select a Referral/Coupon Code	3b86fbad4f <input type="button" value="▼"/>			
Start Date (m-d-y)	09-17-2006	End Date (m-d-y)	09-17-2006	<input type="button" value="display"/>
Sunday 17 September, 2006		Order #16 Discount Coupon ID# 3b86fbad4f		<input type="button" value="edit"/>
Sub-Total:	\$400.00	Flat Rate (Best Way):	\$5.00	
Discount Coupon: 3b86fbad4f:	-\$5.00	Total:	\$400.00	

Viewing Discount Coupon Usage Statistics

To view the usage statistics for *individual* discount coupons:

1. Click on **Gift Certificate/Coupons > Coupon Admin** to access the Discount Coupons screen.
2. Select a discount coupon and click **Report** to bring up the discount coupon usage details screen.

DISCOUNT COUPONS

Customer ID	Customer Name	IP Address	Date Redeemed	Action
1	Jacques Pires	127.0.0.1	09/17/2006	[2]Coupon Name Test Coupon
2	Alan Smith	127.0.0.1	09/17/2006	Redemptions

Displaying 1 to 2 (of 2 coupons)

Page 1 of 1

In Total=2
For this Customer=1

Gift Certificates

Gift certificates are commonly used as a marketing tool for businesses as they offer the following advantages:

- Convenient for people who do not know what gifts to buy.
- Provide immediate cash to the business without having to supply a product or service until a later date. Thus, they behave similarly to an interest-free loan.
- Inexpensive way to widen your customer base.

There are some important concepts to take note of before you start offering gift certificates in your store:

- Unlike discount coupons for which you can specify an expiration date, gift certificates represent real money and do not expire.
- Gift certificates can be purchased by customers like ordinary products, sent by store owners to customers or transferred between customers.
- Discounts cannot be applied to gift certificates.
- A unique code is associated with each gift certificate.
- Gift certificate values are transferable. For example, if a customer has a \$100 gift certificate, he is able to transfer \$20 to his relative and his account will be left with \$80
- They cannot be restricted to different categories like discount coupons.



Note

The terms *Gift Certificate* and *Gift Voucher* are used interchangeably in Zen Cart.

How Gift Certificates Work

The way Gift Certificates work is briefly outlined below:

1. Gift certificates are created as *products* and sold; or they are created by the store owner and sent to customers either during account creation or selectively via email from the Admin Console.
2. Customers who purchase gift certificates will have the amount credited into their gift certificate accounts in your store. Customers who receive their gift certificates via email will have to redeem them at your store using the gift certificate code in their emails. After a gift certificate is redeemed, the gift certificate amount will be credited into the gift certificate account of the redeemer.
3. To prevent cases of fraud, the store owner can configure whether gift certificates need to be approved before they can be used in your store.
4. The value contained in gift certificates can then be used when purchasing goods from your store. The customer will be prompted to enter a gift certificate code on the Payment Information screen during the checkout process.

To give you a more complete picture of the workings of gift certificates, we shall cover the following areas in greater detail.

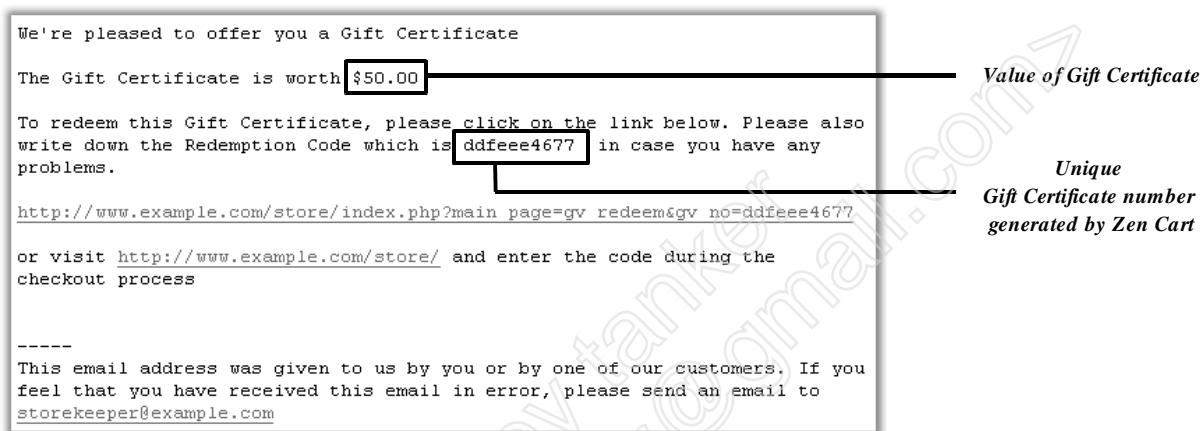
- How customers receive their gift certificates.
- How gift certificates are displayed on customer account screens.
- How gift certificates are used for purchase and transfer.

How Customers Receive Their Gift Certificates

There are actually several ways by which customers can receive their gift certificates.

- Customers can buy them from your store if you have created your gift certificates as *products*.
- Store owners can create gift certificates and send them to selected customers *manually* via email. Alternatively, gift certificates can be *automatically* sent via email on account creation.
- Customers can also receive their gift certificates from other customers. If the receiving parties are not currently customers of your store, they will be prompted to sign up for an account before their gift certificate values can be redeemed.

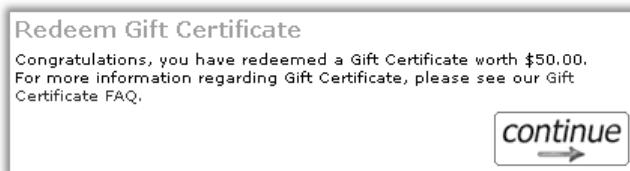
Gift certificates which are not bought as products from your store will have to be redeemed. Details required to redeem a gift certificate are contained in emails sent to customers. A sample gift certificate email sent to a customer by a store owner is shown in the following screen shot.



Redemption of Gift Certificate Values

There are two ways customers can go about redeeming the values in their gift certificates as shown in the gift certificate emails sent to them:

- By clicking on the hyperlink which contains a gift certificate code in the gift certificate email sent to them, the customer will be redirected to your online store. After logging in or creating a new account if the customer does not have an account yet, the gift certificate value will automatically be redeemed. A success message indicating the value of the gift certificate redeemed will be shown to the customer as seen in the following sample screen shot.



- By entering the gift certificate code contained in the gift certificate email in the Redemption Code field of the Payment Information screen during the checkout process.

Gift Certificates

To use Gift Certificate funds already in your account, type the amount you wish to apply in the box that says 'Apply Amount'. You will need to choose a payment method, then click the continue button to apply the funds to your shopping cart.

If you are redeeming a new Gift Certificate you should type the number into the box next to Redemption Code. The amount redeemed will be added to your account when you click the continue button.

Redemption Code Apply Amount: Available balance: \$10.00

A success message indicating the value of the gift certificate redeemed will be shown to the customer only when proceeding to the next screen. A sample success message when a \$50.00 gift certificate is redeemed is shown in the following screen shot.

Step 3 of 3 - Order Confirmation

 Congratulations, you have redeemed \$50.00

The Gift Certificate Account Balance

Customers can check their gift certificate balance when they log in to view their account details. A gift certificate balance displayed in a customer's account is shown in the following sample screen shot.

My Account Information

(show all orders)

Previous Orders					
Date	No.	Ship To	Status	Total	View
09/18/2006	# 19	Jacques Pires France	Pending	\$230.00	
09/18/2006	# 18	Jacques Pires France	Pending	\$190.00	
09/17/2006	# 15	Jacques Pires France	Pending	\$428.00	

My Account

- View or change my account information.
- View or change entries in my address book.
- Change my account password.

Email Notifications

- Subscribe or unsubscribe from newsletters.
- View or change my product notification list.

Gift Certificate Account

You have a balance available in your Gift Certificate account. You may spend it or send it to someone else. To send click the button below.

Your Gift Certificate balance is:
\$50.00



Alternatively, if a customer is logged in, the gift certificate balance will be displayed in the Shopping Cart side-box as shown in the following screen shot.

Shopping Cart [more]

Your cart is empty.

Gift Certificate Balance \$50.00

How Gift Certificates Can Be Used

Customers can choose to use their gift certificates for the following purposes:

- Purchase of products in your store using the balance in their gift certificate account.
- Transfer the value (either wholly or partially) to someone else.

To purchase products using the balance in their gift certificate accounts:

- At the Payment Information screen during the checkout process, customers can make full or partial use of the money currently in their gift certificate accounts for their purchase by entering a suitable value in the Apply Amount field.

Gift Certificates

To use Gift Certificate funds already in your account, type the amount you wish to apply in the box that says 'Apply Amount'. You will need to choose a payment method, then click the continue button to apply the funds to your shopping cart.

If you are redeeming a new Gift Certificate you should type the number into the box next to Redemption Code. The amount redeemed will be added to your account when you click the continue button.

Redemption Code: Apply Amount: Available balance: \$10.00

Alternatively, if customers want to *redeem* and *use* the value in a gift certificate at the same time, they can enter the redeem code into the Redemption Code field instead.

To transfer the values within their gift certificate account balances:

- Customers can click on the **Send a gift certificate** hyperlink in their Account Information screen and the following screen will appear

Send Gift Certificate

Please enter the name, email address and amount of the Gift Certificate you wish to send. For more information, please see our Gift Certificate FAQ.

Your Gift Certificate Account

Your Gift Certificate balance is: \$50.00

Send Gift Certificate

Recipient's Name: *

Recipient Email: *

Amount to Send: *

Your Message:

This message is included with all emails sent from this site: IMPORTANT:
For your protection and to prevent malicious use, all emails sent via this web site are logged and the contents recorded and available to the store owner. If you feel that you have received this email in error, please send an email to storekeeper@example.com

After they are done filling in the details in the screen, they can click **send** to transfer a portion of their gift certificate account balance as a gift certificate to another person.

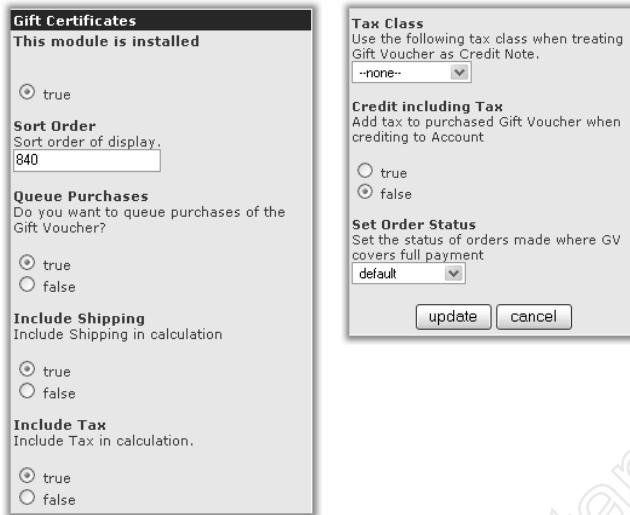
When customers transfer the gift certificate amounts in their accounts to other customers, you can also be notified via email. To set up this email notification, go to **Configuration > E-Mail Options** and set the following fields accordingly.

- **Send Copy of Customer GV Send Emails To - Status**
- **Send Copy of Customer GV Send Emails To**

Configuring the Gift Certificates Module

Before you can start using gift certificates in your store, you need to enable and configure the Gift Certificates order total module as follows:

1. Click on **Modules > Order Total** to access the Order Total Modules screen.
2. Edit the **Gift Certificates** module. Install it if required.



3. Enter a suitable value for the **Sort Order** field. Refer to “The Order Total Modules Screen” on page 226 if you have forgotten the purpose of this field.
4. The **Queue Purchases** field is only relevant for gift certificates that are purchased as products from your store. This field has no effect for gift certificates that are emailed to customers.

Choose false for the **Queue Purchases** field if you want the amount in a gift certificate to be credited automatically into a customer's gift certificate account after purchase. If **Queue Purchases** is set to true, you will have to manually credit the amount to the customer's gift certificate account.

Recommended value is true if you want to avoid the possibility of fraud. For example, consider the case where you set this value to false and customers pay for a gift certificate via credit card. If the gift certificate amount is immediately credited into their accounts, they can use it to purchase goods or services from your store immediately. After they know your goods are being shipped to them, they then cancel their credit card payment.

However, you might choose to set this value to true if it becomes impractical for you to manually approve gift certificates because too many people are buying them. In that case, make sure you use a payment method that would reduce the possibility of fraud (i.e. PayPal).

5. Specify true for the **Include Shipping** field if you want shipping charges to be covered by a gift certificate.
6. Specify true for the **Include Tax** field if you want taxes to be covered by a gift certificate.
7. Choose a suitable value for the **Re-calculate Tax** field. Usually, you should leave this as none. If you choose Standard or Credit Note, you will need to play around with different test orders to see whether

they suit your needs.

8. If you have chosen Credit Note for the **Re-calculate Tax** field, you should choose a suitable option from the **Tax Class** drop-down list box.
9. The **Credit Including Tax** field is only relevant for gift certificates which you have created as *taxable products*. For example, suppose you have created a gift certificate as a product for sale and applied a tax rate of 10% to it. If the gift voucher is priced at \$10.00, the customer will be charged \$11.00 on checkout due to product tax.

Now how much should go into the customers gift certificate account balance? If this option is set to true, then customers will receive \$11.00 in their gift certificate account balance. If this option is set to false, then customers will get \$10.00 in their gift certificate account balance instead.

10. Choose an order status to associate to an order from the **Set Order Status** field if a gift certificate covers the full amount of an order.
11. Click **update** to finish configuration of your Gift Certificates order total module.

You should play around with the **Sort Order** field for all the order total modules if you encounter erroneous or illogical calculations. If that does not help, your last resort is to refer to the PHP code contained in the `<zc-home>/includes/modules/order_total/ot_gv.php` file.

If a Gift Certificate module is enabled, a Gift Certificate FAQ hyperlink will appear in the Information side-box. Upon clicking this hyperlink, a customer can redeem a gift certificate or find out more about the use of gift certificates by clicking the relevant hyperlinks under the “Gift Certificate FAQ” text. The entire process is illustrated in the following screen shots.



Selling Gift Certificates as Products

Unlike discount coupons, you can sell gift certificates as products. Since gift certificates are commonly displayed with their values, you may want to consider creating the relevant gift certificate images before you start creating your gift certificate product.

If you have a local copy of Zen Cart installed, you can refer to the directory `<zc-home>/images/gift_certificates` to take a look at some of the sample Gift Certificate images available.

To create gift certificates as products in your store:

1. Navigate to the Categories/Products screen and create a product of “Product-General” type under your desired category.
2. In the Product screen of the product, pay extra attention to the fields shown in the following table while creating your product.

Field	Value	Explanation
Product is Virtual	Yes, Skip Shipping Address	Since this is an <i>electronic</i> Gift Certificate, no delivery of the Gift Certificate is required.
Always Free Shipping	Yes, Always Free	Since a cash amount equivalent to the value of the Gift Certificate is stored in the customer's account, there is nothing to physically ship to a customer.
Products Model	GIFT-XXX	This field <i>must begin</i> with “GIFT” and with capitals. Consider marking this field as “GIFT-10” or “GIFT-100” to differentiate between different gift certificates. <i>Do not</i> mis-configure this step!
Products Shipping Weight	0	Since an electronic Gift Certificate has no weight.

3. Use your discretion to specify the values for the other fields on the screen.
4. Click on **save** to create the gift certificate as a product.

Approving Gift Certificates

Note that a gift certificate purchased as a product by a customer may not have its value credited into a customer's account immediately. An *optional* approval process may need to be performed by the store owner before the gift certificate value is released into the customer's gift certificate account balance as a precaution against possible fraud. This additional approval process does *not* apply to gift certificates that are sent via *email* from Zen Cart to customers or between customers themselves.

