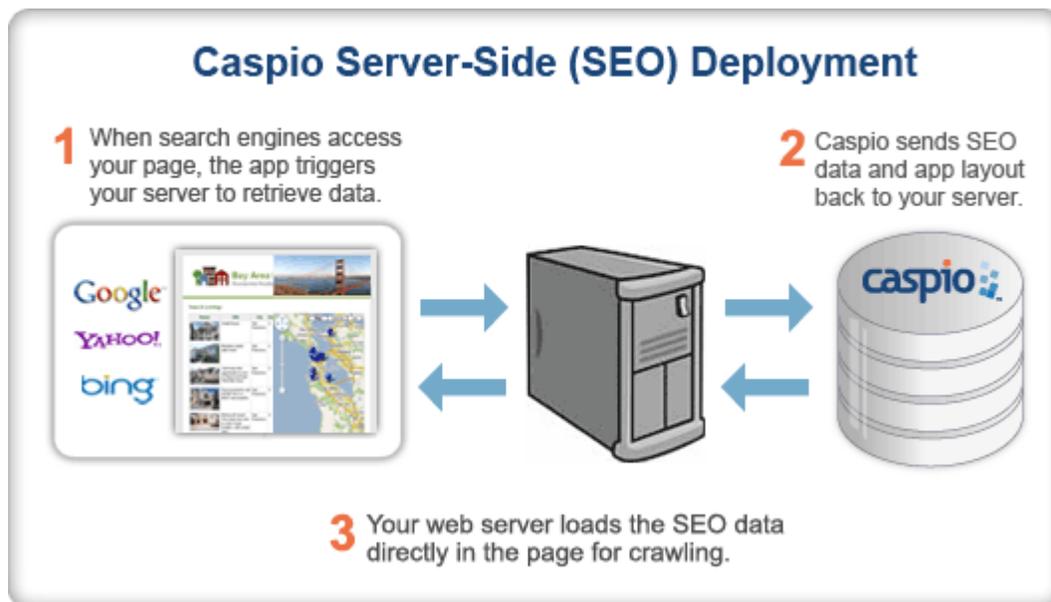


SEO Deployment Best Practices

Guidelines and Tips for SEO-Friendly Caspio Applications

The Caspio SEO Deployment model has the potential to offer significant benefits to any business by increasing online presence. Caspio Bridge has been known as an industry leader among database platforms, providing the tools to efficiently collect, manage and distribute data online. Now, for the first time ever, people can publish the information stored in their database to be crawled by search engines without special coding or programming knowledge.



This document is a collection of best practices, examples and recommendations for optimizing the indexed results of your published database information. A combination of the following proposed steps, along with an SEO-friendly website, can dramatically increase traffic, resulting in increased visibility and effectiveness of your website. While this is a comprehensive guide for the Caspio SEO Deployment model, each situation is different. If there are remaining questions or further clarification is needed, please contact Caspio Support.

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1. DataPage Conditions for SEO Deployment

SEO Deployment is supported through the following server-side languages: PHP, ASP and ASPX. Any of these may be used to deploy your DataPage to your site. SEO Deployment is only available for HTML DataPages and for Report DataPages based on pre-defined criteria.

SEO Deployment Prerequisites:

- Your DataPage is a Report DataPage with a results page, or details page, or both.
- Your DataPage has no search form. It uses “Pre-defined Criteria” with or without external parameters to filter data.
- Your Caspio Bridge account must have the SEO Deployment feature enabled. If SEO does not appear as one of the available deployment methods after adhering to the above prerequisites, your plan may not include the SEO Deployment [add-on feature](#). For more information you may contact your Account Manager, or select Change Plan from the Account menu to add the feature.

1.1 Configuring Results Displayed

Only the first results page will be indexed by search engines. Because of this, the results you want indexed should be shown on the first page of the results set. Steps to implement:

- Log into Caspio Bridge and highlight the DataPage you wish to deploy in the SEO model. Click edit.
- On the “Search Results Options” screen, change the value next to the “Records per page” field with the desired value. It is recommended that you include no more than 100 results per page.
- Input the desired field into the first sort order category. The results you would most like indexed could start with a keyword in the sort field to ensure those results will display on the first page.

