Kaltura and Video SEO
Guidelines

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The purpose of this document is to teach both technical and non-technical readers about Video SEO in general, and how to use Kaltura's tools and capabilities to achieve optimal Video SEO results.

Focus on what interests you: you may want to scan the headings, bolded texts and links to find the parts that apply to you.

Why Video SEO

There are many good and perhaps obvious reasons why SEO in general is important for any website owner. Video SEO differs from general SEO in two important ways:

- Video content is not easily discoverable by search engines
- Achieving great SEO results for video content is still much easier than for traditional SEO.

The bottom line is that Video SEO is effective:

- Forrester Research found that videos were more than 50 times more likely to receive an organic first page result ranking than pages without video.
- A case study by onlinevideowatch.com: Tapping Into Video SEO
- An article by TechCrunch: How To Use Video SEO To Jump To The Top Of Google Search Results

Introduction

Kaltura provides the means to achieving optimal Video SEO utilizing cutting edge Video SEO techniques.

Achieving optimal Video SEO involves several principals, some in line with general SEO practices and some unique to Video SEO. There are two techniques that are unique to Video SEO and only when used together will you achieve the best results possible.

1. Submitting a Video Site Map and providing a mechanism that always serves the most current content on your site whenever a search engine re-polls that site map. This is the easier step and the one with the most impact.
2. Optimizing your site for organic search results. This means making it easy for search engines to traverse (crawl) your site, find the video content, understand that it is video (or other media*) and know things about it such as its title, description, tags, etc. * All future references to "video" should be taken to mean all media types supported by Kaltura and the Kaltura Dynamic Player (KDP).

Kaltura provides you with the tools and means to do both of the above. This article explains what is required both by the site developer and by the site's manager (the Kaltura Management Console user). You can **start by skimming the bolded headings** and texts in this document to find the parts that apply to you.

Video Site Maps

1. **Overview**:
   a. Create a landing page (providing a unique URL for each video).
   b. Create a dynamic video site map using the Kaltura Management Console (KMC).
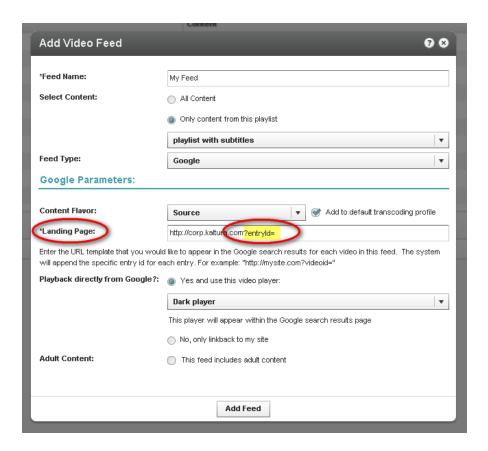   c. Submit the site map to search engines.

2. **Creating the Landing Page**
   a. In order for a video site map to be legitimate and useful, your site must support identifying each video with a unique URL. This is done by passing the video's unique identifier ("Entry ID" in Kaltura terminology) as a URL query parameter, for example: http://kaltura.webs.com?**id=0_qhmv0e34**.
   b. The Landing Page needs to extract the Entry ID from the URL and use it to tell the KDP which entry to play. This is done when the embed code for the KDP is generated.
   c. **Kaltura provides a base Landing Page that provides this functionality**. The Kaltura-provided landing page is implemented in JavaScript so that it can be used regardless of what server-side language you use.
      - We are not concerned that the search engine is not able to recognize the video on this page due to the use of JavaScript, because the search engine already knows about this content via the video site map mechanism - the landing page is linked to *from* the search engines' results page (SERP).

       d. **Download the Landing Page from here**: http://www.kaltura.org/seo_landing_page

1. Extract the seo_landing_page.zip to a folder of your choice.
2. Run seo_landing_page.html in your browser. It should work as-is but there are some settings inside seo_landing_page.html which you should customize for your site:
   - These include the Player ID to use, your Kaltura Partner ID, width and height of the player and more.
   - Detailed explanations of these and other optional settings appear in comments in the page's html code.
3. Design the page to match your site design. Remember that **this is now another entry point to your site** so include navigation and content (galleries, recommendations, related, etc.) that will draw people into the rest of your site.
   - Note: The page makes use of two scripts and one SWF that are served from the Kaltura CDN for your convenience.

