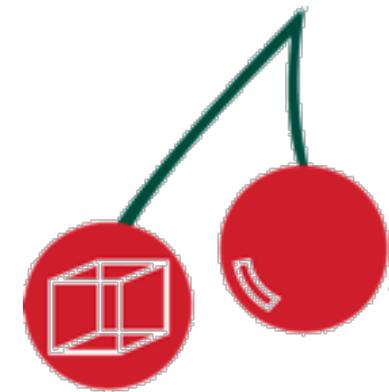




What's New in Drupal 7



Cary Gordon
The Cherry Hill Company
<http://chillco.com>

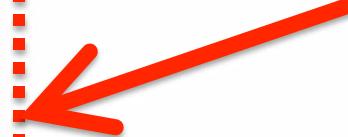


Who makes Drupal



Committers

- Project lead
 - Dries Buytaert
- Branch maintainer
 - Angela Byron (Drupal 7)
 - Gábor Hojtsy (Drupal 6)
 - Neill Drumm (Drupal 5)
- Contributors



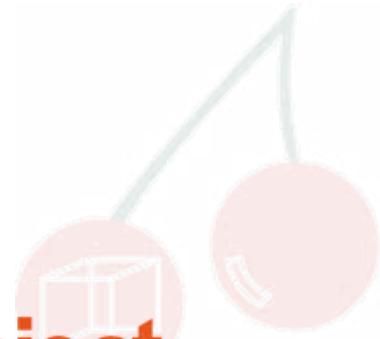


Gratuitous Catfish Shot



Changes for Users

D7UX



Drupal 7 User Experience Project

making Drupal 7 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 »

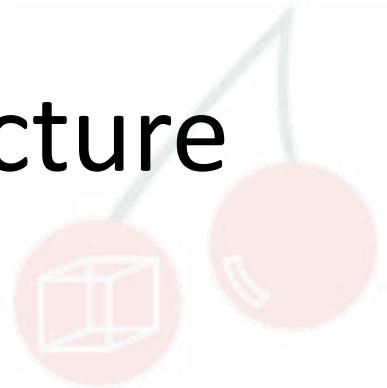


Recent Posts

- 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 6

Default front page

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 the [Drupal modules download section](#).
- 3. Customize your website design**

To change the "look and feel" of your website, visit the [theme manager](#) or themes or download additional themes.
- 4. Start posting content**

Finally, you can [create content](#) for your website or the front page.

For more information, please refer to the [Drupal documentation](#), the [Drupal forum](#), or view the wide range of [Drupal books](#).

Drupal 7

Welcome to localhost

No front page content has been created yet.

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

Help



Help

Dashboard

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](#). You may choose from one of the included themes or download additional themes from the [Drupal themes download section](#).
4. **Start posting content** Finally, you can [add new content](#) for your website.

For more information, refer to the specific topics listed in the next section or to the [online Drupal handbooks](#). You may also post at the [Drupal forum](#) or view the wide range of [other support options](#) available.

Help topics

Help is available on the following items:

- [Block](#)
- [Color](#)
- [Comment](#)
- [Contextual links](#)
- [Dashboard](#)
- [Database logging](#)
- [Field](#)
- [Field SQL storage](#)
- [Field UI](#)
- [File](#)
- [Filter](#)
- [Help](#)
- [Image](#)
- [List](#)
- [Menu](#)
- [Node](#)
- [Number](#)
- [Options](#)
- [Overlay](#)
- [Path](#)
- [RDF](#)
- [Search](#)
- [Shortcut](#)
- [System](#)
- [Taxonomy](#)
- [Text](#)
- [Toolbar](#)
- [Update manager](#)
- [User](#)

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

Locale settings
Your time zone setting:
Time zone: America/New_York
Select the desired time zone

Are you sure you want to cancel your account?

When cancelling your account:

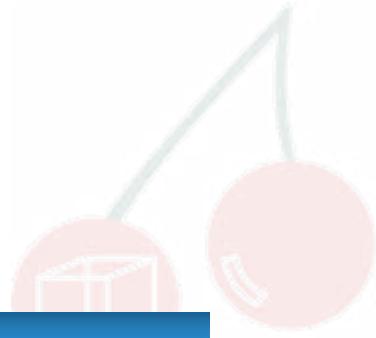
Disable the account and keep all content.
 Disable the account and unpublish all content.
 Delete the account and make all content belong to the *Anonymous* user.
 Delete the account and all content.

