

Acquia®

DREAM IT. DRUPAL IT.



Drupal and the Media Industry

Stéphane Corlosquet

EMWRT IX, Sept 2013, Amsterdam

Agenda

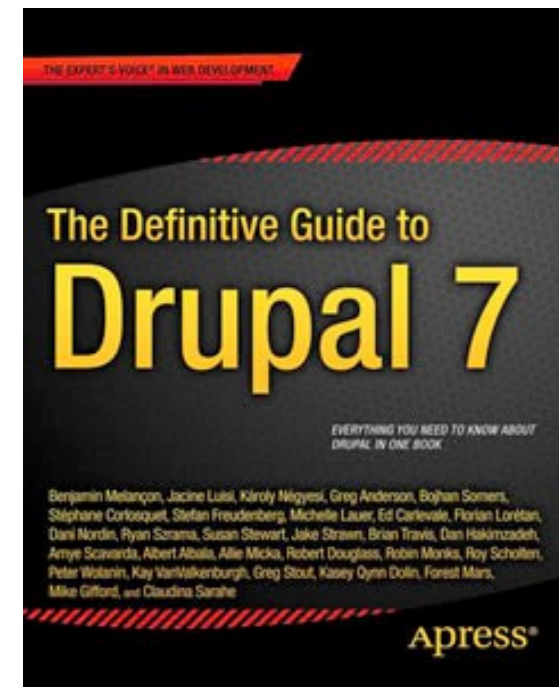
1. Introduction
2. The case for Drupal in Media
3. Drupal and Acquia in the Enterprise
4. Drupal and Semantic content
5. Q&A discussion

About the speaker

Stéphane “scor” Corlosquet

- 7 years with Drupal
- Software engineer
- Drupal 7 RDF core maintainer
- Drupal Security Team member
- Co-author
- Contrib modules: RDF Extensions, SPARQL, schema.org, WebID
- Member of the RDFa WG at W3C

Acquia™



Recurring Concerns in Media

- Building consistent, scalable & highly branded experiences
- Struggling to unify cross-channel digital experiences
 - mobile, social, and the web –
- Attaining flexibility to configure and extend web platform
- Functional limitations to integrate and expand capabilities
- Reducing costs to build and enhance digital experiences

Drupal is the Largest Open Source Community in the World

Drupal

Open source, web phenomenon

Market Presence	2,000,000+ sites
Global Adoption	228 countries
Extensive Capabilities	22,000+ modules
Broad Community	900,000+ members
Active Development	27,000+ developers

2X the size of Linux developer community

Drupal Adoption in Key Verticals

- 5** of the Big 6 US media companies
- 11** of the top 18 US media brands
- 71** of the top 100 universities worldwide
- 3** of the top 3 global music companies
- 130** nations using Drupal for gov't websites
- 2** top global pharmaceutical companies

Who uses Drupal?

The image shows a screenshot of the MTV website homepage. At the top left is the MTV logo. To its right is a banner for the TV show "Pretty Little Liars" with the text "PRETTY LITTLE LIARS ON MTV". Below the banner is a horizontal navigation menu with the following items: CHANNELS, MUSIC, SHOWS, NEWS, VIDEOS, MOVIES, GALLERIES, COMPETITIONS, GAMES, DOWNLOADS, and STYLE. To the right of the menu is a search bar with the text "Search MTV - Type here" and a "GO" button. Below the navigation menu is a large promotional area. On the left is a large image of a musician performing at the 2012 MTV Movie Awards, with the text "2012 MOVIE AWARDS HIGHLIGHTS" and "Check out the best bits from this year's awards show...". To the right of this image is a vertical stack of smaller images, including one for "The MTV Movie Awards" and another for "perks of being a wallflower". Below the main image is a "WATCH" button with a "Pics" icon. On the right side of the promotional area is a blue box for the "BASE CHART SHOW" app, featuring images of two smartphones displaying the app interface. The text in the blue box says "GET OUR NEW MTVBASE CHART SHOW APP" and "Check out the latest Base Chart, have your vote and get all the latest Urban news sent straight to your phone." Below this text is an "Available on the App Store" logo. At the bottom of the page, there is a partial view of another banner for "the official TOP 100" and a row of three women's faces.

Who uses Drupal?

The screenshot shows the Warner Bros. Records website. At the top left is the WB Records logo. The navigation menu includes 'HOME', 'ARTISTS', 'NEWS', 'VINYL', 'STORE', and 'GIVE'. A 'Sign Up for Updates' button is on the right. The main heading is 'ARTISTS', with a sub-menu for 'All / Alternative / Hip Hop / Pop / R&B / Rock'. Below this are six artist profiles, each with a photo and an 'Info' link with a right-pointing arrow.

WB RECORDS

HOME **ARTISTS** NEWS VINYL STORE GIVE

Sign Up for Updates ▶

ARTISTS

All / Alternative / Hip Hop / Pop / R&B / Rock

Art of Dying
Info →

Avenged Sevenfold
Info →

Biffy Clyro
Info →

◀▶▶ 8

Outasight - Now Or Never

F.A.Q. / PRIVACY POLICY / TERMS OF SERVICE / ABOUT OUR ADS

© 2011 Warner Bros. Records

Who uses Drupal?



The screenshot shows the GRAMMY.com website interface. At the top left is the GRAMMY.COM logo. To its right is a Subway advertisement for the 'AVOCADO-IT' sandwich, with the text 'ADD RICH & SMOOTH AVOCADO TO YOUR FAVES' and 'AVOCADO-IT'. Below the ad is a navigation menu with links: Home, Winners, News, Blogs, Photos, Videos, GRAMMY Live, Radio, Press, and Sponsors. The main content area features a large video player showing Jerry Cantrell speaking at a podium with a MusiCares logo. The video title is 'Giving Recovery A Rockin' Facelift' and the subtitle is 'Alice In Chains' Jerry Cantrell honored at MusiCares MAP Fund benefit concert'. Below the video are links for 'Photo gallery' and 'The GRAMMY.com Interview: Jerry Cantrell'. On the right side, there is a vertical sidebar with several smaller video thumbnails, including one of a woman speaking and another of a man in a Lakers jersey.

Who uses Drupal?

FAST COMPANY | SEARCH | SUBSCRIBE | NEWSLETTER | Follow @fastcompany 498K followers | Like 79k | su | in | +

 **DASSAULT SYSTEMES** | IF WE ask the right questions we can change the world.

 **FAST COMPANY**
THE IPAD EDITION
DOWNLOAD IT NOW >>>

Co.DESIGN | Co.CREATE | Co.EXIST | Co.LEAD | TECHNOLOGY | MOST CREATIVE PEOPLE | MAGAZINE



**Investment Hunting With Greylock Partner,
Instagram Backer John Lilly**

Eric Ries: 10 Classic Strategies For A Fast, User-Focused Company Reboot



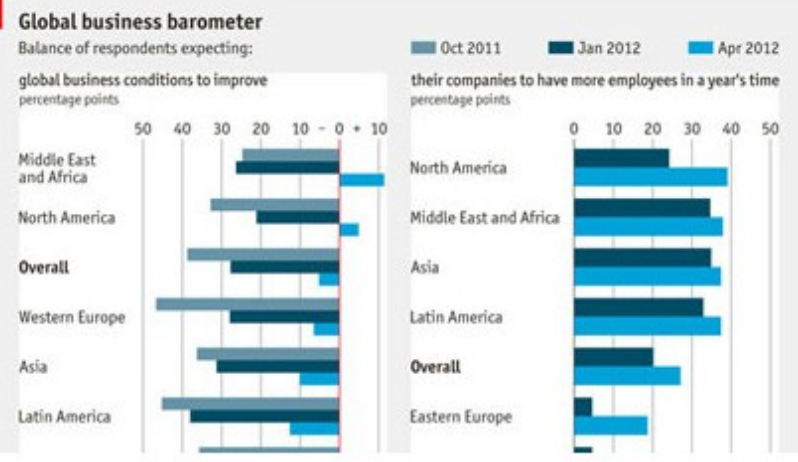
Marriott is ready for real business.
Are you?

get ready

Ready For Real Business **xerox**

Who uses Drupal?