3. **Creating the Site Map**
   a. Login to the KMC, go to Content -> Syndicate (direct link) and click on the "Create New Feed" button.
   b. Most of the fields that need to be filled out are self-explanatory but note the following:
      - If you don't want all of your content to be indexed by the search engines:
         - First go to KMC -> Content -> Playlists (direct link) and create a new playlist (manual or rule-based) that represents the content you *do* want exposed
         - Then return to Content -> Syndicate -> Create New Feed (link) and choose the option called "Only content from this playlist" and select the playlist you created.
      - Ignore "Content Flavor" (leave it at default setting).
         - The "Landing page" field is the place to enter the URL of where you placed seo_landing_page.html on your site, followed by "?entryId=" (without the quotes, e.g. http://www.example.com/seo_landing_page.html?entryId=)
            - This is the URL parameter for the Entry ID, as discussed above in step 2.a
            - If you decide to name this parameter something else, make sure to change the corresponding configuration setting in the Landing Page code
      - See the following image to orient yourself:

- Creating a Yahoo! feed is almost identical. See more info in the KMC QuickStart Guide (page 18 or look for "Yahoo!" in the "SEO" section).

4. **Submitting the Site Map**
    - **Google:**
        - Submitting the site map directly to Google involves several steps and requires access to your web server – see details here, and here
        - **Kaltura can do it for you**:
            - THIS SERVICE IS CURRENTLY OFFERED FOR FREE!
            - Contact Kaltura Support (via the KMC), your Kaltura Project Manager or your Kaltura Account Manager and ask them to submit the feed for you through Kaltura's direct access to Google's sitemaps mechanism – make sure to include the feed name and/ or feed ID.
            - Note that this service is not available for Kaltura Free Trial accounts.
    - **Yahoo:**
        - Create a new feed following the above instructions but choose "Yahoo!" in the "Feed Type" drop down
        - Go to http://video.search.yahoo.com/mrss/submit
        - Fill in the form and submit your feed as a "Full feed"
    - **Bing:**
        - Bing requires manual approval of your feed
        - Contact the Bing mRSS support team and include the URL for the Yahoo! feed you created in the KMC
        - Find out more: Bing mRSS FAQ
    - **TubeMogul:**
        - Create a new feed following the above instructions but choose "TubeMogul" in the "Feed Type" drop down
        - Go to http://www.tubemogul.com/ and log in
        - Go to Advanced Tools > More Tools, select "MRSS Feed Manager" and

submit your feed

- Note that you will need a TubeMogul account for this. Contact Kaltura for more information and pricing.

ORGANIC RESULTS

1. **A Unique URL for Each Video**
   a. Every video should be represented by its own unique URL that can be crawled by the search engines' spiders and linked to from the search engines' results page.
      - This does NOT mean that YOUR USERS must experience your site in Web 1.0 style, where each click on a video in a gallery causes the page to reload - you can still use JavaScript and the KDP's API in order to inject a new video into the player *without* refreshing the page, creating a Web 2.0 style / single page web app/ RIA experience.
      - **What is important** is for the link itself (the HTML's <a> tag's "href" attribute) to be a valid link. When JavaScript is turned off (the way the search engine spiders see your website), the link should lead to a page that loads a KDP with the correct video and its relevant metadata (name, description, etc.)
   b. While not specific to Video SEO, it is a good SEO practice to make it so that each link on your navigation/ menu can be followed by search engines to pages representing that state ("crawled"), even if your website is built as a single page-type Rich Internet Application (RIA). For example, if you have links to Sports, News and Travel, each of those links should still work with JavaScript turned off and bring up the correct list of content (gallery, list of links, etc.), so that the search engine can follow them. This is also in line with the principle of Progressive Enhancement *and* could potentially make it easier to adapt your site for mobile browsing.
   c. Other general SEO principles that can affect Video SEO are the proper use of headings and use of semantic HTML on the individual video pages and the site in general.

