

# Drupal 7: What's New?



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# What is the Drupal CMS

- Drupal is an Open Source Content Management System
- Rapidly Growing Platform for Making Websites
- Powers Thousands of Big Sites from Britney.com to Whitehouse.gov



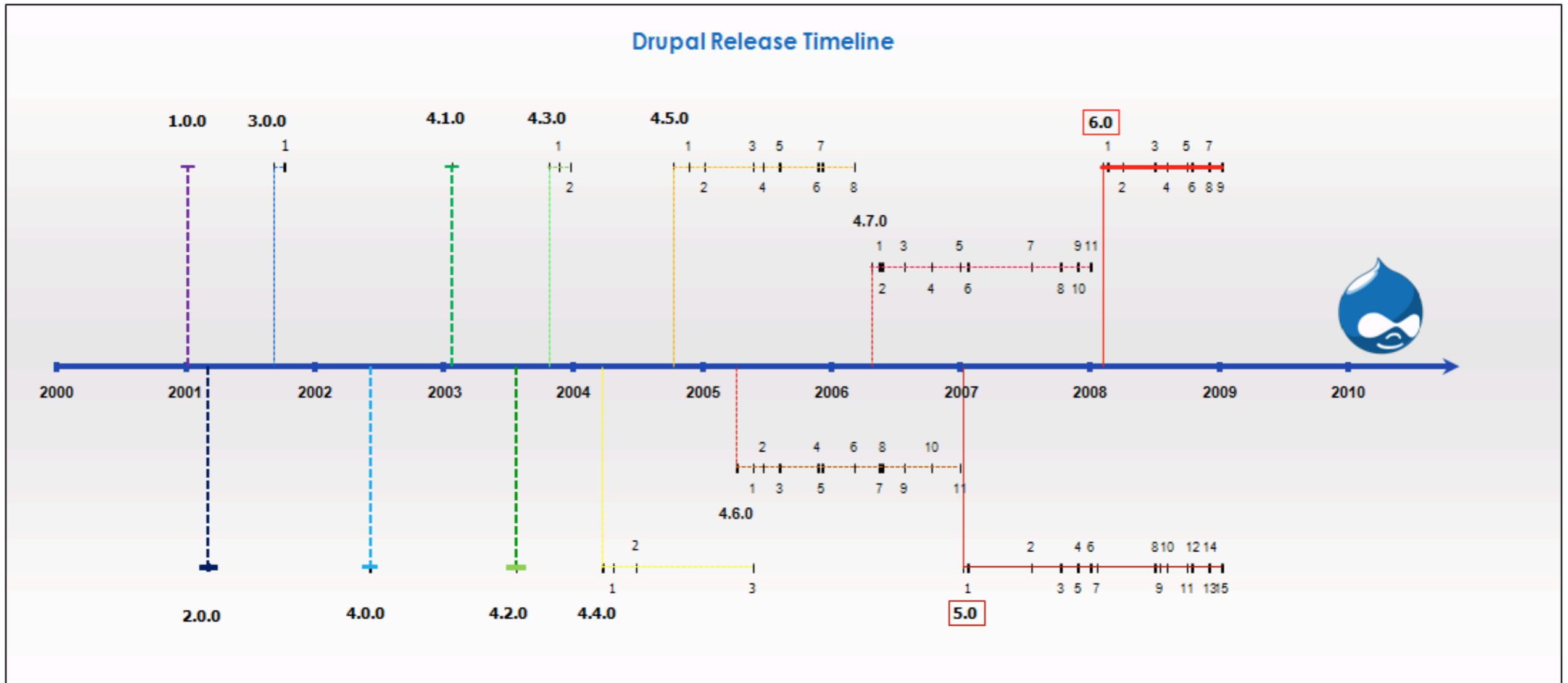
# Drupal 7: CMS Blockbuster

- The kind of feeling you got when you saw Star Wars in 1977....
- Huge technical improvements
- Important usability enhancements
- Drupal 7 moves the whole industry forward. The next big thing.