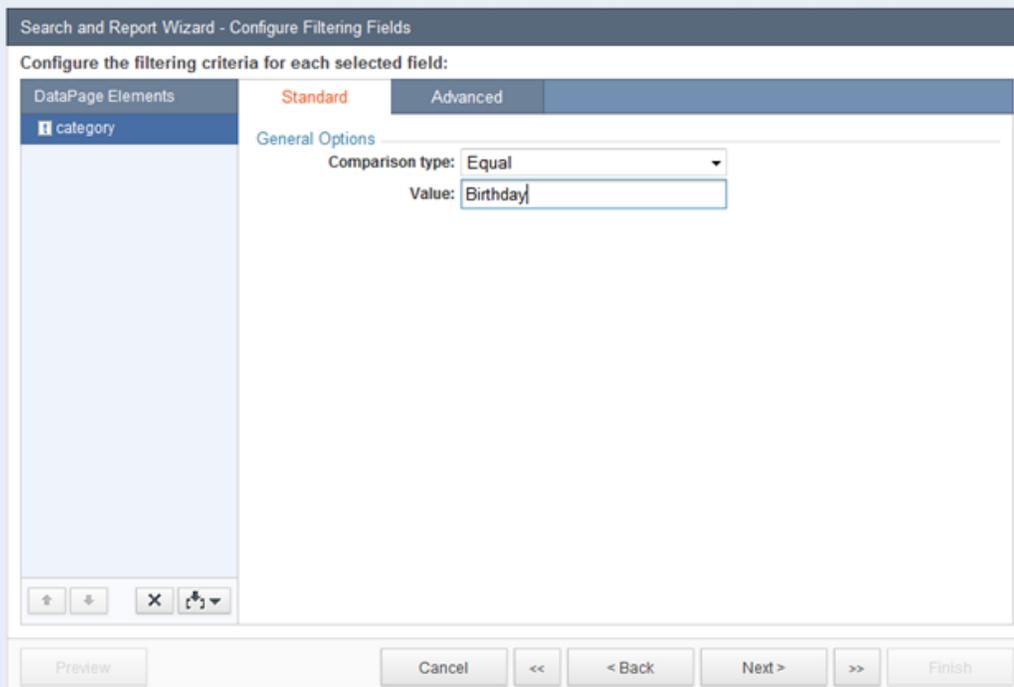
1.2 Creating Multiple DataPages for Less than 10,000 Records

If your database is less than 10,000 records, it is recommended that you create multiple DataPages for each results page to ensure all data will be indexed. If you have more than 10,000 records, it is more efficient to use one DataPage with different parameters (described in section 1.3).

- Determine the number of records from the desired DataPage you would like displayed and indexed by search engines. Decide how many results you would like shown per page, and as a result, how many total pages will be needed. Create a new DataPage for each different page.
- Divide the records among the pages using the “Select Filtering Fields” step in the DataPage wizard.
- Create a different web page on your website for each separate DataPage you have created. Deploy each DataPage on its own web page.
- Replace the standard links to your pages with your own customized links.

In this document, we will use an example of a fictitious website (<http://celebrationcard.com>) where we want 100 Christmas cards and 30 birthday cards to be indexed by search engines. Three total DataPages will be created; two for Christmas cards and one for birthday cards. First, we will create a DataPage to display birthday cards.

1. On the “Search Type” step, we select pre-defined criteria.
2. On the “Select Filtering Fields” step, we move the field we are filtering by into the “Selected Filtering Fields” category. In this case, we use “category”.
3. On the “Configure Filtering Fields” step, the comparison is set to “equal” and the value to “birthday”.
4. On the “Search Results Options” step, enter number 30 for “Records per page” and click Finish.
5. We can then deploy the DataPage to our page at <http://celebrationcard.com/cards/BirthdayCards>.