To ensure that gift certificates are approved by the store owner before their values are released into customer accounts:

1. Click on **Modules > Order Total** to access the Order Total Modules screen.
2. Edit the **Gift Certificates** module.
3. Make sure that the **Queue Purchases** field is set to true.

To approve a gift certificate:

1. Look for the **GIFT Queue** button that appears at the top of your Admin Console as shown in the following screen shot.



2. Alternatively, click on **Customers > Orders** to access the Orders screen and then run through each individual order to see which are the orders that have a **GIFT Queue** button displayed in their side-panels as shown in the following sample screen shot.

ORDERS						
LEGEND: ● Billing and Shipping does not match						
ID	Payment Shipping	Customers	Order Total	Date Purchased	Status	Action
21	cc freeshipper	Alan Smith	\$100.00	09/19/2006 02:46:41	Pending	e i edit delete
20	cc free	Alan Smith	\$25.00	09/19/2006 02:38:48	Pending	e i invoice packing slip
19	cod flat	Jacques Pires	\$230.00	09/18/2006 17:50:47	Pending	e i Date Created: 09/19/2006
18	cod flat	Jacques Pires	\$190.00	09/18/2006 17:43:46	Pending	e i alan@example.com
17	cod flat	Alan Smith	\$200.00	09/17/2006 14:51:57	Pending	e i IP Address: 127.0.0.1 - 127.0.0.1
16	cod flat	Angel Scifo	\$400.00	09/17/2006 14:41:41	Pending	e i Payment Method: Credit Card
15	cod flat	Jacques Pires	\$428.00	09/17/2006 14:31:16	Pending	e i Shipping: FREE SHIPPING! (Free Shipping Only)
14	cod item	Jacques Pires	\$231.62	09/17/2006 14:28:12	Pending	e i GIFT Queue
13	cod perweightunit	Jacques Pires	\$3.40	09/17/2006 13:03:20	Pending	e i Products Ordered: 1
11	cod freeshipper	Alan Smith	\$100.00	09/16/2006 03:27:54	Pending	e i 1 x \$100 Gift Certificate
7	cc	Jacques Pires	\$237.50	09/15/2006 01:42:33	Pending	e i edit

3. Either way, by clicking on a **GIFT Queue** button, you will reach the Gift Certificate Release Queue screen. Another way to reach the Gift Certificate Release Queue screen is to simply click **Gift Certificate/Coupons > Gift Certificates Queue**.

GIFT CERTIFICATE RELEASE QUEUE						
Customers	Order-No.	Gift Certificate Value	Date Purchased	Action	Page 1 of 1	
Alan Smith	20	\$25.00	09/19/2006 02:38:48	► \$25.00		
Alan Smith	21	\$100.00	09/19/2006 02:46:41	i		
Displaying 1 to 2 (of 2 gift vouchers)						
						Edit Order ID# 20
						Order

This screen contains a list of gift certificates that are waiting for approval before their amounts are credited into the relevant customer's gift certificate account.

4. Choose the gift certificate you wish to approve and click on **Release GIFT** to bring up a side-panel prompting you to confirm your decision.



5. Click on **Confirm** to release the value of the gift certificate to a customer's gift certificate account balance.



Note

Once money is credited into a customer's gift certificate account, a store owner will *not* be able to reverse the decision. This is to prevent unscrupulous store owners from "stealing" money from their own customers.

Delivering Gift Certificates to Customers

There are two ways which gift certificates can be sent to customers electronically:

- Selectively email gift certificates to customers *manually* via the Admin Console.
- Send gift certificates *automatically* to customers upon account creation.

Manually Email Gift Certificates to Customers

To receive *copies* of gift certificate emails manually sent to customers from the Admin Console, click on Configuration > E-Mail Options and edit the following fields accordingly:

- Send Copy of Admin GV Mail Emails To - Status
- Send Copy of Customer Admin GV Mail Emails To

To send gift certificates to customers manually via the Admin Console:

1. Click on **Gift Certificate/Coupons > Mail Gift Certificate** to access the Send Gift Certificate To Customers screen.

SEND GIFT CERTIFICATE TO CUSTOMERS

Customer:

Email To: Use this for sending single emails, otherwise use dropdown above

From: storekeeper@example.com

Subject:

Amount

Rich Text Message:

We're pleased to offer you a Gift Certificate

Path: body > html

Text-Only Message:

We're pleased to offer you a Gift Certificate

send mail

You should be able to see two text areas for you to enter your email message if you have enabled **Use MIME HTML When Sending Emails** under Configuration > E-Mail Options.

2. Specify the recipient(s) of the gift certificate by choosing from the **Customer** drop-down list box or entering an email into the **Email To** field.
3. The **From** field is automatically populated with the value from the **Email Address (sent FROM)** field of the

E-Mail Options screen.

4. Enter some text for the **Subject** field which will appear in customer emails.
5. Specify the value of the gift certificate you wish to send to customers by entering a number into the **Amount** field. Do not specify the currency symbol as Zen Cart automatically appends the symbol of the default currency to this amount when sending out the email.
6. Enter any other text that you might want to send to your customers in the **Rich Text Message** and **Text-Only Message** fields. These fields correspond to emails that are formatted in HTML and plain-text respectively.
7. Click on **send mail** to bring up another screen to preview the email message and message recipients.
8. Click on **send mail** in that screen to send the gift certificate.

A sample plain-text gift certificate email sent to a customer from the Admin Console is shown in the following screen shot.



We're pleased to offer you a Gift Certificate
The Gift Certificate is worth \$50.00
To redeem this Gift Certificate, please click on the link below. Please also write down the Redemption Code which is ddfeeee4677 in case you have any problems.
http://www.example.com/store/index.php?main_page=gv_redeem&gv_no=ddfeeee4677
or visit <http://www.example.com/store/> and enter the code during the checkout process

This email address was given to us by you or by one of our customers. If you feel that you have received this email in error, please send an email to storekeeper@example.com

Automatically Send a Gift Certificate on Account Creation

To receive copies of gift certificate emails sent automatically to customers on account creation, click on **Configuration > E-Mail Options** and enable the following fields:

- **Send Copy of Create Account Emails To – Status**
- **Send Copy of Create Account Emails To**

To enable Gift Certificates to be automatically created and sent on account creation:

1. Click on **Configuration > GV Coupons** to access the GV Coupons screen.

GV COUPONS	
Title	Value
Default Order Status For Zero Balance Orders	Processing [2]
Length of the redeem code	10
New Signup Discount Coupon ID#	
New Signup Gift Voucher Amount	
Maximum Discount Coupons Per Page	20
Maximum Discount Coupon Report Results Per Page	20

2. Click on **New Signup Gift Voucher Amount** and concentrate on the side-panel.

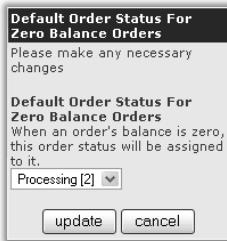


New Signup Gift Voucher Amount
Please make any necessary changes

New Signup Gift Voucher Amount
Leave blank for none
Or enter an amount ie. 10 for \$10.00

update cancel

3. Enter the gift certificate amount into the text box and click **update**.
4. If you want to change the gift certificate code length, edit the **Length of the redeem code** field. For example, if you specify this length to be 10, then the redeem code generated by Zen Cart for the gift certificate may look like 9e47daba3b. (Warning: This field also affects the length of a redeem code for discount coupons!)
6. If you want to change the order status for an order total balance of zero after applying your gift certificate, you can edit the **Default Order Status For Zero Balance Orders** field.



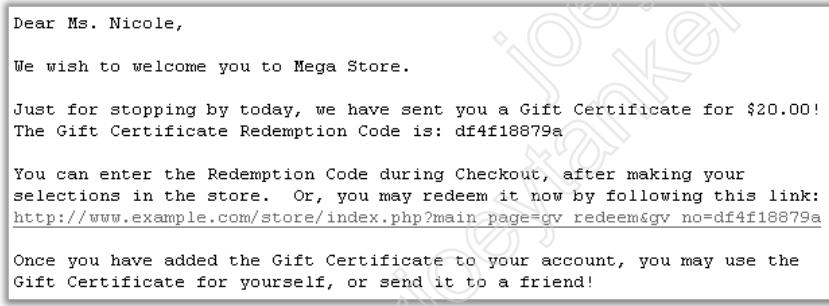
Default Order Status For Zero Balance Orders
Please make any necessary changes

Default Order Status For Zero Balance Orders
When an order's balance is zero, this order status will be assigned to it.

Processing [2]

update cancel

A sample plain-text gift certificate email received by a customer on account sign up is shown below. Note that only the gift certificate portion of the email is shown.



Dear Ms. Nicole,

We wish to welcome you to Mega Store.

Just for stopping by today, we have sent you a Gift Certificate for \$20.00!
The Gift Certificate Redemption Code is: df4f18879a

You can enter the Redemption Code during Checkout, after making your selections in the store. Or, you may redeem it now by following this link:
http://www.example.com/store/index.php?main_page=gv_redeem&gv_no=df4f18879a

Once you have added the Gift Certificate to your account, you may use the Gift Certificate for yourself, or send it to a friend!

Track Gift Certificates Sent

To track all the gift certificates you have sent to customers or those that customers send between themselves, click on **Gift Certificate/Coupons > Gift Certificates sent** to access the Gift Voucher's Sent screen as shown in the following sample screen shot.

GIFT VOUCHER'S SENT							
Senders Name	Gift Certificate Value	Redemption Code	Date Sent	Date Redeemed	Action	[10] \$10.00	
Jacques Pires	\$20.00	e9a56cb044	09/19/2006	Not Redeemed	① Senders ID: 5 ▶ Amount Sent: \$10.00		
Bellamont Nicole	\$10.00	c4b5f5f577	09/19/2006	09/19/2006	① Date Sent: 09/19/2006 ① Redemption Code: c4b5f5f577		
Admin	\$20.00	df4f18879a	09/19/2006	09/19/2006	① Email Addr: alan@example.com		
Admin	\$50.00	3ef1c6fb2	09/19/2006	Not Redeemed	① Date Redeemed: 09/19/2006		
Admin	\$10.00	f7850dc05d	09/18/2006	09/18/2006	① IP Address: 127.0.0.1		
Admin	\$50.00	be32e5eccc	09/18/2006	09/18/2006	① Customer Id: 2		
Admin	\$50.00	ddfee4677	09/18/2006	09/18/2006			
Admin	\$10.00	7998b4936f	09/15/2006	Not Redeemed			

Newsletters

Newsletters allow customers to stay informed of new happenings in your store. They are delivered via email and provide an excellent means of building relationships with your customers.

Zen Cart provides two types of newsletters:

- General newsletters – for promotional purposes and general store news.
- Product newsletters – these are divided into *product-specific* and *all-products* newsletters.

How Newsletters Work

The way Newsletters work is outlined below:

1. Customers opt in to receive a particular newsletter. There are several ways this can be done.

- During account creation, customers can opt in to receive General newsletters.



- After account creation, customers can log in to their accounts to opt in to receive General newsletters or Product newsletters.



- Anytime customers are viewing a product's details, they can opt in to receive a Product-specific newsletter by clicking in the Notifications side-box.



2. Store owners compose and send the relevant newsletters to interested customers.

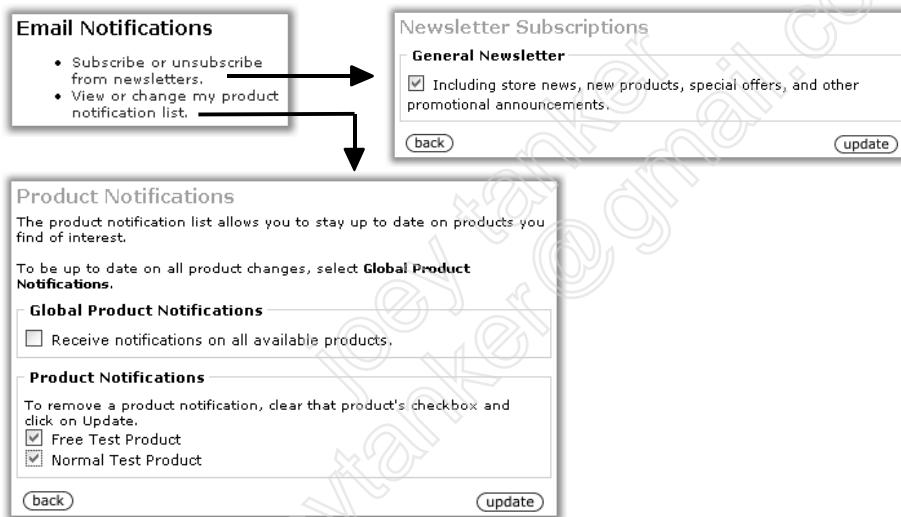
3. Customers can choose to unsubscribe from any newsletter anytime. Again, there are several ways to do this.

- By clicking on the Newsletter Unsubscribe hyperlink in the Information side-box. This will allow customers to unsubscribe from the General newsletter. Customers will be prompted to log in if they have not done so.



To check whether the Newsletter Unsubscribe hyperlink is available in your Information side-box, click on **Configuration > E-Mail Options** and check that the **Display "Newsletter Unsubscribe" Link?** is enabled.

- Customers can log in to their accounts and unsubscribe from the General or Product newsletters.



Note

Only HTML-formatted newsletters contain newsletter unsubscribe hyperlinks. Plain-text newsletters do not contain any unsubscribe hyperlinks.

Enabling Newsletter Sign-Up on Account Creation

This feature applies only to *General* newsletters where users can be informed of the latest promotion or news from your store.

To allow customers to opt in to receive newsletters during account creation:

1. Click on **Configuration > Customers Details** to access the Customer Details screen.
2. Make sure the **Show Newsletter Checkbox** field is enabled.

Your customers should now see the newsletter subscription option when they sign up for an account with your store as shown in the following screen shot.

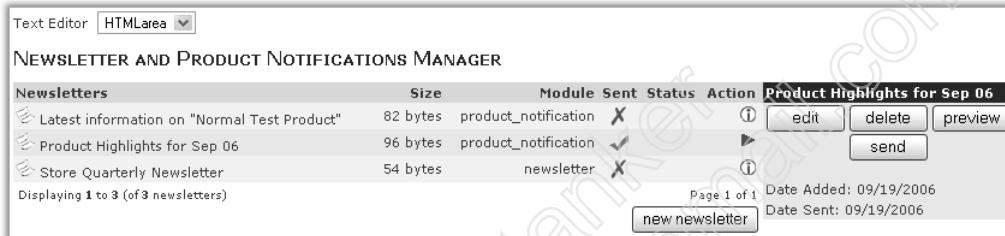


Creating Newsletters

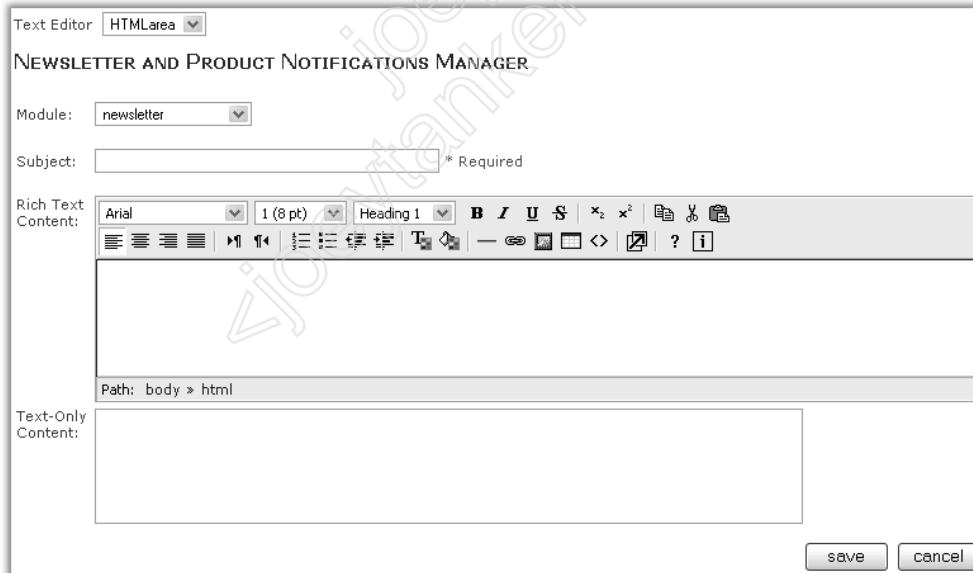
We shall now look at the process of creating the relevant General and Product email newsletters for your customers.

