

Google SEO Tools Help to Optimize Drupal Video Site



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kidsinthehouse
THE ULTIMATE PARENTING RESOURCE

Topics

1. Background: Google Analytics shows traffic drop-down

2. Google Webmaster tools: crawl errors and error fixing

3. Google PageSpeed Insights

4. Image optimization

5. Enable compression: gzip compression on web server

6. Remove render-blocking JavaScript

7. Use asynchronous versions

8. Leverage browser caching

9. Site speed - improve site speed - too many JS & CSS files

10. Google WMT: International targeting - set language



Topics (continue..)

11. Build sitemap & submit it to Google for indexing
12. Build video sitemap & submit it to Google for Indexing
13. Google Analytics and site search tracking
14. Tracking goals in Google Analytics
15. Google Webmasters and VideoObject errors
16. Google Search console: mobile usability errors
17. Google Site Search
18. Always HTTPS: secure version of HTTP
19. Migrate Videos from BrightCove to Amazon AWS
20. Questions



Background: Google Analytics shows our website traffic drop-down

+ Our Website www.kidsinthehouse.com

- + Educational website aims to help parents and caregivers
- + This resource contains over 9,500 videos 450 leading parenting experts.
- + Experts including doctors, pediatricians, psychologists, educators, best-selling authors, celebrities, and parents themselves.

+ Web Architecture

- + Drupal 7 CMF, MariaDB Database, PHP 5.5, Apache on CentOS 7
- + Video Hosting: BrightCove: We are planning to migrate to Amazon AWS

+ Our website traffic drops down in January 2016

- + Google Algorithm Changed in January 2016
- + Google WebMaster Tools => Crawl Errors
- + WHAT IS THE PROBLEM ????????



Background: Google Analytics shows our website traffic drop-down (Continue..)

- ✚ Investigation: If most of the traffic has been Organic and now we see a sudden drop
 - ✚ May have been hit with one of Google Penalties: two main penalties.
 - The first one is a manual action from Google's spam team, and
 - the second one is an algorithmic penalty.
 - ✚ One of popular algorithmic updates is Panda, focused on content quality,
 - ✚ Another is Penguin, focused on backlinks and anchor text distribution.
 - ✚ Article: <https://moz.com/google-algorithm-change>.
- ✚ Other things to check:
 - ✚ To check on both the Crawl Errors and HTML errors. Both of these reports notate the amount of internal errors our website may have.
 - ✚ To keep an eye on the top performing keywords
 - ✚ To check "Manual actions", on Google Webmaster Tools

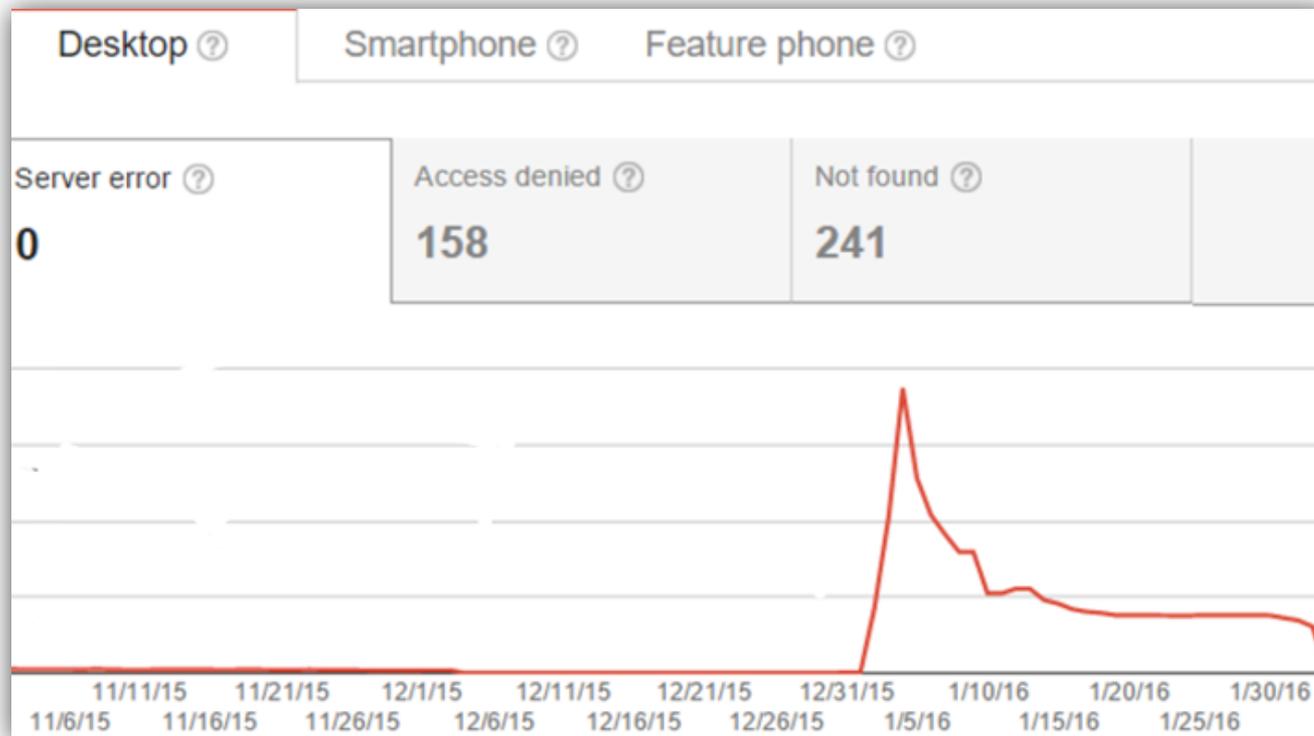


Google Webmaster tools: crawl errors and error fixing

+ Crawl errors: sever errors

+ From December 31, 2016 to January 12, 2017

+ Server error: 700+; Access denied: 200+; Not found: 270



Google Webmaster tools: crawl errors and error fixing (continue..)

