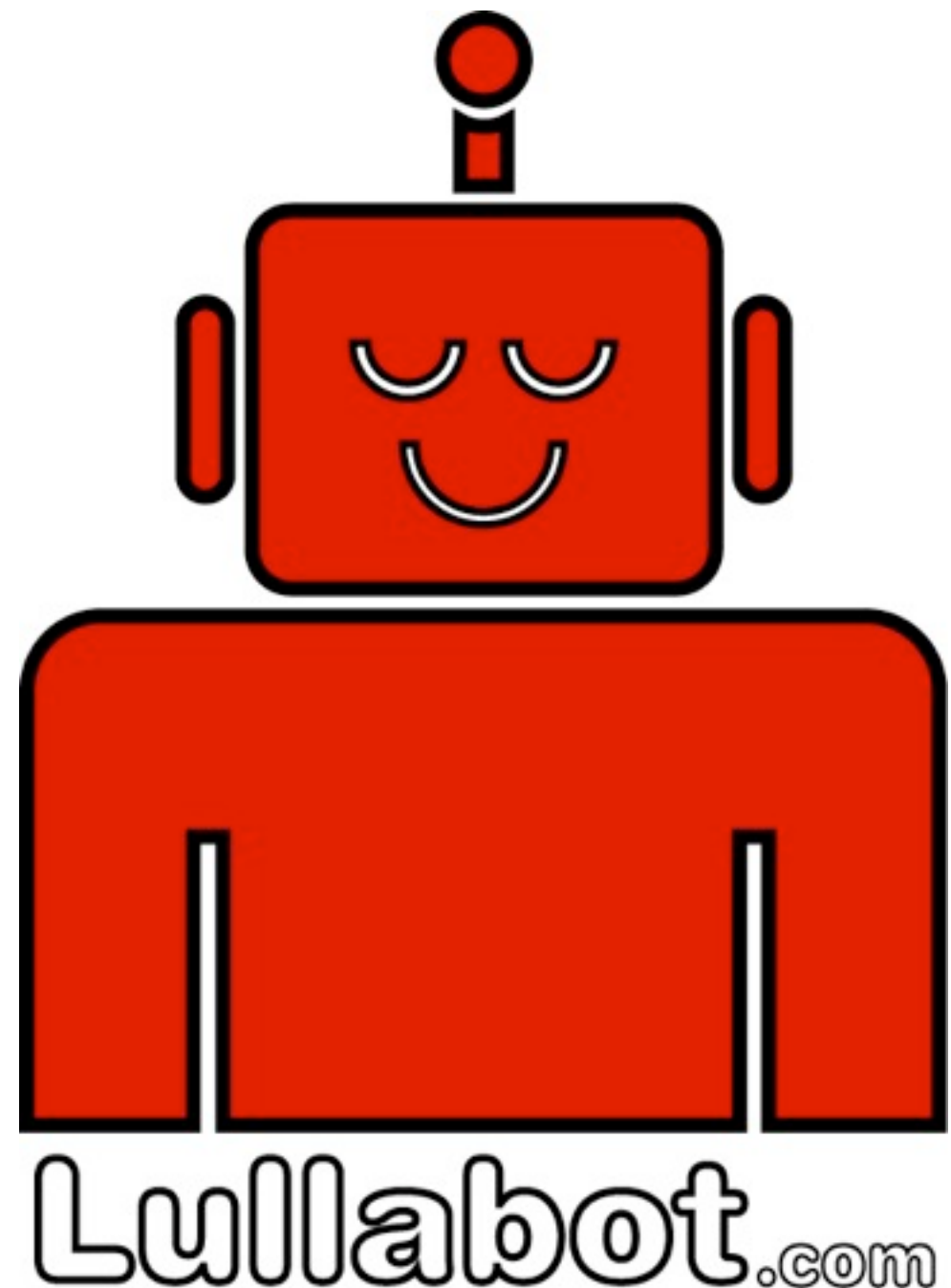


Drupal 7

Angela “webchick” Byron
Drupalcon Paris
September 2, 2009

About Me

- Started Drupal in 2005 as Google Summer of Code student
- Obsessed with everything Drupal (especially getting new people involved!)
- *Using Drupal* co-author, Drupal Association board member, Drupal 7 co-maintainer
- Work at Lullabot doing Drupal consulting and education



Agenda

- Talk about how much Drupal 7 is going to rock your face off.
- Talk about how YOU can help get Drupal 7 out the door so we can start building even more awesome sites!


What's new in Drupal 7?



Changes for end-users and clients



Usability improvements



UB USABILITY TESTING

Results from Usability Testing at the University of Baltimore 2009

[Home](#)

Videos are currently being rendered and compressed and uploaded. They will be available shortly. Videos currently available: [Participant 1](#), [Participant 10](#), and [Participant 11](#). Stay tuned for more! Slides from our presentation are available for download [here](#), the video of the presentation is available [here](#).

UB 2009 Usability Testing

Setup taxonomy for workshops

Issue	Issue	Criticality ▲	Drupal7
Users asked to enter pointless information -	Link		
Terms listed alphabetically, not in creation order -	Link	Critical	Open
Taxonomy help text is too long -	Link	Critical	Open
Users Fill Out Advanced Settings For Terms (but they are never used) -		Critical	Open
Taxonomy example content can look like table header -		Critical	Open
Terms listed alphabetically by default. No filter on user enter them.		Critical	Open

PARTICIPANTS

- [Participant: 1](#)
- [Participant: 2](#)
- [Participant: 3](#)
- [Participant: 4](#)
- [Participant: 5](#)
- [Participant: 6](#)
- [Participant: 7](#)
- [Participant: 8](#)
- [Participant: 9](#)
- [Participant: 10](#)
- [Participant: 11](#)

ISSUE CATEGORIES

"Sort of like COBOL. In small applications it's more work than it's worth, in big applications it's gonna be more useful"

<http://drupalusability.org/>

Password checker

Drupal 6

Password:

Password strength: **Low**

Confirm password:

Passwords match: **No**

It is recommended to choose a password that contains at least six characters. It should include numbers, punctuation, and both upper and lowercase letters.

To change the current user password, enter the new password in both fields.

Drupal 7

Password

Confirm password

Password strength: 

Passwords match: **no**

To make your password stronger:

- ☐ Make it at least 6 characters
- ☐ Add uppercase letters
- ☐ Add numbers
- ☐ Add punctuation

To change the current user password, enter the new password in both fields.

Text format selector

Drupal 6

Input format

☒ Filtered HTML

☐ Web page addresses and e-mail addresses turn into links automatically.

☐ Allowed HTML tags: <a> <cite> <code> <dl> <dt> <dd>

☐ Lines and paragraphs break automatically.

☐ Full HTML

☐ Web page addresses and e-mail addresses turn into links automatically.

☐ Lines and paragraphs break automatically.

[More information about formatting options](#)

Drupal 7

Text format

Filtered HTML

[More information about text formats ?](#)

Web page addresses and e-mail addresses turn into links automatically.

Allowed HTML tags: <a> <cite> <blockquote> <code> <dl> <dt> <dd>

Lines and paragraphs break automatically.

Vertical tabs

Drupal 6

—▷

Revision information

—▷

Comment settings

—▷

File attachments

—▷

Authoring information

—▷

Publishing options

Drupal 7

Menu settings
Not in menu

Revision information

No revision

URL path settings

No alias

Comment settings

Open

Authoring information

By a

Publishing options

Published, Promoted to front page

Menu link title

The link text corresponding to this item that should appear in the menu. Leave blank if you do not wish to add this post to the menu.

Parent item

<Main menu>

The maximum depth for an item and all its children is fixed at 9. Some menu items may not be available as parents if selecting them would exceed this limit.

Weight

0

Optional. In the menu, the heavier items will sink and the lighter items will be positioned nearer the top.

Permission screen

PERMISSION	ANONYMOUS USER	AUTHENTICATED USER	ADMINISTRATOR
Block			
Administer blocks Select which blocks are displayed, and arrange them on the page.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comment			
Administer comments Manage and approve comments, and configure comment administration settings.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Access comments View comments attached to content.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Post comments Add comments to content (approval required).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Default front page

Drupal 6

Welcome to your new Drupal website!

Please follow these steps to set up and start using your website:

1. Configure your website

Once logged in, visit the [administration section](#), where you can [customize and configure](#) all aspects of your website.

2. Enable additional functionality

Next, visit the [module list](#) and enable features which suit your specific needs. You can find additional modules in the [Drupal modules download section](#).

3. Customize your website design

To change the "look and feel" of your website, visit the [themes section](#). themes or download additional themes from the [Drupal themes download](#)

4. Start posting content

Finally, you can [create content](#) for your website. This message will disappear the front page.

For more information, please refer to the [help section](#), or the [online Drupal Drupal forum](#), or view the wide range of [other support options](#) available.

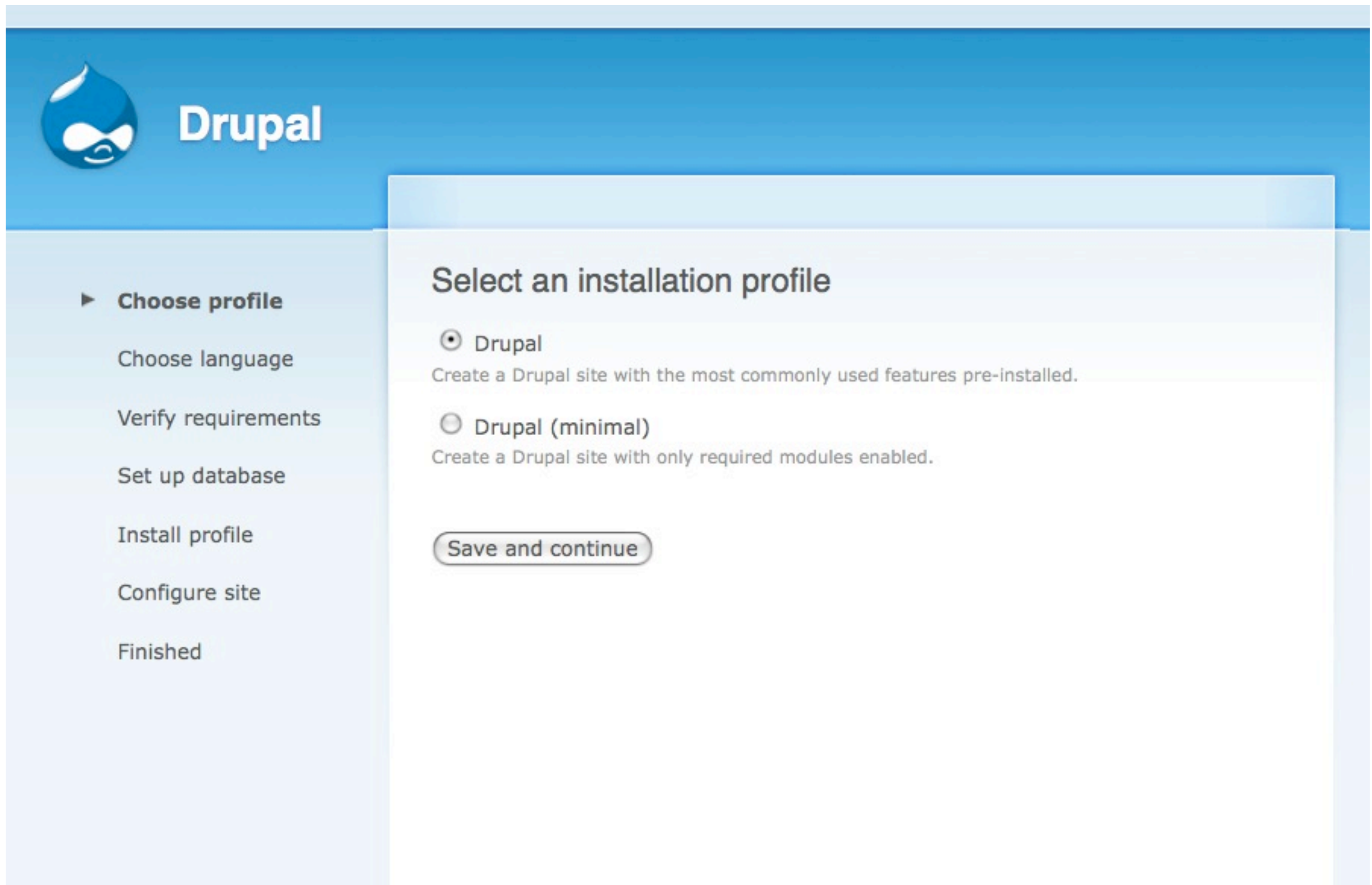
Drupal 7

Welcome to localhost

No front page content has been created yet.

- [Create content](#)
- [Change the default front page](#)

Default/Minimal Profile



The screenshot shows the Drupal installation interface. At the top left is the Drupal logo and the word "Drupal". Below it is a sidebar with a list of steps: "Choose profile" (highlighted with a right-pointing triangle), "Choose language", "Verify requirements", "Set up database", "Install profile", "Configure site", and "Finished". The main content area is titled "Select an installation profile". It contains two radio button options. The first option is "Drupal", which is selected (indicated by a filled radio button), with the description "Create a Drupal site with the most commonly used features pre-installed." The second option is "Drupal (minimal)", which is not selected (indicated by an empty radio button), with the description "Create a Drupal site with only required modules enabled." At the bottom of the main content area is a button labeled "Save and continue".