A really awesome  
(but copyrighted)  
image from Avatar

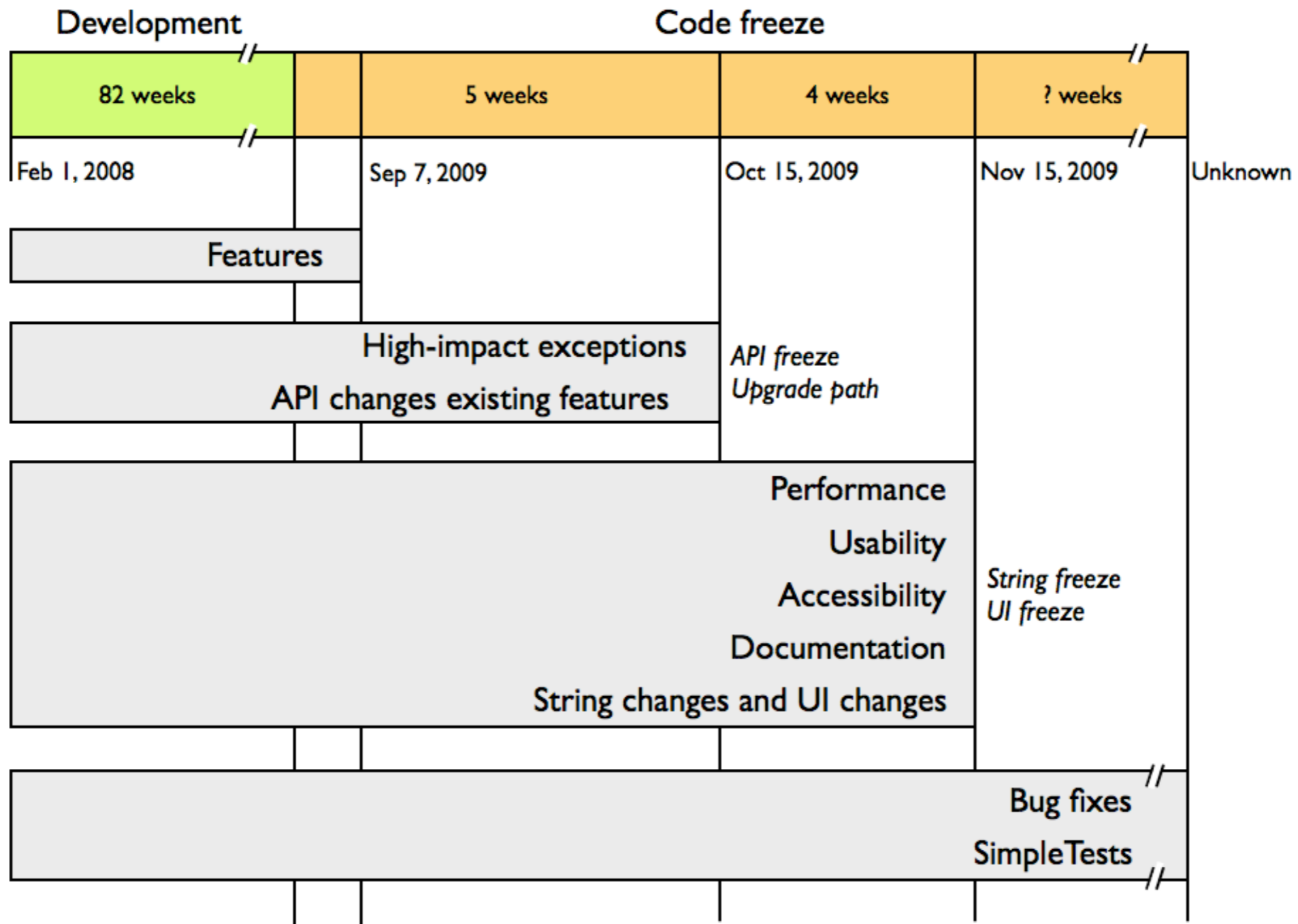


# The Road to Drupal 7





# Drupal 7 Timeline



# Drupal 7: Coming of Age

Image of the Breakfast  
Club ft. John Hughes

- Admin Experience
- Under the Hood
- Theming and Design



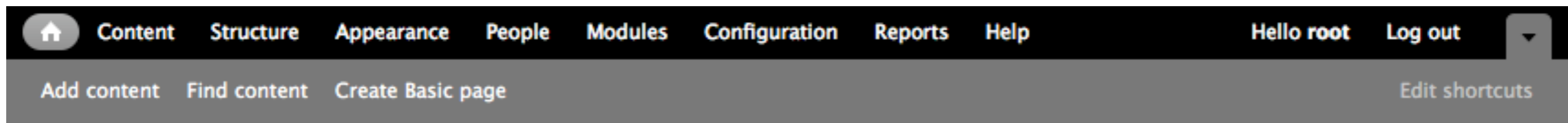
# Out of the Box Experience



- Default States out of the Box
- Install Profile API Support!



