

take your web site to the top

how to boost your search rankings

brian gorbett
architect – microsoft
briangorbett.com
twitter.com/briangorbett

Agenda

- ▶ Search Engine Optimization Basics
 - How does search engines work
 - What Impacts SEO
 - Best Practices
- ▶ IIS SEO Toolkit
 - Site Analysis
 - Key Features
 - Demo
 - Robots
 - Sitemap and Sitemap Index Editor

Search Engine Optimization

- ▶ Search engine optimization (SEO)
 - is the process of improving the volume or quality of traffic to a web site from search engines via "natural" ("organic" or "algorithmic") search results.
(*Wikipedia.org*)
- ▶ Why should you care?
 - Different studies have concluded that in average, 50%-80% of web site traffic originates from a Search engine

How does Search Engines work?

1. Finds a Reference to your Site
 - Usually through a Referral in another Web Site or through Submitting your URL to their SE
2. Requests the /Robots.txt (Robots Exclusion Protocol or REP)
 - List of Files/Directories that it should not visit
 - Discovers SiteMaps on it. (sitemap.org)
3. Process the URL
 - If allowed by Robots
 - Downloads the Resource
 - Analyzes the Content
 - Discovers links on it... and continues to 3.

What Impacts SEO

- ▶ There are several factors that impact SEO:
 - Links
 - External and Internal
 - The more the better (quality matters)
 - Navigation/Organization
 - Clear/Consistent navigation into and around your site
 - Valid Markup
 - Does not require authentication, cookies, sessions, scripts, objects, referral, etc.
 - Content
 - Proper page form and html usage
 - Title, Keywords, Headings, Link Text, Bolded Text, etc
 - Lost content (404)
 - Content Relevance
 - Is your Web Site considered an authority in the community?
 - How fresh is the content?

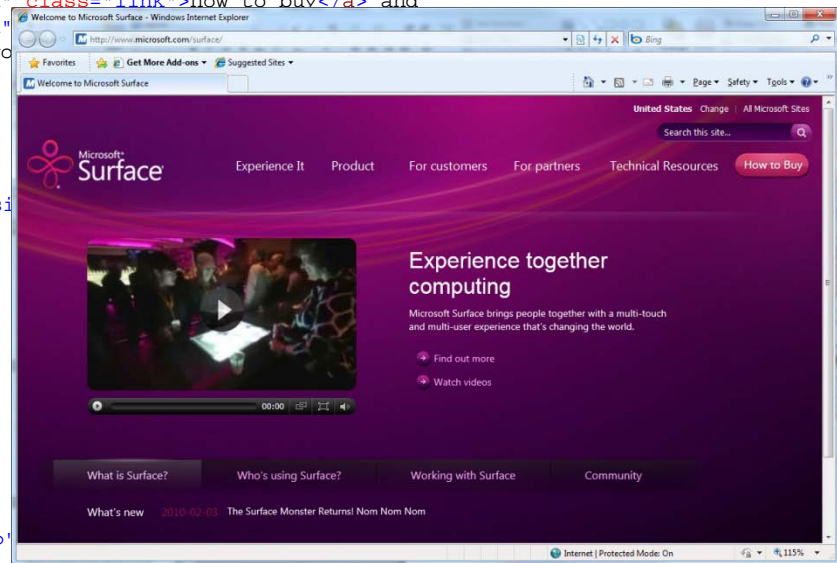
10 KB of HTML

Example of bad SEO:

http://www.microsoft.com/surface

What the browser gets

```
<center>
  <table cellpadding="0" cellspacing="0" border="0">
    <tr>
      <td>
        <div style="text-align: center">
          <object
            id="SilverlightTopMenu"
            width="960"
            height="134"
            data="data:application/x-silverlight,"
            style="outline-style: none;"
            type="application/x-silverlight-2" >
            <param name="source" value="http://www.microsoft.com..."/>
            <param name="Background" value="Transparent"/>
            <param name="Windowless" value="true"/>
            <param name="BackColor" value="Transparent"/>
            <param name="minRuntimeVersion" value="2.0.31005.0"/>
            <param name="autoUpgrade" value="true"/>
            <param name="onThread" value="siteUrl = {f:opa%a%&f...} />
            <!-- No silverlight --> <div class="topNoSl">
              
            </div>
            <div class="topNoSl" style="width: 410px">
              <p class="Text">
                This site is powered by Microsoft Silverlight. You can still visit our
                <a href="Pages/Product/WhatIs.aspx" class="link">what is Surface</a>,
                <a href="Pages/Customers/Support.aspx" class="link">support</a>,
                <a href="Pages/HowToBuy/HowToBuy.aspx" class="link">how to buy</a> and
                <a href="Pages/Partners/Partners.aspx" class="link">how to buy</a> and
                without installing Silverlight, but you will miss out on the full
                experience, including our out of this world
              </p>
            </div>
            <div class="topNoSl">
              <!-- Display installation image. -->
              <a href="#">
                
              </a>
            </div>
          </object>
        </div>
      </td>
    </tr>
  </table>
  <td class="SilverlightContentHolder">
    <object
      id="SilverlightPlugin1"
      width="960"
      height="410"
      data="data:application/x-silverlight,"
      style="outline-style: none;"
      type="application/x-silverlight-2" >
      <param name="source" value="ClientBin/Silverlight.Homepage.xap"/>
      <param name="Background" value="Transparent" />
    </object>
  </td>
</tr>
</table>
```



Best Practices

- ▶ Provide as much information as possible using Text
 - Use Title, Heading, Description, Keywords, Bolded Text, alt text, <noscript>, etc
 - Use proper HTML semantics to highlight importance
- ▶ Maximize the time spent by the crawlers in your site
 - Use Robots.txt to filter non-relevant areas
 - Use Sitemaps to guide crawler to difficult places
 - Clear descriptive internal links to content
 - Avoid duplicate content
- ▶ Optimal & Simple Navigation
 - Ensure Javascript is not required to access pages
 - If using images/RIA make sure to provide textual representation
- ▶ Beware of...
 - Malware, Hidden Text, Too many arguments in URLs, Login pages, unnecessary redirects,

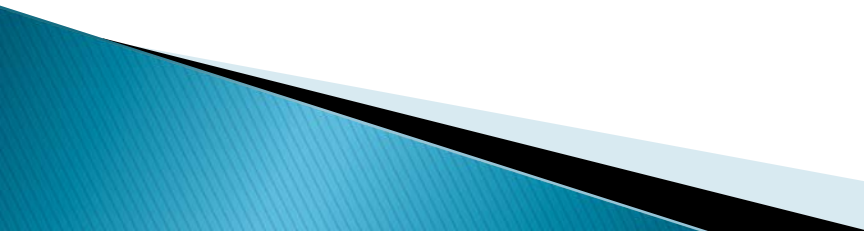
Sounds Simple, but...

- ▶ Sites can get large and complex so tracking...
 - Is the content and structure of my site optimized for a search engine to crawl it?
 - How do I ensure that all external links on my site are valid?
 - If I change something on my site – what will it break?
 - Are all pages on my site easily discoverable?
 - Do all pages on my site load correctly?
 - Is robots.txt too restrictive or too permissive?
 - Is sitemap.xml up to date with valid URL's?
 - What are the most difficult to access pages?
 - Has anybody inserted a reference to a bad web site?
 - What has changed since last time I analyzed the site?
 - Etc...

IIS SEO Toolkit

- ▶ Improve the volume and quality of traffic to your web site from search engines
- ▶ Improve the content on your web-site for human users
- ▶ Help you analyze and fix common SEO problems in your Web Site and look at it from a Search Engine perspective
- ▶ Run it at development, staging, production, any time updates are made, etc.
- ▶ Consists of Three Main Features
 - **Site Analysis**
 - **Robots Editor**
 - **Sitemap and Sitemap Index Editor**