Drupal

- **Choose profile**
- Choose language
- Verify requirements
- Set up database
- Install profile
- Configure site
- Finished

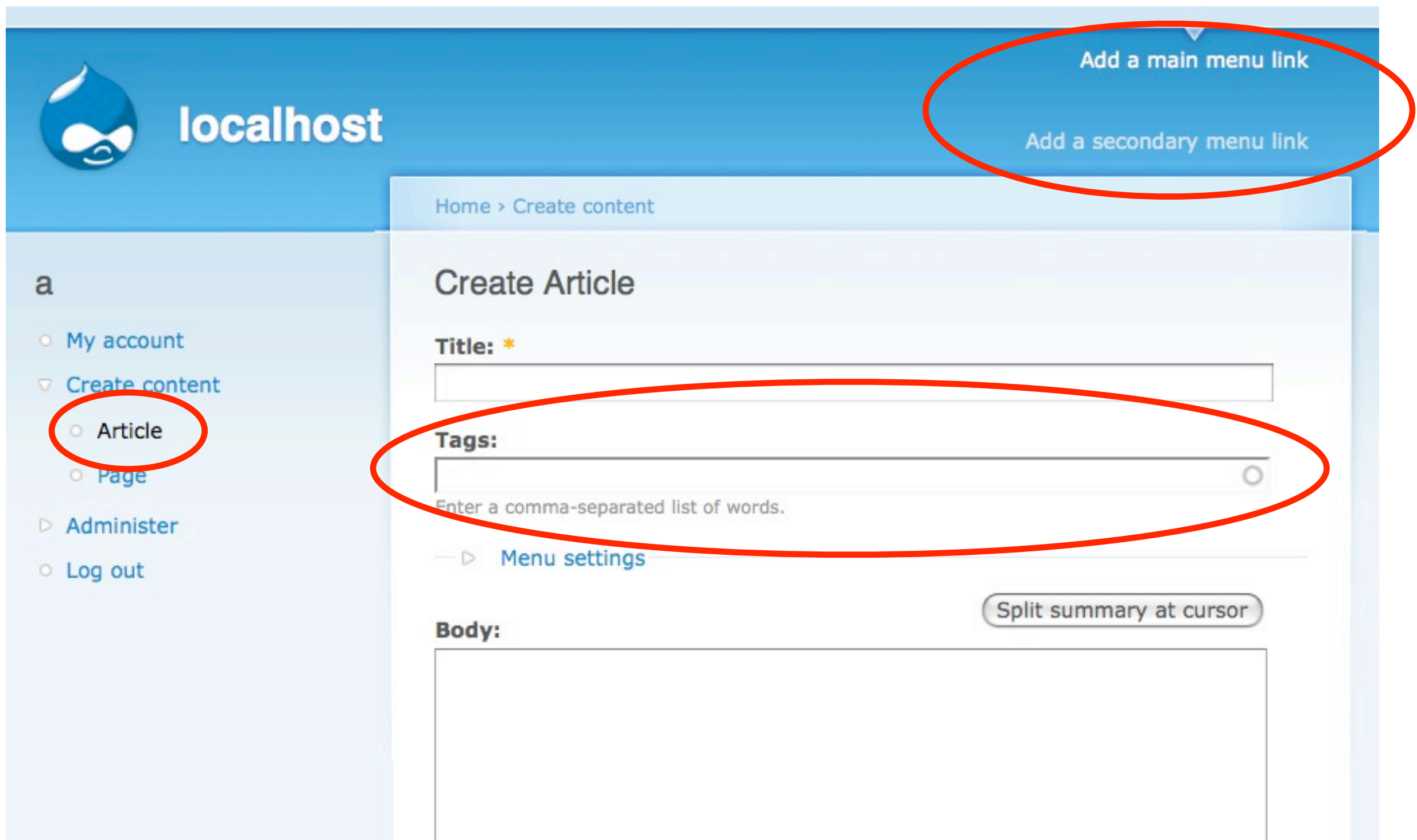
Select an installation profile

☒ **Drupal**
Create a Drupal site with the most commonly used features pre-installed.

☐ **Drupal (minimal)**
Create a Drupal site with only required modules enabled.

Save and continue

Default profile



The screenshot shows the Drupal 'Create Article' form. The top navigation bar is blue with the Drupal logo and the text 'localhost'. On the right side of the bar, there are two links: 'Add a main menu link' and 'Add a secondary menu link', both of which are circled in red. The left sidebar contains a menu with the following items: 'My account', 'Create content' (expanded), 'Article' (circled in red), 'Page', 'Administer', and 'Log out'. The main content area is titled 'Create Article' and contains the following fields: 'Title: *' (a required text field), 'Tags:' (a text field with a help icon, circled in red), and 'Body:' (a large text area). Below the 'Tags' field, there is a hint: 'Enter a comma-separated list of words.' and a link 'Menu settings'. To the right of the 'Body' field, there is a button labeled 'Split summary at cursor'.

localhost

Home > Create content

Create Article

Title: *

Tags:

Enter a comma-separated list of words.

Menu settings

Split summary at cursor

Body:

D7UX

Drupal 7 User Experience Project

making Drupal7 an amazing user experience

[About](#) [Project Framework](#)

Our UX Principles: 1. Make the most frequent tasks easy and less frequent tasks achievable. 2. Design for the 80% 3. Privilege the Content Creator 4. Make the default settings smart

Media Library Microproject - Update & Feedback Please!

Posted: July 3rd, 2009 | **Author:** Leisa Reichelt | **Filed under:** 4.0 Content, designing together | **Tags:** media, media

library, microprojects | 10 Comments »

Recent Posts

Media Library Microproject - Update & Feedback Please!

D7UX Information Architecture - A detailed view

Information Architecture Strategies

Understanding the D7UX Information Architecture Approach

<http://www.d7ux.org/>

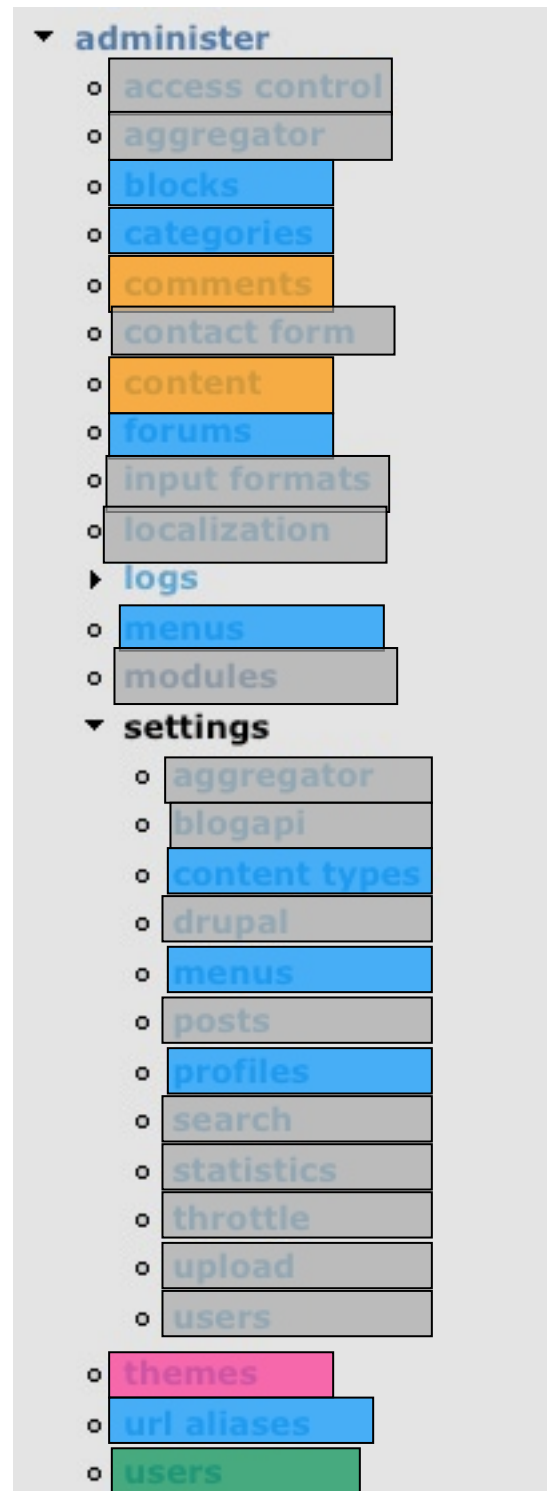
New Information Architecture

- New IA separates administrative tasks into “contexts”:
 - I’m dealing with **content**.
 - I’m building out site **structure**.
 - I’m changing my site’s **appearance**.
 - I’m managing the **people** who come to my site.
 - I’m **configuring** modules and settings.

Drupal 4.x IA

- ▼ administer
 - access control
 - aggregator
 - blocks
 - categories
 - comments
 - contact form
 - content
 - forums
 - input formats
 - localization
 - ▶ logs
 - menus
 - modules
 - ▼ settings
 - aggregator
 - blogapi
 - content types
 - drupal
 - menus
 - posts
 - profiles
 - search
 - statistics
 - throttle
 - upload
 - users
 - themes
 - url aliases
 - users

Drupal 4.x IA



Drupal 5 & 6 IA

Content management

Manage your site's content.

Books

Manage your site's book outlines.

Comments

List and edit site comments and the comment moderation queue.

Content

View, edit, and delete your site's content.

Content types

Manage posts by content type, including default status, front page promotion, etc.

Feed aggregator

Configure which content your site aggregates from other sites, how often it polls them, and how they're categorized.

Forums

Control forums and their hierarchy and change forum settings.

Post settings

Control posting behavior, such as teaser length, requiring previews before posting, and the number of posts on the front page.

RSS publishing

Configure the number of items per feed and whether feeds should be titles/teasers/full-text.

Taxonomy

Manage tagging, categorization, and classification of your content.

Site building

Control how your site looks and feels.

Blocks

Configure what block content appears in your site's sidebars and other regions.

Contact form

Create a system contact form and set up categories for the form to use.

Menus

Control your site's navigation menu, primary links and secondary links, as well as rename and reorganize menu items.

Modules

Enable or disable add-on modules for your site.

Themes

Change which theme your site uses or allow users to set.

Translate interface

Translate the built-in interface and optional other text.

Triggers

Tell Drupal when to execute actions.

URL aliases

Change your site's URL paths by aliasing them.

Views

Views are customized lists of content on your system; they are highly configurable and you control over how lists of content are presented.

User management

Manage your site's users, groups and access to site features.

Access rules

List and create rules to disallow usernames, e-mail addresses, and IP addresses.

Permissions

Determine access to features by selecting permissions for roles.

Profiles

Create customizable fields for your users.

Roles

List, edit, or add user roles.

User settings

Configure default behavior of users, including registration requirements, e-mails, and user pictures.

Users

List, add, and edit users.

Reports

View reports from system logs and other status information.

Recent log entries

View events that have recently been logged.

Recent hits

View pages that have recently been visited.

Top 'access denied' errors

View 'access denied' errors (403s).

Top 'page not found' errors

View 'page not found' errors (404s).

Top referrers

Site configuration

Adjust basic site configuration options.

Actions

Manage the actions defined for your site.

Administration theme

Settings for how your administrative pages should look.

Blog API

Configure the content types available to external blogging clients.

Clean URLs

Enable or disable clean URLs for your site.

Date and time

Settings for how Drupal displays date and time, as well as the system's default timezone.

Error reporting

Control how Drupal deals with errors including 403/404 errors as well as PHP error reporting.

File system

Tell Drupal where to store uploaded files and how they are accessed.

File uploads

Control how files may be attached to content.

Image toolkit

Choose which image toolkit to use if you have installed optional toolkits.

ImageAPI

Configure ImageAPI.

Input formats

Configure how content input by users is filtered, including allowed HTML tags. Also allows enabling of module-provided filters.

Languages

Configure languages for content and the user interface.

(this list goes on forever...)

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(this list goes on forever...)

Drupal 7 IA

Content

View, edit, and delete your site's content and comments.

Appearance

Select and configure your site theme.

People

Find and manage people interacting with your site.

Reports

Recent log entries

View events that have recently been logged.

Field list

Overview of fields on all object types.

Top 'access denied' errors

View 'access denied' errors (403s).

Top 'page not found' errors

View 'page not found' errors (404s).

Top search phrases

View most popular search phrases.

Available updates

Get a status report about available updates for your installed modules and themes.

Status report

Structure

Blocks

Configure what block content appears in your site's sidebars and other regions.

Content types

Manage posts by content type, including default status, front page promotion, comment settings, etc.

Menus

Add new menus to your site, edit existing menus, and rename and reorganize menu links.

Taxonomy

Manage tagging, categorization, and classification of your content.

Configuration and modules

Regional and language

Regional settings, localization and translation.

People and permissions

Configure user accounts, roles and permissions.

Search and metadata

Local site search, metadata and SEO.

Web services

Tools related to web services.

Content authoring

Settings related to formatting and authoring content.

Development

Development tools.

Drupal 7 IA

Content

View, edit, and delete your site's content and comments.

Appearance

Select and configure your site theme.

People

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Configure user accounts, roles and permissions.

Search and metadata

Local site search, metadata and SEO.

Web services

Tools related to web services.

Content authoring

Settings related to formatting and authoring content.

Development

Development tools.

Toolbar

New IA along the top



User account-related stuff easily accessible



Shortcut bar for role-specific frequently accessed items along the bottom



needs
your
help!

Admin Theme: “Seven”

[Home](#) » [Administer](#)

Content

CONTENT

COMMENTS

[+ Add new content](#)

SHOW ONLY ITEMS WHERE

☒ status is
☐ type

Filter

UPDATE OPTIONS

Update

<input type="checkbox"/>	TITLE	TYPE	AUTHOR	STATUS	UPDATED	OPERATIONS
<input type="checkbox"/>	A piece of content	Article	a	published	08/30/2009 - 17:18	edit
<input type="checkbox"/>	A page!	Page	a	published	08/30/2009 - 17:19	edit

Overlays

needs
your
help!

[Content](#) [Structure](#) [Appearance](#) [People](#) [Site configuration](#) [Configuration and modules](#) [Reports](#) [Help](#)

[Add](#) [Find content](#) [Dashboard](#)

Content

CONTENTCOMMENTS

Log out

[+ Add new content](#)

SHOW ONLY ITEMS WHERE

☒ status

 is

published

☐ type

Article

☐ term

woot

Filter

UPDATE OPTIONS

Publish

Update

<input type="checkbox"/>	TITLE	TYPE	AUTHOR	STATUS	UPDATED	OPERATIONS
<input type="checkbox"/>	Yeekaw	Article	a	published	09/01/2009 - 22:48	edit
<input type="checkbox"/>	xxx	Article	a	published	09/01/2009 - 22:52	edit

Edit in place

needs
your
help!

The screenshot displays the Drupal 7 administration interface. At the top, a navigation bar contains links for Content, Structure, Appearance, People, Site configuration, Configuration and modules, Reports, and Help. Below this, a secondary bar includes buttons for Add, Find content, Dashboard, and Disable edit mode. The main header features the Drupal logo and the word 'Drupal', along with links for My account and Log out. On the left sidebar, a 'Search this site' box is present, followed by a 'Management' menu with options for Add new content and Administer. A red arrow points from a yellow box labeled 'Mouse hovering over the configure icon. Border becomes solid.' to the 'Management' menu. Another red arrow points from a yellow box labeled 'Inactive, but editable items with dashed borders.' to the dashed border of the main content area. The main content area shows a node titled 'Testing' with a timestamp of 'Wed, 08/19/2009 - 04:34' and a user 'cwgordon7'. The node body contains the text 'This is a test.' repeated three times, followed by a numbered list from 1 to 10. At the bottom of the node, there are links for 'Read more' and 'Add new comment'. The entire content area is enclosed in a dashed blue border, indicating it is in edit mode.