FEATURED: Pakistan and America come to terms | Shining light on short-selling | China's plans to dominate the skies | Obituary: Carlos Fuentes | Economist Radio



Capitalism

The endangered public company

Bo Xilai v Chen Guangcheng
Who is the mightier?

Daily chart
Global business barometer

Debate

This house believes that bank branches are obsolete

Vote »

Poll

What the world thinks

Are stronger rules needed to protect online privacy? »

Full contents | [Subscribe](#)

Obituary

Carlos Fuentes

Carlos Fuentes, man of letters, died on May 15th, aged 83

Facebook's flotation

The final countdown

Last minute tweaks to Facebook's epoch-making IPO (29)

- Zuckerberg's rocket, ready for lift-off (59)
- The giant social network reveals its latest results and pays a fortune for a pile of patents (Apr 2012) (87)
- A billion dollars is a lot to pay for a tiny start-up with no revenue (Apr 2012) (18)

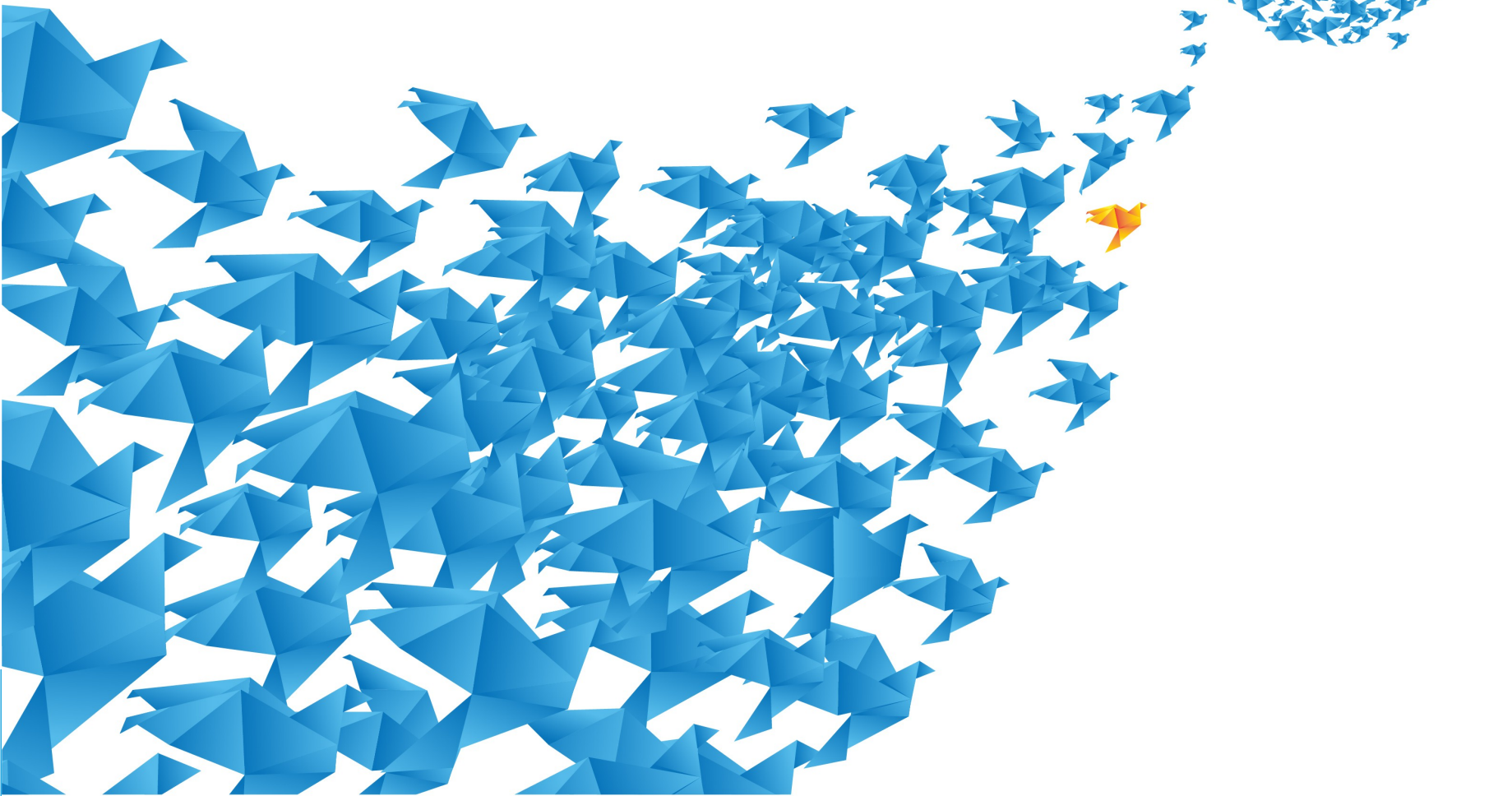
Facebook is likely to become a gargantuan company (Feb 2012) (42)

Advertisement

76 NOBEL PRIZES IN SCIENCE AND TECHNOLOGY

Acquia®

DREAM IT. DRUPAL IT.



Acquia is the Enterprise Guide to Drupal



Forbes

Acquia Named
to America's Top
One-Hundred
Most Promising
Companies

[read more](#)



