



DRUPAL & GOVERNMENT OR:

HOW THE CITY OF TAMPA LEARNED TO STOP
WORRYING AND LOVE DRUPAL

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OUR FOCUS

- Background on the previous version of the City of Tampa's website and the challenges in migration
- The architectural planning needed to ensure everything went to its proper spot, especially amongst political and legal requirements unique to government
- How we created a work flow for the 50+ daily content contributors to the site, while still allowing them optimal flexibility and control over their content and permissions
- The tools used to handle proper scaling for a highly trafficked site like the City of Tampa's
- Other unique challenges and quirks in such a large project, and tips & tricks we can recommend for others getting involved in building governmental sites.

THE “GOOD” OLD DAYS

(What The City of Tampa Had Before)

CONTENT & SERVER ORGANIZATION

- **All files were previously .ASP**
 - Didn't contain classic ASP scripting.
 - Server compiled header, footer and menus or other code
- **Strict Folder Rules**
 - Folder names cannot have any special characters or spaces.
(Special characters include commas and hyphens.)
 - Acronyms are not allowed
(acronyms may be industry standards but they are not citizen friendly).
 - Folder names will be in title case when displayed in the left-side menu.
 - Every folder needs an index.asp page.
 - Subsequent levels - Sub-Folders, can be created and nested under the appropriate main root folder structure
 - Naming conventions
 - "dept_" is a "subweb" for a department
 - "appl_" is a classic ASP application

CONTENT & SERVER ORGANIZATION (CONT.)

- **Page conventions**

- Pages are named without spaces or special characters; use underscores “_” instead of spaces.
- Pages are saved within its related content folder. (Only the index.asp and inc_main_menu.asp files are the root.)
- Non-HTML/ASP pages open in a new window

- **FrontPage Templates.**

FrontPage 2003 templates attach the TampaGov banner, CSS, department menus, TampaGov footer, and more. Web contributors update content within the “body1” section only. All other areas are non-editable regions.

- **Two-column & three-column templates.**

Two-column template provides one editable region. The first column is the left-side navigation menu and the second column is the page content. The "TWO_column_template.asp" file is located in the "_private" folder of each FrontPage subweb.

The three-column template provides 2 editable regions and produces a 3 column final page