✚ Crawl errors: sever errors

✚ From December 31, 2016 to January 12, 2017

✚ Server error: 700+; Access denied: 200+; Not found: 270

✚ Check the Error URL Patterns and fix these errors

✚ URL Patterns: user/username, user/register?destination=node/NID

✚ Check these URL and mark them fixed in WMT

✚ *Googlebot couldn't access the contents of this URL because the server had an internal error when trying to process the request.*

✚ **Problem: a Profile node was deleted which is referenced by a Video node**
Video Node: field_data_field_video_expert

✚ **Solution 1: Restore Profile nodes from backup;**

✚ **Solution 2: Manually edit nodes to add Profile(node) references to fix data errors**



Google Webmaster tools: crawl errors and error fixing (continue..)

✚ Sever had an internal error when trying to process the request :

✚ URL <http://www.kidsinthehouse.com/forum-topic/wilkes-barre-pa-dumpster-rental-have-spring-cleanup-maryland>

✚ Fixing:

✚ node/46769/edit => reference to a profile node/46364/node_export
Export node node/46364/node_export on Backup Server

✚ SELECT * FROM `field_data_field_video_expert` where `field_video_expert_nid` = 463453

✚ UPDATE `field_data_field_video_expert` SET `field_video_expert_nid` = 49484
WHERE `field_video_expert_nid` = 461234

✚ Download the image of expert from Backup: Upload the image and save the profile node

✚ Repeating above fixing for other Video nodes



Google Webmaster tools: crawl errors and error fixing (continue.. ..)

+ Fixing Other Sever Errors

+ 404 file not found

- + Creating redirects to <AnotherUrl>

+ Page Access denied: patternn

- + [/relationship/268498/request](#)

- + Exclude this URL pattern from /robot.txt: Disallow: /relationship/

+ empty page

- + Double check the page and create redirects

+Section "Not found":

- + Marking as fixed

+There are about many Articles (Node Type) deleted from the living site, but many hyper links are still linking to them from other web pages



Google PageSpeed Insights:

+ developers.google.com/speed/pagespeed/insights

+ There are hundreds of issues reported by Insights

+ Another Tool I recommend: <https://gtmetrix.com/analyze.html>

+ Fixing Issues

+ **Optimize images:** Properly formatting and compressing images can save many bytes of data.

+ **Enable compression:** Compressing resources with gzip or deflate can reduce the number of bytes sent over the network.

+ **Remove render-blocking JavaScript:** blocking script resources and 5 blocking CSS resources cause a delay in rendering your page.

+ **Use asynchronous versions**

+ **Leverage browser caching:** Setting an expiry date or a maximum age in the HTTP headers for static resources

+ **Improve site speed - too many JS & CSS files:** Minify JavaScript and CSS



Image optimization

✚ Properly formatting & compressing images can save many bytes of data.

- ✚ Manually edit image with PhotoShop and Export Small Size as =>
- ✚ JPG file => Reduce the Quality of image => 40%~85%
- ✚ PNG file => Smaller File (8-bit)
- ✚ Edit more than 100 images

✚ Image Optimize Tools

- ✚ Drupal ImageAPI Optimize module, <https://www.drupal.org/node/773342>.
- ✚ Image optimization requires external tools written mainly in C/C++.
 - (PNG) advpng is a part of advancecomp.
 - (PNG) OptiPNG is a tool to optimize PNG images.
 - (JPEG) jpegtran is a part of jpeglib and is available in most systems
 - (JPEG) jfifremove strip JFIF headers.
- ✚ Compressing and optimizing existing images



Image optimization (continue..)

+ Install and Configure Tools Above on CentOS 7 Linux:

+ /admin/config/media/image-toolkit : processing toolkit with ImageAPI Optimize

+ `sudo yum install advancecomp`

+ `sudo yum install optipng`

+ `sudo yum install jpegtran`

+ **jfifremove strip JFIF headers. Compile it:**

```
sudo gcc -o jfifremove jfifremove.c
```

+ Install a package to optimize all existed images:

+ ImageAPI Optimize can manipulate newly created images only, so it cannot optimize existed images.

+ Install a bash script written by Joel Hardi:

<https://lyncd.com/2009/03/imgopt-lossless-optimize-png-jpeg/>

+ Install the required package PNGOUT (pngout)

+ Run program to optimize: `[~@:/all/themes/MyTheme]$ imgopt images/*`

+ More than 550 images are compressed under `/MyTheme/images/*`

+ More than 10000 images are compressed under `/defaults/files/images/*`



Enable compression: gzip compression on web server

- ✦ Compressing resources with gzip or deflate can reduce the number of bytes sent over the network.
- ✦ Gzip compression:
 - ✦ [Document: https://varvy.com/pagespeed/enable-compression.html](https://varvy.com/pagespeed/enable-compression.html)
 - ✦ Drupal Advanced Aggregation settings to make the the gzip compressing is activated right..
 - ✦ Solution #1: add code in .htaccess file. NOT working on our case.
 - ✦ Solution #2: Install And Configure mod_deflate On CentOS 7



Enable compression: gzip compression on web server (continue..)