Search and Report Wizard - Configure Filtering Fields

Configure the filtering criteria for each selected field:

DataPage Elements	Standard	Advanced
category	<p>General Options</p> <p>Comparison type: Equal</p> <p>Value: Birthday</p>	

Buttons: Preview, Cancel, <<, < Back, Next >, >>, Finish

The two DataPages for Christmas Cards will be created in the same way. We will need to filter by other fields to divide the 100 cards into two separate pages with 50 cards on each.

1. We first filter by card_id and set the comparison type to “Less than” or “Greater Than” and insert the value to filter by. On the “Search Results Options” page, we set “records per page” to 50.
2. We then deploy to two separate web pages. The first will be deployed to <http://celebrationcard.com/cards/ChristmasCardsFirst.aspx> and the second to <http://celebrationcard.com/cards/ChristmasCardsLast.aspx>
3. We then create links to these pages from our main page. We will insert the following customized links:


```
<a href="http://celebrationcard.com/cards/BirthdayCards.aspx"> Click here to view Birthday Cards </a>
```

```
<a href="http://celebrationcard.com/cards/ChristmasCardsFirst.aspx"> Click here to view first 50 Christmas Cards </a>
```

```
<a href="http://celebrationcard.com/cards/ChristmasCardsLast.aspx"> Click here to view last 50 Christmas Cards </a>
```

1.3 Creating a DataPage for Large Data Sets

If you have many records, (for example, 100,000 records) which you would like indexed by search engines, use one result set DataPage with different parameter values set in the Filter Criteria section.

- Create a Report DataPage and on the “DataPage Data Source” screen, enable advanced options and parameters.
- On the “Search Type” screen, click on pre-defined criteria, enable parameters in criteria, and then select “Bridge and external parameters”.
- On the “Select Filtering Fields” screen, move the fields you would like to filter by into “Selected Fields” area.
- On the “Configure Filtering Fields” screen, highlight one of the fields and click on the Advanced tab. Enable “Receive value or parameter”, select “External Parameters”, and type in a parameter name e.g. “[@parameter_name]”.
- On the “Search Results Options” screen, click on the Advance tab and set the total records returned to “All matching”, complete the rest of the wizard screens, and click “Finish”.
- Deploy the DataPage to your web page using the SEO option and create links to the DataPage. You will need to pass the filter criteria parameters in your web page link.

1. On the “Select Filtering Fields” screen, we will move the card_id field to the “Selected Fields” area.
2. On the “Configure Filtering Fields” step we will need to use two criteria for card_id. To do this:
 - In the DataPage Elements list select card_id and then select Insert → New Criteria and set the logical operator between criteria to “AND”.
 - Highlight Criteria 1 and set the comparison type to “Greater Than or Equal”.
 - Click on the Advanced tab and select “Receive value or parameter” and insert “card_id1”.
 - Select Criteria 2 and set Comparison Type to “Less Than”.
 - Click on the Advanced tab and select “Receive value or parameter” and set option to, “If empty, ignore criteria”. Then insert the parameter name “card_id2”.
3. On the “Search Results Options” step, click on the Advanced tab, set the total records returned to “All matching” and click “Finish”.
4. We then deploy the DataPage to <http://celebrationcard.com/cards.aspx> using SEO Deployment.
5. Finally, we create the following links to the DataPage:

```
<a href="http://celebrationcard.com/cards.aspx?card_id1=1&card_id2=101">first page</a>
```

```
<a href="http://celebrationcard.com/cards.aspx?card_id1=101&card_id2=201 " >second page</a>
```

- Note that Caspio Bridge has a limit of 1000 records per page.
- Pay attention to the known limitations for different search engines.
 - Google indexes only the first 101 KB (about 100 links) of a web page.
 - Yahoo indexes only the first 500 KB of a web page.