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

Save **Cancel account**

Edit in place

The screenshot shows the Drupal 7 demo front page. At the top, there is a blue header bar with the Drupal logo and the text "Drupal 7 demo". Below the header, there is a search bar and a "Search" button. On the left side, there is a sidebar titled "Management" with a red border around it. The sidebar contains links: "Add new cont" (with a dropdown arrow), "Dashboard", "List links" (which is highlighted with a mouse cursor), "Edit menu", and "Configure block". To the right of the sidebar, the main content area displays the message "Welcome to Drupal 7 demo" and "No front page content has been created yet." Below this message, there is a bulleted list: "• Add new content".



Admin Theme: “Seven”



Home » Administer

Content CONTENT COMMENTS

[+ Add new content](#)

SHOW ONLY ITEMS WHERE

status is ▼

type ▼

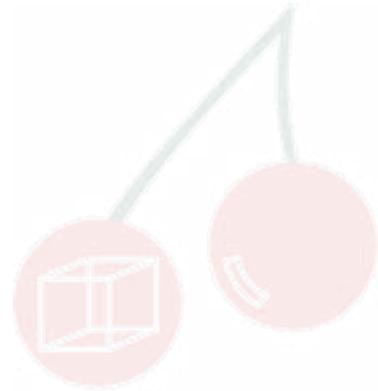
Filter

UPDATE OPTIONS

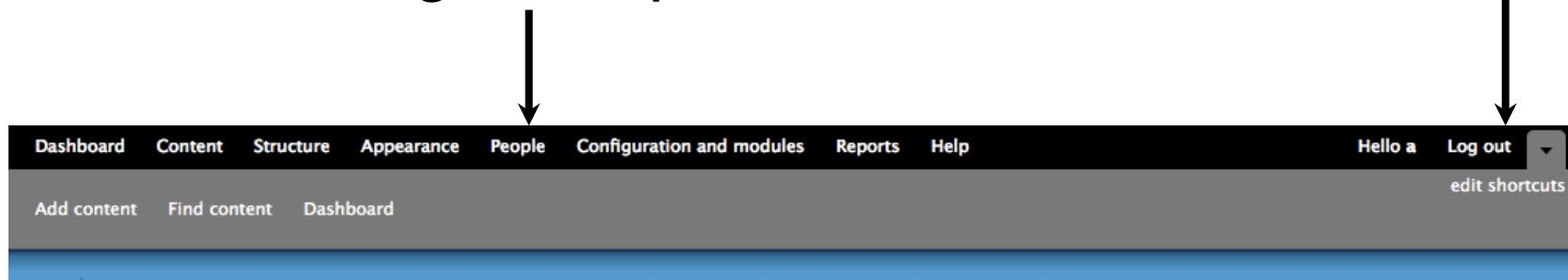
Update

	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

Toolbar & Shortcuts



Toolbar shows new
IA along the top



User account-related
info easily accessible

User specific admin shortcuts

Administrative Dashboard

The screenshot shows the Drupal administrative dashboard. At the top, there is a navigation bar with links: Dashboard, Content, Structure, Appearance, People, Configuration and modules, Reports, Help, Hello a, Log out, and edit shortcuts. Below the navigation bar, there are buttons for Add content, Find content, and Dashboard.

The main content area has a heading "Dashboard" with a plus sign. A message says: "Drag and drop dashboard blocks to their place. Changes are automatically saved. You can also [add a custom block](#)." There are several buttons in a row: Recent comments, Administration shortcuts, Syndicate, Search form, Shortcuts, Powered by Drupal, and Navigation. Below these buttons, there are two more buttons: User menu and Main menu.

On the left, there is a sidebar titled "Management" with a tree view of administrative menus:

- Add new content
- Administer
 - Dashboard
 - Content
 - Structure
 - Appearance
 - People
 - Configuration and modules
 - Reports
 - Help

On the right, there are several dashboard blocks:

- Who's new
- Secondary menu
- Who's online
- There is currently 1 user online.