✚ Gzip compression:

✚ Solution #2: Install And Configure mod_deflate On CentOS 7

```
sudo apachectl -t -D DUMP_MODULES | grep deflate
```

✚ Check if the mod_deflate module has been loaded:

```
more ~/httpd/conf.modules.d/00-base.conf | grep mod_deflate.so
```

✚ To configure mod_deflate, create a new configuration file:

```
➤ ~/httpd/conf.d/mod_deflate.conf  
  <filesMatch "\.(js|html|css)$">  
    SetOutputFilter DEFLATE  
  </filesMatch>
```

✚ DeflateCompressionLevel - the compression level to be applied. By default, this level is 9, the highest level of compression.

✚ Restart Apache Server:

```
sudo apachectl restart
```



Remove render-blocking JavaScript

- ✚ When PageSpeed Insights detects that the HTML references a blocking external JavaScript file in the Above-the-Fold portion of page.
 - ✚ Above the Fold refers to the portion of the webpage that is visible without scrolling.
- ✚ Avoid and minimize the use of blocking JavaScript, especially external scripts that must be fetched before they can be executed.
- ✚ Scripts that are not critical to initial render should be made asynchronous or deferred until after the first render.
 - HTML `<script>` defer Attribute
 - Using the "onload" event we call an external javascript
 - Document: <https://varvy.com/pagespeed/defer-loading-javascript.html>
- ✚ Scripts that are necessary to render page content can be inlined to avoid extra network requests
- ✚ Document: <https://developers.google.com/speed/docs/insights/BlockingJS>



Use asynchronous versions

+ None-critical Scripts to initial render should be made asynchronous or deferred until after the first render

+ async - The HTML

```
<script async src="siteScript.js" onload="myInit()"></script>
```

+ defer - The HTML

```
<script defer src="siteScript.js" onload="myInit()"></script>
```

+ Using the "onload" event we call an external javascript

+ Defer Load Script to call external JavaScript file:

Document: <https://varvy.com/pagespeed/defer-loading-javascript.html>

```
function myFunction() {
    var myJS= document.createElement("script");
    myJS.src = "defer.js";
    document.body.appendChild(myJS);
}
if (window.addEventListener)
    window.addEventListener("load", myFunction, false);
else if (window.attachEvent)
    window.attachEvent("onload", myFunction);
else window.onload = myFunction;
```



Leverage browser caching

✚ "Leveraging" browser caching is when a webmaster has instructed browsers how their resources should be dealt with.

✚ Change the request headers of your resources to use caching.

✚ Browser caching for .htaccess

```
<IfModule mod_expires.c>
ExpiresActive On
ExpiresByType image/jpg "access 1 year"
ExpiresByType text/css "access 1 month"
ExpiresByType text/x-javascript "access 1 month"
ExpiresDefault "access 1 month"
</IfModule>
```

✚ Cache-Control

```
# 1 Month for most static assets
<filesMatch ".(css|jpg|jpeg|png|gif|js|ico)$">
Header set Cache-Control "max-age=2592000, public"
</filesMatch>Optimize your caching strategy.
```

✚ Document: <https://varvy.com/pagespeed/leverage-browser-caching.html>



Improve site speed – Optimize JS & CSS files

✚ Optimize CSS delivery & Minify JavaScript

✚ Drupal AdvAgg module:

✚ More details about Drupal AdvAgg module:

<http://cgit.drupalcode.org/advagg/tree/README.txt>

✚ Enable Advanced Aggregation

✚ Use DNS Prefetch for external CSS/JS.

✚ Use HTTPRL to generate aggregates

✚ Combine CSS files by using media queries

✚ AdvAgg Cache Settings

✚ After installation of Drupal module Advanced CSS/JS Aggregation (advagg):

- The total number of CSS files reduced from 10 to 5
- The total number of JS files reduced from 11 to 6



Improve site speed – Optimize JS & CSS files (Continue..)

+ Drupal AdvAgg module Continue..

+ Bundler : Active

Target Number Of CSS Bundles Per Page: 1

Target Number Of JS Bundles Per Page: 1

+ CSS Compression

File Compression: Select a Compressor: YUI

Per File Settings: go through every single CSS file and set the compress

+ JS Compression

File Compression: Select a Compressor: we disabled it because it messed up the website a lot.

We need debug all JS files one by one

+ MUST CONFIGURE: Drupal Performance

- Cache pages for anonymous users
- Compress cached pages.
- Aggregate and compress CSS files.
- Aggregate JavaScript files.



Improve site speed – Optimize JS & CSS files (Continue.. ..)