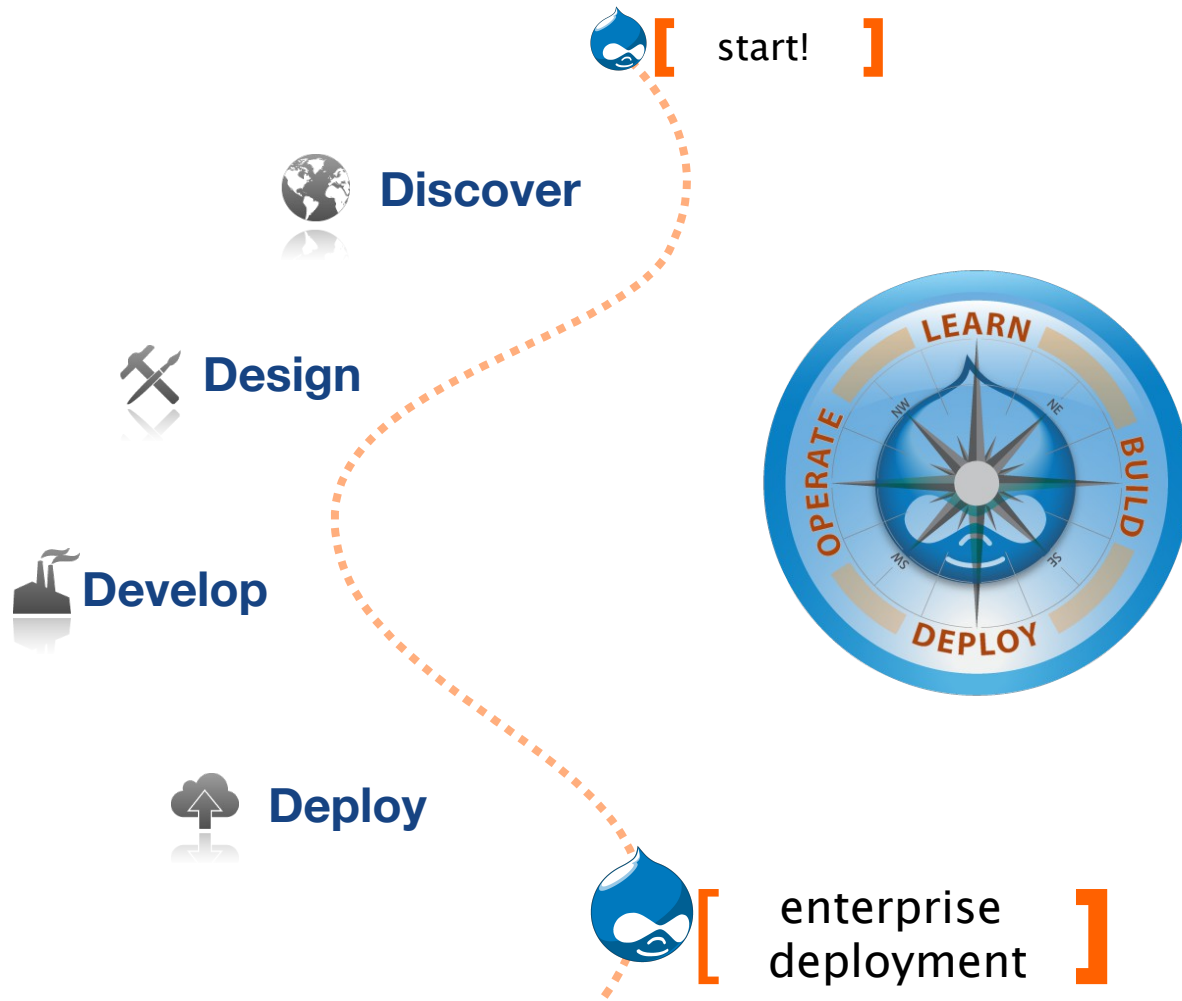
Acquia Named
#1 open-source
company

- Co-founded by the creator of Drupal in 2007
- Acquia Network: Supports 18,000+ sites
- Acquia Cloud, The First Global Drupal PaaS
 - 9 Billion Requests/month
 - 140 Terabytes of content per month
- 2013 Forrester Wave for Web Content Management
- Positioned as Visionary by Gartner 3X
- One of the top 10 software companies on the Inc. 500 two years running.

***Dries Buytaert,
Creator of Drupal***

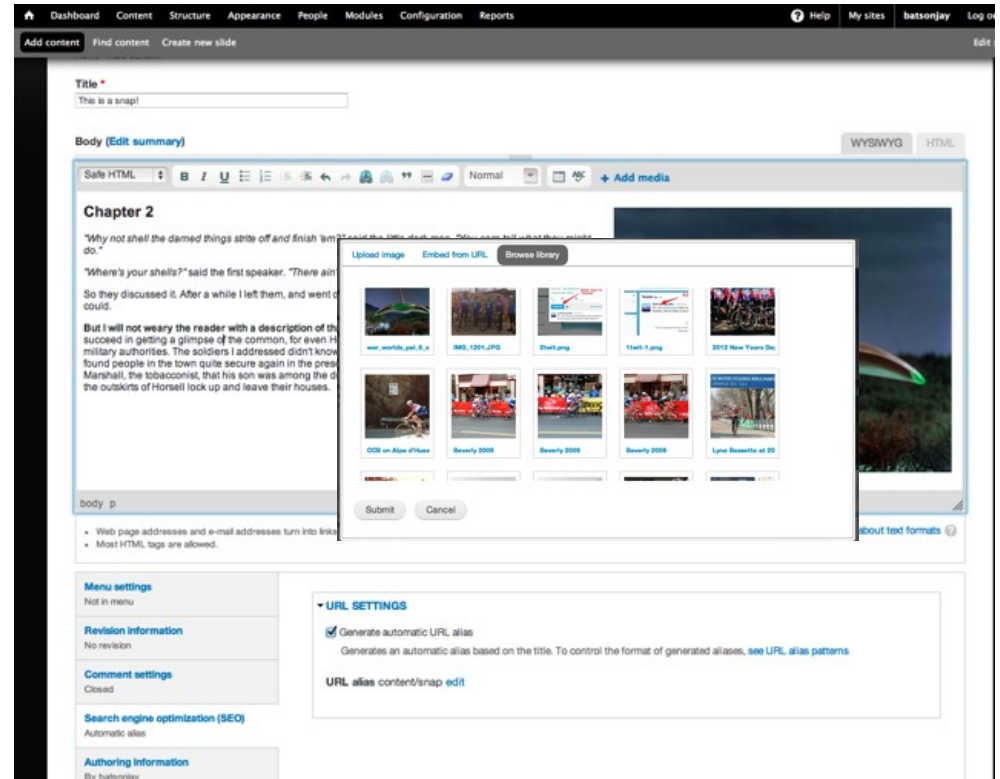


Acquia is the Enterprise Guide to Drupal



Content Authoring

- Managed at Department level
- WYSIWYG editing
- Content & presentation separation
- Rich media integration & controls
- Drag and drop page layouts



Editorial Workflows

- Content creator/editor workbench
- Review, approval, publishing workflows
- Change reviewing
- Content versioning
- Role-based interface & permissions

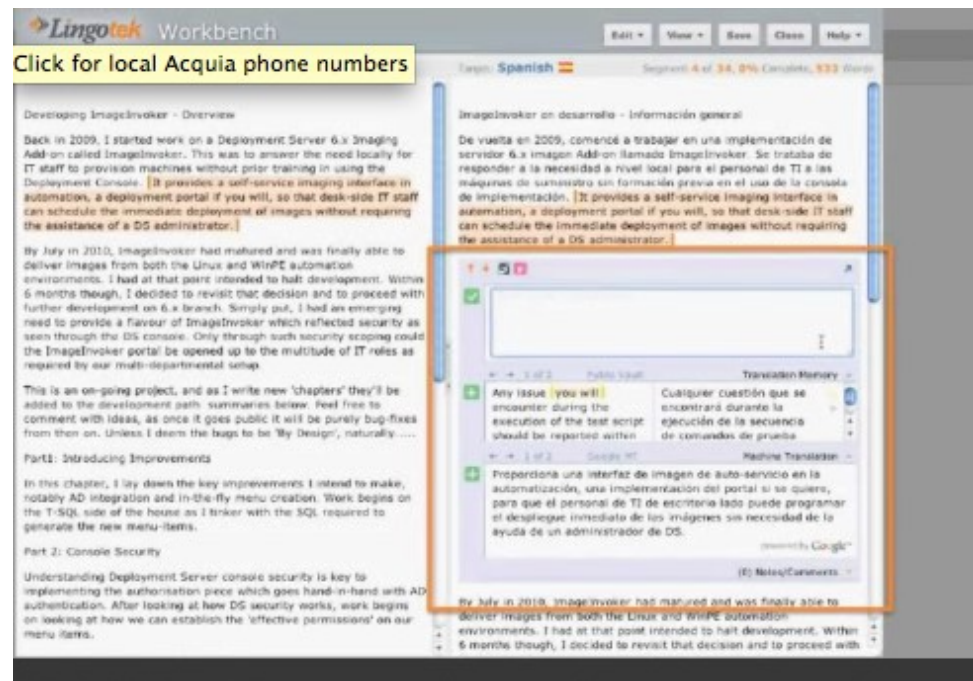
The screenshot displays the Acquia Workbench interface. At the top, there is a navigation bar with links for Dashboard, Content, Structure, Appearance, People, Modules, Configuration, Reports, and Help. Below this, the user's name 'Hello admin' and 'Log out' are visible. The main content area is titled 'My Workbench' and includes a 'My Profile' section with a user photo and a 'Content I've Edited' table. Below the profile, there is an 'All Recent Content' table.

