


# Acquia®

## DREAM IT. DRUPAL IT.

### CDN's Demystified

BADCamp 2014



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# ACQUIA IS HIRING!



Reach out directly; I can tell you more.

[www.acquia.com/careers](http://www.acquia.com/careers)

**Schedule an interview at the Acquia booth this weekend.**

Not looking for a career move, but know friends who are?  
Refer them and earn unlimited \$2,500 external referral bonuses!

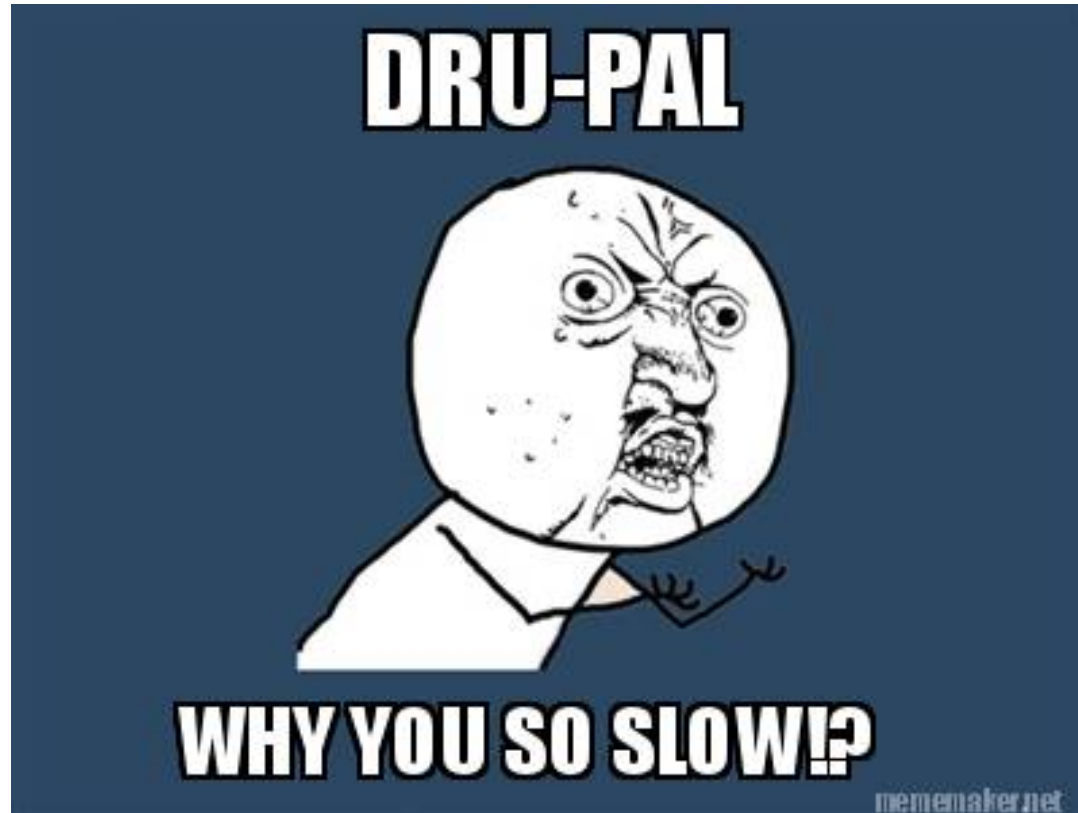
[acquia.employee referrals.com](http://acquia.employee referrals.com)

# ACQUIA IS HIRING!



- Customer Success Engineers
  - Drupal Performance Engineer
  - Senior Executive Assistant (Boston, MA)
  - Cloud Systems Engineers
  - Distributed Systems Cloud Engineer
  - Drupal Engineers
  - PHP/JavaScript Engineer (Toronto)
  - Technical Recruiter
  - eCommerce Senior Product Manager
  - Senior UX Designer
  - Senior Technical Cloud Product Manager
  - Technical Architects
  - Technical Consultants
  - Solutions Architects
  - And Sales & Marketing roles!
- **Some roles are remote or have specific locations; consult the careers site!**