Ideally you shouldn't create pages with more than 100 links per page. In our example, there are 100,000 records so we will do the following:

1. Set the filter criteria in the DataPage to display no more than 100 records per result set
2. Create at least 1,000 links to the different result sets

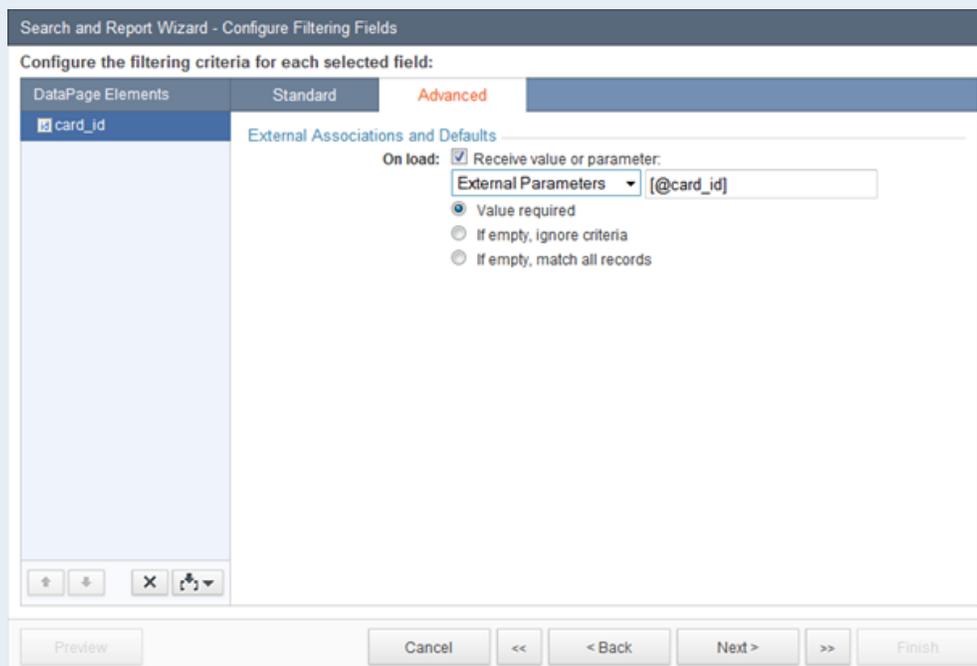
In this case, we need only 10 web pages with 100 links per page.

1.4 Displaying Details Pages

Search engines will only crawl the first page of results so if you want a details page to be indexed, you must create a “straight to details” DataPage instead of relying on the details link included in the typical Caspio Report application.

- Create a new Report DataPage to show detailed information.
- On the “DataPage Data Source” screen, enable advanced options and then enable parameters.
- On the “Search Type” screen, click on pre-defined criteria, enable parameters in criteria, and then select Bridge and external parameters.
- On the “Select Filtering Fields” screen, move the fields you would like to filter by into to “Selected Fields” area.
- On the “Configure Filtering Fields” screen, under the Advanced tab enable “Receive value or parameter” and set a parameter name, such as “[@parameter_name]”.
- On the “Results Page Layout” screen, select “Direct to Details”.

1. Following the above steps, we have created a new DataPage. On the “Select Filtering Fields” screen, we will choose card_id.
2. On the “Configure Filtering Fields” screen we will name our parameter [@card_id].
3. On the “Results Page Layout” screen, we select “Direct to Details” and click Finish to save the DataPage.