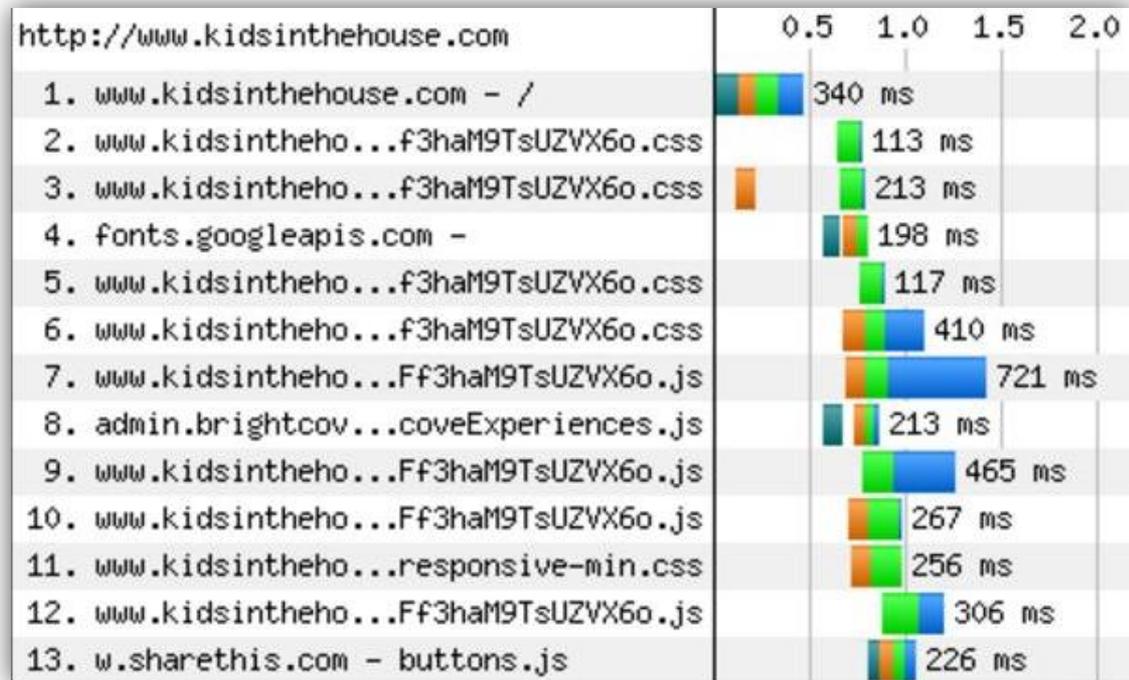
Advanced CSS/JS Aggregation module:

After installation of advagg:

- The total number of CSS files reduced from 10 to 5
- The total number of JS files reduced from 11 to 6

Other topics related:

- MemCache for Database
- PHP 5.5+ & Zend OPcache v7
- Varnish 4 Cache Service and Varnish Module
- LAMP Performance Study
- Configuring Apache for maximum performance
- MySQL performance tuning
- Not covering in this session. Please do the research.*



Google : International targeting - set language if appropriate

+ Google Search Console => International Targeting
Your site has no hreflang tags.

+ Check the Language setting in Drupal configuration:

</admin/config/regional/settings>

Default country: United States

Default time zone : America/Los Angeles

+ Google Doc: Use hreflang for language and regional URLs

– <https://support.google.com/webmasters/answer/189077?hl=en>

+ Edit Drupal code template.php

```
function kith_preprocess_html (&$variables) {
    $element = array( '#tag' => 'http://www.kidsinthehouse.com',
        '#attributes' => array( 'hreflang' => 'en-us', 'rel' => 'alternate' ));
    drupal_add_html_head($element);
}
```

Not working on our case.

+ Edit the code in ~/templates/html.tpl.php

```
<link rel="alternate" href="http://www.kidsinthehouse.com/" hreflang="en-us"/>
```



Build sitemaps and submit sitemaps to Google for indexing

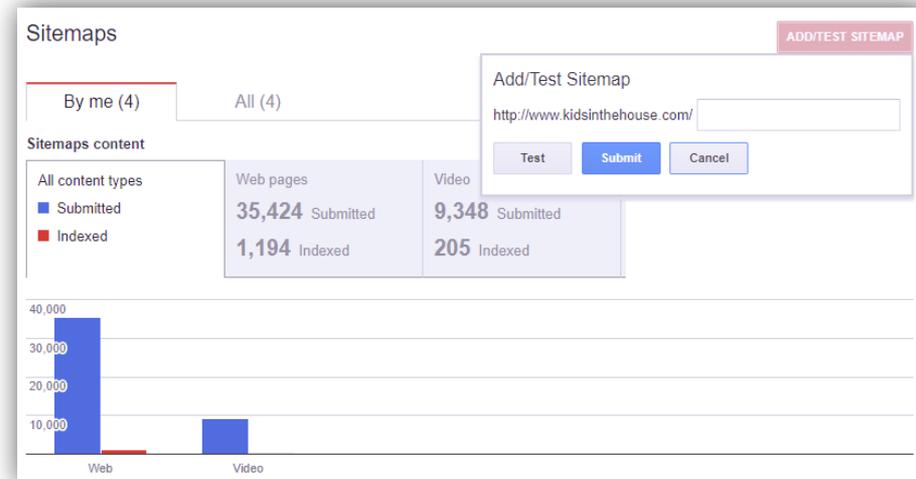
✚ Crawl errors: **SITE MAP INDEX ISSUE** => Blank sitemap page

✚ Google Sitemaps Tool:

<https://www.google.com/webmasters/tools/sitemap-list?>

✚ Deleted the old XML sitemap.

✚ Rebuild XML Site Map and submit to Google Webmaters Tool:
</admin/config/search/xmlsitemap/rebuild>



✚ Build a Sitemap of Drupal Page:

✚ <https://www.kidsinthehouse.com/sitemaps>

✚ Desktop Version

✚ Mobile Version



Build sitemaps and submit sitemaps to Google for indexing (Continue..)