- **Lots and lots of files**

ASP- 2,886

ASPX - 3,731

CSS - 25

GIF - 629

HTM - 202

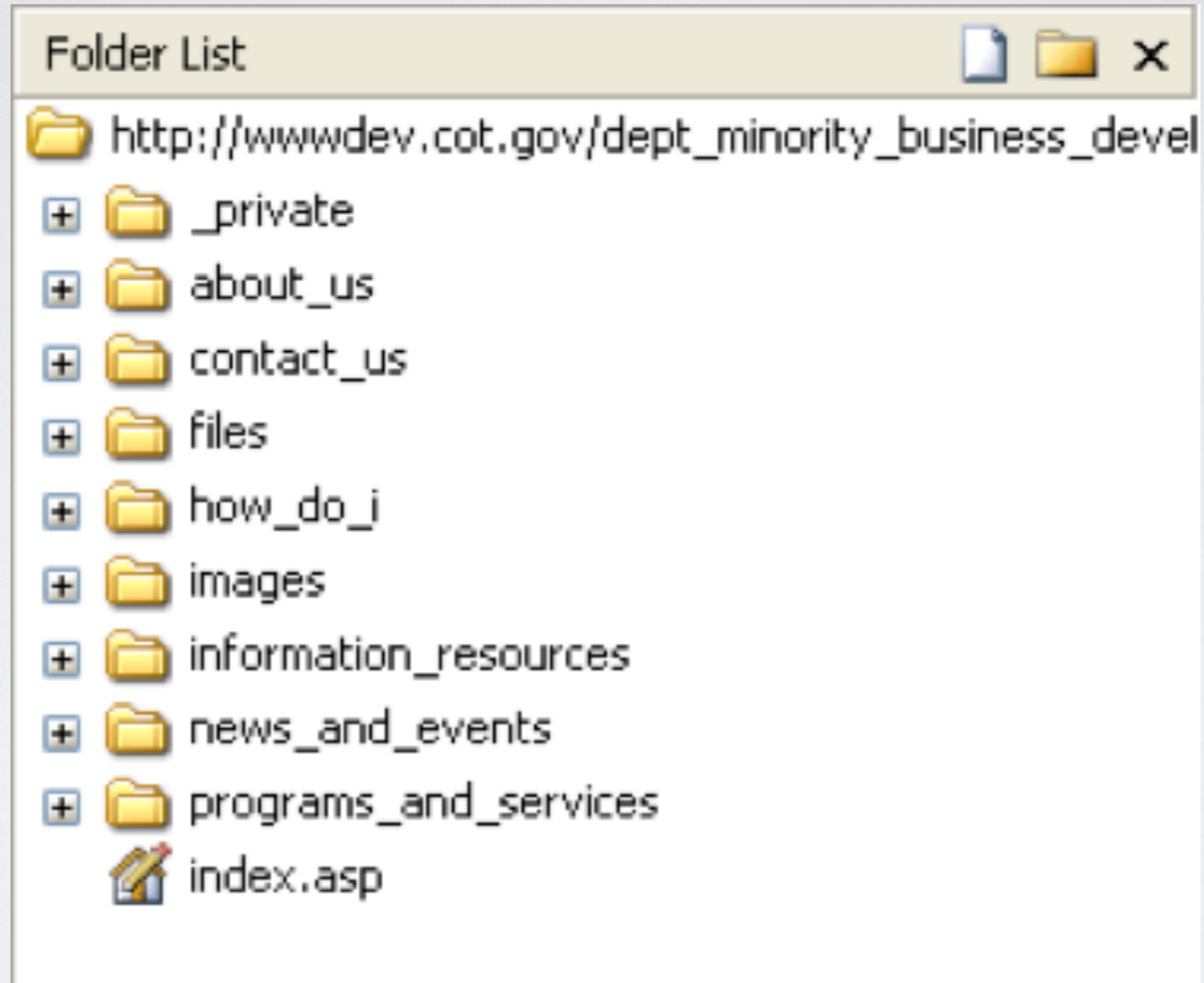
HTML - 287

JPG - 7358

PDF- 6724

Total Files = 21,842

EXAMPLE FOLDER STRUCTURE



REQUIREMENTS & CHALLENGES

How Drupal Can Help

REQUIREMENTS & CHALLENGES

- Responsive Design - Desktop, Tablet, Phone
 - Meet accessibility standards and browser challenges
- Maintain consistent workflow for content authoring
 - Over 50+ content contributors across 67 depts.
 - Inline editing where available for most areas and pages
 - Emphasize a workflow for content approval - not everything published goes live right away
- Set up extensible framework for growth and scale of site as it grows and expands
- Organize directory structure
 - Content areas as well as file system; integrate better media asset library management
- Emphasis on special areas such as the Mayor's page, Police Department, other defined areas
- Create stable development environments for "go live" procedures
- Migration of existing content to new Drupal framework
 - Over 21,000 files and thousands of pages spread across site
- Maintain access to custom web apps for various departments
 - Goal to move all to Drupal eventually

HOW DRUPAL HELPED

(And Why The City of Tampa Loves It!)

HOW DRUPAL HELPED

- **Panopoly Distribution**
 - Integrates Panels throughout
 - Inline editing
 - Easy to setup layouts and structure
- **Workbench**
 - Allows for permissions on field and content levels
 - Defines roles for workflow of content approval
- **Bootstrap**
 - Bootstrap sub theme instead of Panopoly
 - Responsive and fast
 - SASS powered for easy CSS editing

HOW DRUPAL HELPED (CONT.)

- **Feeds**

- Content integration from flat files
- “Sucked in” media assets

- **Media Module**

- Browsable interface (with Media Browser Plus)
- Organized file structure by department/field/content type
- Able to be restricted by role/folder
- Integrate COT Youtube Channel

- **APACHE Solr Search**

- Search inside documents and pages
- Integrated via Acquia

- **Acquia Hosted**

- Multiple environments
- Fast fast fast
- Great support

HOW DRUPAL HELPED (CONT.)