Search and Report Wizard - Configure Filtering Fields

Configure the filtering criteria for each selected field:

DataPage Elements Standard **Advanced**

card_id

External Associations and Defaults

On load: Receive value or parameter:

External Parameters

Value required

If empty, ignore criteria

If empty, match all records

Preview Cancel << < Back Next > >> Finish

- On the “Configure Results Page Fields” screen, add an HTML Block. Note that the place where you add HTML Block will be the place where the link to details will appear.
- In the HTML Block, insert:

```
<a href="http://yoursite.com/details.aspx?parameter_name=[@field:parameter_name]">
Details link </a>
```

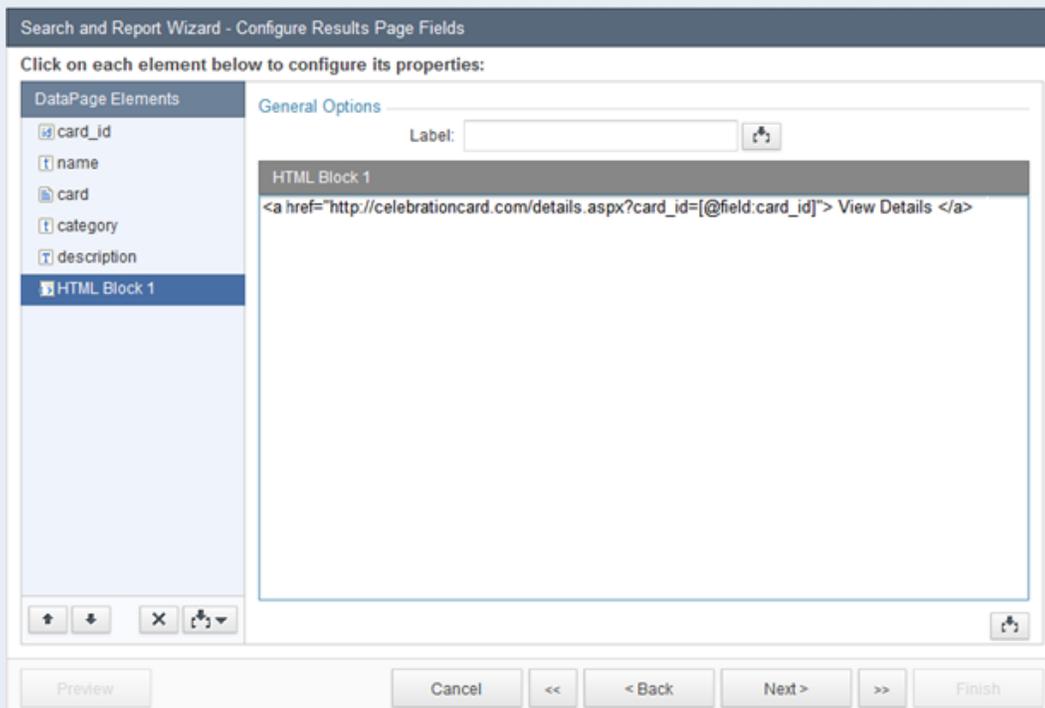
Where:

- yoursite.com = URL of your site
 - details.aspx = The page where you deploy the Direct to Details DataPage
 - parameter_name = The name of your parameter
 - Details link = The name of your details link
- Click Finish to save the DataPage.

On the “Configure Results Page Fields” step, we will insert an HTML block.

yoursite.com = celebrationcard.com
parameter_name = card_id
Details link = View Details

So the final HTML block we will insert is: ` View Details `



1.5 SEO Deployment Limitations

Be aware of some SEO limitations which will affect how you build and design your DataPages:

- Images which are displayed in DataPages cannot be indexed and searched by search engines.
- Authentication doesn't work for SEO-deployed DataPages because Caspio does not support cookies for SEO-deployed DataPages.
- Only one SEO-deployed DataPage can be deployed per one page of your site.
- Caspio Bridge has a limit of 999 records per page. For performance purposes, it's recommended to have no more than 100 records per results page.

2. Deploying DataPages

Once you have created a SEO-friendly DataPage, you are ready to deploy it into your website.

- Select the DataPage you would like to deploy and enable the SEO option.

Deploy DataPage: Celebrationscard Search and Report
✕

Deployment Status: Enabled Disabled ?

Select your preferred deployment method:

<>
Embed


URL


Frame


.NET


SEO

Advanced method enables search engines to index your report data.

