

A (Web) Face for Radio

NPR and Drupal7

—David Moore

Who am I?

- David Moore
- Developer at NPR
- Using Drupal since 4.7
- Focus on non-profit + Drupal
- CrookedNumber on drupal.org, twitter, etc.

What is NPR?

- A non-profit provider of content and services for public radio
- Your local station? Totally independent — but likely buys stuff from NPR (and others)
- Digital Services division based in Boston, provide web services like ...

Core Publisher

- A platform based on Drupal7
- Turn-key solution for public radio stations
- Focus on news and programming
- Ultimate aim is to provide almost everything a station needs

The People

- 5 drupal devs; 2 front-end (dedicated)
- Also: one product owner; one analytics; 4 designers; 3 sysadmins
- Until recently, was much smaller. Included an Acquia “embed” contractor.
- We’re still hiring!

The hardware

- Huge web box X 6
- One 'metric ton' of RAM
- Varnish X 2
- MySQL X 2
- GSA X 2
- Massive isilon machine for files
- Nagios for monitoring

Extreme Makeover

- Quick win
- Gets attention of everyone: from interns to GM
- Sets a tone -- but also sets the bar

Without CP

- news
- what's on
- listen live
- community
- about wbfo
- membership
- events
- shop
- underwriting
- contact us
- podcasts
- playlists



Read and hear about WNEB's acquisition of WBFO

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Now On HD-2:
XPoNential Radio
5:00PM - 12:00AM
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Now On HD-3:
Jazz

wbfo news

Emails point to unqualified Cogan pilot from Flight 3407

 New information has surfaced in the case against Colgan Air involving the fatal crash of Continental Connection Flight 3407 in Clarence.

"Vivien: The Triumph and madness of Vivien Leigh"

 A one-woman show is now on stage at the New Phoenix Theatre in Buffalo. It is about the story of legendary and award-winning actress Vivien Leigh, best remembered as Scarlet O'Hara in Gone with the Wind.

spotlight

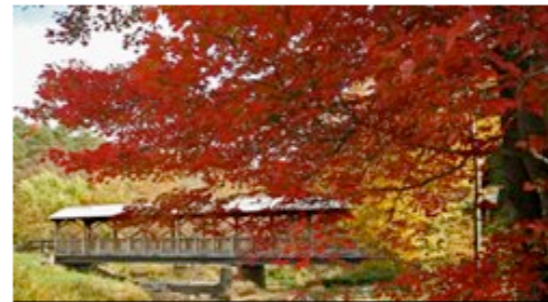


Photo of the Week

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The Record 1:52 PM FRI OCTOBER 21, 2011

Don't Burn Out, Don't Fade Away, Just Close Up The Shop



Mike Katzil / NPR

By DAOUY TYLER-AMEEN
Originally published on Fri October 21, 2011 1:15 pm

Double Dagger is a very loud punk trio from Baltimore — or at least, it will be until tomorrow. The group, which includes bassist Bruce Willen, drummer Denny Bowen, and vocalist Nolen Strals, **announced** this summer that it's breaking up, after a little over nine years together. After a hometown gig tonight, which will wrap up a week-long farewell tour, the band will cease to be.

[Read more »](#)

World Cafe 1:52 PM FRI OCTOBER 21, 2011

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Life on the Bleeding Edge

- Started with 7 alpha 3
- Had to preserve data from alpha to alpha
- Thanks to head_head and alpha_2_alpha
- Able to brag that we were on 7.0 the day it was released.

Is it worth it?

- Shifting API
- Lack of docs
- Tech debt is much worse; lots of hacks
- You get to know the product very early in dev cycle
- Don't have to worry about upgrading for 2 (?) years

What's under the hood?

- Based on an install profile (much easier in 7).
- One big multi-site install
- More like a web *app* — providing uniform experience
- *Lots* of custom code; a few contrib
- One mother theme, with small tweaks at station level.

The Gold Config

- Following a command to be “prescriptive” and keep things consistent and uniform
- We nail everything down to an install profile
- Lots of config goes into a “gold” include file
- All the stuff that can get messed up: roles, users, WYSIWYG, content types, etc.

Lots of Custom Code

- Existing modules weren't ready for D7
- Needed specific code (e.g., for NPR API)
- Needed a “prescriptive” UI, adding abstraction layer on top of more complicated Drupal UI

NPR API

- Pulls down syndicated story
- Stores data in shared DB outside of drupal
- Some basic curation tools
- NPR stories -- but on your local station site, *in its chrome*

Ingest

- Local station stories are automatically sent to the NPR API
- So (the theory is) local stories go national.

Menu

- A 'category menu' — add a taxonomy term, it's automatically added to menu
- A menu based on 'table queue' (like node queue, but more flexible)
- Abstraction layer — stations don't have to mess with menus admin

Content Types

- Pretty basic: post, person, page, program
- All built on install via custom exportables module
- Can be rebuilt on update -- via our old friend, gold config

Layout

- A panels-lite engine, again based on table queue
- Lots of text, no graphics
- Simple, hard to break — but plain

Ads

- Basic DoubleClick for Publishers integration
- Another simplifying abstraction layer (stations don't touch blocks admin page)

Analytics

- Simplified version of Google Analytics module
- Again, to simplify UI (for NPR Client Services)

Search

- Google Search Appliance (gulp!)
- Modified the GSA module — to hard code values, allow for GSA feeds
- In the future, more abstraction layers to tweak search results via drupal admin GUI
- Also: a PHP/drupal layer for *GSA Admin API*

The River

- A/k/a - “Budget views”
- Simple reverse-cron view
- Faster
- But no GUI (feature, not a bug)

Cache Rules Everything

- Varnish is great, but a beast to configure
- Look into “saint mode” — for DB updates
- We use drupal cache and APC too
- Custom module clears varnish *and* drupal caches at CUD node operations
- Other modules can leverage it

Content Migration

- Wordpress (.sql dumps) to drupal 7
- Legacy content (.csv dumps) to drupal 7
- Learn how to write a drush command. It'll change your life.

Code Push

- All via one big drush script
- Puts all sites in maintenance mode
- Pushes code via SVN to six servers
- Runs updates
- Pause for smoke test
- Take all sites out of maintenance mode

It's Ok to Hack Core

... if an Acquia engineer says it's OK

Hungry like the Wolf

- A drush script that “fixes everything”
- Keyed by hooks within modules
- Causes a module to perform certain actions, depending on its environment: local, stage or production
- Still experimental

Running this All

- OMNI
- Essentially an Aegir lite
- Has its own install profile
- Handles SVN pushes, migrations, site creation — all through a GUI

But wait!! There's more

- Real-time playlist updates
- Content lock
- A drafts system (see Wordpress)
- A blame tracker (“every form submit by every user”)

Giving Back

- ~10 patches to core
- ~12 patches to contrib
- More substantive stuff on the way
- <http://drupal.org/project/npr>
- As well as several other modules

Lessons Learned

- Non-paying, pilot customers are no less demanding (not necessarily a bug)
- Make it look good. Early.
- Write custom code. Just never as a first resort.
- Abstraction layers are your friend.
- Install profiles can be very powerful.

Questions?

Thanks!!

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