- **Other Useful Modules/Tools**

- Adminimal Theme (responsive admin theme)
- Flexslider
- Nodequeue
- Cache Exclude
- Geocoder/Geofield Map
- Linkit
- Masquerade
- Media Bulk Upload
- Special Menu Items
- External Links

PANOPLY DISTRIBUTION

- Offers built in Panels and custom layouts
- Includes Panelizer, to set styles and layout by content type/node
- Offers a list of overwritten page templates (“Panopoly Pages”)
- Includes PIE (Panels Inline Editor) or standard panels interface
- Based on Bootstrap (Radix)
- Supported by Pantheon

WORKBENCH

- Configure access by a Taxonomy and/or content types
- Can be set by roles and permissions
- Define an access “field” and use that to set the permissions
- Content goes to draft, for review, then published
 - Keeps revisions
 - Integrates with Rules

CONTENT WORKFLOW BEFORE DRUPAL

- File based system on Windows Servers
- Over 40 content areas and 60 contributors
- Front Page used for content creation/updates
- Workflow:
- Contributor added/updated content in Dev and notified content admins
- Content admins reviewed content and published to Prod or called/email Contributor for review

CONTENT WORKFLOW IN DRUPAL

- Used Workbench, Workbench Access and Workbench Moderation
- Restricted access using:
- Content area taxonomy
- Corresponding access control field (taxonomy) in content type
- Content area roles with permissions

CONTENT WORKFLOW IN DRUPAL (CONT.)

- Created two different moderation workflows for different content types:
- Self-publishing (Draft to Publish)
- Approval Needed (Draft, Needs Review, Publish, Denied)
- Created rules for automatic email notifications between Contributors and Approvers

BOOTSTRAP (THEME)

- Responsive out of the box
- Opted for Bootstrap sub theme over Radix
- Use `@media` queries for breakpoints
- Converted core LESS files to SASS for less server strain
- Works for IE9 with some finagling :)