To create and send newsletters to your customers:

1. Click on **Tools > Newsletter Manager and Product Notifications Manager** to access the Newsletter and Product Notification Manager screen.



2. To create a new newsletter, click on **new newsletter** to proceed to the newsletter details screen.



3. In the **Module** field, choose newsletter if you wish to create a General newsletter and product_notification if you wish to create a Product newsletter.
4. Enter a name for your newsletter in the **Subject** field. This name will also be displayed in the subject line of emails that customers receive.
5. Recall that users have the option of choosing whether they want to receive their emails in HTML or plain

text when they sign up for a newsletter. Therefore, enter your newsletter details into both the **Rich-Text Content** and **Plain-Text Content** areas to cater for both sets of users.

6. Enter all relevant details and click **save** to effect your changes. Your newly created newsletter will be displayed in the Newsletter and Product Notification Manager screen.
7. To send your newly created newsletter, click on your desired newsletter in the Newsletter and Product Notification Manager screen.
8. Click on **send** to begin sending your newsletter. What screen you see next will depend on what you entered for your **Module** field in Step 3.
 - If you specified newsletter, you will be prompted to select your newsletter recipients.



Choose your desired newsletter subscribers from the drop-down list box and then click on **select**. You will be shown a preview of your message and the number of recipients for the newsletter. Click on **send mail** in that screen to send your newsletter.

- If you specified product_notification, you should see the following screen.



If your newsletter is general enough to encompass all products, click **Global**. If your newsletter is meant for users who have signed up for specific products only, you need to choose the relevant products from the **Products** list and move them to the **Selected Products** list by clicking on **>>>**.

Once you have completed your selections, click on **Submit**. You should see a screen saying how many subscribers will receive the Product newsletter. Click on **send** in that screen to send your newsletter.

9. You can check whether your newsletter is sent by looking for a *green tick icon* under the **Sent** column of the Newsletter and Product Notification Manager screen.

Viewing the Number of Newsletter Subscribers You Have

To view the number of newsletter subscribers you have, click on the **Admin Home** hyperlink near the top of the Admin Console. Look at the **Newsletter subscribers** field under the **Statistics** table as shown in the following screen shot.

Statistics	
Hit Counter Started:	09/07/2006
Hit Counter:	888
Customers:	5
Products:	17
Products deactivated:	5
Reviews:	0
Reviews Pending Approval:	0
Newsletter subscribers:	2

Product Reviews

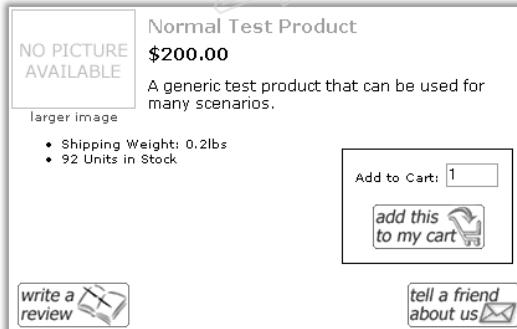
Product reviews increase the likelihood that customers will return to your site, either to write a review of the items they bought or to see what other customers think of a product they want to buy. You also stand to benefit because you can learn from customer preferences, thus adjusting your product offerings and directing your marketing efforts more effectively.

Although product reviews are useful, they can be susceptible to abuse. For example, an unscrupulous competitor could sign up for an account with your store and write bad reviews about your products or store. To overcome this problem, Zen Cart allows you the option of moderating all reviews before they are posted on your site for everyone to see. Furthermore, customers have to sign up for an account first before they are allowed to write any reviews. There is no option to allow anonymous users to write reviews.

How Product Reviews Work

The way Product Reviews work is outlined below:

1. Customers select a product and proceed to the Product Info page as shown in the following screen shot.



2. Customers clicks on "write a review" to proceed to a page where a review of the product can be written as shown in the following screen shot. Zen Cart will prompt customers to log in if they have not done so.

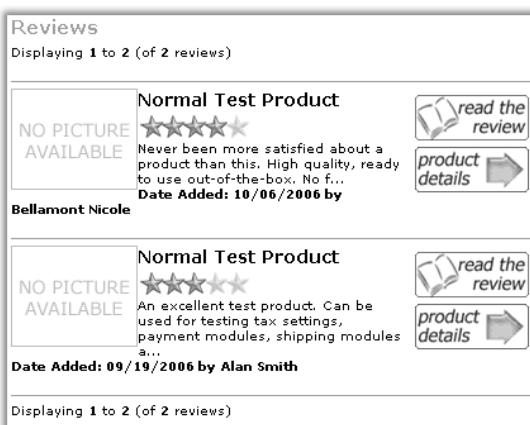


3. Customers choose a rating for the product by clicking on any of the radio buttons with stars displayed next to them.
4. Reviews are entered into the text area on the screen. The minimum number of characters that customers should type before Zen Cart allows a product review to be submitted is configured via the **Product Review Text** field under **Configuration > Minimum Values**.
5. After the product review is completed, customers click on **submit** to send their reviews for the store owner to moderate and approve. Note: Moderation is optional.
6. Once reviews are approved, they will appear in the Reviews side-box randomly.



Store owners can control the number of product reviews that are randomly displayed by editing the **Random Product Reviews For Box** field in the **Configuration > Maximum Values** screen.

7. To see a list of all product reviews in your store, customers can click on the the product image or the “Reviews [more]” **hyperlink** at the top of the side-box. A list of sample reviews are shown in the following screen shot.



Enabling Product Reviews

Product reviews are limited to selected *product types* only; they *cannot* be enabled on a *per-product* basis currently. Before users can write product reviews, you need to enable it first.

To allow users to write reviews:

1. Click on **Catalog > Product Types** to access a list of product types in your store.
2. Choose a product type you want users to be able to write reviews on and then click on **edit layout**.
3. Make sure the **Show Product Reviews Button** field is enabled.
4. Optionally, you can decide whether to display the number of reviews for a particular product (which appears underneath the “write a review” button) by editing the **Show Product Reviews Count** field.

Moderating Product Reviews

It is a good idea to moderate reviews to check that the comments are genuine and legal. For example, you do not want comments that praise your products but criticize other companies because you could end up with a legal case on your hands.

Product reviews submitted by customers may be subjected to moderation by store owners. A store owner is then able to edit the contents of a product review before approving it for display to all visitors.

Enable Moderation for Product Reviews

To enable a product review to be moderated:

1. Click on **Configuration > Product Info** to access the Product Info screen.
2. Make sure the **Product Reviews Require Approval** field is enabled.

Receive Emails for Products Pending Reviews

If you would like to receive email alerts informing you of product reviews ready for moderation, click on **Configuration > E-Mail Options** and configure the following fields accordingly.

- **Send Notice of Pending Reviews Emails To – Status**
- **Send Notice of Pending Reviews Emails To**

This is a good idea if you want to save yourself the effort of constantly logging into your Admin Console to check for product reviews to moderate and approve.

Moderate a Product Review

To moderate a review:

1. Click on **Catalog > Reviews** to access the Reviews screen as shown in the following screen shot.

Alternatively, you can reach the same screen by clicking on the **Admin Home** hyperlink near the top of the Admin Console, and then clicking on **Reviews Pending Approval** in the Statistics table.



2. If you wish to view and edit the contents of a product review written by a customer, click on **edit** to bring up the product review details page as shown in the following screen shot.



- 2.1. Make any changes and preview your changes in another screen by clicking **preview**.
- 2.2. Click on **update** in the new screen once you are satisfied with your changes. You should be redirected back to the Reviews screen after the update completes.
3. To approve a product review, simply click the respective *red button* under the **Status** column to change its color to *green*.

Viewing Product Review Statistics

To view statistics for Product Reviews in your store, click on **Admin Home** on the navigation menu to reach your Admin Console's home page. Look at the following fields under the Statistics table as shown in the screen shot below.

- **Reviews**
- **Reviews Pending Approval**

Statistics	
Hit Counter Started:	09/07/2006
Hit Counter:	916
Customers:	5
Products:	18
Products deactivated:	5
Reviews:	3
Reviews Pending Approval:	2
Newsletter subscribers:	2

Tell-a-Friend

This feature allows your customers to send emails to their acquaintances about a product in your store. The term “Word-of-Mouth” is commonly used to describe this form of marketing activity. Research has shown that this form of marketing is very powerful as people tend to respond better to recommendations by friends and relatives compared to direct marketing messages from companies.

Keep in mind that this feature can also be easily abused by email spammers and unscrupulous competitors. Therefore, Zen Cart allows you to configure whether users should be logged in before they are allowed to utilize this feature. Furthermore, to allow you to weigh the pros and cons of enabling this feature, Zen Cart allows you to track messages sent from your online store to see the usage patterns of your site visitors.

How Tell-a-Friend Works

The way Tell-a-Friend works is outlined below:

1. Customers select a product and proceed to the Product Info screen.



2. Customers either click on the “tell a friend about us” button or the email icon in the “Tell a Friend” side-box to proceed to another screen where they can enter the details of their recommendation. Depending on the store owner's configuration, they might be prompted to log in first. If customers are already logged in, the **Your Name** and **Your Email** fields will be populated automatically.

Tell A Friend About 'Normal Test Product'

* Required information

Your Name:	Alan Smith	*
Your Email:	alan@example.com	*
Friend's Name:		*
Friend's Email:		*
Your Message:	 	

This message is included with all emails sent from this site: IMPORTANT:
For your protection and to prevent malicious use, all emails sent via this web site are logged and the contents recorded and available to the store owner. If you feel that you have received this email in error, please send an email to storekeeper@example.com

3. After filling in the rest of the details, customers click on **send** to submit their recommendations to Zen Cart. Zen Cart then routes the recommendations to the respective email recipients of the recommending customers.

A sample Tell-a-Friend email that a customer's acquaintance received is shown in the following screen shot.

Hi Alan Smith!

Your friend, Jacques Pires, thought that you would be interested in Normal Test Product from Mega Store.

Jacques Pires sent a note saying:

Test Tell-a-Friend message for Normal Test Product.

To view the product, click on the link below or copy and paste the link into your web browser:

http://www.example.com/store/index.php?main_page=product_info&products_id=1

Regards,

Mega Store
<http://www.example.com/store/>

Enabling Tell-a-Friend

Before users can make use of the Tell-a-Friend feature, you need to enable it.

To allow users to use the Tell-a-Friend feature:

1. Click on **Catalog > Product Types** to access the Product Types screen.
2. Choose a product type you want users to be able to utilize the Tell-a-Friend feature, and click on **edit layout**.
3. Make sure that the **Show Product Tell a Friend button** field is enabled.

To configure whether users should be logged in before using the Tell-a-Friend feature, click on **Configuration > Email Options** and set the **Allow Guest To Tell A Friend** field accordingly.

Tracking Tell-a-Friend Email Messages

You may have noticed that the customer is warned that: “... *all emails sent via this web site are logged and the contents available to the store owner ...*” just before the customer clicks on the **send** button in the Tell-a-Friend screen. In actual fact, the store owner has to actively enable certain options to track the messages.

There are two ways to track Tell-a-Friend email messages that are sent from your store.

- Enable email archiving
- Cc Tell-a-Friend emails



Note

Unlike other marketing features, there is no screen in the Admin Console that can provide you with statistics or reports on the Tell-a-Friend emails that are sent from your store.

Enable Email Archiving

When email archiving is enabled, *all emails* (not just Tell-a-Friend emails) are stored in your database. This feature does lead to more maintenance effort and costs because of the additional space and care required when dealing with archived emails.

To go through the different email messages and sift out the ones that are related to “Tell-a-Friend” can be technically challenging as users need to be familiar with database languages like Structured Query Language (SQL) or a particular database administrator tool.

Nevertheless, you are still strongly encouraged to turn on this feature even if you are technically unsound. You can always turn to experts to retrieve the required data if necessary. For example, if you receive complaints that your store is sending out spam to users you are not familiar with, you can always turn over your database records to allow experts to help you identify the offending users.

To enable email archiving:

1. Click on **Configuration > E-mail Options** to access the E-Mail Options screen.
2. Make sure that the **Email Archiving Active** field is enabled.

Receive Copies of Tell-a-Friend Emails

Another way to track Tell-a-Friend emails would be to configure Zen Cart to send copies of such emails to you. Usual patterns of malicious behavior can then be narrowed down quite efficiently. For example, if you have a lot of emails originating from a single email address for all your Tell-a-Friend emails, you would have strong reason to believe someone is using your store to send spam emails.

To ask Zen Cart to send copies of Tell-a-Friend emails to you:

1. Click on **Configuration > E-mail Options** to access your E-Mail Options screen.
2. Make sure that the following fields are enabled and configured properly.
 - **Send Copy of Tell a Friend Emails To – Status**
 - **Send Copy of Tell a Friend Emails To**

Banners

Besides using banners as a form of advertising to generate income for your store, you can also make use of banners to implement a simple affiliates program as part of a cross-promotion marketing campaign with another site. For example, if you sell cars, you can exchange banners with a magazine that covers the car industry. In this way, both sites stand to gain exposure to their products without using any money for advertising.

How Banners Work

The way Banners work is outlined below:

1. Store owners create different banners and position them at specific locations in their Store Fronts.
2. Site visitors click on any of the banners.
3. Zen Cart records each banner click and re-directs visitors to the sites associated with the respective banners.
4. Store owners check banner statistics generated by Zen Cart to determine the effectiveness of their banner marketing campaign.

Banner Display Concepts

There are some important concepts you need to know before you can properly configure the display of banners in your Store Front.

Firstly, each banner you create should belong to a *banner group*. By default, there are three types of banner groups, namely:

- Sidebox-Banners
- Wide-Banners
- BannersAll

Banners belonging to the groups Sidebox-Banners and Wide-Banners are displayed *dynamically*. Only one banner in the group will be displayed at any time. Each refresh of a web page will result in a different banner in the respective group being shown. Banners belonging to the BannersAll group are displayed *statically*. All banners in this group will be displayed at the same time and will not change regardless of any page refreshes.

Furthermore, banners designed for the Sidebox-Banners group should be small enough to fit into a side-box in your Store Front. Banners designed for the Wide-Banners group can be larger as they are commonly placed across the width of the screen.

Secondly, you need to consider where you want to *position* a particular banner group in your Store Front. You have a choice of placing them in selected side-boxes, page headers or page footers as shown in the following screen shot. The names used to identify the different positions are also provided on the screen shot as a quick reference when you configure your banners.



Figure 21.1: Locations of different banners in the Store Front

After you are familiar with the banner display concept, you can start configuring how you want your banners to be displayed. You can make use of Figure 21.1 as a guide when positioning your banners.