# Admin Experience: Admin Bar



- Admin Toolbar: “Admin Menu” Grown Up
- “Shortcuts” and their Advantages



# Admin Experience: “Seven”

[Home](#) » [Dashboard](#)

**Content** ▾

**CONTENT** **COMMENTS**

[+ Add new content](#)

**SHOW ONLY ITEMS WHERE**

status  ▾

type  ▾

**UPDATE OPTIONS**

▾


<input type="checkbox"/>	TITLE	TYPE	AUTHOR	STATUS	UPDATED	OPERATIONS
<input type="checkbox"/>	<a href="#">Movie Review: 16 Candles</a>	Basic page	root	published	03/12/2010 - 09:49	<a href="#">edit</a> <a href="#">delete</a>
<input type="checkbox"/>	<a href="#">Movie Review: Home Alone</a>	Basic page	root	published	03/12/2010 - 09:49	<a href="#">edit</a> <a href="#">delete</a>





# Admin Experience: I.A.

[Home](#) » [Dashboard](#)

Dashboard 

DASHBOARD BY TASK BY MODULE

[Show descriptions](#)

**CONTENT**

- [Comments](#)

**APPEARANCE**

- [Update](#)
- [Settings](#)

**PEOPLE**

- [Permissions](#)

**CONFIGURATION**

- [Regional and language](#)
- [System](#)
- [User interface](#)
- [People](#)
- [Search and metadata](#)

**STRUCTURE**

- [Blocks](#)
- [Content types](#)
- [Menus](#)
- [Taxonomy](#)

**MODULES**

- [Update](#)
- [Uninstall](#)



# Admin Experience: Add Content

[Home](#) » [Add new content](#)

Create Basic page ▾

Title \*

Body ([Edit summary](#))

Text format Filtered HTML ▾

[More information about text formats](#) ?

- Web page addresses and e-mail addresses turn into links automatically.
- Allowed HTML tags: `<a>` `<em>` `<strong>` `<cite>` `<blockquote>` `<code>` `<ul>` `<ol>` `<li>` `<dl>` `<dt>` `<dd>`
- Lines and paragraphs break automatically.

**Menu settings**

Not in menu

**Revision information**

No revision

**URL path settings**

No alias

**Comment settings**

Closed

**Authoring information**

By root

**Publishing options**

Published

Provide a menu link

Save

Preview

Edit Teaser

Input Formats

Vertical Tabs











# Admin Experience: Dashboard

Home  
Dashboard 

DASHBOARD BY TASK BY MODULE

Drag and drop these blocks to the columns below. Changes are automatically saved.

 Recent comments  Syndicate  Shortcuts  Navigation  Management  User menu

 Main menu  Who's online

Done

**Recent content**

Movie Review: Home Alone root	edit	delete
Movie Review: 16 Candles root	edit	delete
<a href="#">More</a>		

**Powered by Drupal**

Powered by [Drupal](#)

**Search form**

**Who's new**

- [root](#)

**Secondary menu**

(empty)