TITLE	SECTION	TYPE	PUBLISHED	REVISED BY	LAST UPDATED	ACTIONS
Exhibit Staff info	Exhibits > Exhibits Staff	Article	Yes	admin	2 months 2 weeks ago	edit
Auto New Exhibit	Exhibits	Basic page	Yes	admin	2 months 2 weeks ago	edit
Library Resources	Library Visitors	Article	Yes	admin	2 months 2 weeks ago	edit
My Draft Article Racks!	Exhibits > Exhibits Staff	Article	Yes	admin	2 months 2 weeks ago	edit
Library Staff News	Museum > Library Staff	Basic page	Yes	admin	2 months 2 weeks ago	edit

TITLE	SECTION	TYPE	PUBLISHED	AUTHOR	LAST UPDATED	ACTIONS
Exhibit Staff info	Exhibits > Exhibits Staff	Article	Yes	jli-contributor	2 months 2 weeks ago	edit
Auto New Exhibit	Exhibits	Basic page	Yes	george-editor	2 months 2 weeks ago	edit
Library Resources	Library Visitors	Article	Yes	george-editor	2 months 2 weeks ago	edit
My Draft Article Racks!	Exhibits > Exhibits Staff	Article	Yes	jli-contributor	2 months 2 weeks ago	edit
Library Staff News	Museum > Library Staff	Basic page	Yes	george-editor	2 months 2 weeks ago	edit
Gift Shop	Museum > Gift Shop	Basic page	Yes	admin	2 months 2 weeks ago	edit
Rustico Tum 9 so much better	Museum > Library Staff	Basic page	Yes	george-editor	4 months 1 week ago	edit
Commodo Neque	Library Visitors	Basic page	Yes	jli-contributor	2 months 2 weeks ago	edit
Invenit Liquor Sagittis	Exhibits > Exhibits Visitors	Article	Yes	george-editor	3 months 2 weeks ago	edit

Language Translation and Multi-Site

- Multilingual content
 - Support for handling text content, fields, variables, ...
 - Language translation workflow
- Localized Drupal UX
- Single site and multisite



Manage Sites & Push Changes at Scale with Site Factory

Central Dashboard for Multisite Management

- Keep all your sites in sync and reduce maintenance headaches
- Access, manage and monitor sites in one place
- Apply new Drupal configurations across any number of sites with a single click



Automated Maintenance with Insight

Acquia Insight tracks module “updated-ness” – we investigate for you!

The dashboard shows an overall site health score of 67%. A notification indicates that page caching is disabled. Below this, there are tabs for Overview, Code, Server, and Statistics. A 'Distribution' section shows the site is on Drupal 7.19. At the bottom, a table lists installed modules with their versions and modification dates. The 'Theme developer' module is highlighted with a red circle.

Module name	Version	Modified
Taxonomy	7.19	
Text	7.19	
Theme developer	7.x-1.x-dev	View diff (rp)
Token	7.x-1.4	
Toolbar	7.19	
Update manager	7.19	
User	7.19	
Views	7.x-3.5	

This screen provides detailed information for the 'Theme developer' module. It shows the current subversion (7.x-1.x-dev) and hosting environment (Dev Cloud). A 'Changed or New Files' section lists several files that could not be accessed, with error messages indicating that the system was unable to request their contents. The 'Last Data Update' section shows the most recent configuration check and code examination, both dated 2013-02-11 14:48PM.


Learn more about Insight - <https://docs.acquia.com/network/enhance/insight>






Easily Deploy using staging tools

Learn how to get started with Acquia Cloud ✕

 Create Import your site or start fresh	 Develop Get access to develop your site	 Publish Add a domain name and publish your site
--	---	---

Git URL: 

Dev visit 	Stage visit 	Prod visit 
Online	Online	Online, Production Mode
+ Code: <input type="text" value="webinar"/>	+ Code: <input type="text" value="tags/WELCOME"/>	+ Code: <input type="text" value="tags/2011-10-25"/>
+ Files	+ Files	+ Files
+ DB: devcloud2	+ DB: devcloud2	+ DB: devcloud2
+ DB: magic	+ DB: magic	+ DB: magic
+ DB: new_db	+ DB: new_db	+ DB: new_db

Continuous Integration Workflow Reduces Customization Risk

- Extend the base Drupal distribution through a shared codebase applied to all sites
- Validate production-readiness of your custom code
- Test customizations in a sandbox and deploy to all production sites when ready

Multiple Paths to Drupal Success

1 Advise

Acquia role

- Training
- Development support
- Maintenance

Customer role

- Site planning
- Architecture design
- Project management
- Site development
- Testing
- Deployment

2 Advise, Architect & Validate

Acquia role

- Training
- Site planning
- Architecture design
- Development support
- Code validation
- Maintenance

Customer role

- Project management
- Site development
- Testing
- Deployment

3 Advise, Architect & Deliver

Acquia role

- Training
- Site planning
- Architecture design
- Project management
- Build to specification
- Development support
- Testing
- Deployment
- Maintenance