Changes for site builders



New Minimum Requirements



5.2



5.0

PostgreSQL



8.3

Timezone and Country support

[Home](#) » [Administer](#) » [Configuration and modules](#) » [Regional and language](#)

Regional settings

LOCALE

Default country

France

First day of week

Sunday

TIME ZONES

Default time zone

Europe/Paris: Wednesday, September 2, 2009 - 00:48 +0200

☒ Users may set their own time zone.

☐ Remind users at login if their time zone is not set.

Time zone for new users

☒ Default time zone.

☐ Empty time zone.

☐ Users may set their own time zone at registration.

Users can cancel own accounts

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: **Confirm password:**

Password strength:

To change the current user password, enter the new password in both fields.

Status:

☐ Blocked

☒ Active

Are you sure you want to cancel your account?

When cancelling your account:

☒ Disable the account and keep all content.

☐ Disable the account and unpublish all content.

☐ Delete the account and make all content belong to the *Anonymous* user.

☐ Delete the account and all content.

Select the method to cancel the account above. This action cannot be undone

[Cancel](#)

Mix and Match Public and Private files

[Home](#) » [Administer](#) » [Configuration and modules](#) » [Media](#)

File system

Public file system path

A local file system path where public files will be stored. This directory must exist and be writable by Drupal. This directory must be relative to the Drupal installation directory and be accessible over the web.

Private file system path

A local file system path where private files will be stored. This directory must exist and be writable by Drupal. This directory should not be accessible over the web.

Internationalization

- New translation interface
- Search module supports language-aware searches
- Fields are translatable
- Support for message contexts (msgctxt) to make translation of short words like “View” much easier.

Native Image Handling

image



Empyrean.jpg (438.94 KB)

Remove



Include file in display

Single Image Field

needs
your
help!

IMAGES

FILE INFORMATION		OPERATIONS
	  T_H_E_K_E_E_P.jpg (1.61 MB)	<p>Remove</p>
	  __AllAboutOrangesS__.jpg (133.3 KB)	<p>Remove</p>

Multiple Image Field

Add a new file

Browse...

Upload

Files must be less than 1000 MB.
Allowed file types: png jpg gif.

Native image handling

Image style name *

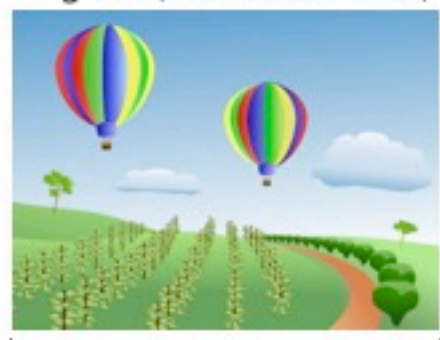
thumbnail

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

EFFECT		OPERATIONS	
+	Scale and crop 85x85	edit	delete
+	Desaturate		delete
+	<div>Select a new effect ▾</div> <div>Add</div>		

Preview

original (view actual size)



600px

800px

thumbnail (view actual size)



85px

85px

Update style

Security

- Prompted for e-mail notifications of security updates upon installation.
- PHP filter module now global “kill-switch” for “enter some PHP here” functionality.
- Cron.php requires key in URL to be run.
- New permission for running site updates.
- Limit login attempts, better flood control.
- Stronger, pluggable password hashing algorithm.

#smallcore

- 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

#largecore

- Contributed modules moved to core:
 - Admin Role
 - Feed API (some of it, anyway...)
 - FileField
 - Image
 - ImageAPI
 - ImageCache
 - ImageField (soon...?)
 - Install Profile API (some of it, anyway...)
 - Poormanscron
 - Token

#largecore

- Contributed modules moved to core:
 - Admin Role
 - Feed API (some of it, anyway...)
 - FileField
 - Image
 - ImageAPI
 - ImageCache
 - ImageField (soon...?)
 - Install Profile API (some of it, anyway...)
 - Poormanscron
 - Token
 - Oh, yeah. And...

CCK!

OMG!

Field Types in Core

- Boolean
- Decimal/Float/Integer
- File
- List
- Text/Textarea
- Taxonomy term
- Node Body

Fields be applied to

Fields be applied to

- Nodes (duh)

Fields be applied to

- Nodes (duh)
- Users (bye, Content Profile)

Fields be applied to

- Nodes (duh)
- Users (bye, Content Profile)
- Comments (bye, Node Comment and Comment Upload)

Fields be applied to

- Nodes (duh)
- Users (bye, Content Profile)
- Comments (bye, Node Comment and Comment Upload)
- Taxonomy terms (bye, Taxonomy Image)





Fields be applied to

- Nodes (duh)
- Users (bye, Content Profile)
- Comments (bye, Node Comment and Comment Upload)
- Taxonomy terms (bye, Taxonomy Image)
- ...and that's just in core! :)

Changes for designers and front-end developers



All butt-ugly, table-based themes removed from core!

SCREENSHOT	NAME	VERSION	ENABLED	DEFAULT	OPERATIONS
	Garland Tableless, recolorable, multi-column, fluid width theme.	7.0-dev	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	configure
	Minnelli Tableless, recolorable, multi-column, fixed width theme.	7.0-dev	<input type="checkbox"/>	<input type="radio"/>	
	Seven A simple one-column, tableless, fluid width administration theme.	7.0-dev	<input checked="" type="checkbox"/>	<input type="radio"/>	configure
	Stark This theme demonstrates Drupal's default HTML markup and CSS styles. To learn how to build your own theme and override Drupal's default code, you should start	7.0-dev	<input type="checkbox"/>	<input type="radio"/>	

Many page elements are now blocks/regions

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

Re-vamped *.tpl.php

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en"
    >language ?>" lang="<?php print $language; ?>"
    $language->dir ?>">

<head>
    <?php print $head; ?>
    <title><?php print $head_title; ?></title>
    <?php print $styles; ?>
    <?php print $scripts; ?>
    <script type="text/javascript"><?php
Content in IE */ ?> </script>
</head>
<body class="<?php print $body_classes; ?>">
    <div id="page">
        <div id="header">
            <div id="logo-title">

                <?php if (!empty($logo)): ?>
                    <a href="<?php print $front_page; ?>"
t('Home'); ?>" rel="home" id="logo">
                        " />

100 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML+RDFa 1.0//EN"
101     "http://www.w3.org/MarkUp/DTD/xhtml-rdfa-1.dtd">
102 <html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en"
103     >language; ?>" dir="<?php print $language->dir; ?>"
104     <?php print $rdf_namespaces; ?>>
105 <head profile="<?php print $grddl_profile; ?>">
106     <title><?php print $head_title; ?></title>
107     <?php print $head; ?>
108     <?php print $styles; ?>
109     <?php print $scripts; ?>
110 </head>
111 <body class="<?php print $classes; ?>">
112
113     <?php print $page_top; ?>
114
115     <div id="page-wrapper"><div id="page">
116
117         <div id="header"><div class="section clearfix">
118
119             <?php if ($logo): ?>
120                 <a href="<?php print $front_page; ?>" title="<?
>" rel="home" id="logo">
                    <img src="<?php print $logo; ?>" alt="<?php p
121
122
```


Re-vamped *.tpl.php

```
<body class="<?php print $body_classes; ?>">
  <div id="page">
    <div id="header">
      <div id="logo-title">

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

        <div id="name-and-slogan">
          <?php if (!empty($site_name)): ?>
            <h1 id="site-name">
              <a href="<?php print $front_page;
rel="home"><span><?php print $site_name; ?>
            </h1>
          <?php endif; ?>

          <?php if (!empty($site_slogan)): ?>
            <div id="site-slogan"><?php print
          <?php endif; ?>
        </div> <!-- /name-and-slogan -->
      </div> <!-- /logo-title -->

      <?php if (!empty($search_box)): ?>
```

```
84 <body class="<?php print $body_classes; ?>">
85
86   <div id="page-wrapper"><div id="page">
87
88     <div id="header"><div class="section clearfix">
89
90       <?php if ($logo): ?>
91         <a href="<?php print $front_page; ?>" title="<?php
. id="logo">
92           
94       <?php endif; ?>
95
96       <?php if ($site_name || $site_slogan): ?>
97         <div id="name-and-slogan">
98           <?php if ($site_name): ?>
99             <?php if ($title): ?>
100               <div id="site-name"><strong>
101                 <a href="<?php print $front_page; ?>" title
. rel="home"><span><?php print $site_name; ?></span></a>
102               </strong></div>
103             <?php else: /* Use h1 when the content title is
104               <h1 id="site-name">
105                 <a href="<?php print $front_page; ?>" title
. rel="home"><span><?php print $site_name; ?></span></a>
106               </h1>
107             <?php endif; ?>
```


Re-vamped *.tpl.php

```
<body class="<?php print $body_classes; ?>">
  <div id="page">
    <div id="header">
      <div id="logo-title">

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

        <div id="name-and-slogan">
          <?php if (!empty($site_name)): ?>
            <h1 id="site-name">
              <a href="<?php print $front_page;
rel="home"><span><?php print $site_name; ?></span></a>
            </h1>
          <?php endif; ?>

          <?php if (!empty($site_slogan)): ?>
            <div id="site-slogan"><?php print
          <?php endif; ?>
        </div> <!-- /name-and-slogan -->
      </div> <!-- /logo-title -->

      <?php if (!empty($search_box)): ?>
```

```
84 <body class="<?php print $body_classes; ?>">
85
86   <div id="page-wrapper"><div id="page">
87
88     <div id="header"><div class="section clearfix">
89
90       <?php if ($logo): ?>
91         <a href="<?php print $front_page; ?>" title="<?php
          id="logo">
92           
94       <?php endif; ?>
95
96       <?php if ($site_name || $site_slogan): ?>
97         <div id="name-and-slogan">
98           <?php if ($site_name): ?>
99             <?php if ($title): ?>
100               <div id="site-name"><strong>
101                 <a href="<?php print $front_page; ?>" title
          rel="home"><span><?php print $site_name; ?></span></a>
102               </strong></div>
103             <?php else: /* Use h1 when the content title is
104               <h1 id="site-name">
105                 <a href="<?php print $front_page; ?>" title
          rel="home"><span><?php print $site_name; ?></span></a>
106               </h1>
107             <?php endif; ?>
```

Re-vamped *.tpl.php

- Re-engineered XHTML structure to facilitate CSS-only design.

```
<body class="<?php print $body_classes; ?>">
  <div id="page">
    <div id="header">
      <div id="logo-title">
        <?php if (!empty($logo)): ?>
          <a href="<?php print $front_page; ?>"
            id="logo">
            
        <?php endif; ?>
      </div>
      <div id="name-and-slogan">
        <?php if (!empty($site_name)): ?>
          <h1 id="site-name">
            <a href="<?php print $front_page; ?>"
              rel="home"><span><?php print $site_name; ?></span></a>
          </h1>
        <?php endif; ?>
        <?php if (!empty($site_slogan)): ?>
          <div id="site-slogan"><?php print $site_slogan; ?>
        <?php endif; ?>
      </div> <!-- /name-and-slogan -->
    </div> <!-- /logo-title -->
  </div>
  <?php if (!empty($search_box)): ?>
```

```
84 <body class="<?php print $body_classes; ?>">
85
86   <div id="page-wrapper"><div id="page">
87
88     <div id="header"><div class="section clearfix">
89
90       <?php if ($logo): ?>
91         <a href="<?php print $front_page; ?>" title="<?php print $logo; ?>"
92           id="logo">
93         "
94       </a>
95       <?php endif; ?>
96
97       <?php if ($site_name || $site_slogan): ?>
98         <div id="name-and-slogan">
99           <?php if ($site_name): ?>
100             <?php if ($title): ?>
101               <div id="site-name"><strong>
102                 <a href="<?php print $front_page; ?>" title="<?php print $site_name; ?>"
103                 rel="home"><span><?php print $site_name; ?></span></a>
104               </strong></div>
105             <?php else: /* Use h1 when the content title is
106               <h1 id="site-name">
107                 <a href="<?php print $front_page; ?>" title="<?php print $site_name; ?>"
108                 rel="home"><span><?php print $site_name; ?></span></a>
109               </h1>
110             <?php endif; ?>
111           </div>
112         </div>
113       </div>
114     </div>
115   </div>
116   <?php if (!empty($search_box)): ?>
```


Re-vamped *.tpl.php

- Re-engineered XHTML structure to facilitate CSS-only design.
- Standard, semantic class/ID names (.section, #navigation, etc.)

```
<body class="<?php print $body_classes; ?>">
  <div id="page">
    <div id="header">
      <div id="logo-title">
        <?php if (!empty($logo)): ?>
          <a href="<?php print $front_page; ?>" id="logo">
            " />
          </a>
        <?php endif; ?>
      </div>
      <div id="name-and-slogan">
        <?php if ($site_name || $site_slogan): ?>
          <h1 id="site-name">
            <a href="<?php print $front_page; ?>" rel="home"><span><?php print $site_name; ?></span></a>
          </h1>
        <?php endif; ?>
        <?php if (!empty($site_slogan)): ?>
          <div id="site-slogan"><?php print $site_slogan; ?></div>
        <?php endif; ?>
      </div> <!-- /name-and-slogan -->
    </div> <!-- /logo-title -->
  </div>
  <?php if (!empty($search_box)): ?>
    <div id="search">
      <input type="text" value="<?php print $search_box; ?>" />
    </div>
  <?php endif; ?>
</body>
```

```
84 <body class="<?php print $body_classes; ?>">
85
86   <div id="page-wrapper"><div id="page">
87
88     <div id="header"><div class="section clearfix">
89       <?php if ($logo): ?>
90         <a href="<?php print $front_page; ?>" title="<?php print $logo; ?>" id="logo">
91           " />
92         </a>
93       <?php endif; ?>
94
95       <?php if ($site_name || $site_slogan): ?>
96         <div id="name-and-slogan">
97           <?php if ($site_name): ?>
98             <?php if ($title): ?>
99               <div id="site-name"><strong>
100                 <a href="<?php print $front_page; ?>" title="<?php print $site_name; ?>" rel="home"><span><?php print $site_name; ?></span></a>
101               </strong></div>
102             <?php else: /* Use h1 when the content title is empty */ ?>
103               <h1 id="site-name">
104                 <a href="<?php print $front_page; ?>" title="<?php print $site_name; ?>" rel="home"><span><?php print $site_name; ?></span></a>
105               </h1>
106             <?php endif; ?>
107           <?php if (!empty($site_slogan)): ?>
108             <div id="site-slogan"><?php print $site_slogan; ?></div>
109           <?php endif; ?>
110         </div>
111       <?php endif; ?>
112     </div>
113     <?php if (!empty($search_box)): ?>
114       <div id="search">
115         <input type="text" value="<?php print $search_box; ?>" />
116       </div>
117     <?php endif; ?>
118   </div>
119 </div>
```

Re-vamped *.tpl.php

- Re-engineered XHTML structure to facilitate CSS-only design.
- Standard, semantic class/ID names (.section, #navigation, etc.)
- Improved consistency throughout.

Re-vamped *.tpl.php

- Re-engineered XHTML structure to facilitate CSS-only design.
- Standard, semantic class/ID names (.section, #navigation, etc.)
- Improved consistency throughout.
- Enables designers to create beautiful, CSS-only themes without touching PHP.