An orange arrow points from the "Secondary menu" block towards the "Management" sidebar, indicating its placement or configuration.

Overlays

The screenshot shows a Drupal administrative interface with an overlay dialog open over the main content list.

Top Navigation Bar:

- Content
- Structure
- Appearance
- People
- Site configuration
- Configuration and modules
- Reports
- Help

User Information:

- Hello a
- Logout

Buttons:

- Add
- Find content
- Dashboard

Content Tab:

- CONTENT
- COMMENTS

Overlay Dialog:

SHOW ONLY ITEMS WHERE:

- status is published
- type Article
- term woot

Filter

UPDATE OPTIONS:

- Publish

Update

Content List:

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

Vertical tabs



Drupal 6

- ▷ Revision information
- ▷ Comment settings
- ▷ File attachments
- ▷ Authoring information
- ▷ Publishing options

E-mails

Drupal 7

Welcome (new user created by administrator)

Welcome (awaiting approval)

Welcome (no approval required)

Account activation

Account blocked

Edit the welcome e-mail message required. You can use the following tokens: [user:mail], [site:login-url], [use...

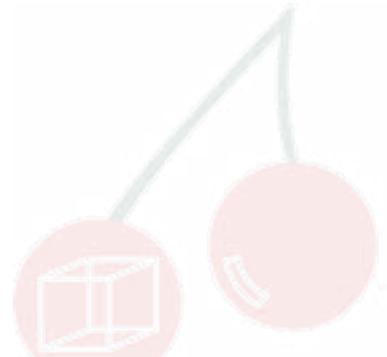
Subject

Account details for [user:nai...

Body

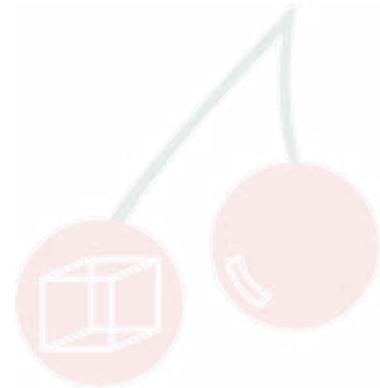
[user:name],

Module screen



ENABLED	NAME	VERSION	DESCRIPTION	OPERATIONS
<input type="checkbox"/>	Aggregator	7.0-alpha2	Aggregates syndicated content (RSS, RDF, and Atom feeds).	
<input checked="" type="checkbox"/>	Block	7.0-alpha2	Controls the visual building blocks a page is constructed with. Blocks are boxes of content rendered into an area, or region, of a web page. Required by: Dashboard (enabled)	Help Permissions Configure
<input type="checkbox"/>	Blog	7.0-alpha2	Enables multi-user blogs.	
<input type="checkbox"/>	Book	7.0-alpha2	Allows users to create and organize related content in an outline.	
<input checked="" type="checkbox"/>	Color	7.0-alpha2	Allows administrators to change the color scheme of compatible themes.	Help
<input checked="" type="checkbox"/>	Comment	7.0-alpha2	Allows users to comment on and discuss published content. Required by: Forum (disabled), Tracker (disabled)	Help Permissions Configure

Permission screen



PERMISSION	ANONYMOUS USER	AUTHENTICATED USER	ADMINISTRATOR
Block			
Administer blocks	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Select which blocks are displayed, and arrange them on the page.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comment			
Administer comments	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Manage and approve comments, and configure comment administration settings.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Access comments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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/Minimal Profile



The screenshot shows the initial setup screen of the Drupal installer. On the left, a sidebar lists the steps: Choose profile, Choose language, Verify requirements, Set up database, Install profile, Configure site, and Finished. The 'Choose profile' step is currently selected. The main content area is titled 'Select an installation profile' and contains two options: 'Drupal' (selected) and 'Drupal (minimal)'. A 'Save and continue' button is at the bottom.

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

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.