Customer role

- Focus on business goals



Acquia Network



Acquia Cloud

- Support & maintenance
- Network services
- Cloud deployment

- Developer tools
- Drupal monitoring
- Performance testing

Semantic Content in Drupal

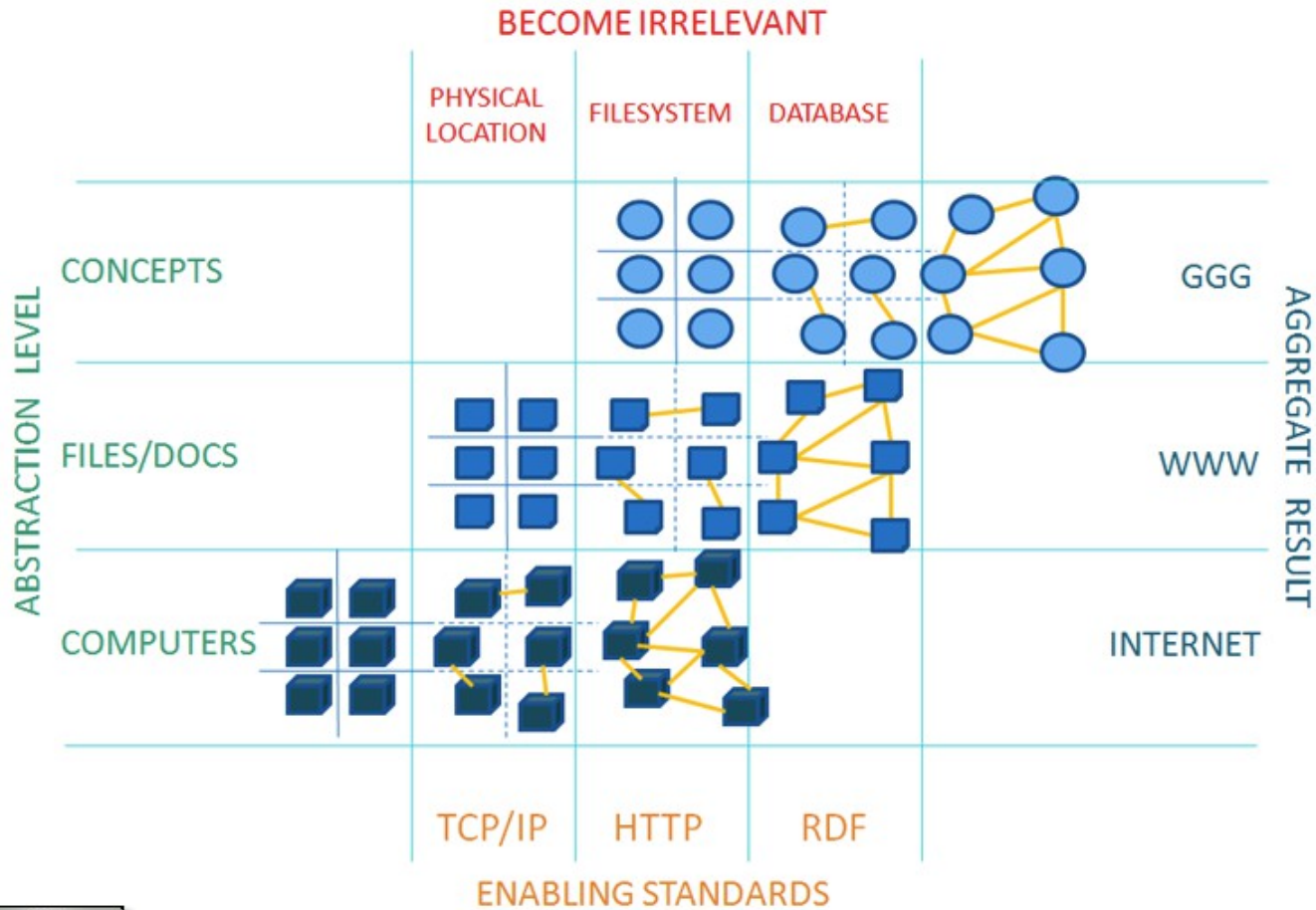
The Web today: Many information silos



Challenges

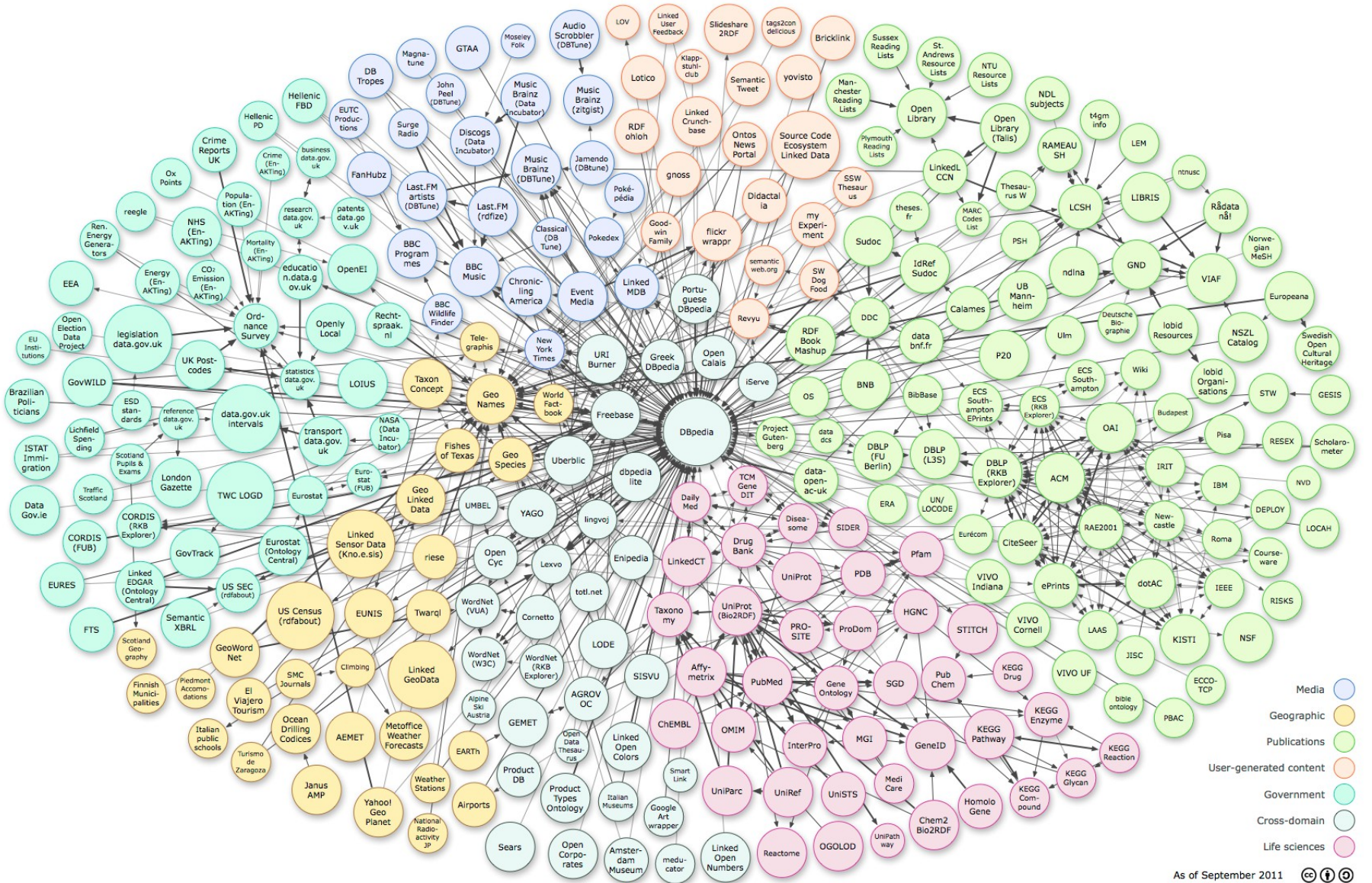
- Growing amount of information
- How can machines help us manage and search all this information?
- How can we help machines to understand this information?

Evolution of the Web






source: www.aldobucchi.com

Linked Open Data Cloud



Google

[Advanced search](#)

Search About 5,210,000 results (0.40 seconds)

Everything

Images

Maps

Videos

News

Shopping




Recipes



More




San Francisco, CA
Change location


Ingredients




	Yes	No
bananas	<input type="checkbox"/>	<input type="checkbox"/>
baking soda	<input type="checkbox"/>	<input type="checkbox"/>
walnuts	<input type="checkbox"/>	<input type="checkbox"/>
pecans	<input type="checkbox"/>	<input type="checkbox"/>
vanilla extract	<input type="checkbox"/>	<input type="checkbox"/>
baking powder	<input type="checkbox"/>	<input type="checkbox"/>
cinnamon	<input type="checkbox"/>	<input type="checkbox"/>
sour cream	<input type="checkbox"/>	<input type="checkbox"/>




Banana Bread Recipe - Allrecipes.com  
[allrecipes.com/recipe/banana-banana-bread/](#) - Cached
 ★★★★★ 6501 reviews - 1 hr 20 mins - 229 cal
Why compromise the banana flavor? This **banana bread** is moist and delicious with loads of banana flavor! Friends and family love my **recipe** and say it's by far ...
Banana Bread | Recipe - Brown Sugar Banana Nut Bread | - Nutty Banana Bread


Banana Bread Recipes - Allrecipes.com  
[allrecipes.com > Recipes > Bread](#) - Cached
Looking for the perfect **banana bread recipe**? Allrecipes has more than 120 ...