To enable the display of banners in side-boxes, turn on the respective side-boxes as follows:

1. Click on **Tools > Layout Boxes Controller** to access the Column Boxes screen.
2. Enable the respective fields accordingly:
 - **sideboxes/banner_box.php**
 - **sideboxes/banner_box2.php**
 - **sideboxes/banner_box_all.php**

To specify where your banners should be positioned:

1. Click on **Configuration > Layout Settings** to access the Layout Settings screen.
2. The locations where banners can appear in your store are controlled by the following fields.
 - **Banner Display Groups - Header Position 1**
 - **Banner Display Groups - Header Position 2**
 - **Banner Display Groups - Header Position 3**
 - **Banner Display Groups - Footer Position 1**
 - **Banner Display Groups - Footer Position 2**
 - **Banner Display Groups - Footer Position 3**
 - **Banner Display Groups - Side Box banner_box**
 - **Banner Display Groups - Side Box banner_box2**
 - **Banner Display Group - Side Box banner_box_all**
3. To enable a banner group to be displayed in a certain position, select a desired field from the list in Step 2. A side-panel should appear as shown in the following screen shot.

Banner Display Groups - Header Position 1
Please make any necessary changes

Banner Display Groups - Header Position 1
The Banner Display Groups can be from 1 Banner Group or Multiple Banner Groups

For Multiple Banner Groups enter the Banner Group Name separated by a colon :

Example: Wide-Banners:SideBox-Banners

What Banner Group(s) do you want to use in the Header Position 1?
Leave blank for none

- Read the instructions and enter the one or more of the banner group names below into the text box.
 - Wide-Banners
 - Sidebox-Banners
 - BannersAll
- Click on **update** to save your changes.

Creating a Banner

To create a banner:

1. Click on **Tools > Banner Manager** to access the Banner Manager screen.

BANNER MANAGER							
LEGEND:	Status OFF	Show SSL	New Window				
Banners	Groups	Displays / Clicks	Status	New Window	Show SSL	Sort Order	Action
<input type="checkbox"/> eStart Your Web Store with Zen Cart(tm)	BannersAll	5 / 0		<input type="checkbox"/>	<input type="checkbox"/>	15	
<input type="checkbox"/> eStart Your Web Store with Zen Cart(tm)	SideBox-Banners	8 / 0		<input type="checkbox"/>	<input type="checkbox"/>	1	
<input type="checkbox"/> eStart Your Web Store with Zen Cart(tm)	Wide-Banners	2 / 0		<input type="checkbox"/>	<input type="checkbox"/>	1	
<input type="checkbox"/> if you have to think ... you haven't been Zenned!	Wide-Banners	0 / 0		<input type="checkbox"/>	<input type="checkbox"/>	0	
<input type="checkbox"/> Sashbox.net - the ultimate e-commerce hosting solution	BannersAll	11 / 3		<input type="checkbox"/>	<input type="checkbox"/>	20	
<input type="checkbox"/> Sashbox.net - the ultimate e-commerce hosting solution	Wide-Banners	3 / 0		<input type="checkbox"/>	<input type="checkbox"/>	0	
<input type="checkbox"/> Start Accepting Credit Cards For Your Business Today!	Wide-Banners	2 / 0		<input type="checkbox"/>	<input type="checkbox"/>	0	
<input type="checkbox"/> Zen Cart	Wide-Banners	4 / 0		<input type="checkbox"/>	<input type="checkbox"/>	0	
<input type="checkbox"/> Zen Cart the art of e-commerce	BannersAll	11 / 3		<input type="checkbox"/>	<input type="checkbox"/>	10	
<input type="checkbox"/> Zen Cart the art of e-commerce	SideBox-Banners	6 / 0		<input type="checkbox"/>	<input type="checkbox"/>	0	
<input type="checkbox"/> Zen Cart the art of e-commerce	SideBox-Banners	8 / 0		<input type="checkbox"/>	<input type="checkbox"/>	0	

Date Added: 05/13/2005

Last 3 Days

11

3

10

Legend:

Displaying 1 to 11 (of 11 banners)

Page 1 of 1

Make sure you do not overlook the statistics shown under the **Displays/Clicks** column. These statistics allow you to measure the effectiveness of a banner advertisement by showing you how many clicks were recorded for the number of times a banner is displayed.

2. To add a new banner, click **new banner** to bring up the banner manager details screen. To save space, only the top half-of the screen is shown.

BANNER MANAGER

Banner Status: Active Not Active
NOTE: Banner status will be updated based on Scheduled Date and Impressions

Banner New Window: Yes No
NOTE: Banner will open in a new window

Banner on SSL: Yes No
NOTE: Banner can be displayed on Secure Pages without errors

Banner Title: * Required

Banner URL:

Banner Group: or enter a new banner group below

Image: , or enter local file below
C:/dev/server/xampp/htdocs/store/images/

Image Target (Save To): C:/dev/server/xampp/htdocs/store/images/
Suggested Target location for the image on the server: C:/dev/server/xampp/htdocs/store/images/banners/

HTML Text: **NOTE: HTML banners do not record the clicks on the banner**

Sort Order - banner_box_all **NOTE: The banners_box_all sidebox will display the banners in their defined sort order**

Scheduled At: (dd/mm/yyyy)

Expires On: (dd/mm/yyyy)
 impressions/views.

Banner Notes:

Read the instructions displayed prominently below the buttons (shown in the following screen shot) to understand some of the rules governing the use of different fields in this screen.

Banner Notes:

- Use an image or HTML text for the banner - not both.
- HTML Text has priority over an image
- HTML Text will not register the click thru, but will register displays
- Banners with absolute image URLs should not be displayed on secure pages

Image Notes:

- Uploading directories must have proper user (write) permissions setup!
- Do not fill out the 'Save To' field if you are not uploading an image to the webserver (ie, you are using a local (serverside) image).
- The 'Save To' field must be an existing directory with an ending slash (eg, banners/).

Expiry Notes:

- Only one of the two fields should be submitted
- If the banner is not to expire automatically, then leave these fields blank

Schedule Notes:

- If a schedule is set, the banner will be activated on that date.
- All scheduled banners are marked as inactive until their date has arrived, to which they will then be marked active.

- Set the **Banner Status** field as Active if you want your banner to be displayed. Disregard this field if you have configured values for **Scheduled At** and **Expires On** as the banner status will be managed automatically by Zen Cart once those fields are set.
- Set the **Banner New Window** field to Yes if you want a new window to appear when a customer clicks on the banner. The new window will display the site that is associated with this banner.
- Set the **Banner on SSL** field to Yes if you want your banner to be displayed correctly if your store's URL switches from "http" to "https".

If this field is set to No, then on SSL pages, your banner will not appear. This is useful if your banner references graphics or content external to your site and would throw security alerts on SSL pages.

- Enter a name for your banner in the **Banner Title** field. This name will be displayed in the Banner Manager screen.

7. Choose a banner group that your banner should belong to in the **Banner Group** field.
8. The next part is a bit tricky, you have a choice of specifying whether you want a *normal* or *HTML Text* banner.

With *normal* banners, you just specify a banner image and a URL that users should be redirected to when they click on the banner. With *HTML Text* banners, you can have banners using Flash, Java Applets, etc. However, you will need to know HTML to properly configure this type of banners.

- To configure a normal banner:
 - In the **Banner URL** field, enter the web address of the site to which users will be redirected when they click on the banner.
 - Follow the on-screen instructions to specify the banner image in the **Image** field.
 - To configure an HTML Text banner:
 - Enter your customized HTML code into the **HTML Text** field. For example, you can enter `Yahoo Site` into this field to show a hyperlink which will redirect users to Yahoo's site if they click on it.
9. If you have specified BannersAll for the **BannerGroup** field previously, you can specify the sequence in which your banner will be displayed among all the banners in the group by entering a value into the **Sort Order - banner_box_all** field.
 10. If you would like your banner to be displayed starting from a certain date, enter a value in the **Scheduled At** field by choosing from the calendar that is displayed when clicking on the dark button next to the field. Leave this field blank if the banner is to be displayed immediately.
 11. You have a choice of disabling your banner display either on a certain date or based on the number of times that the banner has been displayed by entering suitable values into the relevant input box of the **Expires On** field. Leave this field blank if your banner is to be displayed forever.
 12. Click on **insert** to create your banner. You will be redirected to the Banner Manager screen once the banner is created.
 13. At the Banner Manager screen, make sure the **Status** button of the banner you just created is *green* or your banner will not be displayed in the Store Front.

Search Engine Optimization (SEO)

One of the most important things to do after getting your site online is to get it listed on search engines. By doing so, you are able to drive a greater amount of traffic to your site and subsequently increase your sales.

To get listed on a search engine you will need to submit the URL of your site and some personal details to the relevant search engine. Submission rules vary among different search engines so you will need to do some research. Since the rules on site submission to different search engines are updated constantly, we shall not show the steps here as they are likely to become obsolete soon after this book is published.

Once your application is approved, the search engine will send a little program called a “web-bot”, “robot” or “spider” to crawl and index your site pages. The robot then sends back the relevant data it has obtained from your site to the search engine and the algorithms in each search engine will decide how your site ranks when someone performs a search in that particular search engine.

Because robots are computer programs, they cannot “see” the pages like human beings. Instead, they can only see the source code that is used to render your web page in web browsers. To help these robots *understand* your site and content better, Zen Cart provides the following features to aid in their indexing work:

- Site Map
- Meta Tags

We shall use the term Search Engine Optimization (SEO) to describe the above features as they help make your site easier to understand to robots. Most people use the term to describe the methods used to make a site appear on top of page rankings instead. Getting on top of page rankings is a big deal for any online business because it increases the exposure of the business to customers and hence drives greater traffic to the site compared to sites that do not rank as high.

The two SEO methods described above are legal and widely-accepted by search engines as long as you do not abuse them. Other SEO methods might be targeted more for specific search engines. Regardless of which SEO method you use, do check that the method has not been outlawed by a search engine before using it. Search engines tend to change their rules periodically to prevent anyone from using a specific method to get listed on top of page rankings.



Warning

Watch out for *Search Engine Optimization* (SEO) companies that claim they can help you achieve top rankings in search results. Most of these companies employ means that can get you *banned* from ever appearing in search engines again!

Robots and Security

Session IDs are unique sequences of characters generated by web applications to keep track of users actions. Session IDs generated by Zen Cart are preceded by a “zenid” character. An example of a session ID appearing in a store's URL is shown below:

`http://www.example.com/store/index.php?main_page=index&zenid=af40be3714c3b6e70c83e958c1f6e1f6`

Session IDs appearing in search engine results can lead to some strange problems with your store. When multiple users click on the search engine result hyperlink with your session ID embedded in the URL, they could potentially see each others' carts and account details giving rise to security and privacy issues.

Besides the online risks of exposing your session IDs, you should also avoid exposing your store session IDs when displaying your store's URL in magazines, email signatures or other advertising material.

To turn off session ID indexing by robots:

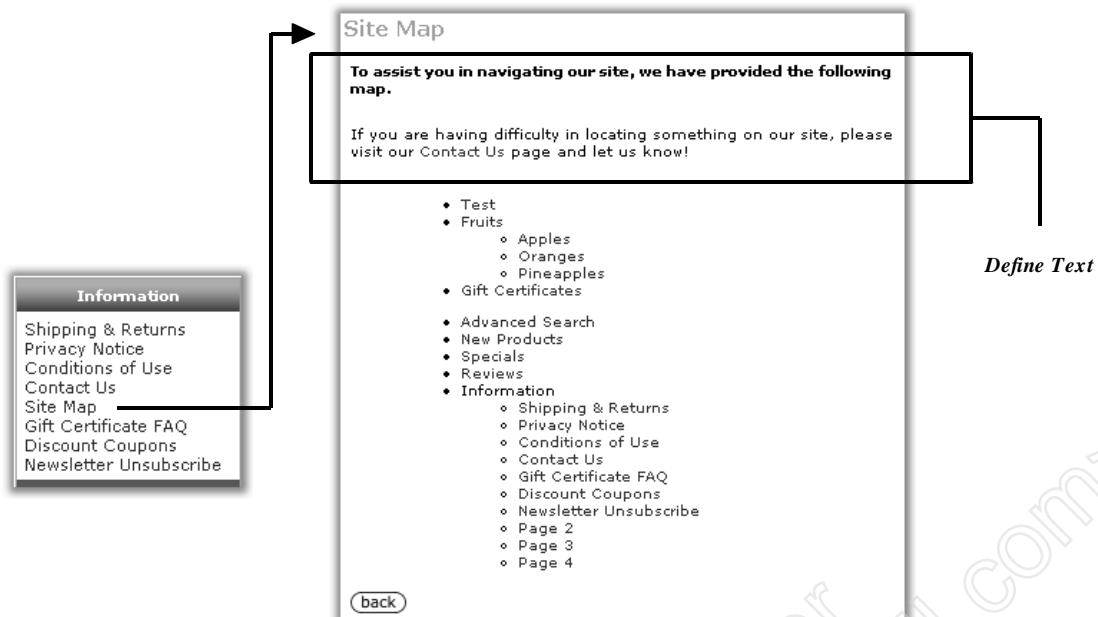
1. Click on **Configuration > Sessions** to access your Sessions screen.
2. Make sure the **Prevent Spider Sessions** field is set to True.



Tip

Advanced users who have defined their own custom web pages might want to consider looking at the file `<zc-home>/includes/languages/english/meta_tags.php`. You can add the names of specific pages to exclude from robot indexing in a line that contains the words “ROBOTS_PAGES_TO_SKIP”.

Site Map



When users click on the Site Map hyperlink in the Information side-box in your Store Front, they will be redirected to a page that shows the different products available in your store and how your store is organized. All this information is *automatically* generated by Zen Cart, and is clearly useful to visitors who might otherwise get lost in your store if you have a lot of content.

Besides being useful to humans, the site map is also beneficial for robots. This is because all the relevant pages in your store are conveniently located in a single place which eases the robot's task of crawling and indexing your site. Furthermore, robots are also able to derive useful relationships between the different products in your store as the structure of your site makes it easier to understand for them.

As a site map is automatically enabled and generated by Zen Cart, the only concern you may have with the site map is the privacy issues it can raise when robots start crawling your site. To address this concern, you should make sure that Zen Cart does not generate My Account hyperlinks in the site map so that robots do not have a chance of crawling them. This is because My Account pages contain sensitive information that should only belong to individual customers and not be indexed as part of your site's content.

To turn *off* the display of My Account links in a generated Site Map:

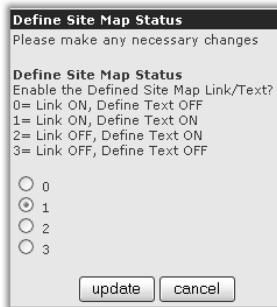
1. Click on **Configuration > Layout Settings** to access the Layout Settings screen.
2. Click on the **Site Map - include My Account Links?** field and concentrate on the side-panel.



3. Make sure the field is set to No before you click **update** to effect your changes.

To customize the look of your site map:

1. Click on **Configuration > Define Page Status** to access the Define Page Status screen.
2. Click on the **Define Site Map Status** field and concentrate on the right-panel.



3. Select your desired setting and click **update** to effect your changes.

To change the wordings of the template text in your site map, use the Template Override System to override the `<zc-home>/includes/languages/english/html/includes/define_site_map.php` file.

Meta Tags

Meta tags are special HTML tags that communicate information to web browsers and robots. They are not meant for human viewing and you can only see them when you view the HTML source code of a web page from within your web browser.

If you are using Mozilla Firefox, you can right-click on a web page and then click View Page Source on the pop-up menu to see the HTML source code associated with that page. Similarly, if you are using Internet Explorer, you can right-click on a web page and click View Source on the pop-up menu instead.

