Advancing nysenate.gov

a hosting platform migration

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Sr Project Manager

A self-proclaimed Drupal evangelist and member of the Drupal Association, Brad MacDonald has nearly ten years of Drupal experience combined with an extensive software development and is a certified scrum master. background. Brad is an organizer and leader of Drupal GovCon in DC.

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Agenda

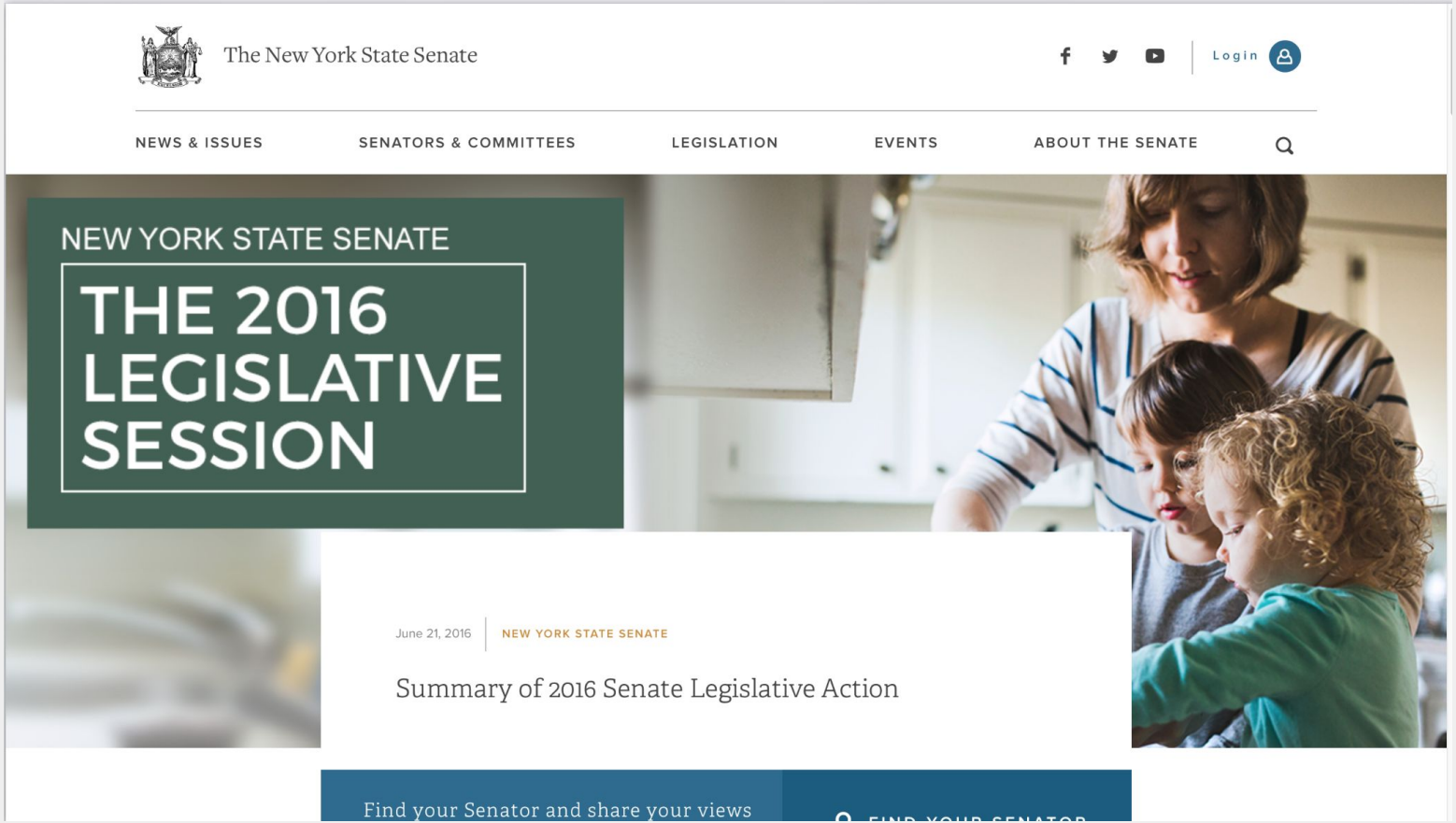
1. Planning and Strategy
2. The Moving Target
3. The Migration
4. Launch
5. Revise/Advance/Status
6. Question(s)

About

Mediacurrent helps organizations build highly impactful, elegantly designed Drupal websites that achieve the strategic results they need.