```
<body class="<?php print $body_classes; ?>">
  <div id="page">
    <div id="header">
      <div id="logo-title">
        <?php if (!empty($logo)): ?>
          <a href="<?php print $front_page; ?>" id="logo">
            " />
          </a>
        <?php endif; ?>
      </div>
      <div id="name-and-slogan">
        <?php if ($site_name || $site_slogan): ?>
          <h1 id="site-name">
            <a href="<?php print $front_page; ?>" title="<?php print $site_name; ?>" rel="home">
              <span><?php print $site_name; ?></span></a>
            </h1>
          <?php endif; ?>
          <div id="site-slogan"><?php print $site_slogan; ?></div>
        </div>
      <!-- /name-and-slogan -->
    </div>
    <!-- /logo-title -->
    <?php if (!empty($search_box)): ?>
      <div id="search">
        <input type="text" value="<?php print $search_box; ?>" />
      </div>
    <?php endif; ?>
  </div>
</body>
```

And to show it off...



Stark: “Naked” Drupal



localhost

[Add a main menu link](#)

a

Welcome to your new Drupal website!

Please follow these steps to set up and start using your website:

- [My account](#)
- [Create content](#)
- [Administer](#)
- [Log out](#)

1. Configure your website

Once logged in, visit the [administration section](#), where you can [customize and configure](#) all aspects of your website.

2. Enable additional functionality

Next, visit the [module list](#) and enable features which suit your specific needs. You can find additional modules in the [Drupal modules download section](#).

3. Customize your website design

To change the "look and feel" of your website, visit the [themes section](#). You may choose from one of

Granular theming of content

Drupal 6

```
<div class="content clear-block">  
  <?php print $content ?>  
</div>
```

- \$content is a big string of XHTML.
- Fine-grained control over where **one** part of content goes means being responsible for **all** parts of content. Security nightmare.
- Comments are smooshed in here, too.

Drupal 7

```
<div class="content clearfix">
  <?php
    // We hide the comments and links now so that we can render them later.
    hide($content['comments']);
    hide($content['links']);
    print render($content);
  ?>
</div>
```

...

```
<?php if (!empty($content['links'])): ?>
  <div class="links"><?php print render($content['links']); ?></div>
<?php endif; ?>

<?php print render($content['comments']); ?>
```

- \$content is now an array of page properties that keeps track of what's been printed so far.
- Selectively hide parts until you're ready to print them where YOU want.

Other awesomeness

- You can now preprocess theme functions as well as template files
- Human-readable block IDs (block-user-online vs. block-user-3)
- Template-specific classes now compressed into one `$classes` string, and also available as `$classes_array` for raw values
- RDFa support

JavaScript improvements

- jQuery 1.3
- jQuery Forms 2.2
- jQuery UI 1.7
- `drupal_add_library()` for adding related JS/CSS files
- New CTools AJAX framework in core
- Can use jQuery alongside other JS frameworks (Prototype, etc.)

drupal_add_js/css() improvements

- Now pass in \$options rather than 500 function arguments
- Uses actual weighting rather than awkward 'core' vs. 'module' vs. 'theme' types.
- Add external files to the page.
- Alter CSS/JS array

Changes for coders