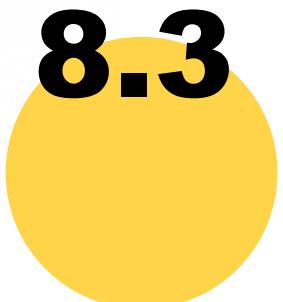
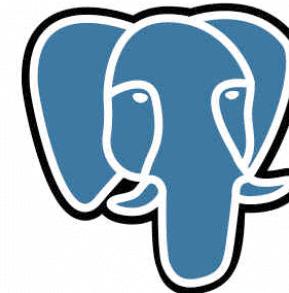
Time zone for new users

Default time zone.
 Empty time zone.
 Users may set their own time zone at registration.

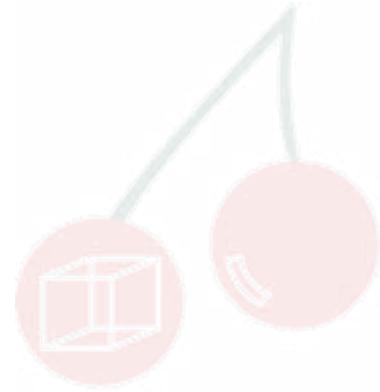
New Minimum Requirements



PostgreSQL



Changes for site builders



Mix and Match Public and Private files



Home » Administer » Configuration and modules » Media

File system

Public file system path

sites/default/files

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

/Users/webchick/private_files

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
- Individual fields can be marked translatable/untranslatable
- Support for message contexts (msgctxt) to make translation of short words like “View” much easier.

New translation interface

The screenshot shows the 'Translate interface' page in the Drupal admin interface. At the top, there's a navigation bar with links like Dashboard, Content, Structure, Appearance, People, Configuration and modules, Reports, Help, Hello a (with a dropdown menu), Log out, and edit shortcuts. Below the navigation is a secondary navigation bar with Add content, Find content, and Dashboard.

The main content area shows the breadcrumb path: Home > Administer > Configuration and modules > Regional and language > Translate interface. Below the breadcrumb is the title 'Translate interface' with a backlink icon.

At the top of the main content area are four tabs: OVERVIEW (selected), TRANSLATE, IMPORT, and EXPORT.

A note below the tabs states: "This page allows a translator to search for specific translated and untranslated strings, and is used when creating or editing translations. (Note: For Configure block translation tasks involving many strings, it may be more convenient to export strings for offline editing in a desktop Gettext translation editor.) Searches may be limited to strings found within a specific text group or in a specific language."

Below the note is a section titled "FILTER TRANSLATABLE STRINGS" with a "String contains" input field and a note: "Leave blank to show all strings. The search is case sensitive." There are also dropdown menus for "Language" (set to All languages), "Search in" (set to Both translated and untranslated), and "Limit search to" (set to All text groups), along with a "Filter" button.

Below the filter section is a table with the following columns: TEXT GROUP, STRING, CONTEXT, LANGUAGES, and OPERATIONS. The table lists four entries:

TEXT GROUP	STRING	CONTEXT	LANGUAGES	OPERATIONS
Built-in interface	Unspecified error misc/drupal.js			edit delete
Built-in interface	An error occurred. \nPath: @uri\nMessage: !text misc/drupal.js			edit delete
Built-in interface	An error occurred. \nPath: @uri\n(no information available). misc/drupal.js			edit delete
Built-in interface	An HTTP error @status occurred. \nPath: @uri			edit delete

Native image handling



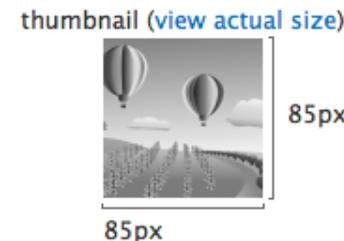
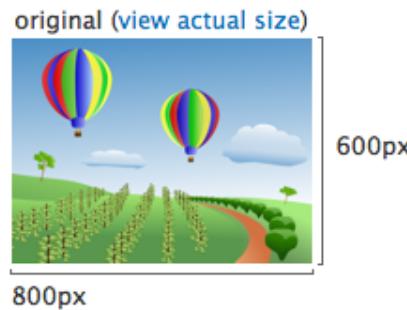
Image style name *