- Single-source provider
- Specializing in Drupal since 2007
- Headquartered in Atlanta, GA
- Team of 60+ Drupal Experts including development, design and strategy
- Clients include: Large Enterprise and high-profile global brands

1 About nysenate.gov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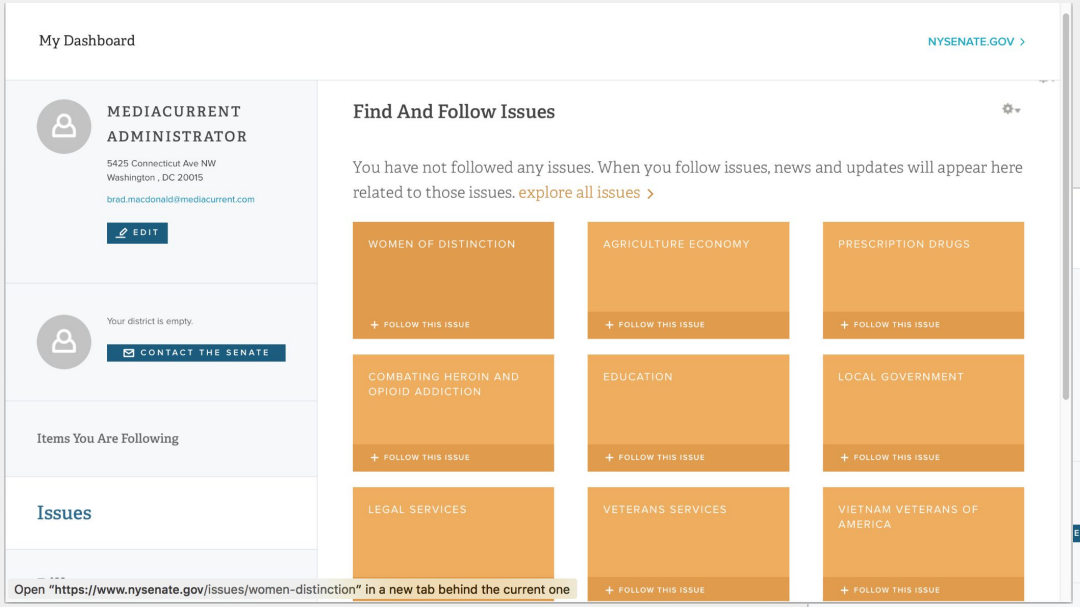
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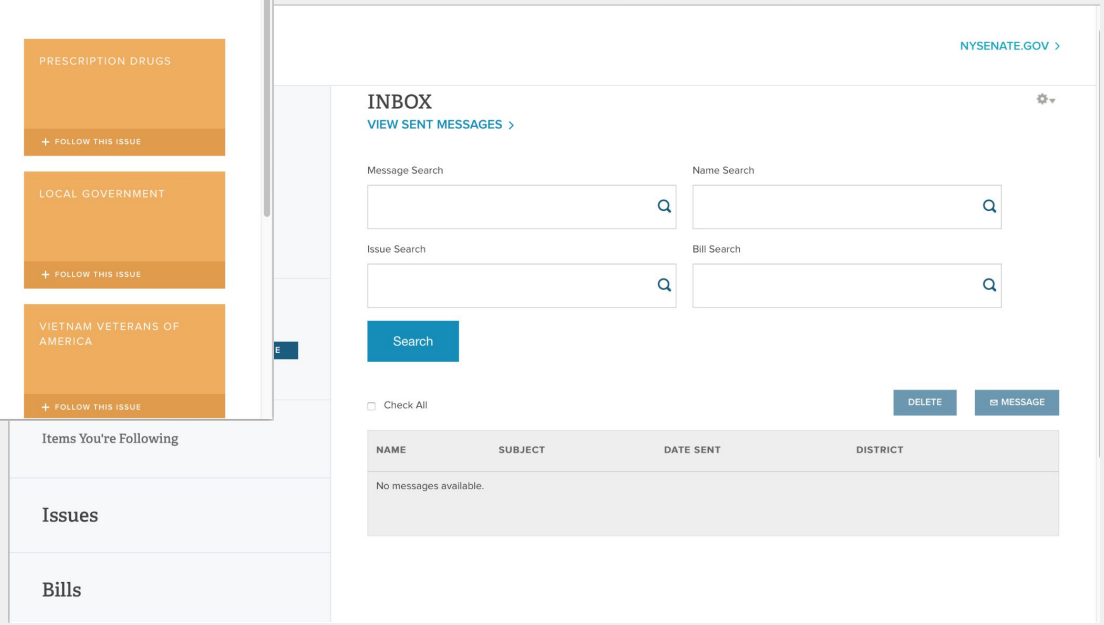
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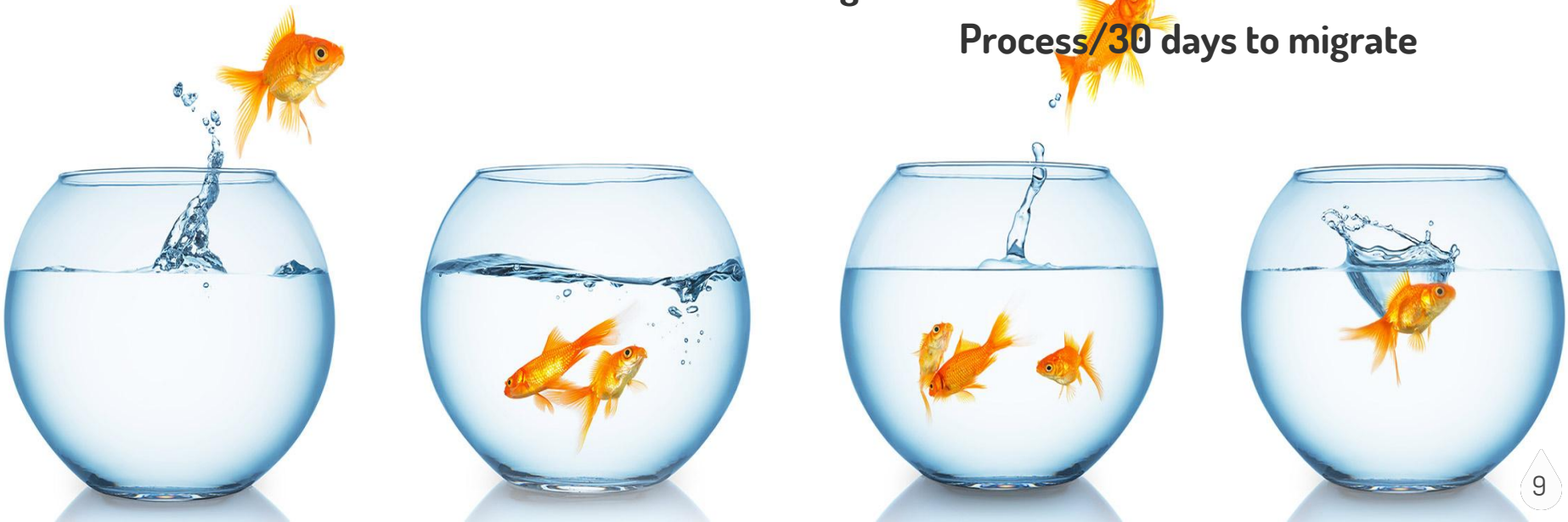
2 Getting ready