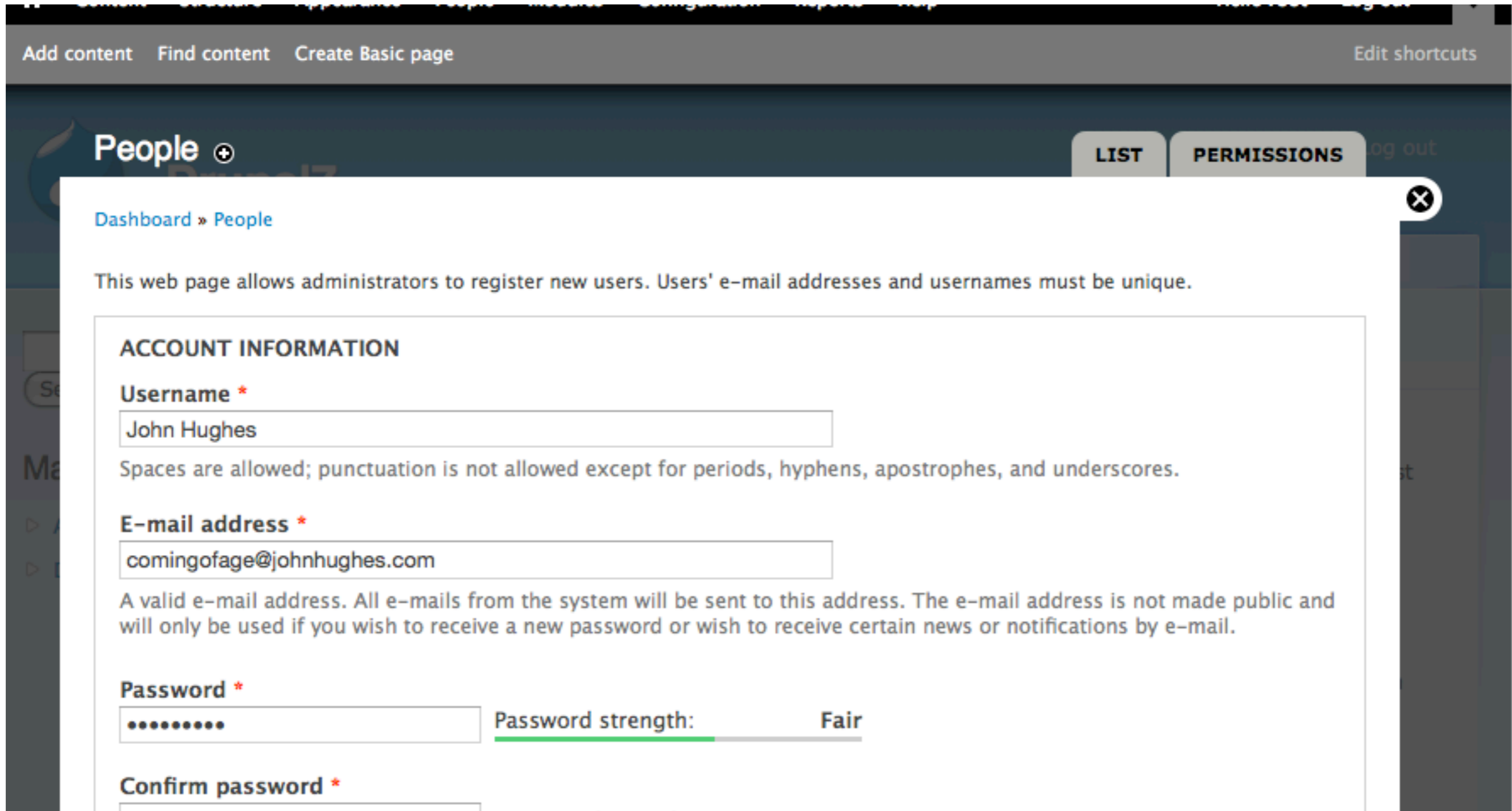
# Admin Experience: Edit in Place



The screenshot displays the Drupal 7 administrative interface. At the top, the Drupal logo and 'Drupal7' are visible. Below this is a search bar with a 'Search' button. The main content area is divided into two columns. The left column contains a 'Management' block with a gear icon and a dropdown menu. The dropdown menu is open, showing three options: 'List links', 'Edit menu' (which is highlighted), and 'Configure block'. Below the 'Management' block are two links: 'Add new content' and 'Dashboard'. The right column shows a 'Home' link at the top, followed by a 'Movie Review: 16' section. Below this is a paragraph of placeholder text starting with 'Praesent et adipiscing aug nibh, elementum et pulvinar'.



# Admin Experience: Overlays



The screenshot shows the Drupal administration interface. At the top, there are navigation links: "Add content", "Find content", "Create Basic page", and "Edit shortcuts". The main header area includes "People" with a plus icon, and tabs for "LIST" and "PERMISSIONS". A "log out" link is also visible.