Key Features

- ▶ Integrated with IIS7
 - Built on IIS7 Admin Tool Framework
 - Requires Windows Vista, Windows 7, Windows Server 2008/R2
 - ▶ Analyze local *and* remote Web sites
 - Run in your own development or staging environments
 - Run against *any* Web Server and *any* framework
 - Keep history and track changes over time, compare side-by-side older versions of your Site
 - ▶ Over 45 best-practices included
 - Built-in Reports, also include performance analysis too
 - ▶ Powerful Query Engine
 - Create your own queries
 - Save/Open existing queries to reanalyze after making site changes
 - ▶ Extensible
 - Add your own parsing logic
 - Add your own violation detection logic
 - Extend the User Interface with your own functionality
- 

Robots Editor

- ▶ Simple tool to generate Robots.txt files
 - Easily author Robots file for your Web site
 - Support for:
 - Physical locations: files, folder, etc
 - Virtual locations: URLs discovered by Site Analysis report
 - Test the rules using Site Analysis

Sitemap and Sitemap Index Editor

- ▶ Simple tool to generate Sitemap and Sitemap Index files
 - Support for:
 - Physical locations: files, folder, etc
 - Virtual locations: URLs discovered by Site Analysis report
 - Automatically fills additional data like Last Modified date based on content
 - Test the Sitemap files using Site Analysis

Site Analysis

The screenshot displays the Internet Information Services (IIS) Manager interface. The main window shows a 'Site Analysis Report' for the 'MSDN' site. The report includes a summary of the analysis, a list of violations, and a detailed table of violation types and counts.

Summary

Start URL: <http://msdn.microsoft.com/en-us/default.aspx>
Start Date: 7/27/2009 1:43:33 PM End Date: 7/27/2009 1:59:45 PM
Downloaded Items: 1082 Links Found: 33105
Number of Violations: 5557

Violations Summary

Violation Title	Violation Level	Violation Cate...	Count
The tag does not have an ALT attribu...	Warning	SEO	2,071
The page contains unnecessary redirects.	Information	SEO	1,523
The link text is not relevant.	Warning	SEO	778
The description is missing.	Warning	SEO	406
The page was excluded by a nofollow attribu...	Information	SEO	406
The <h1> tag is missing.	Warning	SEO	186
The page contains a large amount of script c...	Warning	Performance	55
The title is too long.	Warning	SEO	42
The page contains invalid markup.	Warning	Content	32
The title is empty.	Error	SEO	26
The page contains multiple <h1> tags.	Warning	Standards	15
The page contains a large number of Casca...	Warning	Performance	5
The content type for the resource is incorrect.	Warning	Content	3
An unexpected error has occurred.	Error	Content	2
The page contains multiple canonical formats.	Error	SEO	2

The interface also shows a navigation pane on the left with 'Connections' and a 'Features View' / 'Content View' toggle at the bottom.

Demo

»» IIS SEO Toolkit: Site Analysis

Extensibility

- ▶ There are three main extensibility points provided by `Microsoft.Web.Management.SEO.Client.dll`
 - Crawler Module
 - Provide custom parsing logic for new content types and extend the set of violations with your own
 - Site Analyzer Extension
 - Extend the Site Analysis User Interface with your own set of tasks
 - Sitemap Extension
 - Extend the Sitemaps User Interface with your own set of tasks

Summary

▶ IIS SEO Toolkit

- Automatically analyze your Web site for SEO Best Practices
- Run it against any application running in any server built in any framework
- Free Download: <http://www.iis.net/expand/SEOToolkit>
- Other IIS Extensions:
 - <http://www.iis.net/expand>
 - <http://www.microsoft.com/web/downloads/platform.aspx>
- SEO Posts:
 - <http://blogs.msdn.com/carlosag/archive/tags/SEO/default.aspx>

Microsoft[®]

Your potential. Our passion.[™]

© 2009 Microsoft Corporation. All rights reserved. Microsoft, Windows, Windows Vista and other product names are or may be registered trademarks and/or trademarks in the U.S. and/or other countries. The information herein is for informational purposes only and represents the current view of Microsoft Corporation as of the date of this presentation. Because Microsoft must respond to changing market conditions, it should not be interpreted to be a commitment on the part of Microsoft, and Microsoft cannot guarantee the accuracy of any information provided after the date of this presentation.

MICROSOFT MAKES NO WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AS TO THE INFORMATION IN THIS PRESENTATION.