Copy the following code into your page or destination:

Enable SSL encryption Use External Style

PHP

ASP

ASPX

DataPage:

```
<!-- Begin Caspio Deploy Code (for inserting in body) -->
<?php
require_once("http://bn.caspio.com/scripts/dpload.txt");dpload("http://bn.caspio.com/",5e
```

External Style:

```
<!-- Begin Caspio Deploy Code (for inserting in head) -->
<link rel="stylesheet" type="text/css" href="http://bn.caspio.com/style.aspx?
AppKey=5e0710004359b37fa77e44a694f4"/>
```

IP Filtering

Close

- This deployment method is compatible with three programming languages, PHP, ASP and ASPX. If you are not familiar with which your server uses, contact your webmaster.
- Decide if you would like to encrypt the data by enabling the SSL option.
- Next, you can choose between External or Inline Style.

- **External Style:** It is recommended that you use this deployment option for your DataPages. This will result in faster page load times as well as a reduction in data transfer.

If you select external style, a second tab will appear under the deploy code section next to the DataPage tab. Click the “Copy to Clipboard” button and paste the DataPage deploy code into the source code area of your web page that you want your DataPage to appear. Next, under the external style tab, click the “Copy to Clipboard” button and paste the External Style deploy code into the header source code of your web Page. Save the source file and upload it to your server.

- **Inline Style:** If you don’t have access to deploy an External Style for improved performance, you can still use an Inline Style (only one deploy code is provided). Paste the deploy code into the source code area of your web page that you want your DataPage to appear. Save the source file and upload it to your server.

If the SEO option is not available:

As described in the Section 1 prerequisites, your Caspio Bridge account must have the SEO Deployment feature enabled. If the “SEO’ option does not appear in the Deploy dialog for a pre-defined criteria Report DataPage, your plan may not include the SEO Deployment [add-on feature](#). For more information, contact your Account Manager or select Change Plan from the Account menu to add the feature.

3. Setting up Your Website with Caspio SEO Deployment

The following are guidelines for setting up your website in a way that optimizes results of the SEO Deployment.

3.1 Title Tags

Each page of your website should use a title tag. This tells search engines about your page name. It should be placed within the <head> tag. Ideally, each page should have unique title.

The title of our main page will be “Celebration cards, Cards for Celebration, greeting cards”, so we will insert the following title tag onto our page:

```
<head>

<title>Celebration cards, Cards for Celebration, Greeting cards</title>

<meta name="Description" content="Achievement or happiness has a strange equation with sharing. More you share it, more it gets augmented. Enhance your joy of celebrations with these cute cards from this Just Like That category.">

<meta name="Keywords" content="Just like that cards, just like that e-cards, Celebration cards, Celebration greetings, Celebration e-cards.">

</head>
```

3.2 Description Meta Tag

Use a description Meta tag on each page of your site. This should be as long as a sentence or even a paragraph and will give search engines a summary of what the web page is about. The description Meta tag should be placed within the <head> tag.

For our example we might add the following description meta tag on one of our pages within the <head> tag.

```
<head>

<title> Celebration cards, Cards for Celebration, Greeting cards </title>

<meta name="Description" content="Achievement or happiness has a strange equation with sharing. More you share it, more it gets augmented. Enhance your joy of celebrations with these cute cards from this Just Like That category.">

<meta name="Keywords" content="Just like that cards, just like that e-cards, Celebration cards, Celebration greetings, Celebration e-cards.">

</head>
```

3.3 Keyword Meta Tag

Use Meta tag keywords in the source code of your web page. Insert a list of keywords relevant to your page and divide each word with a comma. Meta tag keywords should be placed within the <head> tag.