thumbnail

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

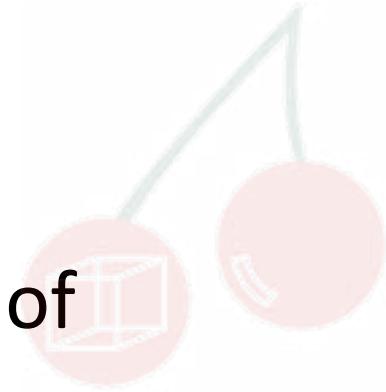
EFFECT	OPERATIONS
⊕ Scale and crop 85x85	edit delete
⊕ Desaturate	delete
⊕ Select a new effect ▾ Add	

Preview



[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.

Field UI (nee CCK)

Screenshot of the Drupal Field UI interface for managing fields on an Article content type.

The top navigation bar includes: Dashboard, Content, Structure, Appearance, People, Configuration and modules, Reports, Help, Hello a, Log out, and edit shortcuts.

The page title is Article, with tabs for EDIT, MANAGE FIELDS, and DISPLAY FIELDS.

The main table lists existing fields:

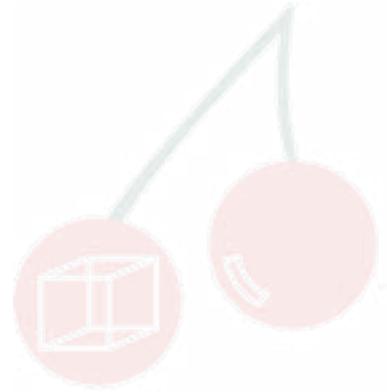
LABEL	NAME	FIELD	WIDGET	OPERATIONS
>Title	title	Text	Text field	
Body	body	Long text and summary	Text area with a summary	edit delete

A new field is being added:

- New field: field_new_field
- Label: Field name (a-z, 0-9, _)
- Widget dropdown menu:
 - Long text (selected)
 - Select a field type -
 - Boolean
 - Decimal
 - File
 - Float
 - Image
 - Integer
 - List
 - List (numeric)
 - List (text)
 - Long text
 - Long text and summary
 - Taxonomy term
 - Text
- Description: Text area (multiple rows) Form element to edit the data.

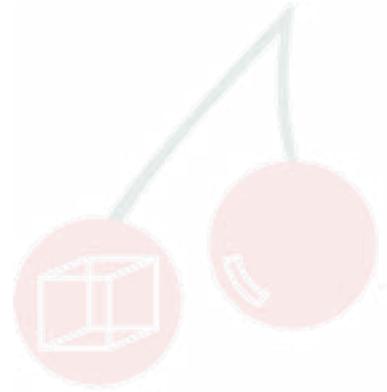
Save button is present at the bottom left.

Field Types in Core



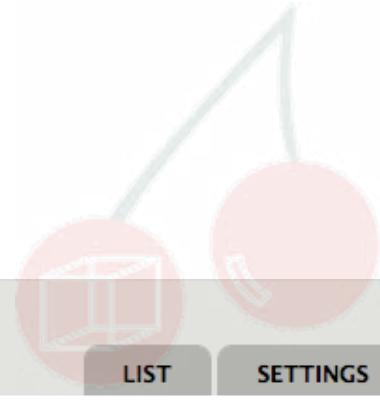
- Boolean
- Decimal/Float/Integer
- File
- Image
- List
- Text/Textarea
- Taxonomy term
- Node Body (long text and summary)

Fields apply to:



- Nodes
- Users (retires Content Profile)
- Comments (retires Node Comment & Comment Upload)
- Taxonomy terms (retires Taxonomy Image)
- Objects from contributed modules

Update Manager



Home » Administer » Reports » Available updates

Available updates +

Last checked: 6 sec ago ([Check manually](#))

Disabled add-ons

<input checked="" type="checkbox"/>	NAME	INSTALLED VERSION	RECOMMENDED VERSION
<input checked="" type="checkbox"/>	Taxonomy CSV import	7.x-4.5	7.x-4.6 (Release notes)

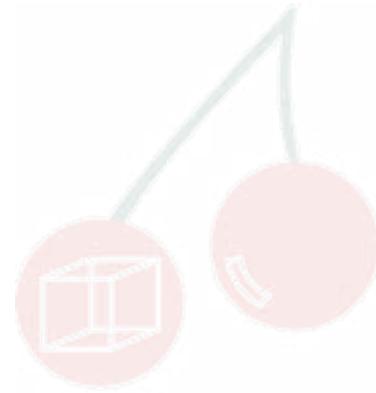
[Download these updates](#)

Add-ons requiring manual updates

Updates of Drupal core or development releases are not supported at this time.