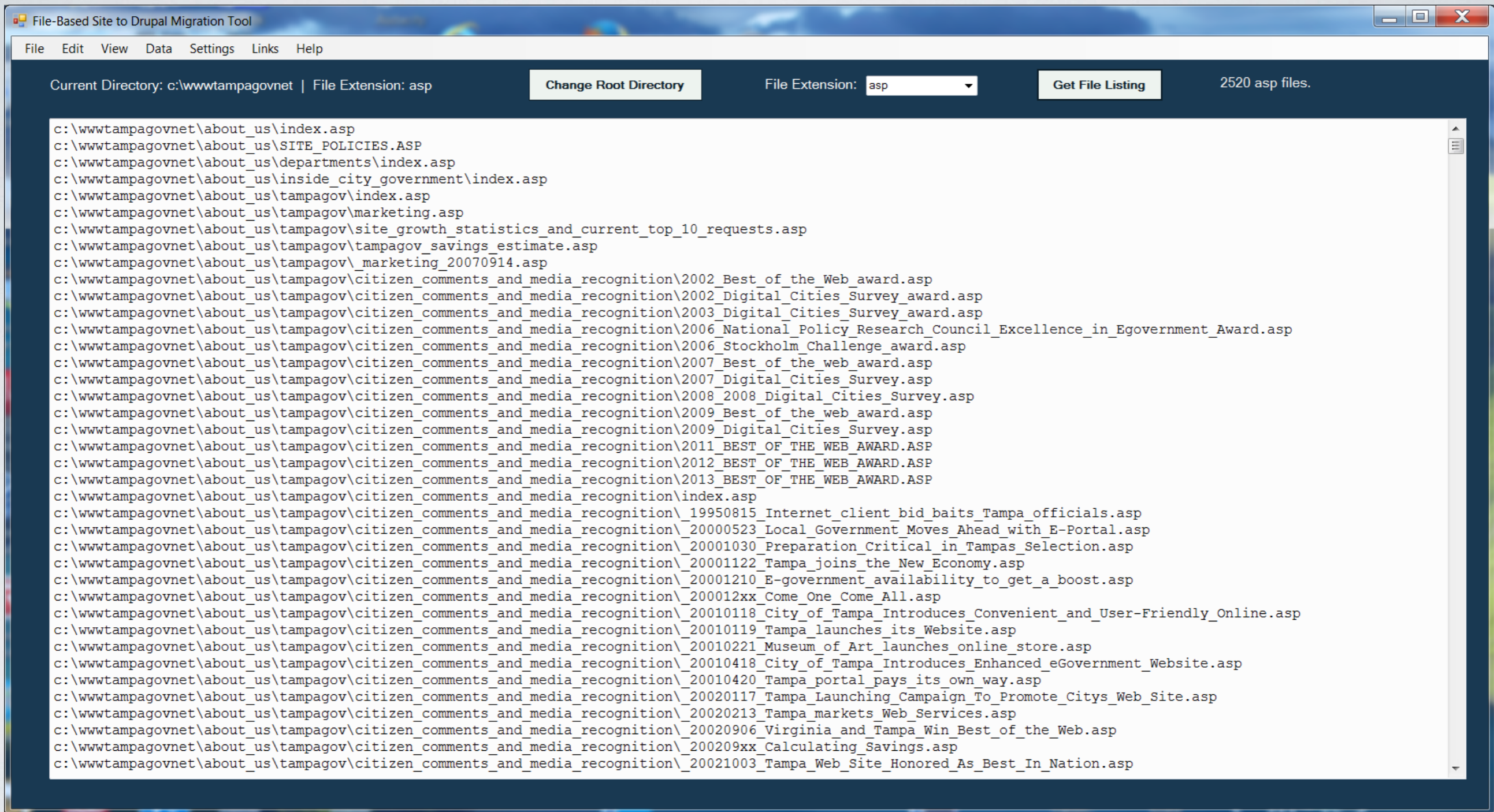
FEEDS

- Created custom importers for content types
 - Content, Files, Events, News, Proclamations, Related Links, Youtube
- Data goes into CSV file but how to get data in?
Custom programming

FILE BASED SITE TO DRUPAL

- Created Windows Form Application to use as a “Migration Tool”
- Copied all files from web server to local machine.
- Parsed files and stored content pieces into DB
- Used database to query content for analysis
- Transformed existing content to make info “Drupal friendly”
- Created CSV files that were imported into new Drupal site

GET ALL SITE FILES



The screenshot shows a web application window titled "File-Based Site to Drupal Migration Tool". The interface includes a menu bar with "File", "Edit", "View", "Data", "Settings", "Links", and "Help". Below the menu, the current directory is "c:\wwwtampagovnet" and the file extension is "asp". There are buttons for "Change Root Directory" and "Get File Listing", and a status indicator showing "2520 asp files.".

The main content area displays a list of file paths, all ending in ".asp". The files are organized into a directory structure, including "about_us", "departments", "inside_city_government", "tampagov", "marketing", and "citizen_comments_and_media_recognition". The "citizen_comments_and_media_recognition" directory contains numerous award-related files, such as "2002_Best_of_the_Web_award.asp" and "2013_BEST_OF_THE_WEB_AWARD.ASP".

```
c:\wwwtampagovnet\about_us\index.asp
c:\wwwtampagovnet\about_us\SITE_POLICIES.ASP
c:\wwwtampagovnet\about_us\departments\index.asp
c:\wwwtampagovnet\about_us\inside_city_government\index.asp
c:\wwwtampagovnet\about_us\tampagov\index.asp
c:\wwwtampagovnet\about_us\tampagov\marketing.asp
c:\wwwtampagovnet\about_us\tampagov\site_growth_statistics_and_current_top_10_requests.asp
c:\wwwtampagovnet\about_us\tampagov\tampagov_savings_estimate.asp
c:\wwwtampagovnet\about_us\tampagov\marketing_20070914.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\2002_Best_of_the_Web_award.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\2002_Digital_Cities_Survey_award.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\2003_Digital_Cities_Survey_award.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\2006_National_Policy_Research_Council_Excellence_in_Egovernment_Award.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\2006_Stockholm_Challenge_award.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\2007_Best_of_the_web_award.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\2007_Digital_Cities_Survey.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\2008_2008_Digital_Cities_Survey.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\2009_Best_of_the_web_award.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\2009_Digital_Cities_Survey.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\2011_BEST_OF_THE_WEB_AWARD.ASP
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\2012_BEST_OF_THE_WEB_AWARD.ASP
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\2013_BEST_OF_THE_WEB_AWARD.ASP
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\index.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\19950815_Internet_client_bid_baits_Tampa_officials.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\20000523_Local_Government_Moves_Ahead_with_E-Portal.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\20001030_Preparation_Critical_in_Tampas_Selection.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\20001122_Tampa_joins_the_New_Economy.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\20001210_E-government_availability_to_get_a_boost.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\200012xx_Come_One_Come_All.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\20010118_City_of_Tampa_Introduces_Convenient_and_User-Friendly_Online.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\20010119_Tampa_launches_its_Website.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\20010221_Museum_of_Art_launches_online_store.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\20010418_City_of_Tampa_Introduces_Enhanced_eGovernment_Website.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\20010420_Tampa_portal_pays_its_own_way.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\20020117_Tampa_Launching_Campaign_To_Promote_Citys_Web_Site.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\20020213_Tampa_markets_Web_Services.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\20020906_Virginia_and_Tampa_Win_Best_of_the_Web.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\200209xx_Calculating_Savings.asp
c:\wwwtampagovnet\about_us\tampagov\citizen_comments_and_media_recognition\20021003_Tampa_Web_Site_Honored_As_Best_In_Nation.asp
```