Janet's Rich Banana Bread Recipe - Allrecipes.com  
[allrecipes.com/recipe/janets-rich-banana-bread/](#) - Cached
 ★★★★★ 1327 reviews - 1 hr 10 mins - 218 cal
Sour cream guarantees a moist and tender **loaf**. And **bananas** are sliced ...

 Show more results from allrecipes.com

Banana Bread Recipe | Simply Recipes  
[simplyrecipes.com/recipes/banana_bread/](#) - Cached
 1 hr 5 mins
Jun 15, 2006 – Moist and delicious classic **banana bread recipe**. Easy to make, no need for a mixer. Ripe bananas, butter, sugar, egg, vanilla, baking soda, ...
Banana Nut Muffins - Orange Bread - Glazed Lemon Bread

Banana Bread Recipe : : Food Network  
[www.foodnetwork.com > Recipes > Baking > Bread](#) - Cached
 ★★★★★ 487 reviews - 3 hrs 10 mins
3 days ago – Food Network invites you to try this **Banana Bread recipe**.



Yahoo!

YAHOO!

18,600 results

WEB IMAGES VIDEO BLOGS MORE ▾

FILTER BY TIME

- Anytime
- Past day
- Past week
- Past month

Cascal
cascalrestaurant.com
(650) 940-9500
400 Castro St, Mountain View, CA ▾
[Menu](#) | [More Info](#) »

★★★★☆ (65)
65 Reviews - I am so sick of people suggesting Cascal who have never been there. Don't let the decor fool you - that was done by someone with taste... [more](#)


Cascal - Welcome to the Journey
www.cascalrestaurant.com

[Tapas](#) [Special](#)
[Lunch](#) [Contact](#)
[Music And](#)

[More results from \[cascalrestaurant.com\]\(http://cascalrestaurant.com\)](#) »


Cascal - Mountain View, CA
★★★★☆ (1237 Reviews) - (650) 940-9500 - Mountain View, CA
(650) 940-9500 - 400 Castro St - "The prosciutto wrapped dates and mushroom empanadas are amazing."
www.yelp.com/biz/cascal-mountain-view - [Cached](#)
[More results from \[yelp.com\]\(http://yelp.com\)](#) »

Cascal Restaurant - Contact - Cascal - Welcome to the Journey
Cascal is centrally located at the corner of California and Castro streets in the heart of downtown Mountain View, California.
www.cascalrestaurant.com/about_contact.asp - [Cached](#)



Bing!

bing
Web

avatar reviews 

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[Avatar - Rotten Tomatoes](#)
It might be more impressive on a technical level than as a piece of storytelling, but **Avatar** reaffirms James Cameron's singular gift for imaginative, absorbing ...
www.rottentomatoes.com/m/avatar


83%
279 reviews

[Avatar :: rogerebert.com :: Reviews](#)
Jake Sully Sam Worthington Neytiri Zoe Saldana Grace Sigourney Weaver Col. Miles Quaritch Stephen Lang Trudy Chacon Michelle Rodriguez
rogerebert.suntimes.com/apps/pbcs.dll/article?AID=/20091211/REVIEWS/912119998

[Avatar Review](#)
Avatar Review Poetry :: Prose :: **Reviews** :: Interviews :: Art. Home; About; Submissions; Index of Contributors; Current Issue. AV13: Summer 2011; Past Issues. AV12: Summer 2010
www.avatarreview.net

[Avatar Review :: Movies :: Reviews :: Paste](#)
Never before have so many cynics wanted to hate a movie, and never have they been so thoroughly thwarted, as with James Cameron's **Avatar**. I had more than my share of ...
www.pastemagazine.com/articles/2009/12/avatar-review.html

[Avatar Reviews, Ratings, Credits, and More at Metacritic](#)
Expert score: 83/100 · PG-13 · 162 min · [35 reviews](#)
Jake Sully is a former Marine confined to a wheelchair. But despite his broken body, Jake is still a warrior at heart. He is recruited to travel light years to the ...
www.metacritic.com/redirectcritic?m=avatar

Structured Data in HTML

- Helps machines extract relevant data from HTML
- Can make use of this data in new ways:
 - enhanced search results
 - Knowledge graph
- Search engines only index HTML



Schema.org



What is Schema.org?

This site provides a collection of schemas, i.e., html tags, that webmasters can use to markup their pages in ways recognized by major search providers. Search engines including Bing, Google and Yahoo! rely on this markup to improve the display of search results, making it easier for people to find the right web pages.

Many sites are generated from structured data, which is often stored in databases. When this data is formatted into HTML, it becomes very difficult to recover the original structured data. Many applications, especially search engines, can benefit greatly from direct access to this structured data. On-page markup enables search engines to understand the information on web pages and provide richer search results in order to make it easier for users to find relevant information on the web. Markup can also enable new tools and applications that make use of the structure.

A shared markup vocabulary makes easier for webmasters to decide on a markup schema and get the maximum benefit for their efforts. So, in the spirit of sitemaps.org, Bing, Google and Yahoo! have come together to provide a shared collection of schemas that webmasters can use.

We invite you to [get started!](#)

New! View our blog at [blog.schema.org](#).

Thing > Event

An event happening at a certain time at a certain location.

Property	Expected Type	Description
Properties from Thing		
description	Text	A short description of the item.
image	URL	URL of an image of the item.
name	Text	The name of the item.
url	URL	URL of the item.
Properties from Event		
attendees	Person or Organization	A person attending the event.
duration	Duration	The duration of the item (movie, audio recording, event, etc.) in ISO 8601 date format .
endDate	Date	The end date and time of the event (in ISO 8601 date format).
location	Place or PostalAddress	The location of the event or organization.
offers	Offer	An offer to sell this item—for example, an offer to sell a product, the DVD of a movie, or
performers	Person or Organization	The main performer or performers of the event—for example, a presenter, musician, or
startDate	Date	The start date and time of the event (in ISO 8601 date format).

Schema.org

Describe the type of your content (Person, Event, Recipe, Product, Book, Movie, etc.)

- 416 types and counting

Each type has a set of properties

- Common properties: name, description, image, url
- Specific properties depending on the type (see type page on schema.org)
- 544 properties and counting

How does schema.org apply to Drupal?

Content types



Breaking News Story

Content Type

Fields

Article

- Title
- Author
- Published

Event

- Name
- Date
- Location

Related Stories

- Title
- Author
- Link

Architecture

User driven data model



Schema.org module for Drupal

Map your content types and fields to the schema.org terms

Submission form settings
Title

Publishing options
Published , Promoted to front page

Display settings
Display author and date information.

Comment settings
Open, Threading , 50 comments per page

Menu settings


Schema.org settings

Type
art

- ApartmentComplex
- ArtGallery
- Article
- AutoPartsStore**
- DepartmentStore
- NewsArticle
- PerformingArtsTheater
- ScholarlyArticle
- VisualArtsEvent

Save content type Delete content type












Content types and Fields

Discussions 

EDIT

MANAGE FIELDS

MANAGE

LABEL	NAME	FIELD
 Title	title	Node module element
 Body	body	Long text and summary
 Featured Image	field_forums_image	Image
 Related Content	field_related_content	Node reference
 References	field_references	Node reference
 Attachment	field_forums_attachment	File
 XML sitemap	xmlsitemap	XML sitemap module element
 URL redirects	redirect	Redirect module form elements
 URL path settings	path	Path module form elements
 Subscription terms	field_subscription_term	Term reference
 Add new field		
<input type="text"/>	field_ <input type="text"/>	<input type="text" value="- Select a field type -"/>
Label	Field name (a-z, 0-9, _)	Type of data to store.