SITE MAP FOR VIDEOS (A-Z INDEX)

Academic Pressure	Academic Pressure	Acne
Activities	Activities	Activities and Downtime
Activities, Sports and Classes	Activities, Sports and Classes	ADD and ADHD
ADD and ADHD	ADD and ADHD	ADHD and Schooling
ADHD Diagnosis	ADHD Parenting Tips	Adopting a Waiting Child
ADOPTION	Adoption Choices	Adoption Costs
Adoption Issues	Adoption Steps	Advanced Maternal Age
Advice for Dads	Advocating for Special Needs	Alcohol Use
ALL PARENTS	Allergies	Allergies and Sensitivities
Allowance	Anxiety and Depression	Anxiety and Depression
Applying to College	Applying to Private Preschools	Applying to Private Schools
Applying to Private Schools	Asperger Syndrome	Asperger's and Friendships
Asperger's and Schooling	Asperger's Diagnosis	Asperger's Parenting Tips
At Risk Youth	At Risk Youth	Attachment Parenting
Attachment Parenting	Autism	Autism and Friendships
Autism and Schooling	Autism Diagnosis	Autism Parenting Tips
Avoiding Chemicals and Toxins	Babies and Sleep	BABY
Baby Activities	Baby Brain Development	Baby Classes
Baby Development & Milestones	Baby Diseases	Baby Gear
Baby Gear	Baby Health	Baby Play and Activities
Baby Proofing	Baby Proofing	Baby Safety
Baby Sign Language	Baby Sign Language	Baby Toys
Baby's Position	Babysitters and Relatives	Babysitters and Relatives
Babysitters and Relatives	Babywearing	Bathing and Grooming
Bed Rest	Bedwetting	Behavior and Discipline
Behavior and Discipline	Behavior and Discipline	Benefits of Play
Benefits of Play	Benefits of Play	Benefits of Preschool
Biomedical Treatments	Birth Control	Birth Methods
Birthfamilies	Biting and Hitting	Biting and Physical Aggression
Body Image	Body Image	Bonding and Attachment
Bonding and Communication	Bonding and Communication	Bonding and Communication
Bonding and Communication	Bonding and Communication	Bonding with 5-7 Year Olds
Bonding with Preschoolers	Bonding with Teens	Bonding with Toddlers
Bonding with Tweens	Bonding With Your Newborn	Bottle Feeding
Bottle Feeding Challenges	Bottle Feeding Tips	Bottle Weaning
Brain Enrichment	Breast and Bottle Weaning	Breastfeeding
Breast and Sleep	Breastfeeding Benefits	Breastfeeding Challenges
Breast Diet	Breastfeeding Laws	Breastfeeding Rights
	Building Self-Esteem	Building Strong Partnerships

All Parents

<p>Parenting</p> <ul style="list-style-type: none"> Building Self-Esteem Parenting Styles Motivation and Praise Resilience and Problem Solving Consequences and Rewards Learning from Mistakes Teachable Moments Bonding and Communication Personality and Temperament Setting Limits Spoiling and Overindulging Parenting Disagreements Parental Stress and Anger Parents with a Purpose Parenting Golden Nuggets 	<p>Family Life</p> <ul style="list-style-type: none"> Sibling Rivalry Gender Differences Siblings and Only Children Twins and Multiples Stay at Home Parents Working Parents Single Parents Step and Blended Families Gay and Lesbian Parents Racial and Cultural Differences Family Crisis Family Time Family Pets <p>Values and Beliefs</p> <ul style="list-style-type: none"> Religion and Spirituality Values Manners and Etiquette 	<p>Nutrition</p> <ul style="list-style-type: none"> Healthy Meals and Snacks Junk Food and Sweets Vitamins and Supplements Vegetarian and Vegan Diets Lunch Box Ideas 	<p>Grief and Loss</p> <ul style="list-style-type: none"> Children and Grief Loss of a Child Ill Family Member Suffering and Grief Support 	<p>Sexual Abuse</p> <ul style="list-style-type: none"> Signs and Types of Abuse Support for Victims <p>Financial Planning and Budgeting</p> <ul style="list-style-type: none"> Saving for College Guardianship, Wills and Trusts Family Budgeting Paid and Unpaid Leave <p>Divorce</p> <ul style="list-style-type: none"> Emotional Support for Children Co-Parenting Considering Divorce Divorce Laws and Rights Dating After Divorce
<p>Safety</p> <ul style="list-style-type: none"> Online Safety Teaching Kids to be Safe Emergency Preparedness Poisons 	<p>Health and Wellness</p> <ul style="list-style-type: none"> Allergies and Sensitivities Illnesses and Ailments Diseases and Disorders Medications and Immunizations Holistic and Alternative First Aid and CPR Rashes and Skin Conditions Lice Insect and Animal Bites Brain Enrichment Dental Health and Care 	<p>Green Living</p> <ul style="list-style-type: none"> Non-Toxic Household Cleaners Avoiding Chemicals and Toxins Consuming Less and Zero Waste 	<p>Partnerships and Marriage</p> <ul style="list-style-type: none"> Building Strong Partnerships Sex After Children Family Planning 	



