Search Engine Optimization for a ProductCart-powered Store
Creating Static Store Pages Using a Custom 404 Error Handler

About This Document

Using a custom 404 error handler, you can rewrite the URL of dynamic pages so that they look and behave like static ".htm" pages. The following paragraphs explain how to edit your existing ProductCart store to accomplish this.

Here is an example of our own software store at www.earlyimpact.com uses this feature. We have highlighted the category and product name in the URLs below.

The following category page:
http://www.earlyimpact.com/eistore/productcart/pc/viewcategories.asp?idcategory=118

… can now be accessed here:
http://www.earlyimpact.com/eistore/productcart/pc/**ProductCart-eCommerce-Software**-c118.htm

… and the following product details page:
http://www.earlyimpact.com/eistore/productcart/pc/viewPrd.asp?idproduct=431&idcategory=118

… can now be accessed here:
http://www.earlyimpact.com/eistore/productcart/pc/**ProductCart-Shopping-Cart-Software-v3**-118p431.htm

If you go to the "Browse by Category" start page, all the links are also to static pages:
http://www.earlyimpact.com/eistore/productcart/pc/viewCategories.asp

All of these static pages actually don't exist. The URL is rewritten using a technique that takes advantage of the custom 404 error page.

PLEASE NOTE: These instructions and the accompanying files are provided "as is". Early Impact does not offer technical support on the implementation of these changes to your ProductCart-powered store. In addition, while we have done extensive research on this technique and made every effort to ensure that it does not violate any "best practices" recommended by search engines such as Google & Yahoo!, we cannot make any promises regarding search engine placement for your particular site, or that search engine criteria will not change at some point in the future. You assume all risk and reward for implementing this technique on your own site.
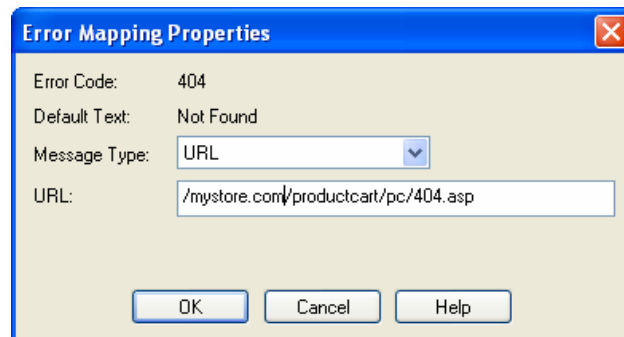
Before You Start

Please carefully review this checklist before you start:

- Applicability: The ReadMe file contained in the folder where you found this document indicates which versions of ProductCart are compatible with the enclosed files.

- Make sure you back up all files mentioned in this document.

- Make sure you perform this update at a time when your store is not busy so that you have time to revert back to the previous configuration if the server behavior is not the expected one.

- Your Web hosting company must allow you to:

   - Specify a custom 404 page
   - Specify that the 404 error is handled by a URL vs. a file. This is the *Message Type* property in IIS. If you don't see this setting in your Web hosting account's administration area, try performing the following steps anyway: in some scenarios this setting is detected automatically, according to our research.

   If you have access to your own server:

   - Start IIS (from the Administrative Tools icon in the Windows Control Panel)
   - Right-click on the Web site, and select *Properties*
   - On the *Properties* Window, click on the *Custom Errors* tab, scroll down to the 404 error, select it and click on *Edit Properties*.
   - On the dialog box that is displayed, change the *Message Type* to *URL* and enter the absolute path to the file 404.asp (like in the example below), which will be located in the *productcart/pc* folder, after you update the files that you received with this document. Click *Apply*, then *OK*.

- Your header.asp file must be using the dynamic meta tag generator (**pc/include-metatags.asp**). To make sure that this is the case, open the file "pc/header.asp" and make sure that it contains the following lines of code towards the top of the page:

```
<!--#include file="include-metatags.asp"-->
<html>
<head>
<%if pcv_PageName<>"" then%>
<title><%=pcv_PageName%></title>
<%end if%>
<%GenerateMetaTags()%>
<%Response.Buffer=True%>
```

- If this is not the case, you will need to edit header.asp so that it uses the dynamic meta tag generator. Please consult the ProductCart v3 User Guide for instructions on how to properly create your *header.asp* and *footer.asp* files.

Installation:

Carefully read this entire section before getting started. Do not perform the next task unless you have completed the previous one, or the system will not perform properly.

(1) Open the file "**pc/404b.asp**". The file only contains 5 lines of code. Change the following line

   Server.Transfer("/404.html")

   ... so that "/404.html" is replaced with your custom 404 error page located in the root of your Web site. If you don't have a custom 404 error page, you should create one. For example, here is the one that we use at Early Impact: http://www.earlyimpact.com/page_not_found.html

(2) **Upload the files to the server**. The ReadMe file contained in the folder where you found this document indicates which versions of ProductCart are compatible with the files. If you are using previous versions, you will have to either update to the version mentioned in the ReadMe file, or edit your existing files by using file comparison software such as www.examdiff.com

(3) **Test the store**. Load the file *viewcategories.asp* in the *pc* folder. You should be browsing the store using static .htm pages.

(4) **Check your server results code**. It is extremely important that your server correctly returns a 404 error code when a page that does not exist and which is not a ProductCart product or category page is loaded.

   Otherwise, your Web site will be in violation of Web master best practices, including best practices endorsed by Google, which could potentially penalize your Web site's rankings. The code that we have developed correctly returns the right response codes. To confirm that your Web site is working properly:

   - Load this tool: http://gsitecrawler.com/tools/server-status.aspx
   - Try loading a page on your site that does not exist. The error code should be 404.
   - Now try loading a ProductCart "htm" page, the error code should be 200.

Important Notes

(1) **Default Meta Tags**
Remember that you must replace your current version of the meta tag generator (pc/include-metatags.asp) with the one included with the ProductCart_SEO files. Make sure to replace the default meta tags with your own, or use file synchronization software to simply synchronize your version of the file with the new one.

(2) **Updating ProductCart**
If you are using an earlier version of ProductCart and/or you have customized the pages that are included with this document, compare the two files using file comparison software. The code changes used by this technique are quite small.

(3) **Control Panel features**
The Generate Links, Generate Store Map, Generate Sitemaps, Generate Google Base File, and Generate Yahoo! File features have been edited so that they generate correct links to the static store pages.

Possible Performance Issues

There are some potential performance issues associated with this technique. First, it requires an extra database call to check the validity of the product or category ID used in the URL. Secondly, the server performs a number of additional tasks before delivering the page. If you experience performance issues, you might want to revert to using the standard ProductCart pages. If you do so, remember to change the reference to the custom 404 error page (revert back to the original 404.html).

Resources

The following articles have been used when creating the code that enables this feature, in case you are interested in reading more about it.

http://www.asp101.com/articles/wayne/extendingnames/default.asp

http://blog.igeek.info/still-fresh/2005/05/10/se-friendly-urls-in-asp-revisited/

http://gsitecrawler.com/articles/error-404-200.asp