The overlay form is titled "People" and contains the following information:

- Dashboard » People**
- This web page allows administrators to register new users. Users' e-mail addresses and usernames must be unique.
- ACCOUNT INFORMATION**
- Username \***  
  
Spaces are allowed; punctuation is not allowed except for periods, hyphens, apostrophes, and underscores.
- E-mail address \***  
  
A valid e-mail address. All e-mails from the system will be sent to this address. The e-mail address is not made public and will only be used if you wish to receive a new password or wish to receive certain news or notifications by e-mail.
- Password \***  
 Password strength:  Fair
- Confirm password \***





# Admin Experience: Module

[Dashboard](#) » [Modules](#)

To install a new module or theme, either enter the URL of an archive file you wish to install, or upload the archive file that you have downloaded. You can find [modules](#) and [themes](#) at <http://drupal.org>. The following archive extensions are supported: *zip, tgz, tar.gz, tar.bz2*

## Install from a URL

For example: *http://ftp.drupal.org/files/projects/name.tar.gz*

Or

## Upload a module or theme archive to install

For example: *name.tar.gz* from your local computer



# Under the Hood: Better Technology



A movie poster from  
Star Trek



# Under the Hood: Less Technology

- Modules removed:
  - Blog API
  - Ping
  - Throttle
  - Upload
- Block module made optional
- Access rules removed
- Minimum # of words in Body removed
- User-selectable themes removed
- Related terms, and taxonomy +, URL arguments removed
- Comment display options removed



# Under the Hood: More Modules!

*Admin Role* **IMAGECACHE** **Token**

Image and Image API **FILEFIELD**

Poormanscron **Imagefield** FeedAPI (some)

*Install Profile API (some)* **CCK**



# Under the Hood: Fields in Core

Boolean      File      Textarea      List      Image

Decimal/Float/Integer      Body      Image      Textfield

**which can be used on...**

Nodes      Users      Taxonomy Terms      Comments

*and many more to come...*





# Under the Hood: Javascript

- jQuery 1.3
- jQuery Forms 2.2
- jQuery UI 1.7
- drupal\_add\_library()
- CTools AJAX Framework