Any tag that contains the word “meta” is a meta tag; e.g. `<meta name="keywords">`.

Generally, there are two types of meta tags. The first type of meta tags are meant for web browsers. The following example meta tag tells your web browser what format and language the web page is encoded in so that your web browser knows how to display it properly.

```
<meta http-equiv="Content Type" content="text/html; charset=iso_8859_1" />
```

The other type of meta tags are meant for robots as they provide details of the contents in your store and help the

robots index your store pages according to your input. These are the meta tags that we will concentrate on and talk about for the rest of this chapter. The following example meta tag may be read by robots to understand the contents of your store better.

```
<meta name="keywords" content="fruits, grocery, apples, oranges, grapes">
```

Note that nowadays, the influence of meta tags on search engine results has been drastically reduced as other parameters are used by search engines to index and rank web sites.

Information you define for meta tags can be divided into the following categories:

- General Information
- Category and Product Information



Note

Although we shall be talking about the configuration of meta tags later, you will notice that the web browser title bar is also used by Zen Cart to provide information about your site. This is because robots can also make use of this information for indexing.

General Store Information

If you wish to have general information about your store appear in meta tags generated by Zen Cart, you will need to edit the <zc-home>/includes/languages/english/meta_tags.php file. The following sample contents are taken from the file.

```
// page title
define('TITLE', 'Zen Cart!');

// Site Tagline
define('SITE_TAGLINE', 'The Art of E-commerce');

// Custom Keywords
define('CUSTOM_KEYWORDS', 'ecommerce, open source, shop, online shopping');

// Review Page can have a lead in:
define('META_TAGS REVIEW', 'Reviews: ');

// separators for meta tag definitions
// Define Primary Section Output
define('PRIMARY_SECTION', ' : ');

// Define Secondary Section Output
define('SECONDARY_SECTION', ' - ');

// Define Tertiary Section Output
define('TERTIARY_SECTION', ' , ');
```

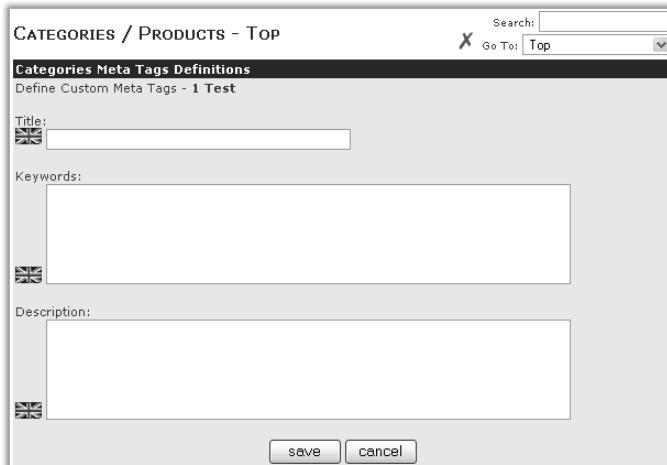
The information contained in this file will be *included* in other meta tags in some other pages that appear in your store. Remember to use the Template Override System if you want to make changes to the file.

Category and Product Information

To add category and product information to your meta tags, you will need to configure each individual category and product separately.

To create meta tags for a *category*:

1. Click on **Catalog > Categories/Products** to access your Categories/Products screen.
2. Navigate to your desired category and click on the “biohazard” button; i.e. the button with black and white quadrants.



3. Enter the name of the web page for the **Title** field. This name will be shown on the web browser title bar when a customer goes to the category page by clicking on the category hyperlink in the Categories side-box.
4. Enter the keywords you want to associate with the category in the **Keywords** field. For example, if you specify test, experiment for this field, your meta tag will show up as `<meta name="keywords" content="test, experiment">`.
5. Enter the description you want to associate with the category in the **Description** field. For example, if you specify testing purpose for this field, your meta tag will show up as `<meta name="description" content="testing purpose">`.
6. Click **save** to save your changes into the database.

To specify meta tags for a *product*:

1. Click on **Catalog > Categories/Products** to access your Categories/Products screen.
2. Navigate to your desired product and click on the “biohazard” button; i.e. the button with 4 black and white quadrants.

PRODUCT IN CATEGORY: "TEST"

Mark What the Product's Meta Tag Title Should Include:

Product Name:	Title:	Model:	Price:	Title/Tagline:			
<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> Yes	<input type="radio"/> No

 Products Name: Normal Test Product Products Model: Price: \$200.00

Meta Tag Title:	<input type="text"/>
Meta Tag Keywords:	<input type="text"/>
Meta Tag Description:	<input type="text"/>

NOTE: The Site/Tagline is your defined definition for your site in the meta_tags.php file.

3. Click the relevant radio buttons under the **Mark What the Product's Meta Tag Title Should Include** table heading to specify which piece of product information should appear in the title bar of a customer's web browser when the customer reaches the Product Info page in your Store Front.

To change the default values for the radio buttons, click on **Catalog > Product Types** to access the Product Types screen. Select a product type and click **edit layout** and then customize the following fields accordingly.

- **Show Metatags Title Default - Product Title**
- **Show Metatags Title Default - Product Name**
- **Show Metatags Title Default - Product Model**
- **Show Metatags Title Default - Product Price**
- **Show Metatags Title Default - Product Tagline**

4. Enter the name of the web page for the **Meta Tag Title** field. Depending on the settings of the radio buttons, this name might be shown on the web browser title bar *together* with other product information when a customer goes to the Product Info page in your Store Front. Note that other general keywords might also appear in the meta tag. Refer to "General Store Information" on page 352 for more information.
5. Enter the keywords you want to associate with the product in the **Meta Tag Keywords** field. For example, if you specify test, experiment for this field, your meta tag will show up as `<meta name="keywords" content="test, experiment">`. Again other general keywords might also appear in the meta tag.
6. Enter the description you want to associate with the product in the **Meta Tag Description** field. For example, if you specify testing purpose for this field, your meta tag will show up as `<meta name="description" content="testing purpose">`.
7. Click **preview** to proceed to the next screen which summarizes your product meta tag configuration.
8. Click **update** in that screen to confirm your changes.

Customizing Meta-Tag Appearances

To further configure meta tag appearances in the Product Info page of your Store Front:

1. Click on **Configuration > Product Info** to access the Product Info screen.
2. Edit the following fields accordingly:

- **Meta Tags - Include Product Model in Title**
- **Meta Tags - Include Product Price in Title**
- **Meta Tags Generated Description Maximum Length?**

Other Product Promotion Features

We shall now talk about some marketing features that are seldom noticed or used by store owners. Two of these features (Also Purchased Products and Best Sellers) are automatically enabled in Zen Cart while the third (Featured Products) needs to be configured.

Also Purchased Products

The Also Purchased Products feature is automatically available in Zen Cart. This feature is similar to a familiar marketing technique called “Cross-Selling” which aims to sell other related products to a customer when the customer is viewing a particular product. An example would be recommending nails when a customer is looking at a hammer in your store.

The Also Purchased Products feature works like this: When a visitor views a product in the Product Info page, Zen Cart will analyze whether the currently viewed product has ever been ordered together with other products by other customers. If the analysis is positive, those other products that were purchased by other customers will appear in the “Customers who bought this product also purchased...” center-box at the bottom of the Product Info page. The following screen shot gives you an idea of how things look.



Note that the recommended products appear *randomly* in the center-box. There is no way to specify which specific products should be recommended based on the currently displayed product.

To change the appearance of the “Customers who bought this product also purchased...” center-box:

1. Click on **Configuration > Product Info** to access the Product Info page.
2. Edit the **Also Purchased Products Columns per Row** field accordingly.

To specify how many eligible recommended products should be available before the center-box is shown:

1. Click on **Configuration > Minimum Values** to access the Minimum Values screen.
2. Edit the **Also Purchased Products** field accordingly. Hint: If you do not want the center-box to ever appear, specify a very high value for this field.

To limit the maximum number of eligible products displayed in the center-box:

1. Click on **Configuration > Maximum Values** to access the Maximum Values screen.
2. Edit the **Also Purchased Products** field accordingly.

Best Sellers

The Best Sellers feature displays a list of products that have made the most sales in your store. It takes advantage of the curiosity factor in humans which wants to find out what and why others are buying. This is especially so if customers are looking for goods that are “safe-bets” as gifts for loved ones.



If you do not see the Bestsellers side-box in your store, click on **Tools > Layout Boxes Controller** and then edit the **sideboxes/best_sellers.php** field.

To set the minimum number of eligible best sellers before the Bestsellers side-box will be displayed:

1. Click on **Configuration > Minimum Values** to access the Minimum Values screen.
2. Edit the **Best Sellers** field accordingly.

To set the maximum number of best sellers that should be displayed in the Bestsellers side-box:

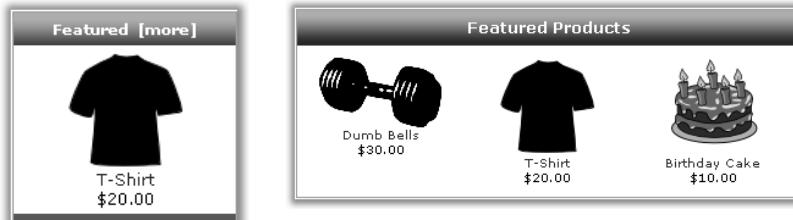
1. Click on **Configuration > Maximum Values** to access the Maximum Values screen.
2. Edit the **Best Sellers For Box** field accordingly.

To configure other Bestsellers side-box settings:

1. Click on **Configuration > Layout Settings** to access the Layout Settings screen.
2. Edit the following fields accordingly.
 - **Bestsellers - Number Padding**
 - **Bestsellers - Truncate Product Names**
 - **Bestsellers - Truncate Product Names followed by ...**

Featured Products

Featured Products allow you to showcase certain products distinctively across several areas of your store as shown in the following screen shots.



There are many reasons why stores might want to put products in a designated “feature” area. For example, if a store has the rights to sell a very limited edition of a branded game console, the store could market the console as a featured product to build up interest and bring in pre-orders before the actual launch of the product.

Take note of the following differences between Specials (discussed on page 229) and Featured Products:

- Specials always include a discount whereas Featured Products have the option of not having a discount.
- Specials can also be positioned as Featured Products too.

To create a featured product:

1. Click on **Catalog > Featured Products** to access the Featured Products screen.

FEATURED PRODUCTS						
NOTE: status is auto enabled/disabled when dates are set						
ID#	Products	Model	Available	Expires	Status	Action
17	Beginner Drum Lessons		09/18/2006	09/05/2007	<input checked="" type="checkbox"/>	  
14	Birthday Cake		--none--	--none--	<input checked="" type="checkbox"/>	  
15	Dumb Bells		--none--	--none--	<input checked="" type="checkbox"/>	  
9	T-Shirt		09/29/2006	--none--	<input checked="" type="checkbox"/>	  

2. Click on **new product** to access the Featured Products details screen.

FEATURED PRODUCTS	
NOTE: status is auto enabled/disabled when dates are set	Search: <input type="text"/>
Product: Free Shipping Test Product (\$100.00) - ID# 3 Free Test Product (\$0.00) - ID# 2 Free Test Product with Free Shipping (\$0.00) - ID# 20 Hotel Accomodation (\$20.00) - ID# 10 Laptop (\$2,359.00) - ID# 16	
Available Date:	<input type="button" value="▼"/>
Expiry Date:	<input type="button" value="▼"/>
<input type="button" value="insert"/> <input type="button" value="cancel"/>	

3. Choose a product from the **Product** field.
4. Optionally, choose a future date for the **Available Date** field by clicking on the dark button next to the field to pop up a calendar, if you want the product to be placed on Featured on the future date. Leave the field blank if you want the product to be placed on Featured immediately.

5. Optionally, choose a future date for the **Expiry Date** field by clicking on the dark button next to the field to pop up a calendar, if you want the product to be removed from the Featured Product areas on that date. Leave the field blank if you want the product to be placed on Featured forever.
6. Click **insert** to create the Featured Product.

To view statistics for Featured Products in your store, click on the **Admin Home** hyperlink near the top of your Admin Console. Look at the following fields under the **Statistics** table.

- Featured Products Expired
- Featured Products Active

Specials Expired	0
Specials Active	0
Featured Products Expired	2
Featured Products Active	2
Sales Expired	0
Sales Active	0

Summary

As you have seen, Zen Cart provides a wide variety of techniques to help you achieve your marketing aims. Experiment with those marketing features that interest you and assess their effectiveness by examining the relevant statistics. With imagination and hard work, you should be able to tune your marketing strategies to generate profits for your business.

Chapter 22 System Administration

Introduction

Proper system administration ensures that your online store stays secure and performs reasonably when users visit your store. System administration may not be directly related to your business logic but it can affect the smooth operation of your online store.

In this chapter, we shall:

- Examine general system administration tasks.
- Learn to properly back up files and database.
- Consider important security settings.
- Look at factors that contribute to site performance bottlenecks.
- Look at how you would upgrade your Zen Cart to a newer version.



Note

This section assumes you have some experience running an online store on a remote host. If you do not have such knowledge, please see Appendix B, “Setting Up Shop On The Internet” first.

General Tasks

We shall now discuss some of the general system maintenance tasks that you may need to perform from time to time.

Changing Administrator Details

Zen Cart provides a simple interface for managing administrator accounts. All administrator accounts have full access to the store so you should consider carefully before assigning an administrator account to another person.

To add an administrator or change an administrator's details:

1. Click on **Tools > Admin Settings** to access the Admin Settings screen.

ADMIN SETTINGS					
ID	Admins Name	Email	Action	admin	
1	admin	webmaster@example.com	  	edit	reset pwd
Displaying 1 to 1 (of 1 admins) Page 1 of 1					
insert					

2. To reset an administrator's password:

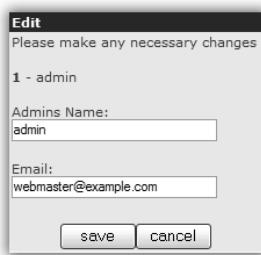
- 2.1. Click on **reset pwd** and concentrate on the side-panel.



Reset Password
Please make any necessary changes
1 - admin
Password: * Required
Confirm Password: * Required
save cancel

- 2.2. Type in the *new* password you want to use in both the **Password** and **Confirm Password** fields. Note that passwords in Zen Cart are *case-sensitive* and must exceed 5 characters in length by default.
- 2.3. Click **save** to update your new administrator password.
3. To edit the details of an existing administrator:

- 3.1. Click on **edit** and concentrate on the side-panel.



Edit
Please make any necessary changes
1 - admin
Admins Name: admin
Email: webmaster@example.com
save cancel

- 3.2. Change the details of the administrator by typing in values for the fields **Admins Name** and **Email**.
- 3.3. Click **save** to update your administrator details.
4. If you would like to add another administrator, just click on **insert** to begin the process. All fields on the corresponding side-panel are self-explanatory and will not be explained here.



Tip To change the minimum password length for administrators, click on **Configuration > Minimum Values** and edit the field **password**. Think carefully before performing this step because this change will affect *all* customer accounts as well.

Checking Server Time

If your site is hosted on a remote server, it is important to know whether there is any difference between the *server* time and your *local* time. Knowing this time difference allows you to better understand when payments are received and also when orders are issued. All your orders and log files are recorded in *server* time. Therefore, you should translate from *server* time to the *local* times of your customers when answering customer queries regarding their orders or shipping dates.

To check the time on your server:

1. Click on **Tools > Server/Version Info** to access the Server Information screen. A portion of that screen is shown in the following screen shot.