Pregnancy

<p>Fertility</p> <ul style="list-style-type: none"> Ovulation and Fertility Infertility IVF and Insemination Sperm, Egg or Embryo Donation Surrogacy <p>Pregnancy and Prenatal Health</p> <ul style="list-style-type: none"> Prenatal Visits and Tests Choosing Practitioners Pregnancy and Fitness Pregnancy Weight Gain Pain and Concerns Stress and Emotions Prenatal Safety Contraction 	<p>Preparing for Birth and Baby</p> <ul style="list-style-type: none"> Creating a Birth Plan Tests and Hospital Procedures C-Sections and V-BACS Labor Baby's Position Cord Clamping Preparing for Breastfeeding Circumcision <p>Childbirth</p> <ul style="list-style-type: none"> Natural Pain Management Epidurals and Medication Hospital Births Birth Methods Home Births and Birthing 	<p>High Risk and Complications</p> <ul style="list-style-type: none"> Preterm Labor Twins and Multiples Gestational Diabetes Preeclampsia Growth Restriction Advanced Maternal Age Bed Rest NICU Eating Disorders & Pregnancy <p>Baby Gear</p> <ul style="list-style-type: none"> What Do I Need? Slings and Baby Carriers Car Seats Cribs 	<p>Laws and Rights</p> <ul style="list-style-type: none"> Paid and Unpaid Leave Job Issues or Limitations Breastfeeding Laws <p>Miscarriage and Loss</p>	<p>Sex and Relationship</p> <ul style="list-style-type: none"> Postpartum Depression

Build a video sitemap and submit it to Google for Indexing

Google Video Sitemaps: all of the tags that Google uses.

Doc: <https://developers.google.com/webmasters/videosearch/sitemaps>

```
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9"
        xmlns:video="http://www.google.com/schemas/sitemap-video/1.1">
  <url>
    <loc>http://www.abc/video\_landing\_page.html</loc>
    <video:video>
      <video:thumbnail_loc>http://www.example.com/thumbs/123.jpg</video:thumbnail_loc>
      <video:title>Grilling steaks for summer</video:title>
      <video:description>Alkis shows you how to get perfectly</video:description>
      <video:content_loc>http://www.example.com/video123.mp4</video:content_loc>
      <video:player_loc autoplay="ap=1">http://www.abc/videoplayer.mp4</video:player_loc>
      <video:duration>600</video:duration>
      <video:expiration_date>2009-11-05T19:20:30+08:00</video:expiration_date>
      <video:rating>4.2</video:rating>
      <video:view_count>12345</video:view_count>
      <video:publication_date>2007-11-05T19:20:30+08:00</video:publication_date>
      <video:family_friendly>yes</video:family_friendly>
      <video:restriction relationship="allow">IE GB US CA</video:restriction>
      <video:gallery_loc title="Cooking Videos">http://example.com</video:gallery_loc>
      <video:price currency="EUR">1.99</video:price>
      <video:requires_subscription>yes</video:requires_subscription>
      <video:uploader info="http://www.example.com">GrillyMcGrillerson</video:uploader>
      <video:live>no</video:live>
    </video:video>
  </url>
</urlset>
```

Build a video sitemap and submit it to Google for Indexing (Continued..)

+ There is no any Media RSS/XML module match our need

+ Build a custom view “video_video”

+ Build a PHP program to load the view and output to a XML file

```
# php index-video-xml.php > video-sitemap.xml
```

+ Generate sitemap XML file including more than 9300 videos

TITLE

Title: Sitemap Video:Video

FORMAT

Format: XML data document | Settings

FIELDS

Add ▾

Content: Video (video:thumbnail_loc)

Content: Title (video:title)

Content: Transcription
(video:description)

Content: Video Duration (video:duration)

Content: Post date
(video:publication_date)

Content: Title (video:family_friendly)

Content: Path (video:gallery_loc)

Global: Custom text (video:uploader)

Content: Link (video:content_loc)

Google Analytics and site search tracking

+ Drupal module "Google Analytics" & Configuration

+ Web Property ID: UA-22222222-1

+ Search and Advertising: Track internal search

+ Setup "Site search tracking" in Google Analytics.

+ Site search Tracking : on

+ Query parameter: search, site, keyword, q

+ Site search categories : on

+ Category parameter: type

+ Recommend an open-source Web analytics Platform

+ PIWIK <https://piwik.org/>

+ One of the best open-source analytics platforms

+ PHP, MySQL/MariaDB, Apache



Visitors in Real-time

DATE	VISITS	ACTIONS
Last 24 hours	<div style="width: 100%;"></div>	
Last 30 minutes	<div style="width: 100%;"></div>	

Tuesday, October 17, - 11:40:56 📄
🇺🇸 🌐 🖥️ IP: 199.16.0.0
from Google - "Keyword not defined"

Actions: 📁

Tuesday, October 17, - 11:40:39 📄
🇺🇸 📱 iOS IP: 96.231.0.0
from sleep lady-com.cdn.ampproject.org

Actions: 📁

Tuesday, October 17, - 11:40:33 (16 min 30s) 📄
🇺🇸 🌐 📺 🧑 IP: 76.167.0.0
from f6376164c2-new tv season - "0_e92f06ec46-f6376164c2-164472209"

Actions: 📁 📁 📁

Tuesday, October 17, - 11:38:55 📄
🇺🇸 🌐 🖥️ IP: 137.45.0.0
from Google - "Keyword not defined"

Actions: 📁

Visits Over Time



Visitor Map



Premium Products & Services for Piwik



Want to know how to use all the exciting features in Piwik? Try a User training to be up to speed with working with Piwik.