# THE PROBLEM



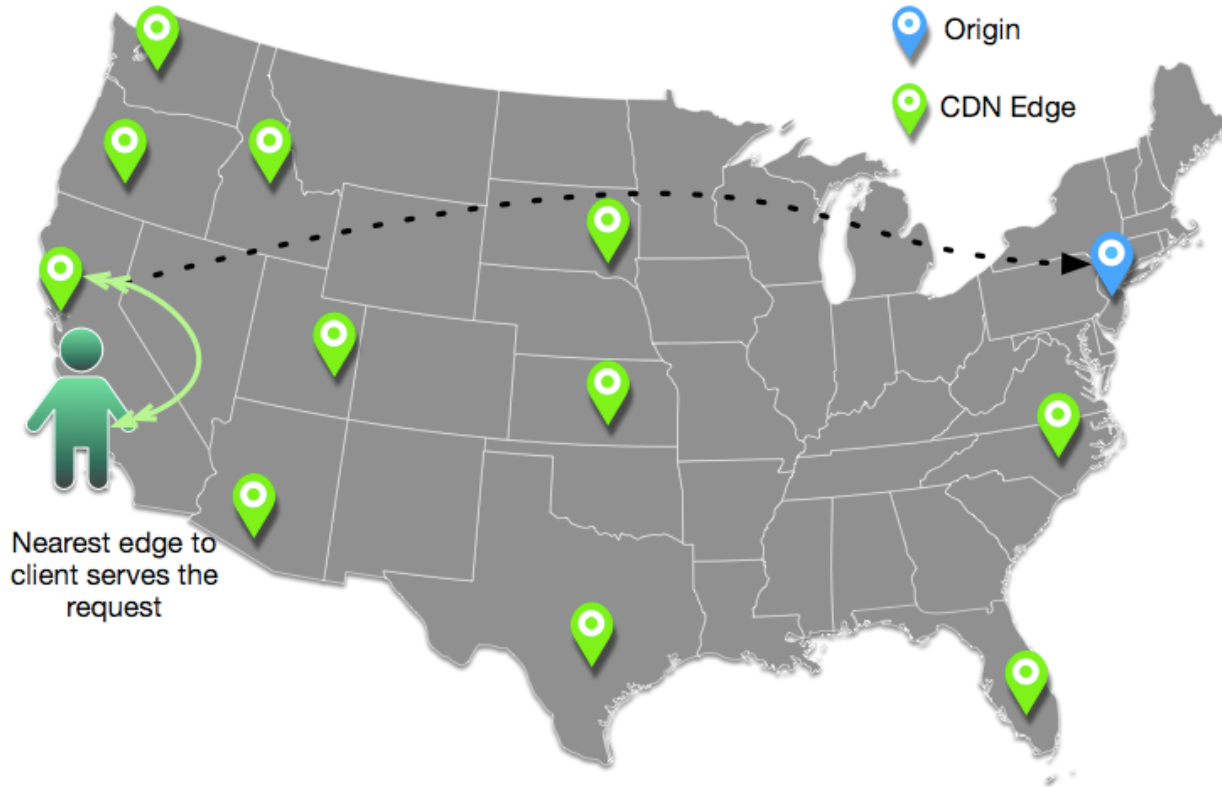
# Overview of how CDN's work

- Vocabulary
  - **Client** - end user making requests
  - **Edge** - nodes out on the CDN network where you content is served from
  - **Origin** - Where you site(s) are hosted

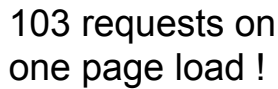
## Standard client request and response model



## CDN Fronted site



## Media Rich sites





# Mobile advantages

- Mobile carriers network edges are often not where you are!
- Some CDN providers have special compression rules for Mobile requests.
- MUST have for Mobile heavy sites.