A movie poster  
from Cars



# Under the Hood: SimpleTest

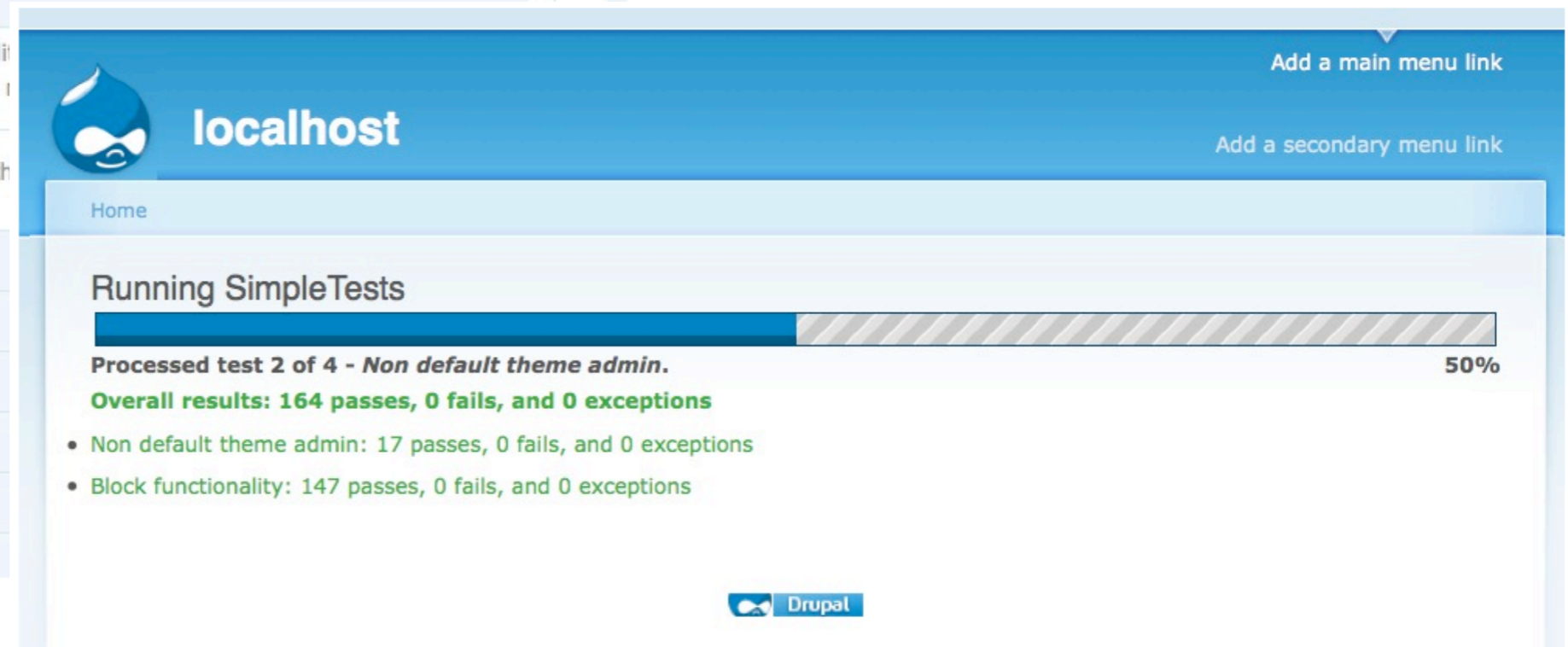
Home > Administer > Site building

## Testing

### Tests

Select the tests you would like to run, and click Run tests.

<input type="checkbox"/>	Test	Description
<input type="checkbox"/>	▶ <b>Aggregator</b>	
<input checked="" type="checkbox"/>	▼ <b>Block</b>	
<input checked="" type="checkbox"/>	Block functionality	Add, edit, move a block
<input checked="" type="checkbox"/>	Non default theme admin	Check the theme admin
<input type="checkbox"/>	▶ <b>Blog</b>	
<input type="checkbox"/>	▶ <b>Blog API</b>	
<input type="checkbox"/>	▶ <b>Book</b>	
<input type="checkbox"/>	▶ <b>Bootstrap</b>	
<input type="checkbox"/>	▶ <b>Cache</b>	
<input type="checkbox"/>	▶ <b>Comment</b>	



localhost

Home

### Running SimpleTests

Processed test 2 of 4 - *Non default theme admin.* 50%

**Overall results: 164 passes, 0 fails, and 0 exceptions**

- Non default theme admin: 17 passes, 0 fails, and 0 exceptions
- Block functionality: 147 passes, 0 fails, and 0 exceptions

Drupal



# Under the Hood: Security

- Email Notifications for Security Updates
- PHP Filter has global kill switch
- Cron.php requires key in URL
- New Permission Screen!
- Stronger Password Hashing
- Login Limitations



# Under the Hood: DBTNG

- Full Database Abstraction Layer using PHP's Data PDO
- Full PHP Database Support - MySQL, SQLite, PostgreSQL in D7. MSSQL, Oracle forthcoming.
- Master/Slave Replication, Transactions, Multi-Insert, Delayed Insert!

A group shot of  
Star Trek TNG  
cast





# Under the Hood: Performance

- Proxy and Reverse Proxy Support: Varnish!
- Full XDebug Profiling for Micro Optimizations
- InnoDB Default Storage System
- CDN Support

The Fast and the  
Furious Movie  
Poster





# Under the Hood: Registry

name	type	filename	module	suffix	weight
system_help	function	modules/system/system.module	system	help	0
system_theme	function	modules/system/system.module	system	theme	0
system_perm	function	modules/system/system.module	system	perm	0
system_rdf_namespaces	function	modules/system/system.module	system	rdf_namespaces	0
system_elements	function	modules/system/system.module	system	elements	0
system_menu	function	modules/system/system.module	system	menu	0
blocked_ip_load	function	modules/system/system.module	system		0
_system_themes_access	function	modules/system/system.module	system		0
system_init	function	modules/system/system.module	system	init	0
system_preprocess_page	function	modules/system/system.module	system	preprocess_page	0
system_user_form	function	modules/system/system.module	system	user_form	0
system_user_register	function	modules/system/system.module	system	user_register	0
system_user_login	function	modules/system/system.module	system	user_login	0
system_user_timezone	function	modules/system/system.module	system	user_timezone	0
system_block_list	function	modules/system/system.module	system	block_list	0
system_block_configure	function	modules/system/system.module	system	block_configure	0
system_block_save	function	modules/system/system.module	system	block_save	0
system_block_view	function	modules/system/system.module	system	block_view	0
system_admin_menu_block	function	modules/system/system.module	system	admin_menu_block	0
system_theme_select_form	function	modules/system/system.module	system	theme_select_form	0



# Under the Hood: Hooks

- `hook_modules_X()`
- `hook_taxonomy_term_X()`
- `hook_taxonomy_vocabulary_X()`
- `hook_aggregator_X()`
- `hook_node_X()`
- `hook_user_X()`

and many many more...