[READ MORE](#)

Referrer Types

REFERRER TYPE	VISITS
<input checked="" type="checkbox"/> Search Engines	<div style="width: 100%;"></div>
Direct Entry	
<input checked="" type="checkbox"/> Websites	
<input checked="" type="checkbox"/> Campaigns	

Visits Overview

unique visitors

53s average visit duration

PIWIK

Piwik.org Blog

Tracking goals in Google Analytics

- + Google Analytics standard reports => “Admin” => Goal sets, click “+ Goal” => set up a new goal
 - + Pages/Visit Goals: track specific page
 - + Email Log In Goal: track user’s login
 - + Facebook Log In Goal
 - + New Account Sign Up Goal: track new account signup
 - + URL Destination Goals: keep track of specific URLs
 - + Membership Subscripton Goal
 - + Visit Duration Goals: track people stay on your site for a certain amount of time
 - + Shopping Goal
 - + Video Play Event goal: a little bit more complicated
 - + Other Evet Goal
 - External links
 - Downloads
 - Time spent watching videos
 - Social media buttons
 - Widget usage



Google Webmasters and VideoObject errors

+ Structured Data Testing Tool:

developers.google.com/structured-data/testing-tool/

+ VideoObject Errors:

- The property status is not recognized by Google for an object of type VideoObject.
- The property content_id is not recognized by Google for an object of type VideoObject.
- thumbnailUrl: missing and required // error
- uploadDate: missing and required // error

```
VideoObject
playerType: HTML5 Flash
encodingFormat: MP4
videoQuality: SD
isFamilyFriendly: http://schema.org/True
status: published // error
content_id: 5029 // error
description: See Ling Wong, MS, CHC's video
duration: PT2M5S
name: Is coffee safe during pregnancy?
description: See Ling Wong, MS, CHC's video
productionCompany [Organization]:
name: Kids In The House
width [Intangible]:
name: 620
height [Intangible]:
name: 400
provider [Organization]:
name: Kids in The House
url: http://www.kidsinthehouse.com
thumbnailUrl: missing and required // error
uploadDate: missing and required // error
```



Google Webmasters and VideoObject errors (Continue..)

- ✚ We are hosting videos on BrightCove
- ✚ BrightCove Video fields setting page
 - ✚ status: is required by BrightCove Video Player
 - ✚ content_id: is required by BrightCove Video Player
 - ✚ thumbnailUrl option is invalid on BrightCove
 - ✚ uploadDate option is invalid on BrightCove
- ✚ We must build new VideoObject Schema tags in the custom module
 - ✚ Single video player page
 - ✚ Video playlist page



Google Webmasters and VideoObject errors (Continue....)

New VideoObject Schema Tags

```

<div itemscope itemtype="https://schema.org/VideoObject" >
  <meta itemprop="name" content="Antidepressants and family life" />
  <link itemprop="url" href="https://www.kidsinthehouse.com/all-parents/family-life/step-and-blended-families/advice-on-entering-a-blended-family" />
  <meta itemprop="productionCompany" content="Kids In The House" />
  <meta itemprop="playerType" content="HTML5 Flash" />
  <meta itemprop="encodingFormat" content="MP4" />
  <meta itemprop="videoQuality" content="SD" />
  <meta itemprop="width" content="620" />
  <meta itemprop="height" content="400" />
  <meta itemprop="isFamilyFriendly" content="True" />
  <div itemprop="provider" itemscope itemtype="https://schema.org/Organization" >
    <meta itemprop="name" content="Kids in The House" />
    <meta itemprop="url" content="https://www.kidsinthehouse.com" />
  </div>
  <meta itemprop="uploadDate" content="November 2014" />
  <meta itemprop="thumbnail" content="https://www.kidsinthehouse.com/sites/default/files/video-thumbnails/jeff_probst_7.jpg" />
  <link itemprop="thumbnailUrl" href="https://www.kidsinthehouse.com/sites/default/files/video-thumbnails/jeff_probst_7.jpg" />
  <meta itemprop="description" content="Psychology of blended families" />
  <meta itemprop="duration" content="PT1M17S" />
  <div itemprop="actor" itemscope itemtype="https://schema.org/Person" >
    <meta itemprop="name" content="Shoshana" />
  </div>
</div>

```

VideoObject (1) All good ✓

VideoObject	
name:	Advice on entering a blended family
url:	http://www.kidsinthehouse.com/all-parents/family-life/step-and-blended-families/advice-on-entering-a-blended-family
playerType:	HTML5 Flash
encodingFormat:	MP4
videoQuality:	SD
isFamilyFriendly:	http://schema.org/True
uploadDate:	2014-12-29T03:43:00
thumbnailUrl:	http://www.kidsinthehouse.com/sites/default/files/video-thumbnails/jeff_probst_7.jpg
description:	Watch Jeff Probst's video on Advice on entering a blended family...
duration:	PT2M40S
name:	Advice on entering a blended family
description:	Watch Jeff Probst's video on Advice on entering a blended family...
productionCompany [Organization]:	
name:	Kids In The House
width [Intangible]:	
name:	620
height [Intangible]:	
name:	400

Google Search console: mobile usability errors

+ Google PageSpeed Insights:

<https://developers.google.com/speed/docs/insights/rules>

+ All errors on Desktop version are also included in Mobile Usability

+ Touch elements too close: 189

+ Content not sized to viewport: 66

- the page content does not fit horizontally within the specified viewport size, thus forcing the user to pan horizontally to view all the content.

+ Viewport not configured: 4

- A viewport controls how a webpage is displayed on a mobile device. The page does not specify a viewport, or specifies a viewport that does not adapt to different devices.

+ Small font size: 4

+ Solutions:

+ Debug and test CSS

+ Design mobile CSS if necessary



Google Search (GSS & CSE)

Google has discontinued sale/renewal of the Google Site Search since Apr 1 2017. The product will be completely shut down by April 1, 2018.