2. **Search Engine Readable Embed Code**
   a. While the main example below refers to Flash, all the SEO methods mentioned can work for Microsoft Silverlight embeds as well as HTML5 <video> and even <iframe> embeds (see more details below).
   b. Overview
      - KDP is a Flash application (used to present various media types, most notably video, as well as provide many additional user interactions, advanced statistics collection, etc).
      - Like all Flash, it can be embedded into a web page in several different ways and there are many (many) discussions on the internet about the "best" way.
      - These methods can be broken down into two types:
        - HTML based embed codes (from either static or server generated HTML).
        - JavaScript generated embed codes, e.g. the very popular swfObject or the less known but highly recommended Flashembed.
   c. **The Kaltura Recommended HTML Embed Code**:
      - Kaltura recommends the embed code presented and dissected below, which has proven to work in the vast majority of circumstances and which enables achieving optimal Video SEO.
        - The texts highlighted in <mark>yellow</mark> are the special additions which enable Google and Yahoo to recognize the embed code as representing a video and the video's metadata.
          - This utilizes RDFa for HTML (Resource Description Framework - in - attributes), a W3C recommendation that adds a set of attributes to XHTML for embedding rich metadata within web documents.
        - The texts highlighted in <mark>cyan</mark> are placeholders (value stubs) which need to be replaced with the actual values for your video.

```
<object
  id="{UNIQUE_OBJ_ID}"
  name="{UNIQUE_OBJ_ID}"
  type="application/x-shockwave-flash"
```

```
      height="{HEIGHT}"
      width="{WIDTH}"
      allowFullScreen="true"
      allowNetworking="all"
      allowScriptAccess="always"
      data="
http://www.kaltura.com/kwidget/wid/_{PARTNER_ID}/uiconf_id/{PLAYE
R_ID}/entry_id/{ENTRY_ID}"
      xmlns:dc="http://purl.org/dc/terms/"
      xmlns:media="http://search.yahoo.com/searchmonkey/media/"
      rel="media:video"
      resource="
http://www.kaltura.com/kwidget/wid/_{PARTNER_ID}/uiconf_id/{PLAYE
R_ID}/entry_id/{ENTRY_ID}"
>
    <param name="allowFullScreen" value="true" />
    <param name="allowNetworking" value="all" />
    <param name="allowScriptAccess" value="always" />
    <param name="bgcolor" value="#000000" />
    <param name="flashVars" value="" />
    <param name="movie" value="
http://www.kaltura.com/kwidget/wid/_{PARTNER_ID}/uiconf_id/{PLAYE
R_ID}/entry_id/{ENTRY_ID}" />
    <a rel="media:thumbnail"
href="http://www.kaltura.com/p/{PARTNER_ID}/sp/{PARTNER_ID}00/thu
mbnail/entry_id/{ENTRY_ID}" />
    <span property="dc:description" content="{ENTRY_DESCRIPTION}"
/>
    <span property="media:title" content="{ENTRY_NAME}" />
    <span property="media:height" content="{HEIGHT}" />
    <span property="media:width" content="{WIDTH}" />
    <span property="media:duration" content="{DURATION}" />
    <span property="media:type" content="application/x-shockwave-
flash" />
    <!--other alternate content may be entered instead of this
comment -->
</object>
```

- Note that the values for "data", "resource" and "movie" are always the same (this might save you a bit of coding complexity).