Server Information

Server Host: (192.168.0.10)	Database Host: localhost (127.0.0.1)
Server OS:	Database: MySQL 4.1.14
Server Date: 09/14/2006 03:45:25	Database Date: 09/14/2006 03:45:24

2. The server time is found in the following two fields.

- **Server Date**
- **Database Date**

If you notice a significant difference between the two fields, you should immediately alert your web hosting provider and find out the reason.

Website Maintenance

There will be times when you need to close your online store for a short period of time. You could use this time to do a stock take, do a Zen Cart version upgrade or simply to back up all your data. You can inform customers about an impending service disruption by placing your site in *maintenance* mode.

When your store is placed in maintenance mode, customers can still reach your website. However, they will see a message indicating that your store is undergoing maintenance and will not be able to perform any transactions. A sample screen shot of what a customer may see for a store placed under maintenance mode is shown in the following screen shot.



Although a web site can be placed in maintenance mode immediately, most web sites will inform customers a few days or weeks ahead before doing so. This leaves a better impression on users because they will not begin to suspect that you had to place your site under maintenance to handle an emergency (e.g. hackers).

When configuring settings for web site maintenance, always specify the time values in *server* time instead of your local computer time. Furthermore, try to set the time in GMT or another timezone format to cater to international users.

To place your store in maintenance mode:

1. Click on **Configuration > Website Maintenance** to access the Website Maintenance screen.

WEBSITE MAINTENANCE	
Title	Value
Down for Maintenance: ON/OFF	false
Down for Maintenance: filename	down_for_maintenance
Down for Maintenance: Hide Header	false
Down for Maintenance: Hide Column Left	true
Down for Maintenance: Hide Column Right	true
Down for Maintenance: Hide Footer	false
Down for Maintenance: Hide Prices	false
Down For Maintenance (exclude this IP-Address)	your IP (ADMIN)
NOTICE PUBLIC Before going Down for Maintenance: ON/OFF	false
Date and hours for notice before maintenance	15/05/2003 2-3 PM
Display when webmaster has enabled maintenance	false
Display website maintenance period	false
Website maintenance period	2h00

2. To put your store in maintenance mode *immediately*, set the **Down for Maintenance: ON/OFF** field to true.
3. If your store is *already* in maintenance mode; i.e. **Down for Maintenance: ON/OFF** is set to true.
 - 3.1. Set the **Display when web master has enabled maintenance** field to true if you want to inform users *when* your site was placed under maintenance.
 - 3.2. Set the **Display website maintenance period** field to true if you want to display the value specified for the **Website maintenance period** field. Preferably, leave this option as false because you do not want to pressurize yourself and disappoint your customers if you cannot complete your maintenance on time.
 - 3.3. Enter a value for the **Website maintenance period** field to inform visitors how long you expect the site to be down for maintenance.
 - 3.4. Set the **Down For Maintenance (exclude this IP-Address)** field with a list of IP addresses that will still be able to access all the *normal* store functions like buying products and checking out.
 - This setting is good for cases where you have set up a store but would like to do further testing on normal store functions before allowing access to real-world customers.
 - The IP address of a store owner can be seen on the Admin Console's menu bar next to the date. You can copy that IP address and paste it into this field if you intend to access your store normally when your site is under maintenance and may require updating each time you go into maintenance mode.
 - 3.5. Modify the following fields accordingly to specify how your store should look when visitors reach your site while it is under maintenance:
 - **Down for Maintenance: Hide Header**
 - **Down for Maintenance: Hide Column Left**
 - **Down for Maintenance: Hide Column Right**
 - **Down for Maintenance: Hide Footer**
 - **Down for Maintenance: Hide Prices**
4. If your store is *not* in maintenance mode; i.e. **Down for Maintenance: ON/OFF** is set to false.
 - 4.1. Set the **NOTICE PUBLIC Before going Down for Maintenance: ON/OFF** field to true if you want the value in the **Date and hours for notice before maintenance** field to be displayed in your Store Front. Note that if the **Down for Maintenance: ON/OFF** field has been set to true, the **NOTICE PUBLIC Before going Down for Maintenance: ON/OFF** field will be ignored and no maintenance notification will be displayed.

- 4.2. Enter the desired time for the beginning of your website maintenance in the **Date and hours for notice before maintenance** field. Your store will *not* be placed in maintenance mode automatically when this date is reached.
5. Leave the **Down for Maintenance: filename** field alone. This field specifies which program file in Zen Cart should handle the programming logic behind the website maintenance module.

To enable EZ-Pages to be viewed by store owners accessing the store from IP addresses specified in the **Down For Maintenance (exclude this IP-Address)** field of the Website Maintenance screen:

1. Click on **Configuration > EZ-Pages Settings** to access the EZ-Pages Settings screen.
2. Set your desired field to a value of 2.
 - **EZ-Pages Display Status – HeaderBar**
 - **EZ-Pages Display Status – FooterBar**
 - **EZ-Pages Display Status – Sidebox**

Viewing Who's Online Information

Both site visitors and administrators are able to view information regarding other visitors who are currently accessing an online store. However, a customer's view and an administrator's view of information pertaining to other visitors is different.

The Customer's View



The Who's Online side-box allows a customer to see the total numbers of users currently browsing the same online store. No detail on individual customers are provided.

This feature is not very useful unless you have a community-driven site where users can reach out to each other in real-time and communicate. To disable this side-box, click on **Tools > Layout Boxes Controller** and edit the **sideboxes/whos_online.php** field under Box File Name accordingly.

The Administrator's View

Store owners can see more information relating to the customers visiting their store. They can use this information to ascertain which pages are the most popular, where most of the customers come from, etc. This information can also be used for system maintenance purposes. For example, you can check that you do not have any users before you bring your site down for maintenance.

To see information regarding who is currently online:

1. Click on **Tools > Who's Online** to access the Who's Online screen. A list of users currently using your system will be displayed.

The screenshot shows the 'Who's Online' section of a Zen Cart store. It includes a legend for active/inactive status and cart status. A note says inactive users are removed after 180 seconds. It shows 1 customer online. The main table lists the user 'YGuest' with IP 127.0.0.1, session 689c890b6ad00b358e8854902ea7525b, and last viewed 05:59:37. A detailed view of the user's shopping cart shows a single item: '1 x Plasma TV' with a subtotal of \$4,999.00. The page also displays a note about unique visitors and duplicate IP addresses.

2. Click on the **REFRESH LIST** hyperlink to see the latest statistics.

You can learn a lot of interesting stuff about your site visitors using this screen, so make sure you read through the legend and other statistics in smaller print.

Backing Up Your Store's Data

Make sure you back up your data routinely. This point cannot be overstated enough because your business depends on it. Imagine if your database gets corrupted for some reason, how are you going to deliver your goods to customers who have already paid up? Your reputation is at stake and you may even end up in court to face legal proceedings.

Before performing your backup, make sure that there are no users online and your site has been placed under maintenance mode.

There are essentially two things you need to back up.

- File system.
- Database.

File System Back Up

If your site is hosted remotely, you can copy all the files you want to back up into your local machine via an FTP program.

If you prefer to do a *minimum* back up, you just need to back up the following files:

- All the files you have changed.
- All the images and modules you have uploaded

If you are paranoid, you can perform a *full* backup by copying all files from the <zc-home> directory of your remote web host to your local computer.

Database Back Up

This is the most important backup because most of your system settings and all your customer, payment and order data, etc, are stored here. If anything goes wrong or you feel that your database is corrupted, you can always recover your database via a database backup file.

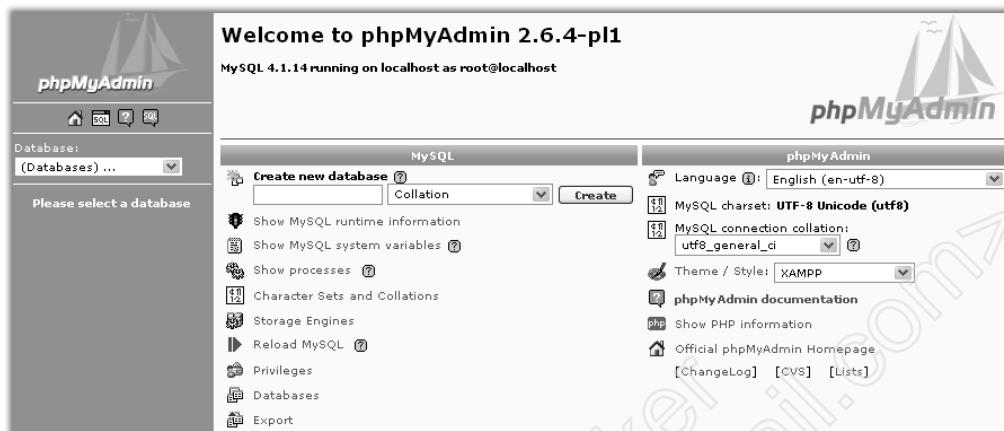
If your site is hosted remotely, you will most likely be supplied with phpMyAdmin to back up your database. If you

do not have phpMyAdmin installed, check with your web host on how you can back up your database.

To familiarize yourself with the database back up procedure, we shall use the phpMyAdmin that comes with XAMPP to perform a back up of the online store on your local machine. Note that there might be slight interface differences between the version of phpMyAdmin that comes with XAMPP and the one provided by your web hosting provider.

To back up your database using the phpMyAdmin that comes with XAMPP:

1. Access the phpMyAdmin web interface (<http://www.example.com/phpmyadmin>).



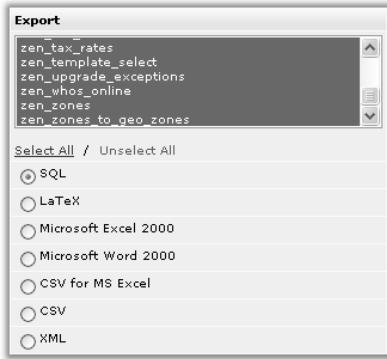
2. Select the database which you used to set up Zen Cart during your installation from the drop-down list box on the left-panel.



3. You should see all the tables in your store's database listed on the right-panel of your screen.



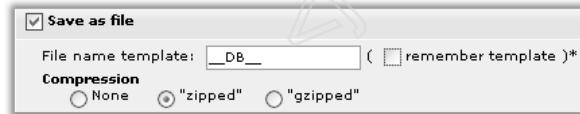
4. Click on the **Export** tab near the top of the screen to go to the next screen where you can specify your details on how to export data from your database.
5. Click the **Select All** hyperlink under the **Export** section to select all the tables in your store for export. Make sure the radio button is set to SQL.



6. Use the settings displayed in the following screen shot for the **SQL options** section on your screen. Only *check* the **Add DROP TABLE** option if you want to be able to use the backed-up data to *override* an *existing* database!



7. Check the **Save as file** check-box and enter a filename in the **File name template** field. This will allow you to save the backup as a normal text file. Click the **Compression** radio button of your choice. Note: Do *not* check the **remember template** check-box.



8. Click **Go** to begin the backup process.
9. After the backup process completes, your browser will prompt you to save the backup file in your local machine.

To recover your database using the backup file:

1. Repeat Steps 1 – 3 above.
2. Click on the **SQL** button on the top row of tabs and a screen will appear with details on how you can import data into your database.

3. Choose the backup file you saved previously in Step 9 above by clicking the **Browse** button.
4. Click on the **Go** button next to the **character set of the file** drop-down list box to begin your database recovery process. If errors occur during the recovery process, unzip the backup file on your local computer and then repeat from Step 3 using the unzipped file.
5. After your backup process completes, log in to your Admin Console and Store Front and run some test transactions to make sure everything is recovered properly.

Addressing Security Concerns

Security is a big and intimidating topic in all IT-related systems and a whole book will be required to write about all aspects of this topic. Therefore, to reduce the scope of security coverage, we will only be touching on issues specific to your Zen Cart web site in this book

Before we begin, if you have a local copy of Zen Cart installed, you can open up `<zc-home>/docs/important_site_security_recommendations.html` in your web browser to run through a list of things you can do to make your site more secure.

File Permissions

Misconfigured file permissions allow hackers to easily gain unauthorized access to your system. Therefore, you should pay careful attention to the permissions you set for certain Zen Cart directories when your site is hosted on a remote server.

Before we continue, make sure you understand how file permissions are specified for your operating system. For example, Linux and Unix file permissions come in *read*, *write* and *execute* modes which is represented using three numbers; i.e. `chmod 777`. Windows permissions, on the other hand, are less complicated and less powerful.

Because most web hosts use Linux-based or Unix-based servers, we shall use Unix-style permissions to explain how file permissions should be set for certain directories in your Zen Cart directories. For files hosted on a remote server, you can use a GUI-based FTP program to alter file permissions directly. For more details of FTP programs, refer to Appendix A, “Utility Software”.

The following directories under `<zc-home>` should be set to *writable* and *readable* in Linux/Unix environments after installation. After your store has been set up properly, their permissions should be tightened again.

- `/cache`
- `/pub`
- `/images`
- `/includes/languages/english/html_includes`
- `/admin/backups`
- `/admin/images/graphs`

All these files under `<zc-home>` must be set to *user-executable* only (i.e. `chmod 444` or `644` in Linux/Unix).

- `/includes/configure.php`
- `/admin/includes/configure.php`

If your site is hosted on Windows or Mac, please check with your site administrator as to how you can achieve the same effect as the preceding permission levels for the relevant files and directories.

Secure Sockets Layer (SSL)

Secure Sockets Layer (SSL) ensures that the traffic between users' browsers and your server is secure and not open to sniffing by hackers. SSL capability is achieved by placing a *digital certificate* on your web server.

Although many web hosts provide you with a *shared* certificate for free, it is recommended that you fork out some money and get yourself a *dedicated* certificate instead. A dedicated certificate ensures that the certificate is uniquely identified with your domain. With shared certificates, web browsers usually pop up a dialog box warning users that the site they are dealing with is not who they claim to be. The latter scenario looks unprofessional and users might decide to leave when they encounter the pop-up warning; thus abandoning their carts altogether.

Although you can configure SSL for your entire site, this is not advisable. SSL requires intensive computing resources because of the encryption and decryption processes and thus slows down your site tremendously.

Instead, SSL is usually configured only for certain areas of your site where information confidentiality is of utmost importance. Some areas on your site which will benefit from the use of SSL are:

- Customer login/sign-up page
- Customer checkout page
- Admin login page
- Admin catalog modification page

Configure SSL Support for Your Store

There are essentially two files in Zen Cart you need to edit for SSL support:

- <zc-home>/includes/configure.php
 - ➔ Changes to this file affects SSL access to your Store Front. Zen Cart will automatically redirect customers to a secure checkout process via SSL. Customers will also be automatically redirected to a SSL page during sign up or log in.
- <zc-home>/admin/includes/configure.php
 - ➔ Changes to this file affects SSL access to your Admin Console. Zen Cart will automatically redirect the store owner to an SSL page when a login to the Admin Console is performed.

Make sure you have a valid SSL certificate installed on your web host before proceeding to configure your site. Your web host will be the one to install the certificate on the server. Once you have SSL configured properly, users who access SSL-enabled pages on your site should see a "lock" icon appearing at the bottom of their browser windows as shown below.



If you cannot get SSL to work properly on your site, you will need to check with your web hosting provider.

Test Out SSL Configuration on the Store in Your Local Computer

Since XAMPP already comes with a certificate installed and you have created a sample domain

(<http://www.example.com/store>) on your local computer, you can have some hands-on practice in configuring SSL for the store in your local computer before you do it on your remote server.