Use Google Custom Search Engine (CSE)

But the advertisement cannot be removed.

Embed Google Search on the website

Auto handle the 404 page not found error

Return a Google search result page instead 404

Typing:

<https://www.kidsinthehouse.com/ptsd>

404 not found => search result page:

The screenshot shows a browser window with the URL <https://www.kidsinthehouse.com/index.php?q=...>. The search bar contains the text "ptsd". Below the search bar, there are tabs for "Web" and "Image". The search results show "About 55 results (0.34 seconds)" and are sorted by "Relevance". The results are powered by "Google Custom Search".

The first result is titled "How To Tell If Your Child Has PTSD After A Traumatic Event" with the URL <https://www.kidsinthehouse.com/special-needs/.../diagnosing-ptsd>. It features a profile picture of Preetpal Sandhu, MD Child & Adolescent Psychiatrist, and a snippet: "Preetpal Sandhu, MD Child & Adolescent Psychiatrist, shares advice for parents on how to tell if their child has PTSD following a traumatic event in their life."

The second result is titled "PTSD In Kids | Treatments And PTSD" with the URL <https://www.kidsinthehouse.com/special-needs/.../ptsd-and-treatment>. It also features a profile picture of Preetpal Sandhu, MD Child & Adolescent Psychiatrist, and a snippet: "Preetpal Sandhu, MD Child & Adolescent Psychiatrist, shares advice for parents with kids who have PTSD on how to help decrease their anxiety stemming from ..."

The third result is titled "Relationship Advice | Impact of sexual addiction on the partner" with the URL <https://www.kidsinthehouse.com/.../impact-sexual-addiction-partner>. It features a profile picture of a man and a snippet: "Sex addiction expert Kenneth M. Adams, PhD explains how partners of sex addicts often develop a form of PTSD."

The fourth result is titled "Students with Learning Disabilities at Risk for Teacher Bullying..." with the URL <https://www.kidsinthehouse.com/.../students-with-learning-disabilities-at-risk- for-teacher-bullying>. It features a profile picture of a person and a snippet: "He was diagnosed with PTSD by an experienced sports psychology expert. He was exempted from exams in grade 11 and 12. His reaction to bullying is typical ..."

Always HTTPS: secure version of HTTP

✚ Redirect condition/rules in the file `.htaccess`

```
✚ RewriteCond %{HTTPS} off RewriteRule ^(.*)$  
  https://%{HTTP_HOST}%{REQUEST_URI} [L,R=301]
```

✚ Disable the module Secure Pages: no need anymore

✚ Buy SSL Certificates (HTTPS) from godaddy.com or other hosting companies

✚ Pricing: from \$69.99/yr to \$700/yr depends on the type HTTPS

✚ Basic SSL

✚ EV SSL : a new type of certificate that is designed to prevent phishing attacks better than normal SSL certificates.

✚ UCC (SAN) SSL: Multi-Domain SSL certificate, one UC SSL Certificate covers the main domain and all of sub domains.



Always HTTPS: secure version of HTTP (Continue..)

- ✚ **Let's Encrypt, <https://letsencrypt.org/getting-started/>**
 - ✚ **Free, automated, and open Certificate Authority**
Easy to install and configure
 - ✚ **Get Free SSL Certificates for our three development servers**

- ✚ **Recommend that users with shell access use the [Certbot](#) ACME client.**
 - ✚ **Automate certificate issuance and installation with no downtime**
<https://certbot.eff.org/#centosrhel7-apache>
 - ✚ `$ yum -y install yum-utils`
`$ yum-config-manager --enable rhui-REGION-rhel-server-extras rhui-REGION-rhel-server-optional`
 - ✚ `$ sudo yum install certbot-apache`
 - ✚ `$ sudo certbot --apache // run program and get start`
 - ✚ `$ sudo certbot --apache certonly // make changes to Apache configuration by hand`
 - ✚ `$ sudo certbot renew --dry-run // Automating renewal`



Migrate Videos from BrightCove to Amazon AWS

+ Preparing

+ Build a new DEV environment

+ Name conversion for videos

+ AWS services:

- Amazon S3 for storage
- Amazon Elastic Transcoder for video processing,
- Amazon CloudFront for delivery.

+ On a pay-as-you-go basis

Storage Pricing : First 50 TB / month
\$0.023 per GB : 2 TB => \$50/month

+ JW Player to replace BrightCove Video Player

JW Player for single video

JW Player for playlist

+ Test and evaluate the AWS



Migrate Videos from BrightCove to Amazon AWS (Continue..)

- + Step 1: Downloading Videos from BrightCove
- + Step 2: Generate a file to track Video ID, Video Name, and Drupal Node ID
- + Step 3: Run FFMPEG to convert original videos to HLS format and MP4 format for all resolutions (1080p, 720p, 540p, 360p, 270p)
- + Step 4: Generate video thumbnails by running FFMPEG
- + Step 5: Implement PHP program on AWS PHP-SDK to upload all videos to Amazon AWS S3 bucket
- + Step 6: Update Drupal 7 database tables
- + Step 7: Build a module to handle new videos automatically (One click to do processes of Step 2 - 6)
- + Step 8: Rewrite all custom modules and templates related to Videos
- + Final Step: Cut over the Production Website



Questions

Any Questions?

Thank You!

Gung Wang
Lead Drupal Developer
KidsInTheHouse LLC