  d. RDFa with JavaScript generated embed code
      i. Intro:
          1. Since search engines don't read and process JavaScript, we need to apply the RDFa attributes to a wrapper element.
          2. To understand how to do this, here is a quick overview of how JavaScript-generated embed codes work:
              a. A placeholder <div> is placed on the page
              b. The script targets that <div> and either:
                  i. Inserts the embed code *into* it (e.g. flashembed)
                  ii. *Replaces* it with the embed code (e.g. swfObject)
      ii. Using the "Kaltura Recommended HTML Embed Code" above as a reference, insert the yellow-highlighted texts from the opening <object> tag into the opening tag of your placeholder <div>.
      iii. Insert the remaining yellow-highlighted text from the above example before the closing </div> tag.
      ii. Replace the cyan-highlighted texts with your actual values.

  e. RDFa with Silverlight
      i. Using the "Kaltura Recommended HTML Embed Code" above as a reference, insert

the <mark>yellow</mark>-highlighted texts into the appropriate parts of the Silverlight embed code.

     ii.   Replace `"application/x-shockwave-flash"` with `"application/x-silverlight-app"`.

    iii.   Replace the <mark style="background:cyan">cyan</mark>-highlighted texts with your actual values.

f. **RDFa with the HTML5 <video> tag**

     i.   Using the "Kaltura Recommended HTML Embed Code" above as a reference, insert the <mark>yellow</mark>-highlighted texts from the opening <object> tag into the opening <video> tag.

     ii.   Insert the remaining <mark>yellow</mark>-highlighted text before the closing <video> tag.

    iii.   Replace `"application/x-shockwave-flash"` with `"video/h264"`, where "h264" might actually need to be "ogg" or "webm", depending on how you video is encoded.

    iv.   Replace the <mark style="background:cyan">cyan</mark>-highlighted texts with your actual values.

     v.   If at the top of the html code you declared `<!DOCTYPE HTML>` change it to `<!DOCTYPE `<mark>X</mark>`HTML>`.

          1.   If you didn't write the rest of your html to conform to xhtml, this might cause your page not to "validate". This should not have any adverse effect on browser compatibility or SEO results.

g. **Getting dynamic (media-specific) data into the RDFa code**

     i.   The embed code template:

         •   The embed code is generated on the server side by using template replacing the placeholders / value stubs with dynamic data (such as Partner ID and Entry ID for the URL and name and description for the RDFa attributes). Use the "Kaltura Recommended HTML Embed Code" shown above as the basis for the template.

     ii.   Broad outline:

          1.   Instantiate a Kaltura Client

          2.   Start a Kaltura Session

          3.   Get entry object (an "entry" is the Kaltura term for a media asset). Once you get the object, you have access to all its properties.

     ii.   Useful links:

          1.   Understanding Kaltura - Open Source Online Video Platform

          2.   Kaltura Terminology guide

          3.   To instantiate a Kaltura client and perform API calls in your programming language of choice: Kaltura API Client Libraries Guide.

          4.   Kaltura API (api_v3) - Getting Started guide

          5.   Full api_v3 documentation (aka Partner Services 3) - api_v3 API documentation

              •   session start

              •   baseEntry get

          6.   Learn how to use the Kaltura TestMe Console to test your API calls and to generate code samples: Kaltura API and TestMe Console Introduction.

          7.   Explore and understand the Kaltura entry object:

              •   http://www.kaltura.com/api_v3/testmeDoc/index.php?object=KalturaBaseEntry

              •   http://www.kaltura.com/api_v3/testmeDoc/index.php?object=KalturaMediaEntry

    iii.   How do I get an Entry ID in the first place:

         •   Creating a dynamic list of entries

         •   Kaltura Gallery Services (KGallery)

Additional Resources

- See a **sample finished application** that uses these principles: Kaltura MediaSpace^{TM} demo.
  - Try using it with JavaScript and CSS turned off to see it in a way similar to how search engines will see it (note that this application is **not open source** and the link to it is only provided as an example of what a finished result might look like).
- Read these great Video SEO articles by the experts at ReelSEO: SEO for Video Tips & Tutorials.

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