To set up Zen Cart to automatically switch to SSL during a customer login or account checkout, edit the file `includes/configure.php` and change the following lines accordingly.

```
define('HTTP_SERVER', 'http://www.example.com');
define('HTTPS_SERVER', 'https://www.example.com');

define('ENABLE_SSL', 'true');

define('DIR_WS_CATALOG', '/store/');
define('DIR_WS_HTTPS_CATALOG', '/store/');
```

To set up Zen Cart to automatically switch to SSL for an administrator during log in and catalog manipulation, edit the file `admin/includes/configure.php` and change the following lines accordingly

```
define('HTTP_SERVER', 'http://www.example.com');
define('HTTPS_SERVER', 'https://www.example.com');
define('HTTP_CATALOG_SERVER', 'http://www.example.com');
define('HTTPS_CATALOG_SERVER', 'https://www.example.com');

define('ENABLE_SSL_CATALOG', 'true');
define('ENABLE_SSL_ADMIN', 'true');

define('DIR_WS_ADMIN', '/store/admin/');
define('DIR_WS_CATALOG', '/store/');
define('DIR_WS_HTTPS_ADMIN', '/store/admin/');
define('DIR_WS_HTTPS_CATALOG', '/store/');
```

Perform the following checks to verify that SSL has been configured properly for your store.

1. To check that admin login will automatically switch to SSL:
 - Enter <http://www.example.com/store/admin> into your web browser URL location. Ignore any warnings from your web browser if it complains that it does not recognize the SSL certificate or that it has expired. You will automatically be redirected to a SSL-secured site with the following URL - <https://www.example.com/admin/store/login.php>.
2. To check that customer login or sign-up will automatically switch to SSL:
 - Go to your Store Front and click on the **Login** hyperlink. You will automatically be redirected to a secure page to enter your login credentials. After you have logged in, you will be redirected back to a non-secure page.
3. To check that customer checkout will automatically switch to SSL:
 - Go to your Store Front and purchase a test product. Once you initiate a checkout, you will automatically be redirected to a SSL page to complete the transaction.

Sessions

Sessions are your server's way of keeping track of who you are. There are a number of ways your server can do this, most notably using cookies.

Zen Cart allows you to configure how sessions are controlled. The default settings are sufficient in most cases, so unless you are a developer, you are unlikely to change any settings here. Nevertheless, it is always good to know

there is such a feature in case you need to use it.

General Session Settings

Click on **Configuration > Sessions** to access the Sessions screen.

SESSIONS		
Title	Value	Action
Session Directory	C:/dev/server/xampp/htdocs/store/cache	►
Cookie Domain	True	ⓘ
Force Cookie Use	False	ⓘ
Check SSL Session ID	False	ⓘ
Check User Agent	False	ⓘ
Check IP Address	False	ⓘ
Prevent Spider Sessions	True	ⓘ
Recreate Session	True	ⓘ
IP to Host Conversion Status	true	ⓘ

The default values should work well for most servers. Do not make any changes here unless you are absolutely sure you know their consequences. Most of these settings will only make sense to advanced users with web programming knowledge, so do not worry too much if you are lost.

Admin Session Setting

There is an additional setting that controls how long a logged in administrator is allowed to remain inactive before Zen Cart automatically logs out the administrator. The default value is 3600 seconds; i.e. 60 minutes.

To change the duration of inactivity for a administrator in the Admin Console, click on **Configuration > My Store** and set your desired value for the **Admin Session Time Out in Seconds** field.

Viewing Customer's Session History

Zen Cart provides a convenient view of your customer's session history in a Counter History table. This table can be accessed by clicking on **Admin Home** in the navigation menu of your Admin Console.

Counter History for last 10 recorded days	
Session - Total	
04/24/2006	6 - 32
04/23/2006	7 - 53
04/22/2006	4 - 75
04/21/2006	1 - 1
04/20/2006	4 - 85
04/19/2006	3 - 96
04/18/2006	1 - 2
04/17/2006	4 - 7
04/16/2006	1 - 2
04/15/2006	3 - 18

The information displayed in the table shows you the statistics for each day - the *unique* number of session hits to your site and the *total* session hits to your site. In layman terms, this means how many unique visitors came to your site, and the total number of pages viewed by all visitors. For example, if a customer visits your store once that day and moves around 5 pages before leaving, you will see a statistic of "1 - 5". If another customer came that day and viewed 10 pages, you will see a statistic of "2-15".

Log Files

If your online store is hosted on a remote server, your web hosting provider will likely have log files configured to record information about your online store. These *server* log files are an important source for troubleshooting your application or identifying hacking attempts.

Although these files can be a bit unwieldy to read and understand for non-technical people, you should still find out from your web host where they are located and then download them periodically. If you encounter any problems with your online store (fraud, hacking attempts, etc), you can then turn over these log files to experts for analysis.

The main *server* log files you should have access to are listed below:

- Apache web server log file.
- MySQL database log file.

Improving Site Performance

Performance issues are usually the most frustrating to resolve because complaints are usually based on perceived experiences. For example, a customer can call you to say your online store is behaving slowly today compared to yesterday. But your question will be how *slow* is the site? This is because you know that sometimes the server will be slightly slower if there are too many users accessing it at the same time.

We will restrict our performance discussions strictly to what you can achieve with Zen Cart instead of topics like hardware upgrades, network selection, etc. This helps sharpen our focus and allows you to concentrate only on tasks that are directly within your control.

Gathering Performance Statistics

Always be *objective* and gather useful statistics for your server before deciding whether to look into how to improve your server performance. Indeed, such statistics will also be the reference point which you use to conclude whether your performance tuning has yielded any measurable results.

Page Parse Time

For each page that is dynamically generated, Zen Cart is able to log the amount of time required to process that page. The page parse time can either be displayed in real-time in your Store Front or be recorded in a separate log file on your server which can be downloaded for off-line analysis.

To analyze your page processing performance:

1. Click on **Configuration > Logging** to access your Logging screen.

LOGGING			
Title	Value	Action	Store Page Parse Time
Store Page Parse Time	false	►	<input type="button" value="edit"/>
Log Destination	/var/log/www/zen/page_parse_time.log	①	① Store the time it takes to ① Parse a page ① Date Added: 09/07/2006
Log Date Format	%d/%m/%Y %H:%M:%S		
Display The Page Parse Time	false		
Store Database Queries	false		

2. If you want to have a separate log file generated for *off-line* analysis, set the following fields.

- 2.1. Set the **Store Page Parse Time** field to true to enable logging to a server file.
- 2.2. Set the name of an existing file in the **Log Destination field** to store the page parse time data. For example, if you are on Windows, you can set this value to D:\test.txt for testing purposes.
- 2.3. If you want to change the display format of the entries in the log file, you can enter the appropriate value in the **Log Date Format** field.
- 2.4. If you are running PHP 4, you have the option of storing database queries in the log file by setting the **Store Database Queries** field to true.

The following screen shot of a sample off-line file that is generated by Zen Cart is shown to give you an idea of how the contents of a log file might look like.



test.txt - Notepad

File Edit Format View Help

```
29/06/2006 17:19:57 [0.444s] /store/admin/configuration.php?gID=10&cID=201
29/06/2006 17:20:04 - /store/index.php?main_page=product_info&products_id=30 (1.556s)
29/06/2006 17:20:07 - /store/index.php?main_page=contact_us (1.184s)
29/06/2006 17:20:10 - /store/index.php?main_page=product_reviews_info&products_id=9&reviews_id=5 (1.336s)
29/06/2006 17:20:14 - /store/index.php?main_page=product_info&products_id=9 (1.478s)
```

3. If you also want to have *real-time* logging statistics displayed in the Store Front, set the **Display The Page Parse Time** to true. A screen shot of how the page parse time will be displayed at the bottom of your Store Front is shown below.

Parse Time: 1.329 - Number of Queries: 195 - Query Time: 0.696673444519

Remember to turn off page parsing after you feel you have gathered enough data to help you troubleshoot your performance problem. If page parsing is left enabled, it can also be a performance drain on your server since it requires more processing for each page to load.



Warning Ensure that the directory holding the page parse time log file restricts viewing by normal website visitors. A simple approach is to give the log file a unique name and place it under the admin directory of your Zen Cart installation. The admin directory is `<zc-home>/admin` unless it has been renamed.

User Load

User load refers to the number of page hits to your online store. This is usually the number of page views by your site visitors but it can also include indexing activities by a search engine robot. For the purpose of our discussion, we shall not discuss search engine indexing activities as they do not play a big part in the statistics related to user load.

When we spoke about customer session history on page 370, we came across the Counter History table. You can use the statistic in that table to quickly identify the user load on your site for a *particular day*. If a sudden spike in user load is detected, you should not be surprised if your site behaves slower than normal.

Another use for the Counter History table is to determine the average number of visitors to your site over a period of time by performing a *manual* calculation. With this information, you can then decide what a reasonable response time for your web site performance is. Thus, if your customer complains that a page is taking too long to load, you

can refer to your desired response time and provide an appropriate reply.

To identify the user load on your site over a *period of time*, you should refer to the Hit Counter statistic found under the Statistics table in your Admin Home page.

Statistics	
Hit Counter Started:	09/07/2006
Hit Counter:	3208

To reset the value in the Hit Counter field, click on **Tools > Store Manager** and edit the **Update Counter** field accordingly before clicking **reset**. Note that the Hit Counter Started field in the Statistics table will not be updated to the latest date.

Update Counter
to a new value:

Checking Server Uptime

Server uptime shows how long your server has been running since the last system restart. If a system is restarted, your Zen Cart customers may perceive a disruption in their shopping experience.

Before we continue, note that some web hosts might not allow the server uptime information to be made available via the Zen Cart Admin Console. In that case, you will have to check with your web host.

To enable Zen Cart to check how long your server has been running:

1. Click on **Configuration > My Store** to access the My Store screen.
2. Make sure the **Server Uptime** field is enabled.

To check how long your server has been up and running:

1. Click on **Tools > Server/Version Info** to access the Server Information screen.
2. The uptime is found in the **Server Up Time** field.

Check with your web host if you find that your server has been constantly restarted (i.e. uptime is always a few days). This might explain why your site is performing slowly because they might just be performing upgrades to the server while your store is still running.

Enabling GZip Compression

GZip compression enables the faster display of web page contents in a web browser. If GZip compression is enabled, the server first compresses the contents of a web page before delivering to a customer's web page. When the page reaches the customer's end, the web browser will automatically uncompress and display the contents to the customer.

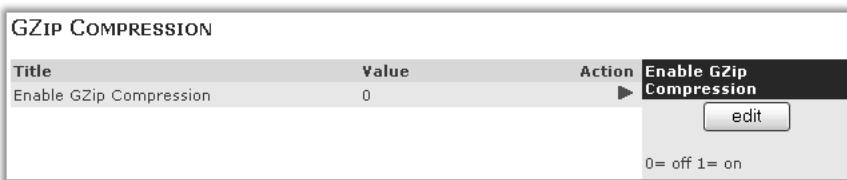
If GZip compression has been enabled, you will notice that your browser window goes blank for a while before the actual page you requested is displayed.

Note that some web hosting providers turn on PHP Output Buffering and GZip compression by default. In such cases, you should *not* turn on GZip compression in Zen Cart as you will be recompressing already-compressed content, thus slowing things down rather than gaining speed.

You can ask your web hosting provider whether GZip compression is on by default in their PHP configuration; or you can click on **Tools > Server/Version Info** and check the value for the **output_buffering** field. If GZip compression is on, the value of the **output_buffering** field will show as either On or 1.

To turn on GZip compression in Zen Cart:

1. Click on **Configuration > GZip Compression** to access the GZip Compression screen.



2. Set the **Enable GZip Compression** field to 1.

Although this feature can minimize your CPU and bandwidth loads tremendously, some older browsers do not support it. Use your own discretion to decide whether you want to enable this feature.

Optimizing Image Sizes

Image size is usually the main cause of why web pages load slowly and it is also the main consumer of bandwidth on your site. Therefore, you should always optimize your images by reducing their file sizes if you find your site is loading slowly.

As a general guideline, you can reduce the size of your *product* images to 30 kilobytes each. Icon images are usually small enough in size so you can ignore them when optimizing your images. For other images, you will need to decide for yourself as you need to balance the need for visual clarity and appeal against speed.

For store owners, the file size limit for images they upload is indicated by the **upload_max_filesize** field under **Tools > Server Info**. If an image exceeding this limit is uploaded, the file will not be uploaded and no warning messages will be displayed.

Reducing Database Reads

One of the most common and effective ways to improve your site performance is to reduce the number of database read operations. One of the biggest culprits of excessive database reads is the *category count* that you see next to your catalog entries in your Categories side-box.

To remove the category count from your catalog:

1. Click on **Configuration > My Store** to access your My Store screen.
2. Make sure you set **Show Category Counts** to false.

As most side-boxes and feature listings may also involve a lot of database reads, try to turn off all those that are not

essential to your customers; manufacturer's side-box, who's online, etc.

Optimizing Your Store's Database

Another technique to improve database performance is to delete unwanted records that have been deleted by the Zen Cart program but are still present in the database. This action should be performed periodically and preferably at a time when your store does not have many customers as it will impact the database performance during that time.

To optimize your database:

1. Click on **Tools > Store Manager** to access your Store Manager screen.
2. Go to the bottom of the screen and you will see a section similar to the following screen shot.



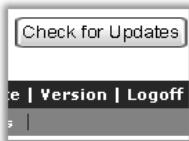
3. Click on **confirm** to begin optimizing your database.
4. After the cleanup is completed, a message indicating how many database tables were affected will be displayed.

Upgrading Your Zen Cart Installation

From time to time, you will have to perform upgrades to your Zen Cart installation. This could be because you want to utilize features in a more recent version or you need to upgrade to higher versions to patch security loopholes.

Checking Your Zen Cart Version

To check for available updates to your Zen Cart store, click on **Configuration > My Store** and enable the **Show if version update available** field. To check whether you are running the latest version of Zen Cart, click on the **Check for Updates** button at the top-right corner of your Admin Console as shown in the following screen shot.



Obtaining the Latest Upgrade Instructions

Whenever a new version of Zen Cart is available, an announcement will be posted in Zen Cart's forum. Details on how to perform an upgrade are also posted there. As upgrade instructions may vary from version to version, we shall not cover them here.

Summary

After completing this chapter, you should be able to identify areas that makes your online store perform better and more securely. You have also seen how to perform proper backups of your important data and guidelines to upgrading your Zen Cart installation. Although the techniques here are not directly related to your business objectives, do not ignore them as they play an important part in the smooth operation of your online store.

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Appendices

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Appendix A Utility Software

Introduction

Besides the standard web browser (Internet Explorer, Mozilla Firefox, etc), email clients (Microsoft Outlook, Mozilla Thunderbird, etc) and file compression tools (WinZip, WinRAR, etc), you will need additional utility software to customize Zen Cart properly.

Because similar programs are easily available for the Unix/Linux platforms, we will only highlight those available for the Windows platform. You can find more of such programs by running a search at <http://www.download.com>.

Each software category will highlight the desirable features that should exist in a program before recommending a free-ware version and a share-ware version that supports those features. Which one you decide to use will depend purely on your personal preference.

Text Editors

To customize any Zen Cart installation properly, you will need to edit some of the text files (HTML, CSS and PHP files, etc). Do not use word processors (e.g. Microsoft Word) to edit the text files as they will add invisible characters to those files. These invisible characters can cause problems either for Zen Cart or for web browsers.

Before you settle on a text editor, make sure it has the following features:

- Supports *syntax* highlighting for HTML, CSS, Javascript and PHP.
 - ➔ Helps you to code and debug faster by visually separating the different elements of the file. For example, such a text editor might highlight PHP code in blue and HTML code in red.
- Automatic *error* highlighting for HTML, CSS, Javascript and PHP.
 - ➔ Helps you catch errors in your programs while you are writing your code before these errors are detected when you run your program in Zen Cart. For example, if you fail to specify a closing tag for your HTML code, the editor uses a red underline to highlight the offending HTML tag.