Migration path

Moving to Pantheon

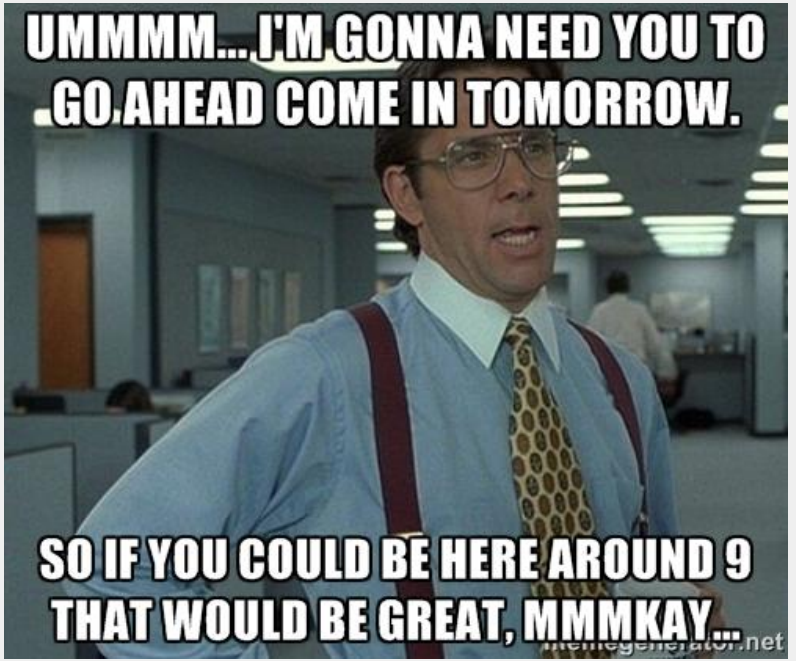
Initial Effort to Migrate

Process/30 days to migrate



Planning the Approach

- Breaking down the components
- Defining a realistic scope
- Determining priority
- Assign Responsibilities*