USEFUL FEATURES

- Good QA Tool to create lists of links, pages...
- Browser within app could scroll through website pages for each department
- Good analysis tool
- Number of Pages Containing Links: 1,850
- Number of External Links = 4,298
- Number of Internal Links = 13,268
- Total Links: 17,566

MEDIA MODULE (AND ADD-ONS)

- Media browser plus allows for a browsable interface, with folders limited to just your permissions
- Utilize Media itself to upload different doc types (image/word/video via youtube/etc)

The screenshot displays the Media Module interface. At the top, there are navigation options: '+ Import files + Add file + Media Folders'. Below this is a search bar with fields for 'File name', 'Type' (set to '- Any -'), 'Scheme' (set to '- Any -'), 'Sort by' (set to 'Upload date'), and 'Order' (set to 'Desc'). A blue arrow labeled 'Searchable' points to the search bar. Below the search bar is an 'Operations' section with a dropdown menu set to '- Choose an operation -' and an 'Execute' button. A blue arrow labeled 'Bulk operations on files' points to this section. Below the operations section is a checkbox labeled 'Select all items on this page'. The main area is divided into two columns: 'Folders' and 'Media Files'. The 'Folders' column lists various departmental folders such as 'accounting', 'Art Programs', 'budget', 'business-tax', 'cable-communication', 'chief-of-staff', 'citizen-corps-council', 'city-attorney', 'city-clerk', 'city-council', 'clean-city', 'community-affairs', 'community-partnerships-and-neighborhood-engagement', 'construction-services', 'contract-administration', 'economic-and-urban-development', 'emergency-management', 'employment-services', 'fire-and-police-pension', 'fire-rescue', 'fire-rescue-public-education', and 'foreclosure'. A blue arrow labeled 'Department specific folders' points to the 'accounting' folder. The 'Media Files' column displays a grid of files, each with a thumbnail icon and a filename. Some files are PDFs, such as '20150406_pollcies_and_procedures_manual.pdf' and '20090625.pdf'. Other files are images, such as 'city_of_tampa_2015_oath_of_office_ceremony' and 'city_of_tampa_oath_of_office_opening_video_2015'. The interface is clean and organized, with a clear distinction between folders and files.

APACHE SOLR INTEGRATIONS

- Configured through Acquia with their support/install guidance but can be done on any server
- Utilize a suite of tools to allow searching of content and inside files

ctor			
gation			
Enabled Disabled Required Unavailable			
Enabled	Name	Version	Description
<input type="checkbox"/>	Apache Solr Access	7.x-1.6	Integrates node access and other permissions with Apache Solr search Requires: Apache Solr framework (enabled)
<input checked="" type="checkbox"/>	Apache Solr framework	7.x-1.6	Framework for searching with Solr Required by: Apache Solr search (enabled), Acquia search (enabled), Apache Solr Access (disabled), Apache Solr search attachments (enabled), Apache Solr Workbench Moderation (enabled)
<input checked="" type="checkbox"/>	Apache Solr search	7.x-1.6	Search with Solr Requires: Search (enabled), Apache Solr framework (enabled) Required by: Acquia search (enabled)
<input checked="" type="checkbox"/>	Apache Solr search attachments	7.x-1.3+7-dev	Search file attachments with Solr Requires: Apache Solr framework (enabled)
<input checked="" type="checkbox"/>	Apache Solr Workbench Moderation	7.x-1.1	Make apachesolr and workbench moderation module compatibles. Requires: Workbench Moderation (enabled), Apache Solr framework (enabled)
<input checked="" type="checkbox"/>	Current Search Blocks	7.x-1.3	Provides an interface for creating blocks containing information about the current search. Requires: Facet API (enabled), Chaos tools (enabled)
<input checked="" type="checkbox"/>	Facet API	7.x-1.3	An abstracted facet API that can be used by various search backends. Requires: Chaos tools (enabled) Required by: Current Search Blocks (enabled), Search facets (disabled), Panopoly Search (disabled)