Content types and Fields

Number of values

Unlimited ▾

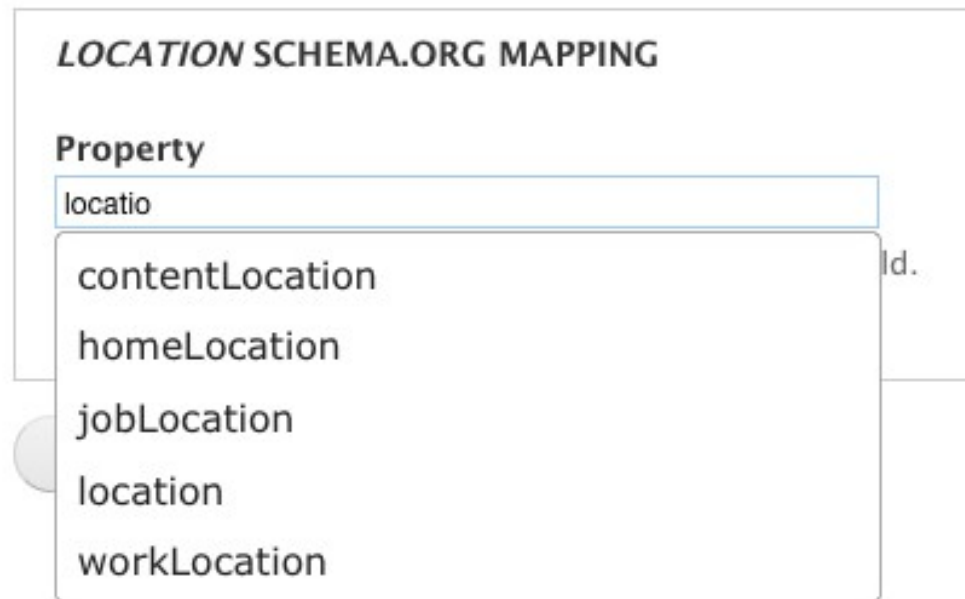
Maximum number of values users can enter for this field.

'Unlimited' will provide an 'Add more' button so the users can add as many values as they like.

Content types that can be referenced

- Basic page
- Blogs
- Bulletin Board
- Clinical Trials
- Collection
- Discussions
- Drugs
- Essays and Opinions
- Funding Opportunities
- Image Slidehow
- Jobs

Content types and Fields



Rich Snippet testing tool

- <http://www.google.com/webmasters/tools/richsnippet>

[Dries Buytaert | Schema.org Drupal 7 playground](#)

schema.openspring.net/person/dries-buytaert - [Cached](#)

Co-founder & CTO - Acquia

The excerpt from the page will show up here. The reason we can't show text from your webpage is because the text depends on the query the user types.

[2014 Winter Olympics | Schema.org Drupal 7 playground](#)

schema.openspring.net/event/2014-winter-olympics - [Cached](#)

Feb 7, 2014 - Sochi, Russia

The excerpt from the page will show up here. The reason we can't show text from your webpage is because the text depends on the query the user types.

[Apple pie | Schema.org Drupal 7 playground](#)



schema.openspring.net/recipe/apple-pie - [Cached](#)

30 mins - 155 cal

The excerpt from the page will show up here. The reason we can't show text from your webpage is because the text depends on the query the user types.

Schema.org module

- <http://drupal.org/project/schemaorg>
 - UI for mapping content types and fields to schema.org
 - Documentation on drupal.org
 - Screencast + examples

Content in Drupal

View Edit Track Devel

NEWS SYNTHESIS | 2 JUN 2012

Moving Toward Convictions

Risk VI: New strategies to root out the cause of MS

AMY MAXMEN

If the hunt for causes of multiple sclerosis were a simple murder mystery, investigators might be having an easier time cracking the case. The disease detectives must identify the multiple agents, rather than a lone perpetrator, that lead to the disease—and unravel how the culprits work individually and together. To complicate the inquiry further, each contributor might begin causing damage decades before the disease begins. And finally, the ultimate test of causation—restraining or removing a suspect and assessing whether the disease diminishes in response—isn't generally practical because methods do not exist to contain most of the candidate troublemakers.

Nonetheless, MS investigators have drawn up an inventory of top suspects, which include a lack of vitamin D (see ["The Sunshine Suspect"](#)), the Epstein-Barr virus (EBV) and the infectious mononucleosis that it can cause (see ["Viral Villain"](#)), certain genes (see ["Genetic Associations"](#) and ["Nature, Nurture, and What's in Between"](#)), female gender (see ["Discriminatory Disease"](#)), smoking, and stress (see ["Where There's Smoke \(and Stress\), Is There Fire?"](#)). To build a case against these characters, researchers are measuring the strength of the associations between the potential wrongdoers and the

Related Content

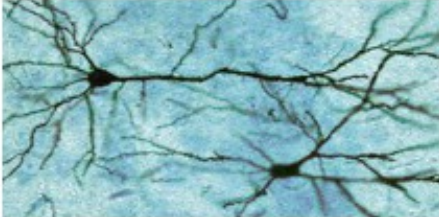
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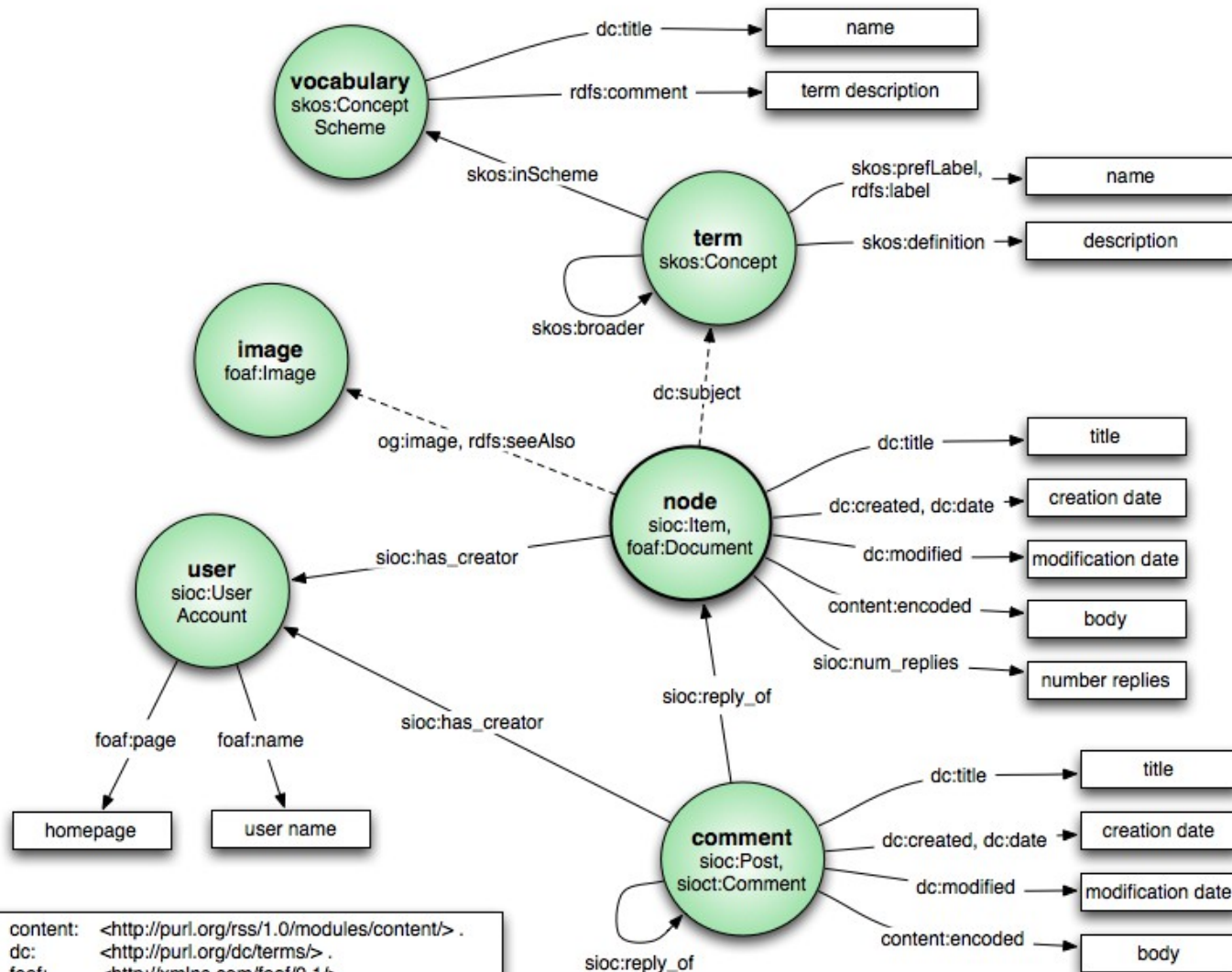