“Hook” by Robin Williams and others





# Design: A Theme Called “Stark”



[Drupal7](#)

## Management

- ▶ [Add new content](#)
- ▶ [Dashboard](#)

## Secondary menu

[root](#) [Log out](#)  
Powered by [Drupal](#)

## Welcome to Drupal7

No front page content has been created yet.

- [Add new content](#)

“Stark” from Jim  
Henson’s “Farscape”



# Design: \$page and hook\_page\_alter()

```
$page['left']['blocks']['user-navigation']['#block'] = (block object);  
$page['content']['message']['#markup'] = 'Welcome to a big list of nodes.';  
$page['content']['nodes'] = (array of node objects keyed by node ID);  
$page['content']['pager']['#markup'] = (HTML markup of pager);  
$page['footer']['blocks']['system-powered-by']['#block'] = (block object);
```



# Design: #WYSIWYG

The screenshot shows a WYSIWYG editor interface. At the top is a toolbar with various icons for text formatting (bold, italic, underline), alignment, lists, links, and media. Below the toolbar are dropdown menus for Styles, Format, Font, and Size. The main content area displays a story about Little Red Riding Hood. A large green box highlights the text: "Improved support for integration of WYSIWYG editors." To the right of the text, there is a table of international names for the character.

**Little Red Riding Hood**

Improved support for integration of WYSIWYG editors.

International Names
小紅帽
Cappuccetto Rosso
Caperucita Roja

A wolf wants to eat the girl but is afraid to do so in public. He approaches the girl, and she naively tells him where she is going. He suggests the girl pick some flowers, which she does. In the meantime, he goes to the grandmother's house and gains entry by pretending to be the girl. He swallows the grandmother whole, and waits for the girl, disguised as the grandmother.

When the girl arrives, she notices he looks very strange to be her grandma. In most retellings, this eventually culminates with Little Red Riding Hood saying, "My, what big teeth you have!" To which the wolf replies, "The better to eat you with," and swallows her whole, too.

A [hunter](#), however, comes to the rescue and cuts the wolf open. Little Red Riding Hood and her grandmother emerge unharmed. They fill the wolf's body with heavy stones, which drown him when he falls into a well. Other versions of the story have had the grandmother shut in the closet instead of eaten, and some




# Design: Image Handling in Core

**Image style name \***  
  
 The name is used in URLs for generated images. Use only lowercase alphanumeric characters, underscores ( \_ ), and hyphens (-).

EFFECT	OPERATIONS
+ Scale and crop 85x85	<a href="#">edit</a> <a href="#">delete</a>
+ Desaturate	<a href="#">delete</a>
+ <input type="text" value="Select a new effect"/>	
<input type="button" value="Add"/>	


**Preview**

original (view actual size)



800px  
600px

thumbnail (view actual size)



85px  
85px





# Design: Page Elements as Blocks

Block	Region	Operations
<b>Header</b>		
+ User login	Header	configure
<b>Left sidebar</b>		
+ Navigation	Left sidebar	configure
<b>Right sidebar</b>		
<i>No blocks in this region</i>		
<b>Highlighted content</b>		
+ Mission statement	Highlighted content	configure delete
<b>Help</b>		
+ System help	Help	configure
<b>Content</b>		
+ Main page content	Content	configure
<b>Footer</b>		
+ Footer message	Footer	configure delete
+ Powered by Drupal	Footer	configure