APACHE SOLR INTEGRATIONS

Acquia Search: Search Index Content

Type	Value
Indexed	7786 Items (72.96 MB on disk)
Remaining	2 items (99% has been sent to the server)
Schema	drupal-4.3-solr-3.x
Solr Core Name	DHLX-46141
Delay	2 min before updates are processed.
Pending Deletions	0

[View more details on the search index contents](#)

Actions

- Index queued content (100)** Indexes just as many items as 1 cron run would do.
- Index all queued content** Could take time and could put an increased load on your server.
- Queue all content for reindexing**
- Delete the Search & Solr index** Useful with a corrupt index or a new schema.xml.

Configuration

Select the entity types and bundles that should be indexed.

Content

- Content Page
- Content Slideshow
- Departments
- Event
- FAQ
- File
- Link (for Lists of Links)
- News Article
- Panel
- Proclamation
- Slideshow
- Spotlight
- Videos
- Webform

File

- Audio

APACHE SOLR INTEGRATIONS

Excluded file extensions

aif art avi bmp gif ico jpg mov mp3 mp4 mpg oga ogv png psd ra ram rgb tif wmv

File extensions that are excluded from indexing. Separate extensions with a space and do not include the leading dot. Extensions are internally mapped to a MIME type, so it is not necessary to put variations that map to for tif and tiff)

Extract using

Tika (local java application)

Solr (remote server)

Extraction will be faster if run locally using tika.

Filesize limit (in bytes) for files to be indexed

20

If a file is larger than this limit, do not index it. Default is 40MB

Tika directory path

The full path to the tika directory. All library jars must be in the same directory. If on Windows, use forward slashes in the path.

Tika jar file

tika-app-1.1.jar

The name of the tika CLI application jar file, e.g. tika-app-1.1.jar.

Save configuration

Actions

Clear the attachment text extraction cache

Delete the attachments from the index

Test your tika extraction

ACQUIA HOSTING

CITY OF TAMPA ▼ Getting started
0 of 4 tasks

Insight Cloud Search Git URL ▼

Workflow

- Platform Health
- Domains
- Servers
- Databases
- Logs
- Statistics
- Backups
- Drush and API
- Cron

Dev

Code Live development ?

Files

DB tampagov ↓

Stage

Code tags/2015-03-13.0 </>

Files

DB tampagov ↓

Prod

Code tags/2015-03-13.0 </>

Files

DB tampagov ↓

RA

Code AcquiaRA-2015-02-12-... </>

DB tampagov ↓

Task	Initiated
✓ Enable Live Development on Dev.	2015-04-06 01:05 pm Details
✓ Disable Live Development on Dev, discarding uncommitt...	2015-04-06 12:38 pm Details
✓ Enable Live Development on Dev.	2015-04-06 12:34 pm Details
✓ Disable Live Development on Dev, discarding uncommitt...	2015-04-06 12:33 pm Details
✓ Clear the Varnish cache for the Prod environment.	2015-04-02 01:57 pm Details
✓ Clear the Varnish cache for the Prod environment.	2015-04-02 01:54 pm Details
✓ Clear the Varnish cache for the Prod environment.	2015-04-02 01:52 pm Details
✓ Clear the Varnish cache for the Prod environment.	2015-04-02 12:35 pm Details
✓ Clear the Varnish cache for the Prod environment.	2015-04-01 01:15 pm Details
✓ Clear the Varnish cache for the Prod environment.	2015-04-01 01:11 pm Details

SPECIAL CHALLENGES

- Accessibility
- Special Sections
 - Mayor
 - Police Department
 - Calendar of Events
- Mobile Feeds
- Web Apps
- Instant Alert System

QUESTIONS?



THANKS FOR COMING!

(Here's a Kitten!)