Challenges

Limited Time

- > 15 days
- Needed 3 months

Moving Parts

- Live development
- Multiple teams at work

Custom Integrations

- Differences in Solr
- Subdomain redirects

3 The Technical solution

Development Items

- Get Custom Solr Search working on Pantheon
- Rebase migration branch with Pantheon core & modules
- Remove legacy environment modules from repo
- Update legacy environment custom code
- Fixing cron runs to work on Pantheon
- Create Pantheon migration drush scri
- Test Pantheon with Restored DB
- Move code/DB to Pantheon dev en
- Fresh Migration on Pantheon stage env
- Verify that no site-breaking bugs remain after test migration
- No time to perform an exhaustive review of all the site's code for Pantheon-specific issues.
- “Pantheon should be expected to remark about errors piling up in the log. I suggest perhaps that starting in January we tone down the feature enhancements a bit and focus on codebase quality and resolving the longstanding warnings and minor errors that have persisted over from the site on the previous environment.”
- Enabled stage_file_proxy to auto download missing files.
- Build Solr index in each environment.
- Run a series of small, intensive load tests to check for code edge cases, performance bottlenecks and general site stability.

A Lot.

Scripting the Migration

- Check for the Pantheon environment
- Set pantheon install profile via SQL &
- system variable
- Uninstall unsupported modules
  - Memcache_admin
  - Custom unsupported apache SOLR search modules
- Rebuild registry
- Clear out legacy DB tables from unsupported modules & configuration

- Enable Pantheon-specific modules
  - Apache SOLR support
- Re-install Apache SOLR & custom search modules
- Set default Pantheon variables
  - Apachesolr & active search modules
  - Caching
  - Aggregation

- variable_set ('pantheon_apachesolr_schema', 'sites/all/modules/contrib/apachesolr/solr-conf/solr-3.x/schema.xml');
- Revert features, especially for search configuration
- Enable Redis

4 Migration Steps

Creating a Production backup DB

1. Copy the nysenate2 DB from prior production to staging.
2. Put the site in maintenance mode.
3. Disable and then uninstall all of the host proprietary modules (search, connector etc.).
4. Clear caches.
5. Create a manual backup on prior host.
6. Download the backup.
7. Upload to pantheon using redirection.*

    mysql -u -p pantheon < path/to/db.sql

The push

- Estimated 70 hours of effort
- “Crunch” due to timeline
  - Don’t do this
  - 48 hrs straight for codebase and dev work
  - 24 hrs straight for migration and support standby

PLANNING + STRATEGY

BEAT

Uncertainty!

Executing the Migration

1. Push the 2.x code with the merged migration PR to the Pantheon remote using the --force option.
2. Allow code to be deployed through to the Production environment.
3. Drop the existing Production database via mysql command line.
4. Create a new blank Production database.
5. Load the Production backup DB from previous host.
6. Run the drush command `pantheon-migrate` via terminus.
7. Clear any hanging cache and DB updates via drush `updb -y`.
8. Verify & then take out of maintenance mode.

Outcome and results

Refined the MVP for an on-time launch

Collaborated on a more robust Solr solution

Launch!

5 Current Status

Participatory Governance Tools for All

- 1.0 was D6 version
- 2.0 realized on D7
- Currently v2.18.0
- Working towards release version 3.0
- The goal of 3.0
  - A “full open architecture version
  - Available on github”.
  - The challenges in generalizing, securing and releasing the code for 3.0.
  - Open source the site to enable participatory and transparent governance.

Advancing Tools for Participatory Governance

- Multi-dev - a game change for collaborative development
- Advancements in Bills

- To include dev tools
- Full setup to make it easy for citizens to contribute
- Needs to be error/notice/warning free
- Runs out of the box

- Available on Pantheon as an publically available upstream for sites

6 Questions

Thank you!

RELEVANT RESOURCE

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