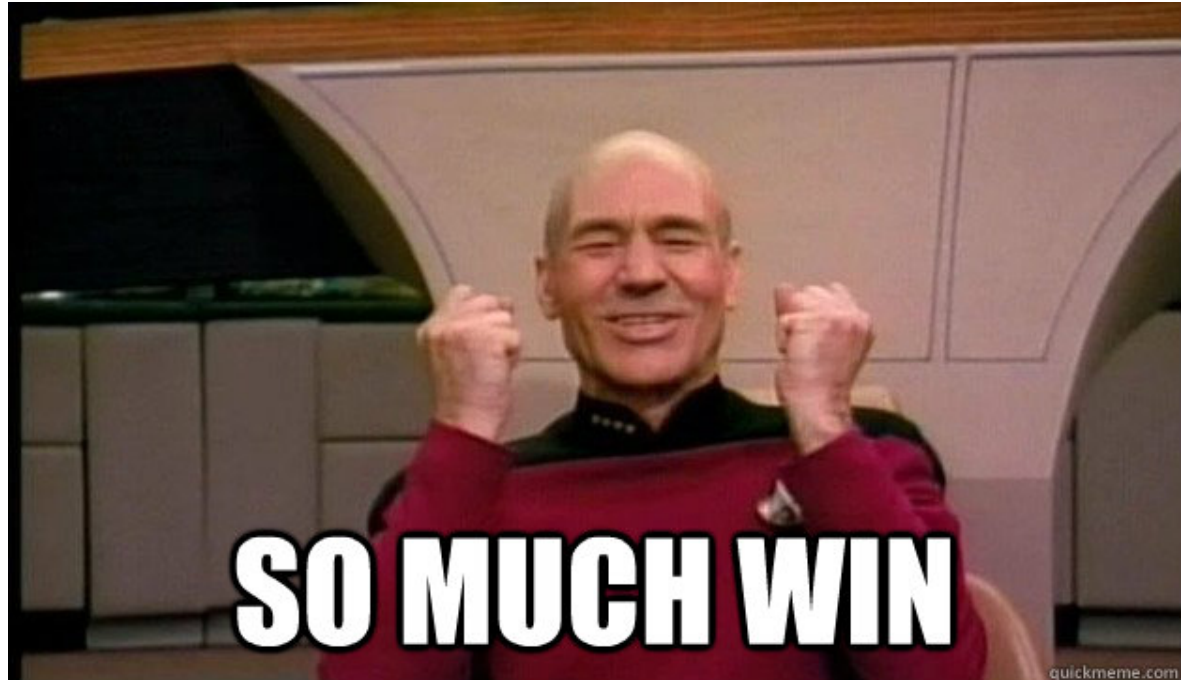


# Types of CDN implementations that work well with Drupal

- Asset Caching via CDN module
  - images/video, CSS, JS are served from CDN
- Full Site caching via DNS
  - All traffic requests are fed through CDN
  - CDN rules manage page cache rules along with asset caching

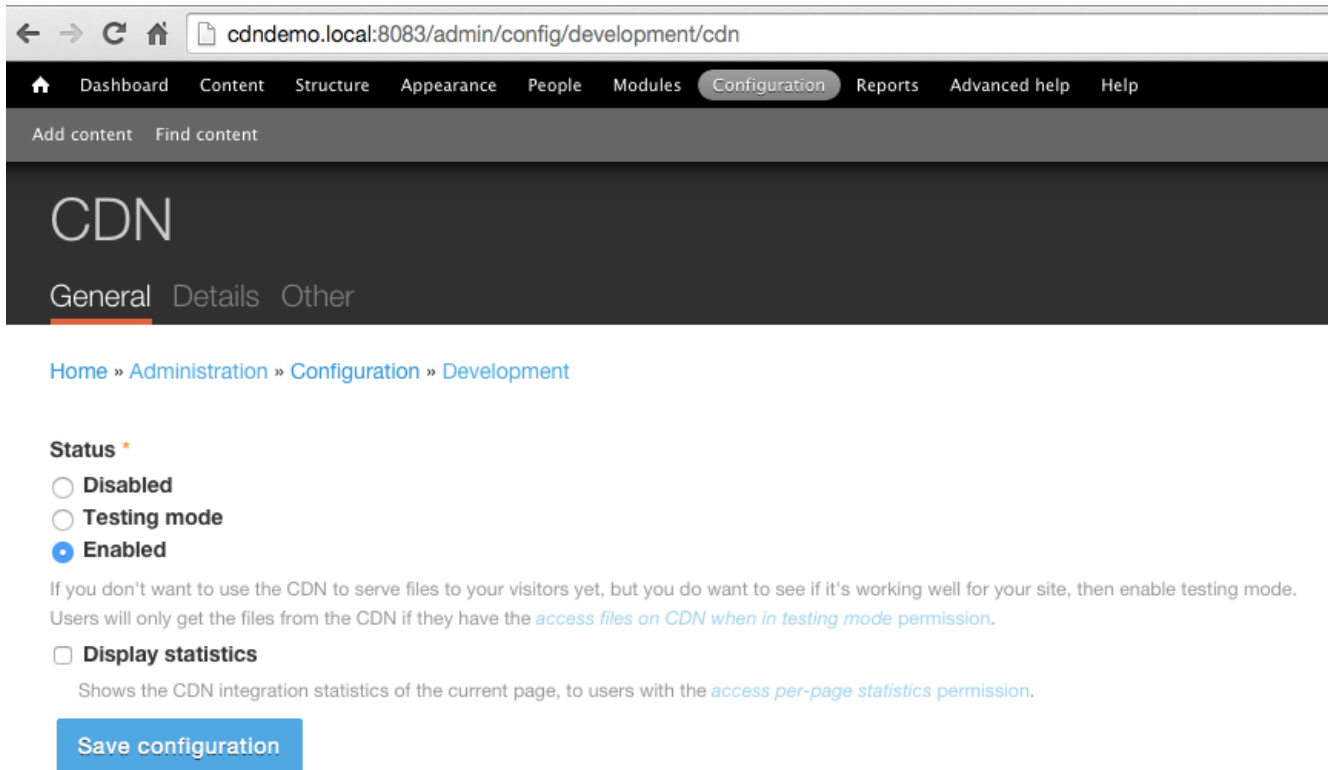
# Asset Caching with Drupal is easy

- Sign up for CDN
- Install CDN module
- Configure module
- WIN!