# Design: Revamped \*.tpl.php

- Better XHTML Structure for CSS-only Design. Zen!
- Standard Semantic Class/ID Names (.section, #navigation)
- Simply: Easier to Theme

```

<body class="<?php print $body_classes; ?>">

  <div id="page-wrapper"><div id="page">

    <div id="header"><div class="section clearfix">

      <?php if ($logo): ?>
        <a href="<?php print $front_page; ?>" title="<?php
id="logo">
          
      <?php endif; ?>

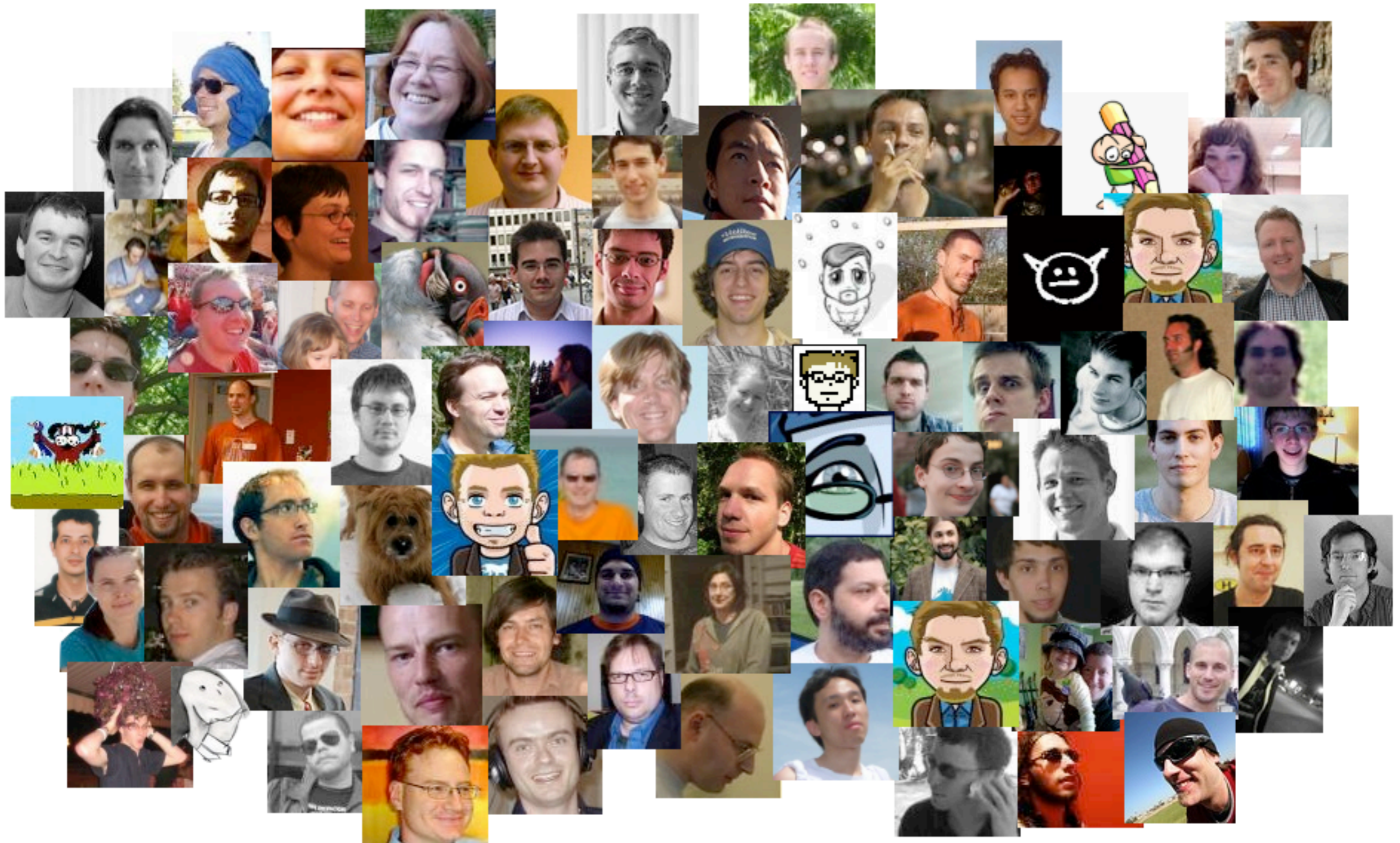
      <?php if ($site_name || $site_slogan): ?>
        <div id="name-and-slogan">
          <?php if ($site_name): ?>
            <?php if ($title): ?>
              <div id="site-name"><strong>
                <a href="<?php print $front_page; ?>" title
rel="home"><span><?php print $site_name; ?></span></a>
              </strong></div>
            <?php else: /* Use h1 when the content title is
              <h1 id="site-name">
                <a href="<?php print $front_page; ?>" title
rel="home"><span><?php print $site_name; ?></span></a>
              </h1>
            <?php endif; ?>
          </div>
        </div>
      </div>
    </div>
  </div>

```





# Drupal 7: A Community Affair



# What about Contrib?

# #D7CX





# Demo: Let's Enter the Drupal 7

“The Matrix”





# When Will it be Ready?

It's ready when  
it's ready.

Dries Buytaert



# Drupalcon SF: The Drupal 7 Party

**DRUPALCON SF**   
San Francisco / April 19-21, 2010



# Questions?

and thanks to many for pictures and images about Drupal 7 reused here!