```
01110111 01101001 01101100  
01101100 00100000 01100011 01101111  
01100100 01100101 00100000 01110000  
01101000 01110000 00100000 01100110  
01101111 01110010 00100000 01100110  
01101111 01101111 01100100
```

Warning:
Things are about to
get... **geeky**.



TESTING

I FIND YOUR LACK OF TESTS DISTURBING.

SimpleTest

home > Administer > Site building

a

My account

Create content

Administer

Content management

Site building

Blocks

Content types

Menus

Modules

Testing

Themes

Site configuration

User management

Reports

Help

Log out


Testing

Tests

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

<input type="checkbox"/>	Test	Description
<input type="checkbox"/>	► Aggregator	
<input checked="" type="checkbox"/>	▼ Block	
<input checked="" type="checkbox"/>	Block functionality	Add, edit and delete custom block. Configure and move a module-defined block.
<input checked="" type="checkbox"/>	Non default theme admin	Check the administer page for non default theme.
<input type="checkbox"/>	► Blog	
<input type="checkbox"/>	► Blog API	
<input type="checkbox"/>	► Book	
<input type="checkbox"/>	► Bootstrap	
<input type="checkbox"/>	► Cache	
<input type="checkbox"/>	► Comment	

SimpleTest

**localhost**

Add a main menu link

Add a secondary menu link


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**

SimpleTest

**localhost**

Add a main menu link

Add a secondary menu link


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**

SimpleTest

**localhost**

Add a main menu link

Add a secondary menu link


Home

Running SimpleTests

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

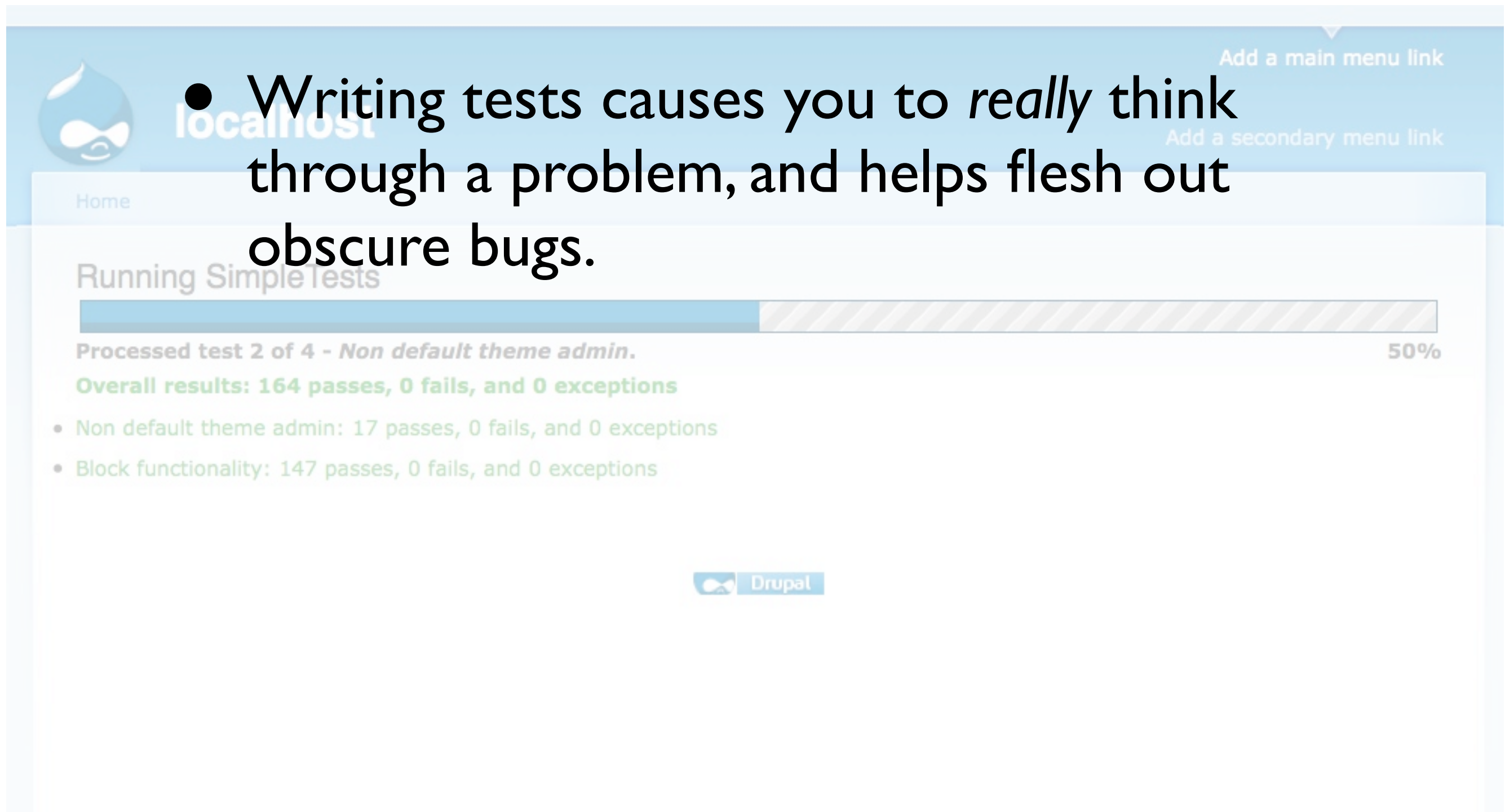
Overall results: 164 passes, 0 fails, and 0 exceptions

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

Drupal

SimpleTest

- Writing tests causes you to *really* think through a problem, and helps flesh out obscure bugs.



The screenshot shows the SimpleTest web interface. At the top, there's a blue header with the Drupal logo on the left and two links on the right: "Add a main menu link" and "Add a secondary menu link". Below the header, a "localhost" banner is visible. A "Home" link is on the left. The main content area is titled "Running SimpleTests" and features a progress bar that is half-filled (50%). Below the progress bar, it says "Processed test 2 of 4 - Non default theme admin." and "Overall results: 164 passes, 0 fails, and 0 exceptions". A bulleted list follows: "• Non default theme admin: 17 passes, 0 fails, and 0 exceptions" and "• Block functionality: 147 passes, 0 fails, and 0 exceptions". At the bottom center, there is a Drupal logo.

localhost

Add a main menu link

Add a secondary menu link

Home

Running SimpleTests

Processed test 2 of 4 - Non default theme admin.

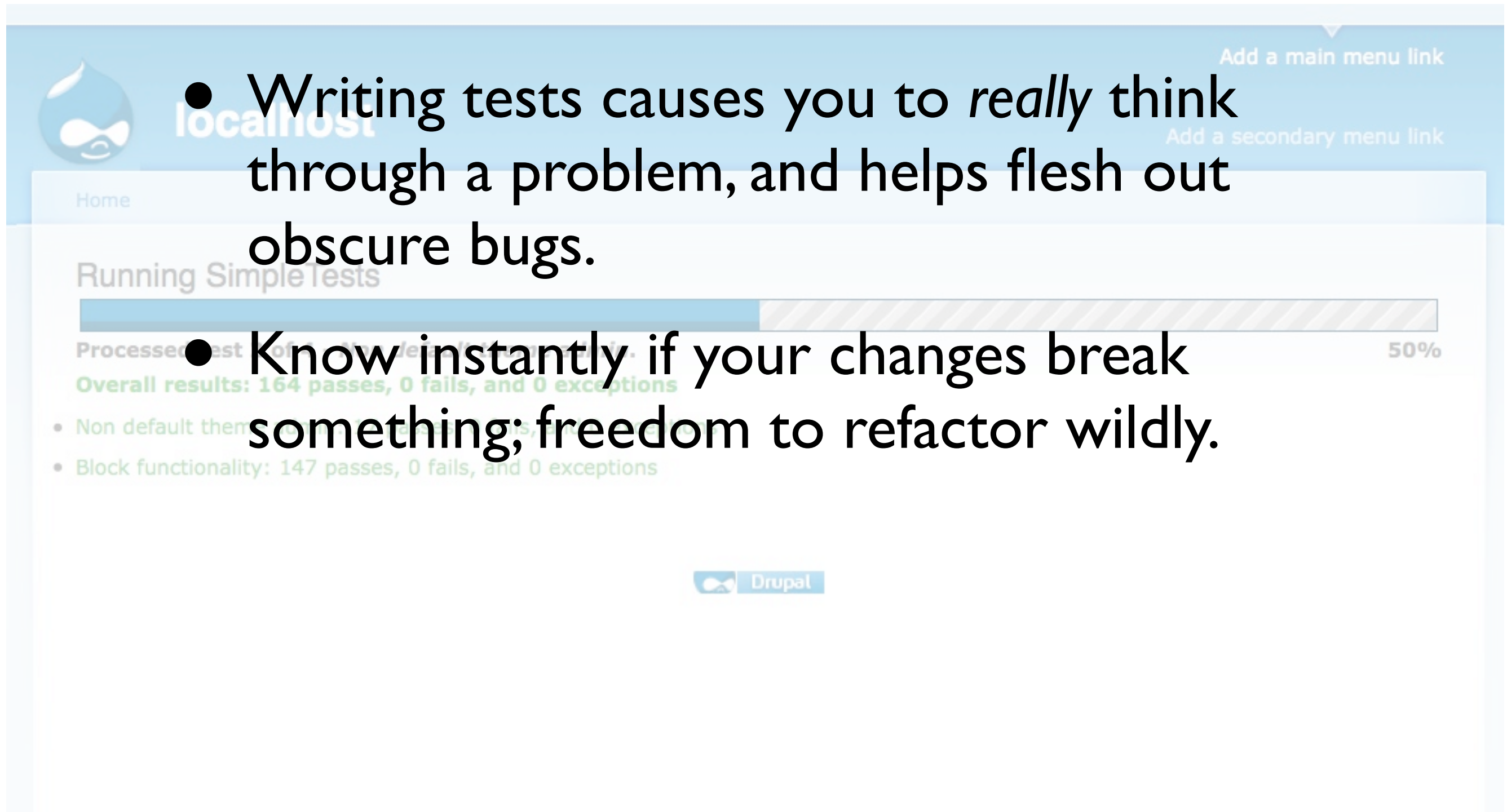
Overall results: 164 passes, 0 fails, and 0 exceptions

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

Drupal

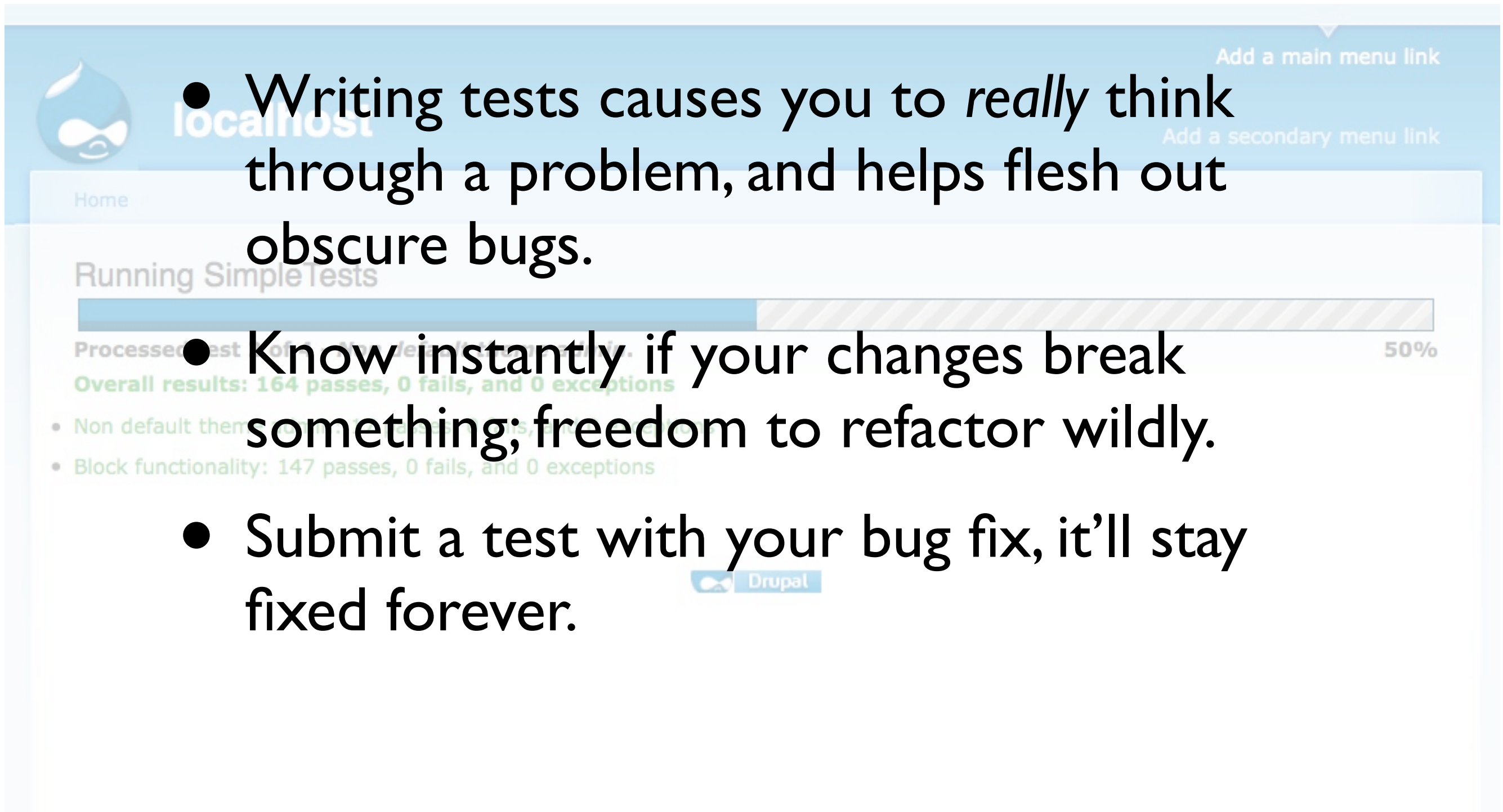
SimpleTest

- Writing tests causes you to *really* think through a problem, and helps flesh out obscure bugs.
- Know instantly if your changes break something; freedom to refactor wildly.



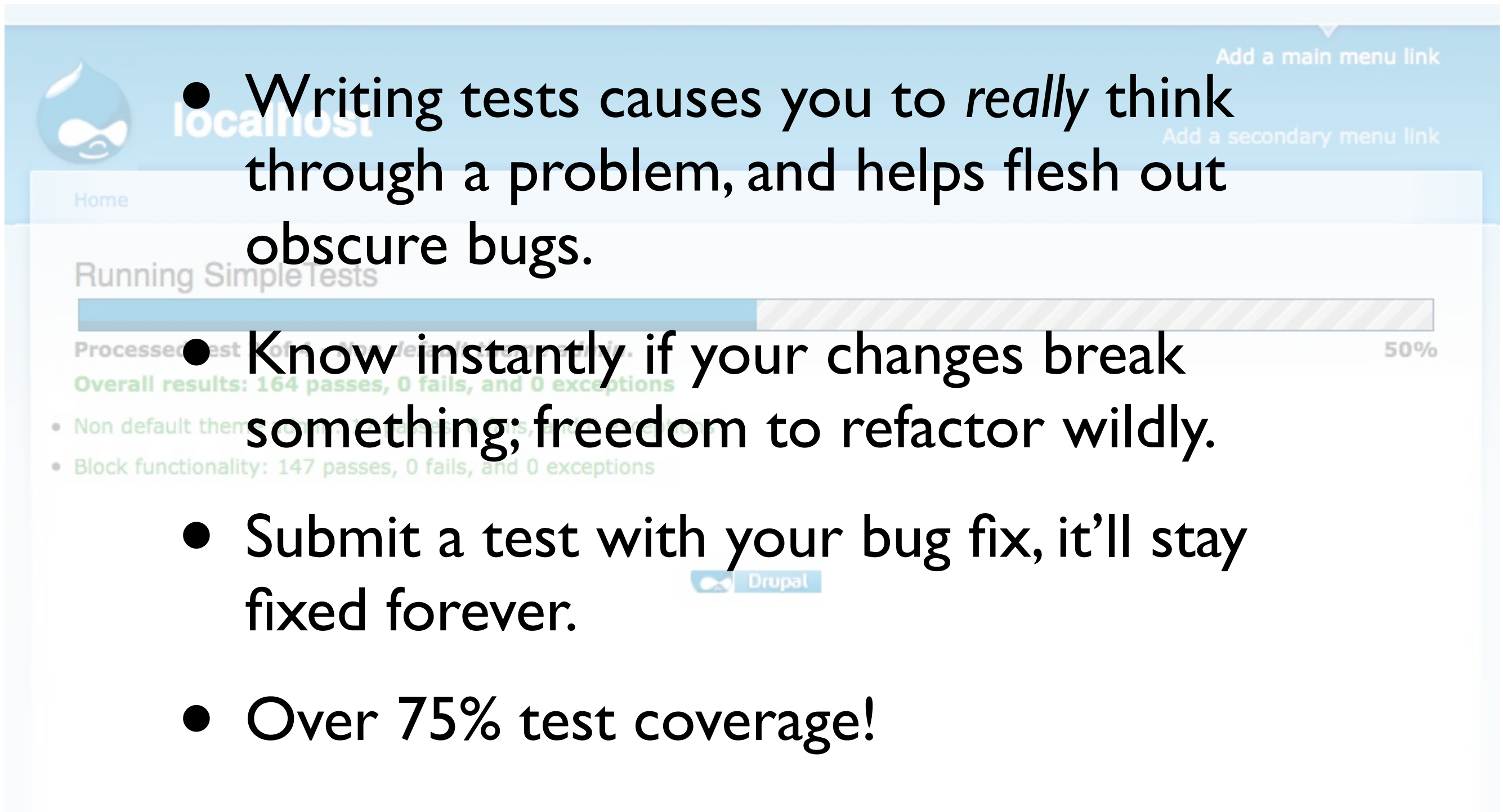
SimpleTest

- Writing tests causes you to *really* think through a problem, and helps flesh out obscure bugs.
- Know instantly if your changes break something; freedom to refactor wildly.
- Submit a test with your bug fix, it'll stay fixed forever.




SimpleTest

- Writing tests causes you to *really* think through a problem, and helps flesh out obscure bugs.
- Know instantly if your changes break something; freedom to refactor wildly.
- Submit a test with your bug fix, it'll stay fixed forever.
- Over 75% test coverage!



testing.drupal.org

[Main](#) [Status](#) [Stats](#) [Log](#) [Issues](#) [Development](#) [Contact](#)



 **testing.drupal.org** Let no patch go untested

Home

4677 patches tested!

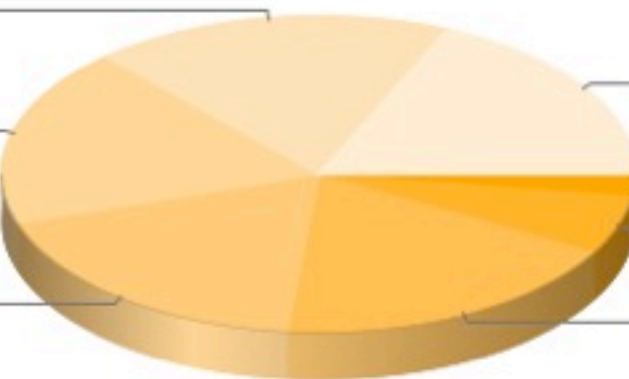
Query:

Search

ATS Development
\$0 \$3,000
 **27%**
Raised **\$810** of \$3,000
7 contributors | Ends 3/31
Automated Testing System Development
 Copy  About
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Stats

Testing result breakdown



Category	Count
Passed tests.	10
Failed tests.	5
Failed to install HEAD.	3
Invalid PHP syntax.	2
Failed to run tests.	2
Failed to fetch file.	2
Failed to apply patch.	2

Drupal is a registered trademark of [Dries Buytaert](#).

18995 tests run!

testing.drupal.org

#1

[webchick](#) - December 23, 2008 - 20:11

Here, try this patch.

Attachment	Size
awesome_patch.patch	13.46 KB

Testbed results

[awesome_patch.patch](#) failed Failed: 10267 passes, 1 fail, 0 exceptions [Detailed results](#)

[delete](#) · [edit](#) · [reply](#)

#2

System Message - January 8, 2009 - 08:15

Status: patch (code needs review) » patch (code needs work)

The last submitted patch **failed testing**.

[delete](#) · [edit](#) · [reply](#)

#3

[webchick](#) - January 8, 2009 - 16:23

Status: patch (code needs work) » patch (code needs review)

Oops! Right you are, testing bot.

Attachment	Size
more_awsomer_patch.patch	13.46 KB

Testbed results

[more_awsomer_patch.patch](#) passed Passed: 10270 passes, 0 fails, 0 exceptions [Detailed results](#)

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testing.drupal.org

- “Patch (code needs review)” and “Patch (reviewed & tested by community)” statuses can now be trusted.

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testing.drupal.org

- “Patch (code needs review)” and “Patch (reviewed & tested by community)” statuses can now be trusted.
- Reviewers no longer getting carpal tunnel clicking through all the basic stuff.

The screenshot displays the testing.drupal.org interface with three distinct sections. The top section, labeled #1, shows a patch named 'awesome_patch.patch' (13.46 KB) that has failed testing, with a red background indicating 'Failed: 10267 passes, 1 fail, 0 exceptions'. The middle section, labeled #2, is a system message stating 'The last submitted patch failed testing.' The bottom section, labeled #3, shows a patch named 'more_awsomer_patch.patch' (13.46 KB) that has passed testing, with a green background indicating 'Passed: 10270 passes, 0 fails, 0 exceptions'. The interface includes user avatars, timestamps, and status labels like 'patch (code needs review)' and 'patch (code needs work)'.

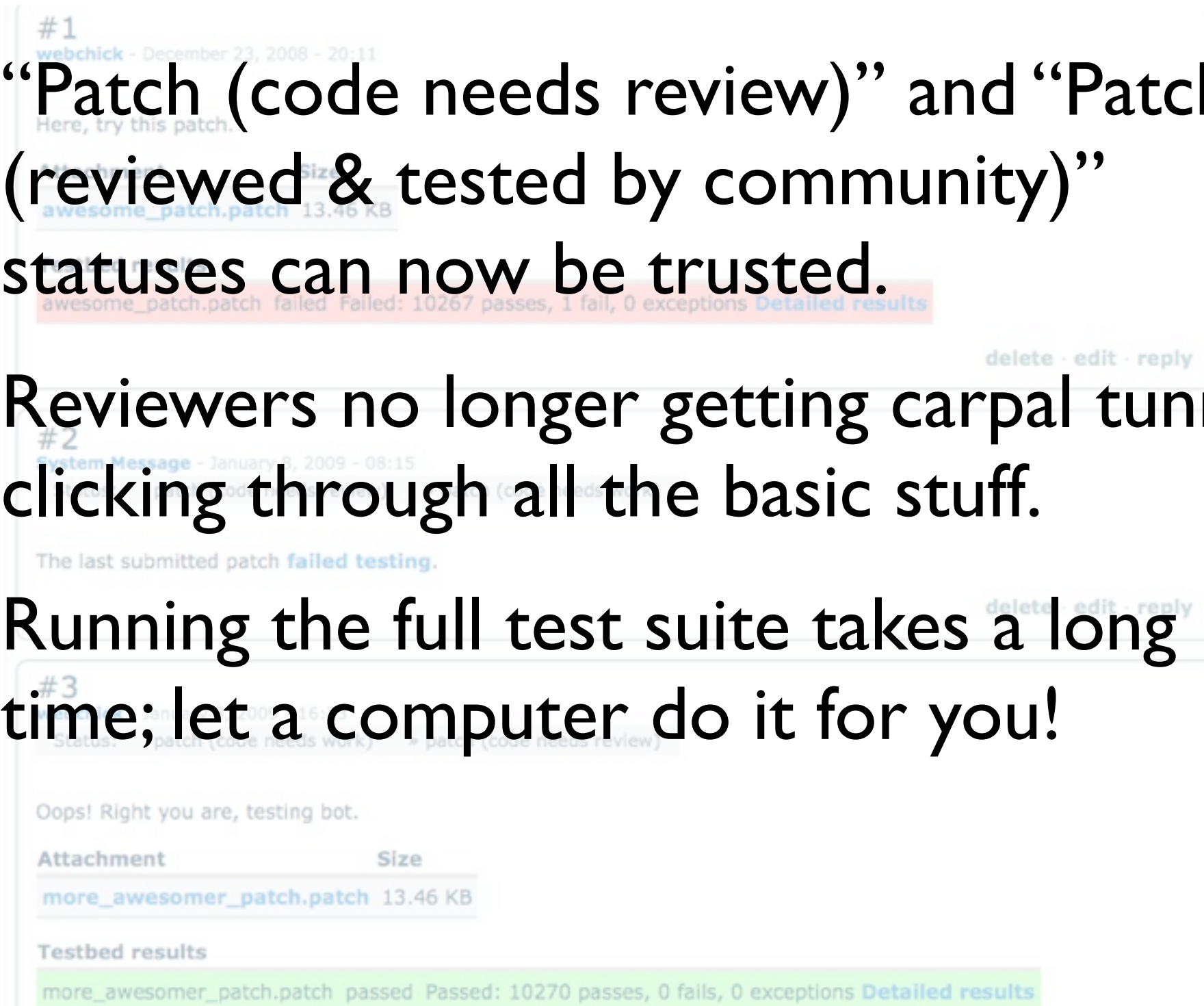
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delete · edit · reply

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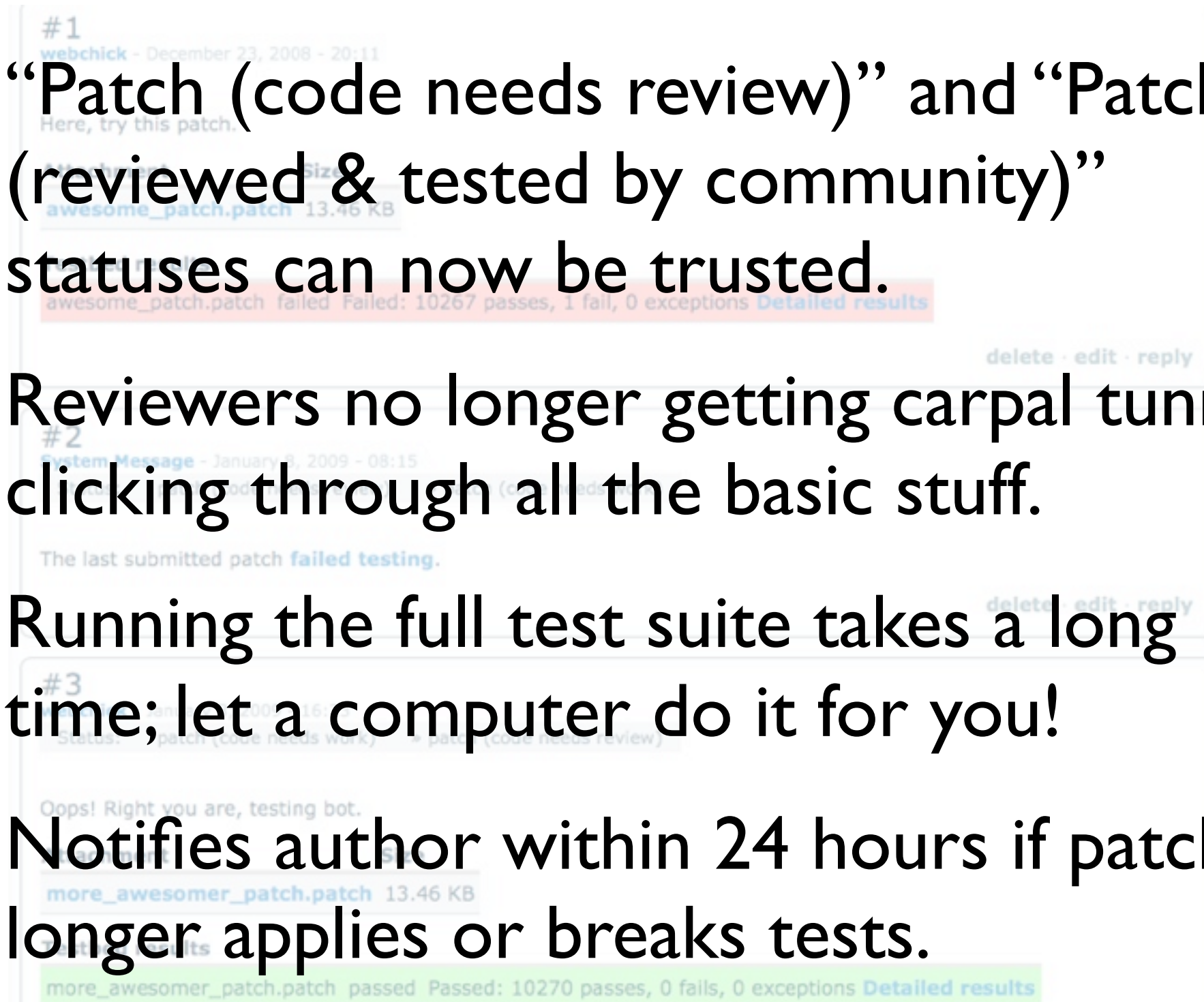
testing.drupal.org

- “Patch (code needs review)” and “Patch (reviewed & tested by community)” statuses can now be trusted.
- Reviewers no longer getting carpal tunnel clicking through all the basic stuff.
- Running the full test suite takes a long time; let a computer do it for you!



testing.drupal.org

- “Patch (code needs review)” and “Patch (reviewed & tested by community)” statuses can now be trusted.
- Reviewers no longer getting carpal tunnel clicking through all the basic stuff.
- Running the full test suite takes a long time; let a computer do it for you!
- Notifies author within 24 hours if patch no longer applies or breaks tests.





DATABASE

THE NEXT GENERATION

The who in the what now?

- Database abstraction layer utilizing PHP's Data Objects (PDO)
- Theoretical support for any database PHP supports; mysql, sqlite, and pgsql drivers in D7.
- Support for master/slave replication, transactions, multi-insert queries, delayed inserts, and other features.
- Summary: Everything that ever sucked about our DB abstraction layer is now fixed. ;)

Static Select Queries

Drupal 6:

```
$result = db_query("SELECT nid, title FROM {node} WHERE  
type = '%s' AND nid = %d", array($type, $nid));  
$node = db_fetch_object($result);
```

Drupal 7:

```
$node = db_query('SELECT nid, title FROM {node} WHERE  
type = :type AND nid = :nid', array(':type' => $type,  
':nid' => $nid))->fetchObject();
```

Dynamic Select Queries

Drupal 6:

```
$result = pager_query(db_rewrite_sql('SELECT n.nid FROM {node} n  
WHERE n.promote = 1 AND n.status = 1 ORDER BY n.sticky DESC,  
n.created DESC'), variable_get('default_nodes_main', 10));
```

Drupal 7:

```
$select = db_select('node', 'n')  
->fields('n', array('nid'))  
->condition('promote', 1)  
->condition('status', 1)  
->orderBy('sticky', 'DESC')  
->orderBy('created', 'DESC')  
->extend('PagerDefault')  
->limit(variable_get('default_nodes_main', 10))  
->addTag('node_access');
```

Other Queries

Insert

```
$nid = db_insert('node')
->fields(array('title', 'uid'))
->values(array(
    'title' => 'Example',
    'uid' => 1,
))
->execute();
```

Delete

```
$num_deleted = db_delete('node')
->condition('nid', 5)
->execute();
```

Update

```
$num_updated = db_update('node')
->fields(array(
    'uid' => 5,
    'status' => 1,
))
->condition('created', REQUEST_TIME - 3600, '>=')
->execute();
```

hook_query_alter()

Drupal 6:

```
function hook_db_rewrite_sql($query, $primary_table, $primary_field, $args) {  
  switch ($primary_field) {  
    case 'nid':  
      $return = array();  
      if ($primary_table != 'n') {  
        $return['join'] = "LEFT JOIN {node} n ON $primary_table.nid = n.nid";  
      }  
      $return['where'] = 'created >' . time() - 3600;  
      return $return;  
      break;  
    }  
}
```

Drupal 7:

```
function hook_query_alter(&$query) {  
  if ($query->hasTag('node_access')) {  
    $query->condition('created', time() - 3600, '>');  
  }  
}
```


Field API

<http://www.flickr.com/photos/piper/>

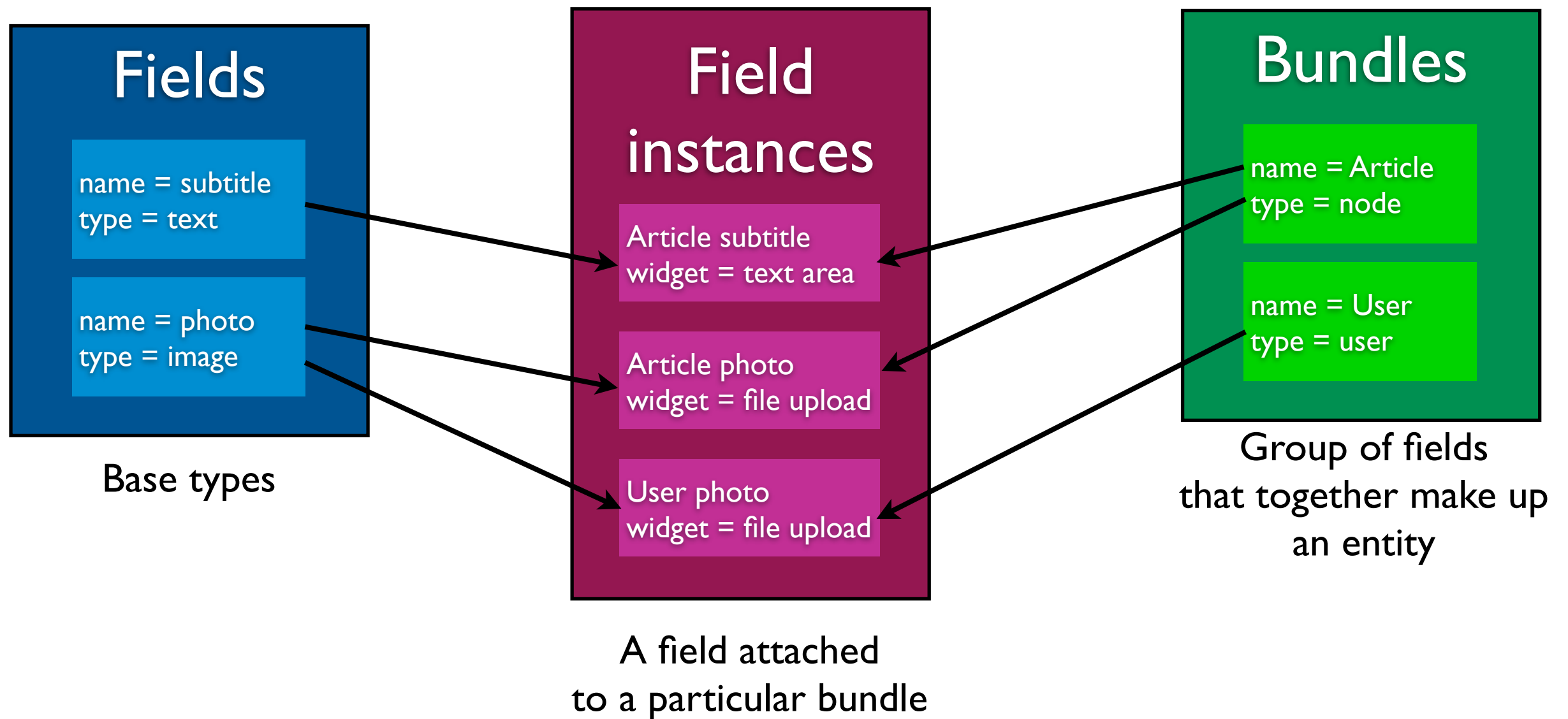
About Field API



needs
your
help!

- No longer node-specific: can attach fields to users, potentially other objects.
- Declare any entity in Drupal as “fieldable”
- Swappable storage back-ends (currently, SQL but potentially web services, etc.)
- Supports translatable content.

Overview



Overview

body_value	body_summary	body_format
woot	woot	1
sdfdsf	sss	1

Field:

How data is stored
in database

Internal notes

Browse...

Upload

Files must be less than 128 MB.
Allowed file types: txt.

Widget:

How field is presented
on add/edit

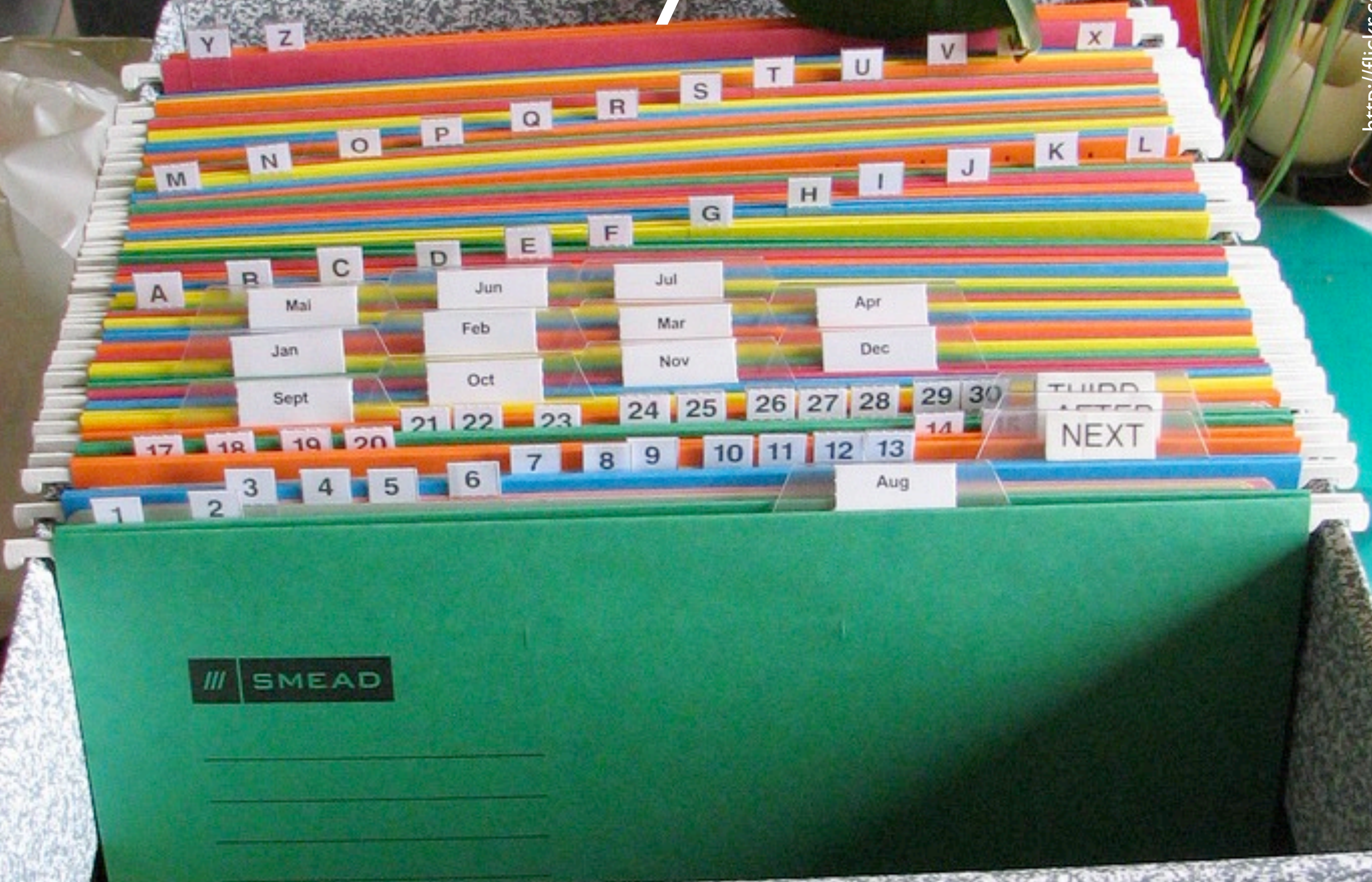
Internal notes:

 CHANGELOG.txt

Formatter:

How field is
presented on view

File System



File API improvements

- Files are now first-class objects
- `hook_file_load()`, `hook_file_save()`, `hook_file_move()`, etc.
- Files are managed automatically; no need to deal with `{files}` table yourself
- `hook_file_url_alter()` for CDN support

Stream Wrapper Support

- Rather than referencing files by path, you now reference them by URI:
schema://file/path/file.ext
- Allows you to change location of files directory without a DB update.
- public://, private://, temp:// supported in core.
- Contrib can also create s3://, flickr://, etc.

Image API

- Image toolkits now implemented as modules, rather than .inc files that users need to copy over.
- Supports image manipulation effects: scale, crop, resize, rotate...
- Can combine these into “image styles” that can be applied to any image (user pictures, file uploads...)



Performance

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

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

Registry

- Auto-parses and caches list of all functions, classes, and interfaces in all files

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_rm_name_menus	function	modules/system/system.module	system	rm_name_menus	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

Registry

- Auto-parses and caches list of all functions, classes, and interfaces in all files
- Facilitates faster hook calls; only loop through modules that implement a hook

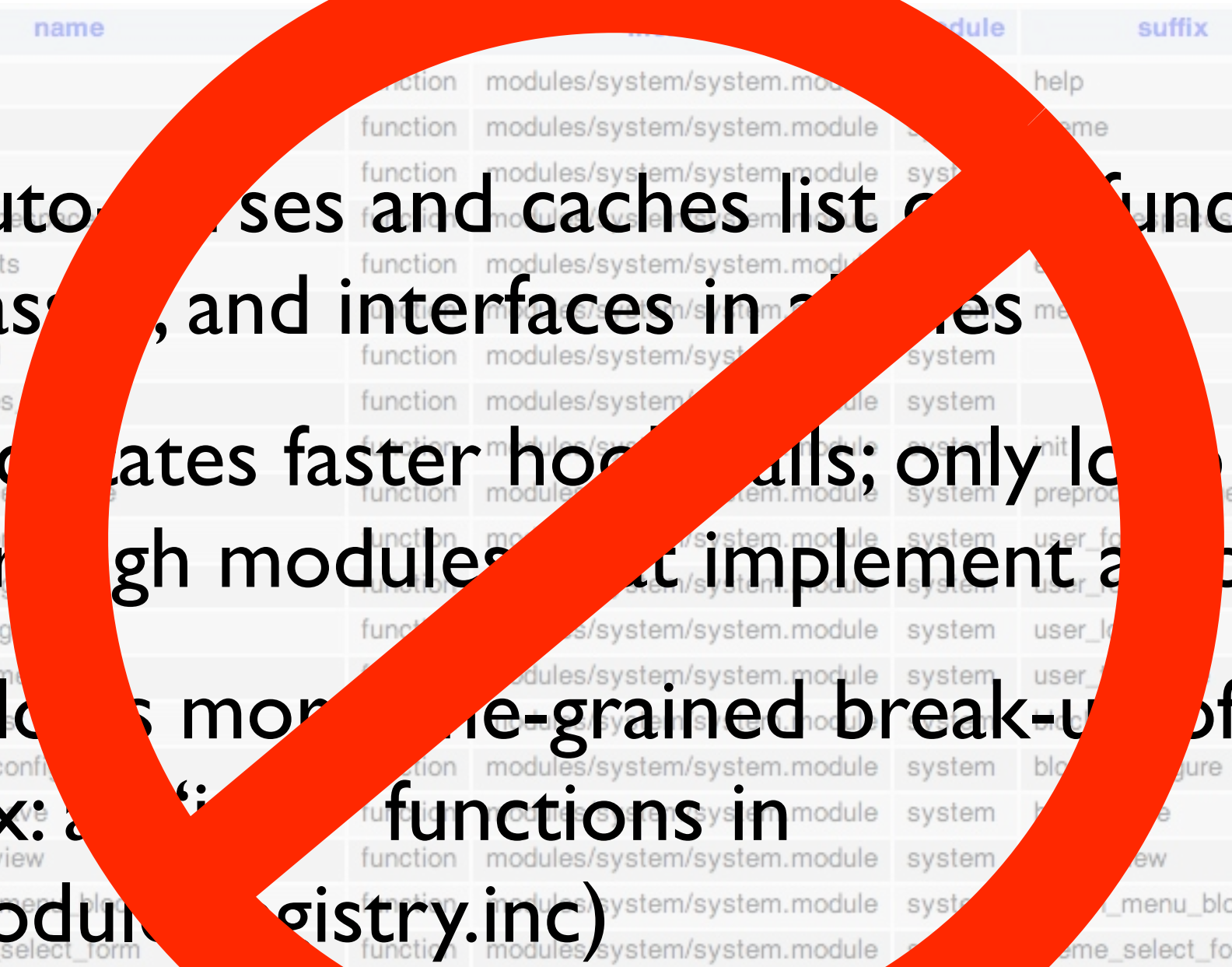
name	type	filename	module	suffix	weight
system_help	function	modules/system/system.module	system	help	0
system_theme	function	modules/system/system.module	system	theme	0
system_perm	function	modules/system/system.module	system	perm	0
system_menu_name_pages	function	modules/system/system.module	system	name_pages	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

Registry

- Auto-parses and caches list of all functions, classes, and interfaces in all files
- Facilitates faster hook calls; only loop through modules that implement a hook
- Allows more fine-grained break-up of code (ex: all “info” functions in module.registry.inc)

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_name_elements	function	modules/system/system.module	system	name_elements	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

Registry



name	type	module	suffix	weight
system_help	function	modules/system/system.module	help	0
system_theme	function	modules/system/system.module	theme	0
system_perm	function	modules/system/system.module	system	0
system_mn_image	function	modules/system/system.module	mn_image	0
system_elements	function	modules/system/system.module	elements	0
system_mn_image	function	modules/system/system.module	mn_image	0
blocked_ip_load	function	modules/system/system.module	system	0
_system_themes	function	modules/system/system.module	system	0
system_init	function	modules/system/system.module	system	0
system_preproc	function	modules/system/system.module	system	0
system_user_for	function	modules/system/system.module	system	0
system_user_reg	function	modules/system/system.module	system	0
system_user_log	function	modules/system/system.module	system	0
system_user_time	function	modules/system/system.module	system	0
system_block_conf	function	modules/system/system.module	system	0
system_block_save	function	modules/system/system.module	system	0
system_block_view	function	modules/system/system.module	system	0
system_admin_menu_block	function	modules/system/system.module	system	0
system_theme_select_form	function	modules/system/system.module	system	0

- Automates and caches list of functions, classes, and interfaces in modules
- Facilitates faster hot reloads; only load through modules that implement a book
- Allows more fine-grained break-up of code (ex: a function in modules/system/registry.inc)

Class registry

- Auto-parses and caches list of all classes and interfaces in all files
- Allows you to do:

```
$something = new Something;
```

- ...from anywhere
- Need to register all files in .info:

```
files[] = example.module  
files[] = example.install
```

Multi-load! \$queries--;

- `node_load_multiple()`
- `file_load_multiple()`
- `taxonomy_term_load_multiple()`
- `taxonomy_vocabulary_load_multiple()`
- `user_load_multiple()`

Faster, more scalable Drupal

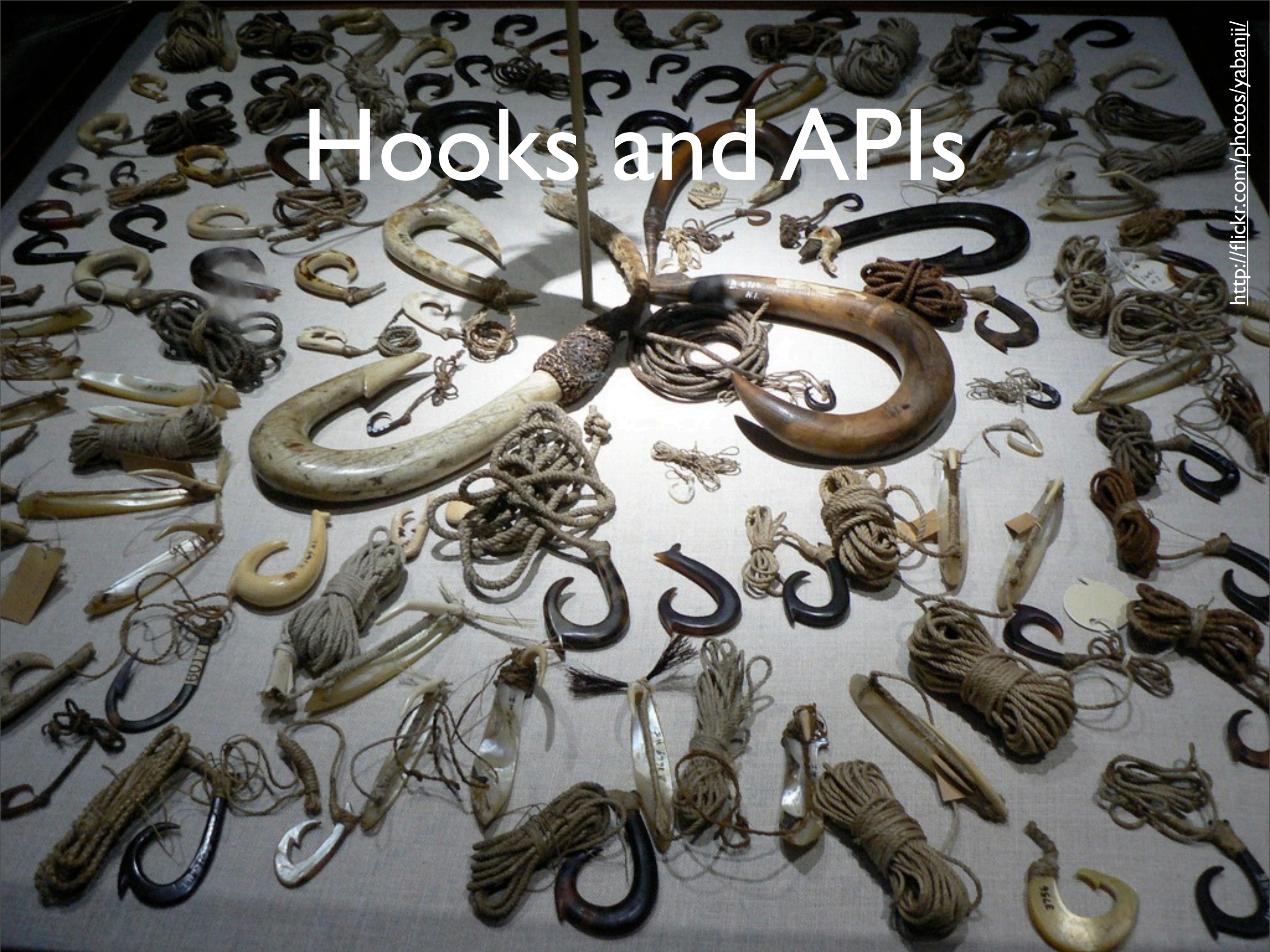


needs
your
help!

- Proxy and reverse-proxy support: serve anon page requests entirely via proxy
- Tons of micro-optimizations caught by XDebug profiling
- Smarter look-ahead system for grabbing path aliases
- InnoDB default storage system
- CDN support for files

Hooks and APIs

<http://flickr.com/photos/yabanji/>



New Hooks in D7

- `hook_modules_X()`: installed, enabled, disabled, uninstalled
- `hook_taxonomy_term_X()`: load, insert, update, delete
- `hook_taxonomy_vocabulary_X()`: load, insert, update, delete
- `hook_aggregator_X()`: fetch, parse, process, remove
- `hook_user_role_X()`: delete, update, insert

No more \$op

- `hook_nodeapi()`, `hook_user()`, `hook_block()`, etc. are no longer “mega” hooks:
 - `hook_node_load()`, `hook_node_update()`
 - `hook_user_register()`, `hook_user_login()`
 - `hook_block_list()`, `hook_block_view()`
 - `hook_form_FORM_ID_alter()`

\$page object