The Next Frontier
What's in the future?
Check out the "Key open questions" at the end of most MSDF news stories
108 READS

Drupal 7 and RDF

- The RDF mapping API allows any vocabulary
- Default mappings on blogs, forums, comments, etc. using FOAF, SIOC, DC, SKOS
- Drupal 7 core outputs these mappings in RDFa
- Mappings can be changed to include other vocabularies like schema.org

Drupal 7 default RDF mappings



```

@prefix content: <http://purl.org/rss/1.0/modules/content/> .
@prefix dc: <http://purl.org/dc/terms/> .
@prefix foaf: <http://xmlns.com/foaf/0.1/> .
@prefix og: <http://ogp.me/ns#> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix sioc: <http://rdfs.org/sioc/ns#> .
@prefix sioc: <http://rdfs.org/sioc/types#> .
@prefix skos: <http://www.w3.org/2004/02/skos/core#> .
    
```

← Default mapping set via hook_rdf_mapping() implementations
 ← - - - Mapping set via the RDF CRUD mapping API in install profile



Drupal 7 and RDF

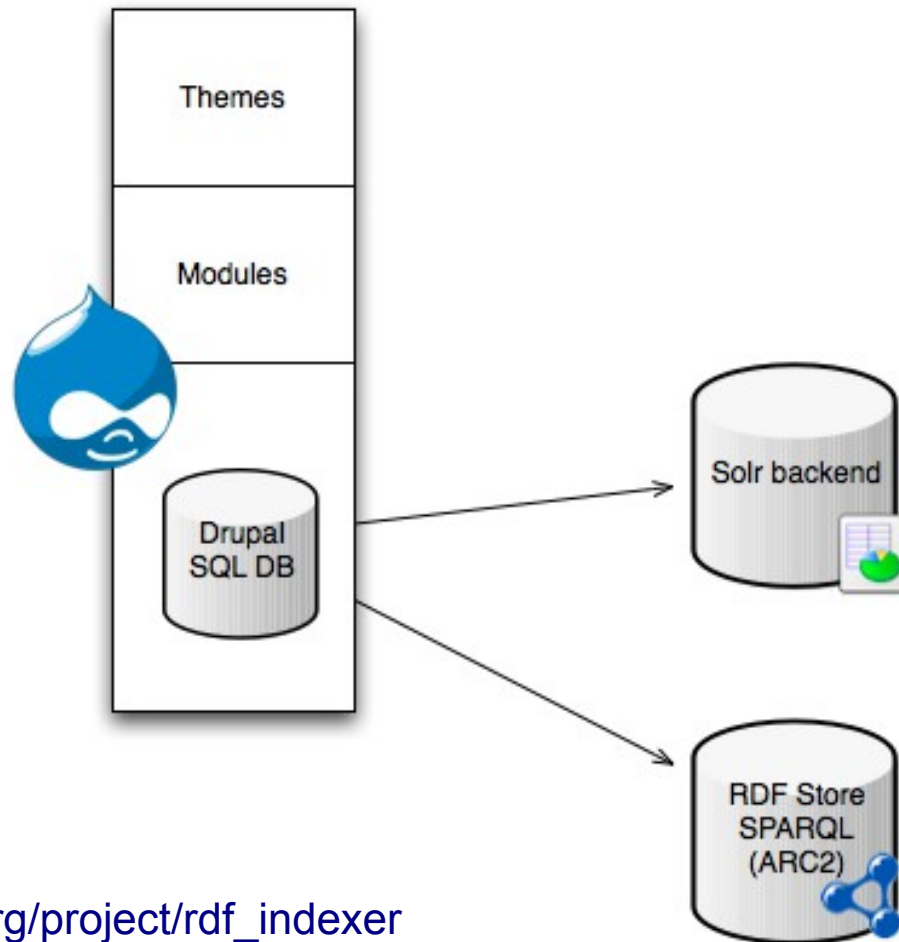
Contributed module for more features

- RDF Extensions
 - Serialization formats: RDF/XML, Turtle, N-Triples
 - Mapping UI
- RDF Indexer
 - Expose Drupal RDF data in a SPARQL Endpoint
- SPARQL Views
 - Display remote RDF data in Drupal using SPARQL
- JSON-LD
 - Expose Drupal RDF data as JSON-LD (CORS-enabled)
- Features and packaging
 - Build distributions / deployment workflow

Drupal and SPARQL

RDF store + SPARQL Endpoint

- Indexing



Module: https://drupal.org/project/rdf_indexer
Documentation: <https://drupal.org/node/2028111>

RDF store + SPARQL Endpoint

- Public endpoint available at /sparql

ARC SPARQL+ Endpoint (v2011-12-01)

[This interface](#) implements [SPARQL](#) and [SPARQL+](#) via [HTTP Bindings](#).

Enabled operations: select, construct, ask, describe, load, insert, delete, dump

Max. number of results : 500

```
SELECT * WHERE {  
  GRAPH ?g { ?s ?p ?o . }  
}  
LIMIT 10
```

Options

Output format (if supported by query type):

default ↕

jsonp/callback (for JSON results)

API key (if required)

Show results inline:

Change HTTP method: [GET](#) [POST](#)

Send Query

Reset

RDF store + SPARQL Endpoint

- Example: popular tags by comments
 - <http://openspring.net/sparql>

```
PREFIX dc: <http://purl.org/dc/terms/>
PREFIX sioc: <http://rdfs.org/sioc/ns#>

SELECT ?tag sum(?replies) as ?total_replies
WHERE {
  ?post sioc:num_replies ?replies.
  ?post dc:subject [ rdfs:label ?tag ] .
}
GROUP BY ?tag
ORDER BY DESC(?total_replies)
```

tag	total_replies
Drupal	25
Planet Drupal	21
RDFa	19
RDF	19
conference	9
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Questions?



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- <http://openspring.net/>