Techniques for Managing Evolving Web Content

Sean Brown
IS&T - Web Communication Services
<smbrown@mit.edu>
http://web.mit.edu/ist/web/
Overview

- Introduction
- Outline of Presentation
- Audience Survey
Techniques for Managing Evolving Web Content

• Making site-wide updates easier
• What to do when you need to move pages around
• How to manage major changes, like launching a new version of your site
• Give your audience a better user experience when things go wrong
• Improve search engine effectiveness
Primary Audience

- Web publisher at MIT
- Medium - large website
- Primarily static website
- Use the source Luke
- web.mit.edu
Topics Covered

• Maximizing content re-use with some advanced server-side include (SSI) tricks
• What to do when your site starts changing; doing content re-direction the Right way
• Custom error pages; they won’t thank you, but they should
• Search engine impact, plus a new twist on an old idea
Server-Side Includes

• Most often used for content that repeats verbatim
• Did you know that it can be used for variable content?
  • Rotating news, callouts, special events
  • Site navigation (including highlight states)
• XBitHack - When you don’t want to .shtml
MIT Sloan Management Review
Spring 2005
Volume 46, Number 3

The Dark Side of Close Relationships
Erin Anderson and Sandy D. Jap
The same factors that strengthen a strategic alliance, supplier relationship or other partnership can open the door to trouble. For example, a company can benefit from sharing information but also can be hurt if a partner uses that information to take an unfair advantage. The authors offer strategies to counter the "dark side" and show how to recognize when a relationship cannot be saved. Acknowledging that all business partners behave opportunistically can help managers react appropriately when problems emerge.

The High Impact of Collaborative Social Initiatives
John A. Pearce II and Jonathan P. Doh
Corporate social responsibility (CSR) has become a vital part of the business conversation and a widely accepted imperative. The challenge for managers is how to get the maximum benefit from the resources available for social projects, while fulfilling company obligations to increase shareholder value. CSR activities work best, the authors’ research shows, when they are managed strategically and are conducted in collaboration with an array of commercial...
The Dark Side of Close Relationships

Erin Anderson and Sandy D. Jap

Topic: Leadership and Organizational Studies

Reprint 46314; Spring 2005, Vol. 46, No. 3, pp. 75-82

Buy this article

Forming close relationships with suppliers or customers is a popular business strategy, but such partnerships can develop problems. The authors observe that many close business relationships — whether joint ventures or loose alliances — fail. They describe a phenomenon they call the "dark side" of close relationships and maintain that close relationships that seem quite stable can, in fact, be vulnerable to decline and destruction. The authors draw both on their own surveys of business relationships and on other examples.

The authors point out that the same factors that strengthen a partnership can also open the door to relationship problems. For example, when an automaker and a supplier built up personal relationships between employees at the two firms to facilitate their alliance and just-in-time manufacturing process, the trust and personal relationships also enabled the supplier more easily to cut corners in the production process. While observing that business relationships with problems can linger on for a surprisingly long time, the authors recommend strategies to prevent the "dark side" from taking over a business relationship. One such strategy is to ensure that both parties in the relationship make investments in it, in effect swapping "mutual hostages." If, however, damage to the relationship has already occurred, possible strategies include turning the crisis into an opportunity to improve the partnership.
In each page, set template type:

Using plain HTML, the code looks like this:

```
<td align="top">
    <div class="nav">
        <a href="/smr/topic/">Articles by Topic</a>
    </div>
    <div class="highlight_nav">
        Articles by Issue/Date
    </div>
    <div class="nav">
        Search by Reprint #
    </div>
    <div class="nav">
        Order & Price Info
    </div>
    <div class="nav">
        Subscription Service
    </div>
    <div class="nav">
        Advertising with Us
    </div>
    <div class="nav">
        Author Guidelines
    </div>
</td>
```