```
$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);
```

The most unholy hook of all...

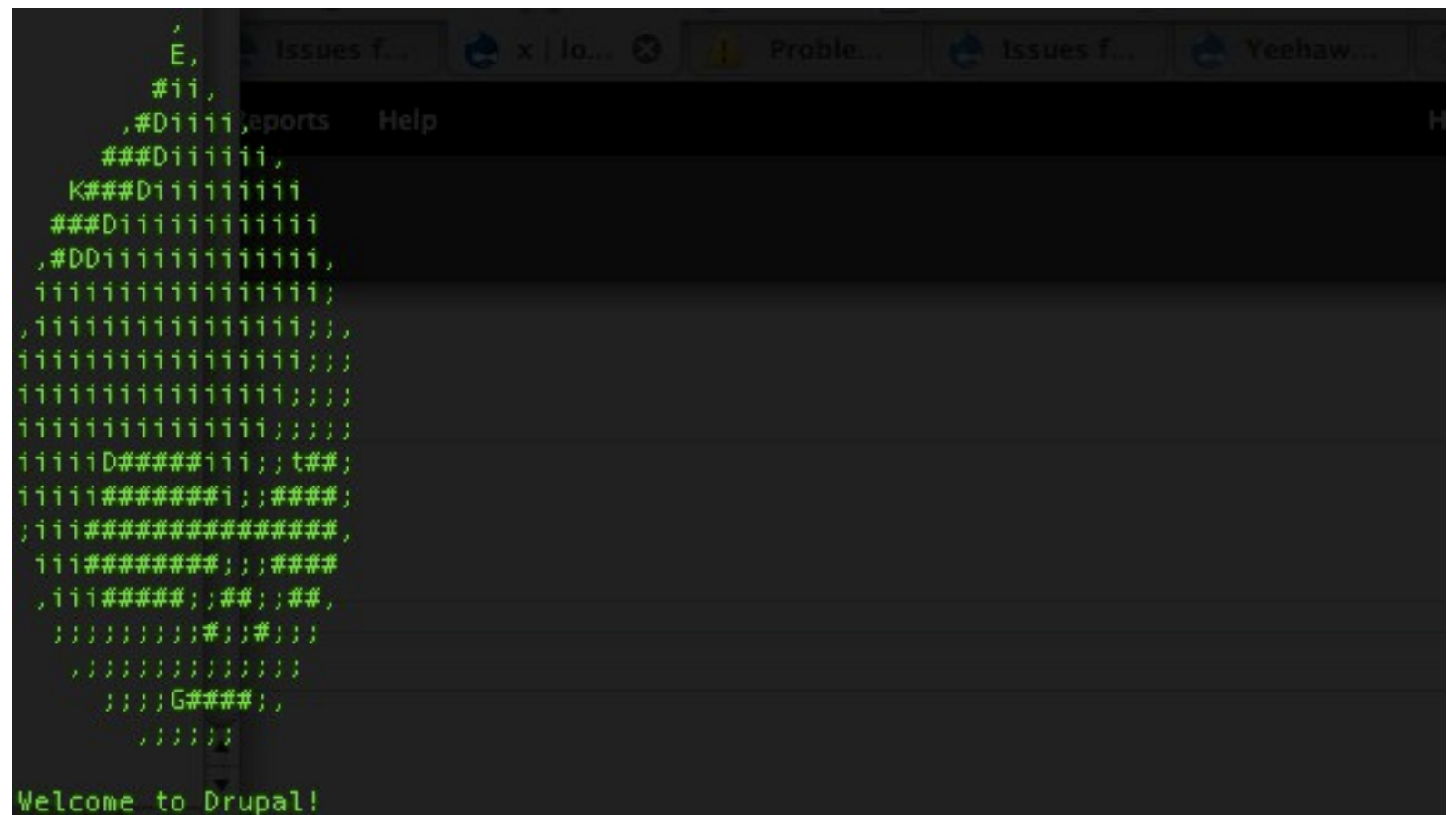
hook_page_alter()

```
function evilmodule_page_alter(&$page) {  
    // Screw you, hippie. The page is what _I_ say it is!  
    $page = array();  
    $page['content']['main']['#markup'] = '  
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"  
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">  
<html>  
    ...  
    ';  
}
```

The most unholy hook of all...

hook_page_alter()

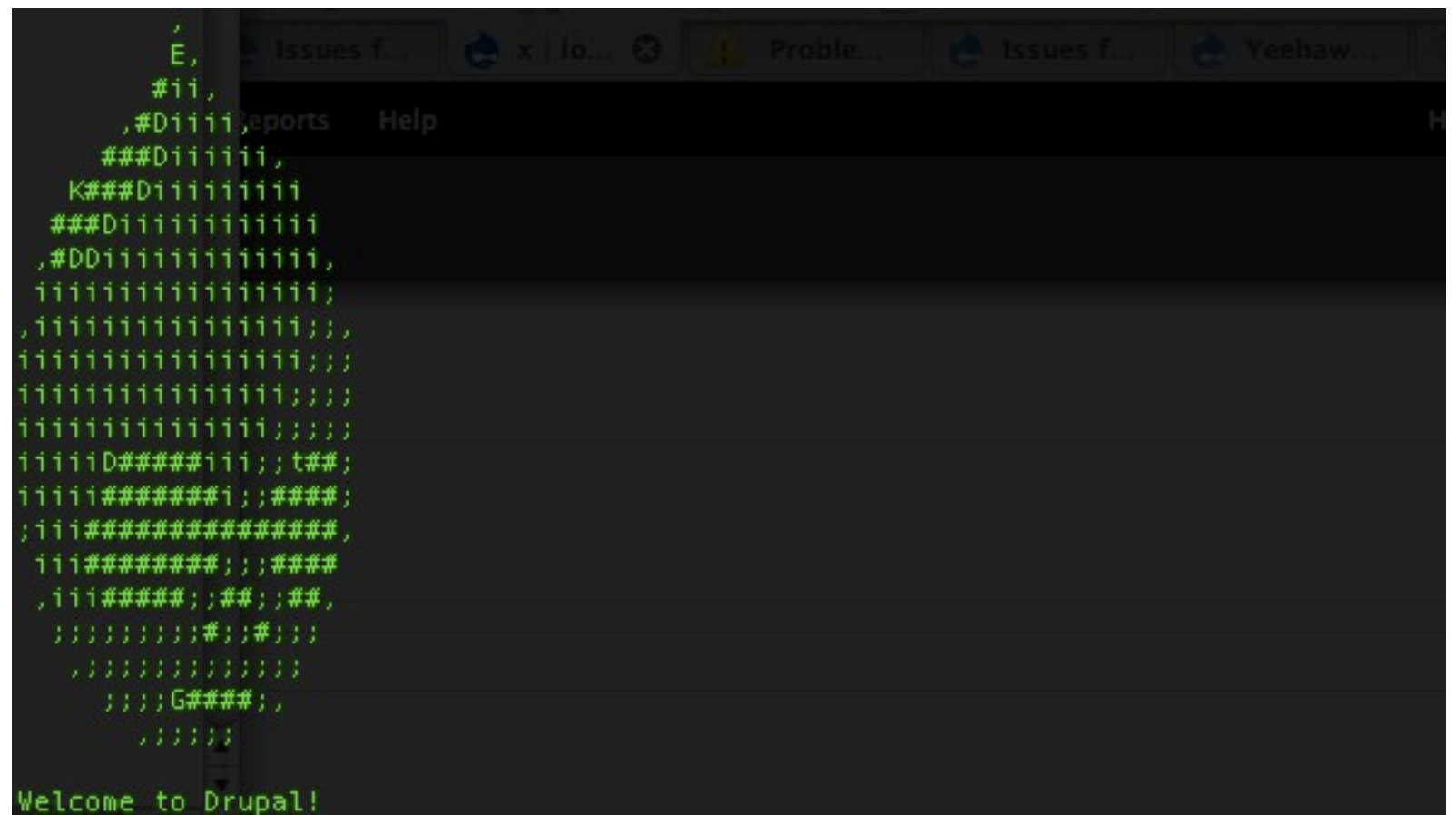
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function evilmodule_page_alter(&$page) {  
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  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">  
<html>  
  ...  
  ';  
}
```



The most unholy hook of all...

hook_page_alter()

```
function evilmodule_page_alter(&$page) {  
  // Screw you, hippie. The page is what _I_ say it is!  
  $page = array();  
  $page['content']['main']['#markup'] = '  
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"  
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">  
<html>  
  ...  
  ';  
}
```



<http://webchick.net/node/60>

Oh hai, APIs!

- Roles/Permissions API
- Filter/Format API
- Centralized static caching mechanism
- Locking framework
- Job queue

Node Access Improvements

- “administer nodes” and “bypass node access” two separate permissions
- Alter hook_node_grants and hook_node_access_records
- Node access applies to unpublished nodes
- hook_node_access() allows modules to influence access on nodes defined by other modules

Install Profiles

Install Profiles

Drupal 6

Install Profiles

Drupal 6

default.profile

```
function PROFILE_profile_modules() {  
  return array('module1', 'module2');  
}
```

```
function PROFILE_profile_details() {  
  return array(  
    'name' => 'Example',  
    'description' => 'Description.',  
  );  
}
```

```
function PROFILE_profile_task_list() {  
}
```

```
function PROFILE_profile_tasks(...) {  
  // Start-up tasks...  
}
```

```
function PROFILE_form_alter(...) {  
  // Alterations to set-up form...  
}
```

Install Profiles

Drupal 6

default.profile

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function PROFILE_profile_modules() {  
  return array('module1', 'module2');  
}  
  
function PROFILE_profile_details() {  
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function PROFILE_profile_task_list() {  
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function PROFILE_profile_tasks(...) {  
  // Start-up tasks...  
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```

Drupal 7

Install Profiles

Drupal 6

default.profile

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  );  
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function PROFILE_profile_task_list() {  
}  
  
function PROFILE_profile_tasks(...) {  
  // Start-up tasks...  
}  
  
function PROFILE_form_alter(...) {  
  // Alterations to set-up form...  
}
```

Drupal 7

default.info

```
name = Example  
description = Description  
core = 7.x  
dependencies[] = module1  
dependencies[] = module2 (>2.4-beta2)  
files[] = example.profile
```

default.install

```
function PROFILE_install() {  
  // Start-up tasks...  
}
```

default.profile

```
function PROFILE_form_alter(...) {  
  // Alterations to set-up form...  
}
```

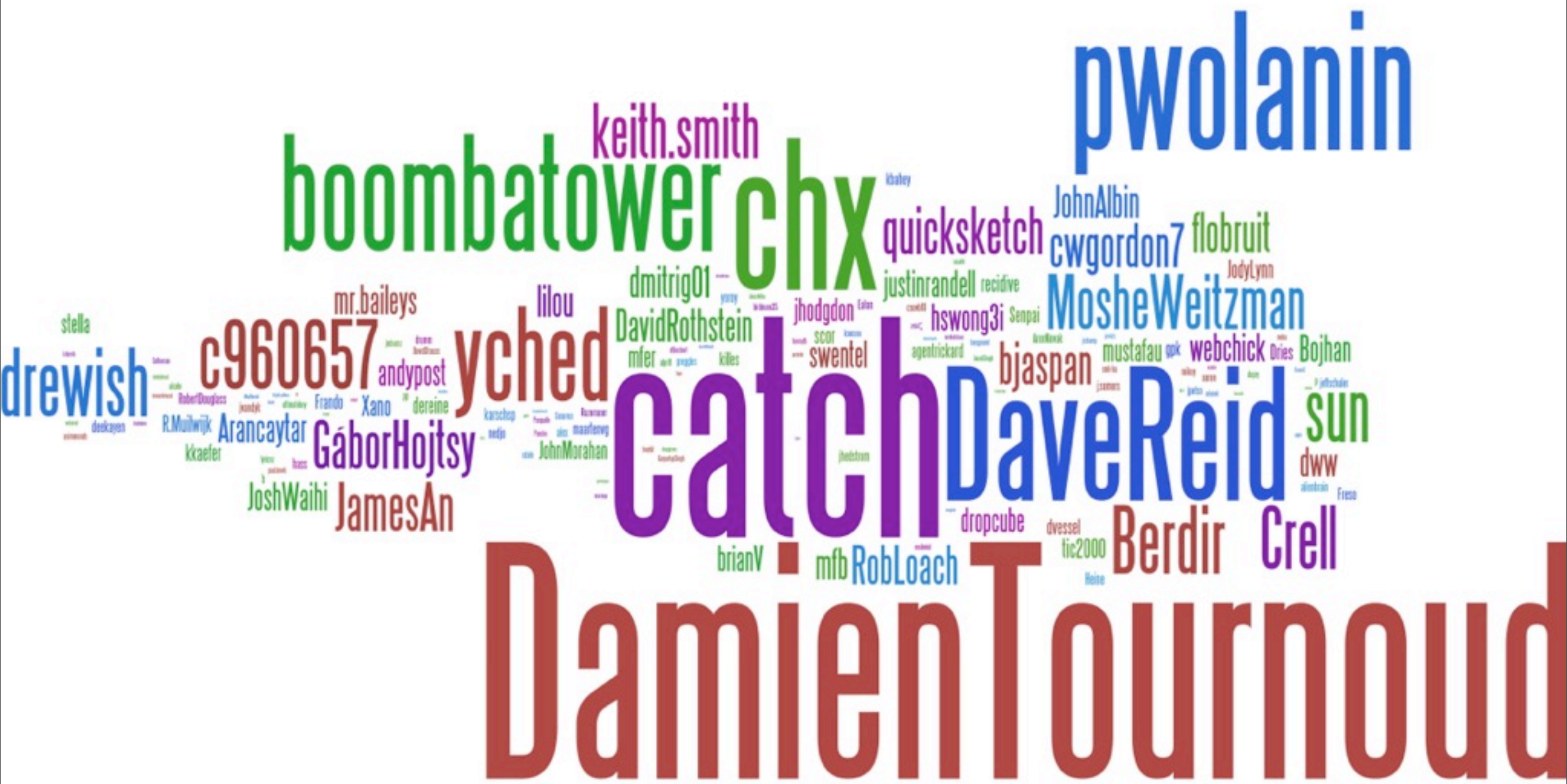
Get the *full* list of changes

- CHANGELOG.txt
- <http://drupal.org/update/modules/6/7>
- <http://drupal.org/update/theme/6/7>
- <http://drupal.org/project/coder>

Let's hear it for Drupal 7!



Tuesday, September 15, 2009



Nearly 500 contributors to Drupal 7 so far

(some of)

Team Drupal 7



(some of)

Team Drupal 7



How YOU can help!

- Mark non-critical issues as non-critical
- Write automated tests
- Fix bugs
- Hold local bug-fix sprints
- Help with critical freeze-extension issues
- Test and review patches
- Port modules and themes to D7 to flesh out API issues
- Help with Coder module
- Fix user-facing strings
- Update documentation
- *Come to the sprint on Saturday! :)*

#D7CX

Backup and Migrate

By **ronan** on the 3rd of November, 2007

#D7CX: I pledge that Backup and Migrate will have a full Drupal 7 release on the day that Drupal 7 is released.

Backup and Migrate simplifies the task of backing up and restoring your Drupal database

Take the pledge.

<http://cyrve.com/d7cx>

Go find out more!

Sept 2

13:40 - 14:30:

Explore the glory of Drupal 7's
improved render and theming systems
Moshe Weitzman

16:10 - 17:00:

Taxonomy Everywhere: D7 Core
Overhaul and the Expanding Contrib
Universe
Benjamin Melançon

17:15 - 18:00:

Intro to the Field API for Module
Developers
Barry Jaspan

Sept 3

11:20 - 12:10:

The state of RDF in Drupal 7
Stephane Corlosquet

11:20 - 12:10:

Image module in core: it's
<strike>almost</strike> real!
Nate Haug

Sept 4

11:20 - 12:10:

Introduction to testing with
Drupal: SimpleTest
Jimmy Berry



Let's make Drupal 7
ROCK!