Crimson Editor

Web Address: <http://www.crimsoneditor.com/>

This is a simple and free program with a built-in spell checker.

EditPlus

Web Address: <http://www.editplus.com/>

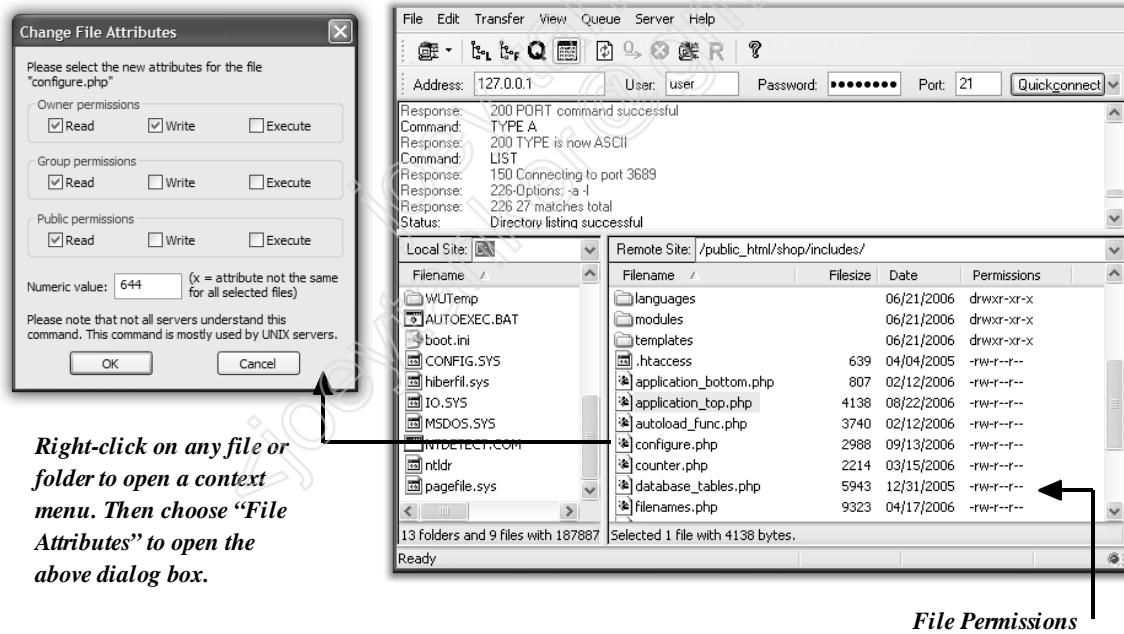
This is a very powerful program that even boasts a built-in web browser. You can download it for a free trial of 30 days before deciding whether to buy it.

FTP Software

To transfer files between a remote server and your local computer, you will need to use an FTP *client* software. Although the standard FTP command line commands are available for both the Windows and Unix/Linux platforms, it is advisable to look for one that has an intuitive Graphical User Interface (GUI).

Before settling on an FTP client program, make sure it has the following features:

- Ability to transfer many files *reliably*.
 - ➔ Some FTP clients are known to corrupt files if too many files are transferred at one go to the server. Do some research on your choice of FTP program to avoid this problem.
- Automatically switch between *text* and *binary* modes when transferring multiple files.
 - ➔ To prevent corruption of files, the FTP protocol requires binary files (images, compressed archives, etc) to be transferred in *binary* mode and text-based files (HTML, CSS, PHP, etc) to be transferred in *text* mode.
- Ability to change *file permissions* directly from within the GUI.
 - ➔ If your FTP client can change permissions directly, it will save you the trouble of having to log in to your server and manually changing the file permissions. A screen shot is provided below to give you an idea how file permissions can be changed directly from within an FTP program. The program featured in the screen shot is FileZilla.



FileZilla

Web Address: <http://filezilla.sourceforge.net/>

This is the same software that is used by XAMPP to run as an FTP *server*. You can also use it as an FTP *client*. If you are not confused by having two versions of FileZilla on your machine (one running as a server and the other as a client), you can go ahead and install this free program.

WS_FTP Home 2007

Web Address: <http://www.ipswitch.com/>

This program has a long history and is very popular. It has a wide user base and the program is very stable. You can download it for a free trial of 30 days before deciding whether to buy it.

An online tutorial on how to use the program is available at
http://www.ipswitch.com/support/ws_ftp/tutorials/tours/index.asp.

File Comparison Software

File comparison software allows you to compare differences between two or more files visually. It is an indispensable tool when upgrading Zen Cart as it is used to determine which files have changed between different versions and therefore need to be updated. It is also used commonly in program debugging to understand changes between different versions of a software.

WinMerge

Web Address: <http://winmerge.sourceforge.net/>

This free program has the ability to compare more than two files at once. File differences are highlighted using different colors. It also has the ability to compare entire folder/subfolder structures via simple drag-and-drop.

Beyond Compare

Web Address: <http://www.scootersoftware.com/>

This program has the ability to compare directories in addition to comparing files. It supports many other advanced features so you will need to spend more time learning how to use it. You can download it for a free trial of 30 days before deciding whether to buy it.

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Appendix B Setting Up Shop on the Internet

Introduction

Once you are familiar with running Zen Cart on your local computer, you can begin to set up your store on the web. To get your store to run on the Internet, you will need to perform the following steps:

- Choose a domain name.
- Register the domain name.
- Choose a web hosting provider.
- Install Zen Cart on the remote machine.

To give you a better picture of why you need to perform the above steps, refer to the following diagram which illustrates the series of events which takes place when users type your store's URL into their web browsers.



Once you understand the above diagram, you will appreciate the steps that are required for your store to be hosted on the Internet.

The first thing you need to do is to come up with a *domain name* for your website (e.g. *wildsales.com*). This domain name will be used by users to access your online store. Because domain names are unique across the Internet, you will need to *register* it to prevent other people from using the same domain name.

The second thing you need to do is to find a web hosting provider that will provide you the infrastructure (hardware, network, etc) and software (Apache, PHP, etc) necessary for you to run a Zen Cart store online. Your hosting

provider will also let you know what the IP address (e.g. 191.0.34.43) of the machine hosting your website is.

Finally, you will need to make the association between your domain name and IP address known to one or more DNS servers across the Internet.

The above steps are just a *logical* view of how things are done. For practical purposes, you will usually just choose a domain name and sign up for a hosting plan with a web hosting provider. The web hosting provider will then perform all the necessary steps to get your site hosted on the Internet.

Choosing a Domain Name

Your first task before setting up shop on the Internet is to choose a domain name for your online store. For example, if you choose “www.pets-r-us.com” as the URL for your store, the *domain name* will be “pets-r-us.com”.



Note To find out whether your desired domain is available, you can perform a search at <http://www.godaddy.com>.

When choosing a domain name, look out for the following criteria:

- For stores engaged in commercial activities, try to choose a domain name which ends with “.com” or “.biz”. Other top-level domains (TLDs) such as “.net”, “.org”, “.info”, etc are also available.
- Avoid domain names which end with a country code. For example, “.com.sg”, “.biz.my”, etc, unless your business activities are limited to a specific locale (e.g. pizza delivery business). The purpose of using the Internet to conduct business is to gain maximum exposure for your business and to serve a large pool of customers regardless of geography.
- Choose a domain name that is short and easy to remember. Most people have problems remembering long names, let alone typing them out error-free.
- Avoid the use of *numbers* in your domain name to minimize problems with users typing the URL incorrectly. For example, if you tell customers your web address is “www.numberonecakes.com”. They may accidentally type “www.number1cakes.com” into their web browser instead.
- Use words with their proper English spelling when coming up with your domain name to minimize human errors when typing your URL into a web browser. For example, using “kar-tiuns.com” instead of “car-tunes.com”.

Registering a Domain Name

After you have found an available domain name, you should have it registered to prevent other people from laying claim to it. There are two ways you can go about doing this:

- Register your domain name yourself.
- Register your domain name through a web hosting provider when you sign up for a hosting plan with them.

Usually, a small fee will need to be paid to secure your rights to a domain name for a period of time (e.g. one year). Thereafter, it will need to be renewed annually. Therefore, practice due diligence to check that your domain name never expires by paying your fees on time. You do not want to lose all the hard work you have done in building up a brand name for your online store only to lose it to someone else just because your domain name needs to be changed!

If you choose to register your domain name yourself, you can go to <http://www.godaddy.com>. There are many other companies who can do the same job, so you might want to try running a search on your favorite search engine.

Most web hosting providers can also provide domain name registration on your behalf. However, you need to be careful when dealing with them. Some unscrupulous web hosting providers will register your domain name under their company name instead of your name. If you decide to migrate your online store to another web hosting provider later, they will demand a huge fee from you if you want to use back the same domain name they registered on your behalf. Therefore, it is best to sign up with reputable and well-established web hosting providers and not those which simply offer the cheapest prices.

Choosing a Web Hosting Provider

A web hosting provider provides the infrastructure that determines whether your online business runs smoothly and reliably. An online store that is constantly inaccessible or performs sluggishly will hurt your image and your sales. Therefore, do as much research as possible when deciding on a suitable web hosting provider.

Some things you will need to look out for when evaluating a web hosting provider are summarized in the following table.

Table A-1: Criteria for evaluating web hosting providers

Criteria	Explanation
Operating System and Software	<p>Try to pick a host that offers a Unix/Linux-based web hosting plan. This is because Apache has a long history of working with Unix/Linux rather than Windows-based operating systems and is consequently more stable on Unix/Linux.</p> <p>Also make sure that the web hosting provider supports PHP and MySQL versions that are compatible with Zen Cart.</p>
Email	Because you are running an online store, you need to make sure that your web hosting provider allows you to have email accounts setup with them. These email accounts must be for <i>both</i> inbound and outbound usage.
Price	Price should <i>never</i> be the deciding factor when choosing a web hosting provider. The market is very competitive for web hosting and most hosting plans vary by a few dollars. Ultimately, what matters more to an online store is speed and reliability.
Technical Support	<p>Provides different means (e.g. by phone, by email or online only) to reach the web hosting provider when you face problems with your account or setup. Most web hosting providers will advertise how good their support is. Do not take their word for it. Try to find out more information about their claims from online forums or people you know to determine whether they are really performing up to task and the level of support they actually provide.</p> <p>A poor supporting staff or system can cripple your online business for long periods if they cannot quickly and reliably solve your problems.</p>

Table A-1: Criteria for evaluating web hosting providers (continued)

Criteria	Explanation
Uptime	Refers to the time that your site will remain accessible. No web hosting provider can guarantee your site will be up 100% of the time but most will likely quote a figure of 99.5% or more.
Bandwidth	Refers to the amount of data (in bytes) that is transferred from your site to visitors. If your store sells digital goods for download, you will need to sign up for a plan which permits a higher bandwidth. Some sites state that they offer <i>unlimited</i> bandwidth, remember to read the fine print. Ultimately, web hosting providers need to pay for bandwidth and they will not allow you to constantly exceed that bandwidth at their expense.
Disk Space	Refers to the amount of storage space allocated to your site. Make sure there is enough space to include an entire Zen Cart installation including any images or files you are likely to upload. Again, be wary of sites that offer <i>unlimited</i> disk space for the same reason as they offer unlimited bandwidth.
Web-Based Control Panel	This feature gives you the convenience and power of managing certain aspects of your web account from the comfort of your desk without having to go through technical support every time. You will be able to view server logs, create user accounts, create email and FTP accounts, etc. Common control panels you might encounter include CPanel, Plesk and Ensim.
SSL Installation	No proper online store is complete without a SSL certificate to encrypt sensitive parts of the store's website. Make sure your host has the ability to provide a SSL certificate to meet your business requirements. To make your store appear more professional and legitimate to your users, pay for a dedicated SSL certificate instead of using a shared SSL certificate. Also make sure that the SSL certificate you purchase offers at least 128-bit of encryption.

A Recommended Solution – Zen Cart Certified Hosting Providers

If you have trouble deciding on a suitable web hosting provider for your online store, there is good news. Just click the **hosting** hyperlink at the top of Zen Cart's web site to see a list of Zen Cart certified web hosting providers .

These web hosting providers have met the rigorous requirements of the Zen Cart team for hosting Zen Cart sites so you can be sure about their work quality. They are very experienced and knowledgeable in the workings of Zen Cart and will thus be able to provide good technical support if you encounter problems with your store configuration. They even offer free installation of Zen Cart on your site.

It is *highly recommended* that you sign up with one of them if you are just starting a new Zen Cart store. The latest list of Zen Cart certified web hosting providers can be found at http://www.zen-cart.com/partners/certified_hosts. Go through their plans and send them an email if you have any questions regarding their hosting packages.

Migrating Your Local Zen Cart Store to a Remote Server

You might be tempted to migrate your local Zen Cart store setup (catalog, images, settings, etc) to your remote server once it is set up. This is definitely possible but will require a lot of work. Furthermore, there are several factors which will affect how your migration should be carried out. For an up-to-date reference on how to do this, take a look at <http://tutorials.zen-cart.com/index.php?article=99>.

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Appendix C Test Account Information

Introduction

When running your Zen Cart store, you will need to create several email and store accounts both for the store owner and the test customers. This section consolidates all such account information used in this book to help you avoid the confusion of looking up which account should be used for testing and also as a precaution against forgetting any login passwords.

The information contained here assumes you are running Zen Cart on your *local* machine.



Warning

If you intend to use any of these test accounts for a Zen Cart store hosted on a *remote* server, *change* the passwords because other readers of this book might attempt to use these test accounts to log in to your online store.

Account Information

Email Accounts

These accounts allow you to read emails sent from Zen Cart to you (store owner) or test customers. They can also be used to simulate customers sending emails among themselves. For example, when a customer sends a gift certificate to another customer.

Table C-1: Email account credentials for store owner, administrator and test customers

Username	Personal Name	Mail Password	Purpose
storekeeper	Claud Blanc	password	Store Owner Email Account.
webmaster	Store Administrator	password	Store Administrator Email Account
alan	Alan Smith	password	Customer Test Account
christine	Christine Summers	password	Customer Test Account
jacques	Jacques Pires	password	Customer Test Account
nicole	Nicole Bellamont	password	Customer Test Account

Zen Cart Administrator Account

This is the login account to the Admin Console for the store owner (i.e. you). Note that you can configure this administrator account to be accessed via SSL only. In that case, change “http” to “https” in your URL.

Table C-2: Administrator login account to Admin Console

Admin Console URL	Username	Password	Email
http://www.example.com/store/admin/login.php	admin	password	webmaster@example.com

Zen Cart Customer Test Accounts

These are the login accounts to your Store Front for your test customers. To reduce the strain of typing and remembering so many accounts, we shall use the same usernames as those you set up in your test email accounts.

However, you need to be clear about the differences between these two account types. The test email accounts are for you to simulate customers logging into their email servers to read emails sent to them from your store. The Zen Cart test customer account is for you to simulate customers interacting with your online store.

Test customers should preferably be from *different* countries so that you can test the different shipping, payment and taxation options available in your store.

Table C-3: Customer login accounts to Store Front with selected personal particulars

Customer UserID	Password	Gender	Country (Choice is up to you)
alan@example.com	abcdef	Male	United States
christine@example.com	abcdef	Female	United States
jacques@example.com	abcdef	Male	France
nicole@example.com	abcdef	Female	France

Database Account

This information is useful when you need to access your database using phpMyAdmin. It is extracted from the file <zc-home>/admin/includes/configure.php.

Table C-4: Zen Cart database login account with selected database settings

Database Name	Prefix	UserID	Password
zencart	zen_	root	<empty field>

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