**SSI’s can do conditional evaluations, like these:**

```
<td align="top">
    <!--[if expr="$template == "topic" " -->
    <div class="highlight_nav">
        Articles by Topic
    </div>
    <!--[else -->
    <div class="nav">
        Articles by Issue/Date
    </div>
    <!--[endif -->
    <div class="nav">
        Search by Reprint #
    </div>
    <div class="nav">
        Books
    </div>
    <div class="nav">
        Order & Price Info
    </div>
    <div class="nav">
        Subscription Service
    </div>
    <div class="nav">
        Advertising with Us
    </div>
    <div class="nav">
        Author Guidelines
    </div>
</td>
```

```
<td align="top">
    <!--[if expr="$template == "issue" " -->
    <div class="highlight_nav">
        Articles by Issue/Date
    </div>
    <!--[else -->
    <div class="nav">
        Articles by Topic
    </div>
    <!--[endif -->
    <div class="nav">
        Search by Reprint #
    </div>
    <div class="nav">
        Books
    </div>
    <div class="nav">
        Order & Price Info
    </div>
    <div class="nav">
        Subscription Service
    </div>
    <div class="nav">
        Advertising with Us
    </div>
    <div class="nav">
        Author Guidelines
    </div>
</td>
```

```
<td align="top">
    <!--[if expr="$template == "search" " -->
    <div class="highlight_nav">
        Articles by Topic
    </div>
    <!--[else -->
    <div class="nav">
        Articles by Issue/Date
    </div>
    <!--[endif -->
    <div class="nav">
        Search by Reprint #
    </div>
    <div class="nav">
        Books
    </div>
    <div class="nav">
        Order & Price Info
    </div>
    <div class="nav">
        Subscription Service
    </div>
    <div class="nav">
        Advertising with Us
    </div>
    <div class="nav">
        Author Guidelines
    </div>
</td>
```
Content Redirection

• Why we do it in the first place
• Link rot, it’s evil
• Link rot effects search engine placement
• Breaks the user experience
• The oft-used “Meta-Refresh” Hack
Meta-refresh is Bad

- (Most of the time)
- About HTTP Response Headers
- Temporarily Moved (302) vs. Moved Permanently (301)
- Cumulative effect. Have you ever followed three “this page has moved...” or more pages only to wind up on a 404 / Document Not Found page? I have.
- Search engine impact
Meta-Refresh - cont.

- When it’s OK
  - Content truly has moved temporarily (will be back < 1 month)
  - Landing pages (tracking campaigns, etc.)
  - Slide-shows, transition pages
- But you can use mod_alias to do the same thing, without creating pages, or delays
What else can I do though?

- mod_alias - Configurable in .htaccess.mit files (Site-wide, per directory)
- Apache directive that provides two components: content aliasing, content redirection
- Can use regular expressions to match patterns in URLs; Let’s you redirect lots of content with one or a few statements
You’ve moved all of the content from /wcs/conference/ to /wcs/conference/05/

in an .htaccess.mit file in the root level place this:

Redirect 302 /wcs/conference(.*)$ 
   http://web.mit.edu/wcs/conference/05/$1
• Converting all your .GIFs to .JPG/PNG
• Moving all your content from one Athena locker to another (or to a dedicated server)
• Site redesigns usually mean new Information Architectures, mod_alias’ Redirect and RedirectMatch can help
**Aliasing Content**

- Like a Shortcut / Symlink / Alias but for URLs
- Can be used to combine Athena lockers into one virtual site
- Also useful sometimes if you need to reuse some assets but they need to look like they are in different places.
Custom Error Documents

- Most popular: custom 404 pages
- Provide branded, consistent interface when errors happen (document not found, SSL required, server error)
- Offer search, links to popular resources
Basic 404 Page

Not Found

The requested URL /smr/badlink was not found on this server.

Additionally, a 404 Not Found error was encountered while trying to use an ErrorDocument to handle the request.

Apache/1.3.33 Server at 127.0.0.1 Port 80
file not found

The page you are looking for might have been removed, had its name changed, or is temporarily unavailable.

- If you typed the page url, check the spelling.
- Start from the MIT Home Page, and look for links to the information you want.
- Click the Back button to try another link.
- Search the MIT web site using the form below:
Customized 404 Page

Sorry, the page you've requested wasn't found.

You may have selected an outdated link or may have typed the page address (URL) incorrectly. You might find what you're looking for by using the Video Finder Search tool or through the global navigation.
Document Not Found

The document you requested cannot be found. Please use the available site-search and navigation links to locate the information you are interested in.
Search Engines

- Returning a relevant HTTP response code is important
- Meta-Refresh pages confuse search results
- Permanent redirects makes search engine’s update their results index
- Link rot interferes with results ranking
Questions & Answers

• Thank you
• Sean Brown <smbrown@mit.edu>
References / Links

- IS&T - WCS Web Reference

- SSI

- Mod_alias

- Custom Error Documents
  - http://httpd.apache.org/docs/mod/core.html

- MIT’s Google Search Engine
  - search@mit.edu