In our example, we might add the following keywords on one of our pages within the <head> tag.

```
<head>

<title> Celebration cards, Cards for Celebration, Greeting cards </title>

<meta name="Description" content="Achievement or happiness has a strange equation with sharing. More you share it, more it gets augmented. Enhance your joy of celebrations with these cute cards from this Just Like That category.">

<meta name="Keywords" content="Just like that cards, just like that e-cards, Celebration cards, Celebration greetings, Celebration e-cards.">

</head>
```

3.4 Effective Use of Robots.txt

Robots.txt uses gives instructions to the web spiders and web robots that search engines use to crawl web pages. You can use Robots.txt to dictate which areas of your website you would like crawled or which areas you would like to keep private. The Robots.txt file should be placed in the root of your domain with the name "Robots.txt". The simplest robots.txt file uses the two following rules:

- User-agent: the robot you want the following rule to apply to.
 - Disallow: the URL you want to block from the web spiders and web robots.
- These two lines are considered a single entry in the file. You can include as many entries as you would like as well as include multiple "Disallow" lines and multiple user-agents in one entry.
 - For example, if you would like all compliant search engine bots to not access the content under "/photos/" or any URL whose path begins with "/search" you need to set the following in your robots.txt file:


```
User-agent: *
Disallow: /search
Disallow: /photos/
```

Note that entries are case-sensitive. For instance, Disallow:/my_photo.asp would block

http://www.celebrationcard.com/my_photo.asp, but would allow
http://www.celebrationcard.com/my_Photo.asp

3.5 Sitemap Setup

A Sitemap is a file containing a list of the web pages on your site. It is used to give search engines information about your site, including URLs that might not otherwise be discovered by search engines during the normal crawling process. Sitemaps can be created manually or you can use a program to automate this process.

One sitemap cannot list more than 50,000 links. If your site has more than 50,000 links, you will need to create several Sitemaps. It is recommended that you also create a Sitemap index file listing your other Sitemaps.

Caspio provides a sitemap generator that creates an XML sitemap file based on the way you would typically deploy your Caspio Bridge DataPages, particularly for large data sets.

- Sitemap Generator: <http://lib.caspio.com/pub/sitemap-generator>
- Documentation: <http://howto.caspio.com?p=254>

The following is an example of what a sitemap for our greeting card company might look like:

```
<?xml version="1.0" encoding="UTF-8"?>
  <urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9">
    <url>
      <loc>http://celebrationcard.com/</loc>
      <lastmod>2014-01-01</lastmod>
      <changefreq>monthly</changefreq>
      <priority>0.8</priority>
    </url>
    <url>
      <loc> http://celebrationcard.com/cards.aspx?card_id1=1&card_id2=101 </loc>
      <lastmod>2014-05-05</lastmod>
      <changefreq>monthly</changefreq>
      <priority>0.7</priority>
    </url>
  </urlset>
```

Telling search engines about your site typically results in faster indexing of your web pages. We recommend at least adding your site to the major search engines.

Google:

- Google Webmaster Tools: <http://www.google.com/webmasters/tools>
- No account: <https://www.google.com/webmasters/tools/submit-url>

Bing

- Bing Webmaster Tools: <https://ssl.bing.com/webmaster/home/mysites>
- No account: <http://www.bing.com/docs/submit.aspx>

Note that as of August 2011, Yahoo's Site Explorer is now merged with Bing Webmaster Tools.

4. Verifying Website Indexing History

Having your website indexed by a search engine typically takes up to a few weeks or longer depending on the circumstances. To check if one of the previously listed search engines has indexed your site, you will need to do the following:

- **Google**
 - Go to **Google** search and type in the URL for your website with “site:” as a prefix. (**site:http://www.yoursiteURL.com** or **site:yoursite.com**). This special syntax will show how many of your pages Google has already indexed.

 - After your site is indexed, you can also determine how thoroughly Google has crawled your website. To do this, type in **info:http://www.yoursiteURL.com** into the search box.

- **Yahoo**
 - Open your browser and go to yahoo.com. To search for your website by its domain, search with “**site:**” preceding the domain. For example, type **site:yoursiteURL.com**.

- **Bing.com**
 - To find out if your website is listed in the Bing.com Search index, type in “**site:**” followed by your website URL in the Bing.com search box. For example type **site:yourwebsiteURL.com**.