# Asset Caching with Drupal is easy (cont.)

## Configuration of CDN module step 1



The screenshot shows the Drupal administration interface for the CDN module configuration. The browser address bar indicates the URL is `cdndemo.local:8083/admin/config/development/cdn`. The top navigation bar includes links for Dashboard, Content, Structure, Appearance, People, Modules, Configuration (active), Reports, Advanced help, and Help. Below this is a secondary bar with 'Add content' and 'Find content' links. The main content area has a dark header with 'CDN' in large white text and tabs for 'General' (active), 'Details', and 'Other'. A breadcrumb trail reads 'Home » Administration » Configuration » Development'. Under the 'Status' section, there are three radio button options: 'Disabled', 'Testing mode', and 'Enabled' (selected). A descriptive paragraph explains that 'Testing mode' allows users to verify the CDN without serving files to visitors, provided they have the 'access files on CDN when in testing mode' permission. Below this is a checkbox for 'Display statistics', which is currently unchecked. A final paragraph states that displaying statistics shows CDN integration statistics to users with the 'access per-page statistics' permission. At the bottom of the configuration area is a blue 'Save configuration' button.

cdndemo.local:8083/admin/config/development/cdn

Dashboard Content Structure Appearance People Modules Configuration Reports Advanced help Help

Add content Find content

# CDN

General Details Other

Home » Administration » Configuration » Development

**Status** \*

☐ Disabled

☐ Testing mode

☒ Enabled

If you don't want to use the CDN to serve files to your visitors yet, but you do want to see if it's working well for your site, then enable testing mode. Users will only get the files from the CDN if they have the [access files on CDN when in testing mode permission](#).

☐ **Display statistics**

Shows the CDN integration statistics of the current page, to users with the [access per-page statistics permission](#).

Save configuration

# Asset Caching with Drupal is easy (cont.)

## Configuration of CDN module step 2

cdndemo.local:8083/admin/config/development/cdn/details

Dashboard Content Structure Appearance People Modules **Configuration** Reports Advanced help Help

Add content Find content

## CDN

General **Details** Other

[Home](#) » [Administration](#) » [Configuration](#) » [Development](#) » [CDN](#)

**Mode**

☒ **Origin Pull**

☐ **File Conveyor**

Choose a CDN integration mode.

### Mode-specific settings

#### CDN mapping

http://cdn-a.com|.css|.js  
http://cdn-b.com http://cdn-c.com|.jpg|.jpeg|.png  
http://cdn-c.com

Define which files are mapped to which CDN.

☐ **Far Future expiration**

Mark all files served from the CDN to expire in the far future — improves client-side cacheability.

Note: this requires the "Aggregate and compress CSS files" performance setting to be enabled (or your site will break).

Note: only use Far Future expiration when using a CDN or a reverse proxy.

**Save configuration**

# Full Site Caching

- Page caches are served from Edge along with assets
- Respects cache-control header response from Origin
- Overrides to Cache-Control response with rules specified in the CDN configuration
- Usually enabled by pointing DNS for domain to CDN provider
- Requires a separate Origin domain (eg: origin.acme.com)
- More involved setup

# Video Delivery

- Fast. period.
- Support for “Scrobbling”
- Upload directly to CDN storage

# Security

- Protect DDOS vectors
- Login protection
- Bot protection
- Block large amounts of requests from single IPs
- IP Whitelisting for editorial/administration staff



# “Gotcha’s!”



- Authenticated sessions (editors/members)
  - set no-cache for SESSxxx cookies
- Images don't update when changed
  - might require API integration to purge assets, or manual purging of assets at CDN layer
- Use purge module or CDN specific module (check D.O. first, many providers have a module that does this for you :)

# Vendors worth taking a look at

- Akamai
- Cloudfront
- Cloudflare
- Fastly
- Incapsula
- MAXCDN



**maxCDN**  
CONTENT DELIVERY NETWORK



**Acquia**

With FREE ACCOUNTS there are



# Questions and Answers

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