NAME	INSTALLED VERSION	RECOMMENDED VERSION
Drupal	7.0-dev	7.x-dev (Release notes)

Install and update modules
and themes from drupal.org!



Changes for designers and front-end developers

Old 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 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 reading the Theming Guide .	7.0-dev	<input type="checkbox"/>	<input type="radio"/>	

▼ ADMINISTRATION THEME

Administration theme

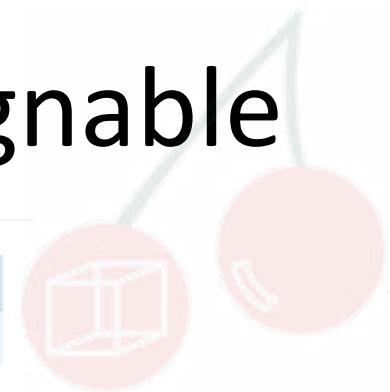
Seven

Choose "Default theme" to always use the same theme as the rest of the site.

Use the administration theme when editing or creating content

Many page elements assignable

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



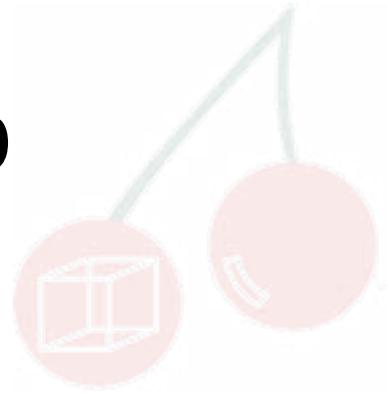
Re-vamped *.tpl.php

```
78 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
79   "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
80 <html xmlns="http://www.w3.org/1999/xhtml" xml:lang="<?php print $language-
· >language ?>" lang="<?php print $language->language ?>" dir="<?php print
· $language->dir ?>">
81
82 <head>
83   <?php print $head; ?>
84   <title><?php print $head_title; ?></title>
85   <?php print $styles; ?>
86   <?php print $scripts; ?>
87   <script type="text/javascript"><?php /* Needed to avoid Flash of Unstyled
· Content in IE */ ?> </script>
88 </head>
89 <body class="<?php print $body_classes; ?>">
90   <div id="page">
91     <div id="header">
92       <div id="logo-title">
93
94         <?php if (!empty($logo)): ?>
95           <a href="<?php print $front_page; ?>" title="<?php print
· t('Home'); ?>" rel="home" id="logo">
96             " />
97           </a>
98         <?php endif; ?>
```

Re-vamped *.tpl.php

```
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=<?php print $language-
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=<?php print t('Home'); ?>
121 .>" rel="home" id="logo">
122           <img src=<?php print $logo; ?>" alt=<?php print t('Home'); ?>" />
123         </a>
124       <?php endif: ?>
```

Re-vamped *.tpl.php



```
<body classe="<?php print $body_classes; ?>">
  <div id="page">
    <div id="header">
      <div id="logo-title">
        <?php if (!empty($logo)) { ?>
          <a href="<?php print $front_page; ?>">
            <?php print $logo; ?>
          </a>
        <?php endif; ?>
      </div>
      <div id="name-and-slogan">
        <?php if (!empty($site_name)) { ?>
          <u href="<?php print $front_page; ?> rel="home"><span><?php print $site_name; ?></span>
        <?php endif; ?>
        <?php if (!empty($site_slogan)) { ?>
          <div id="site-slogan"><?php print $site_slogan; ?>
        <?php endif; ?>
        </div> <!-- /name-and-slogan -->
      </div> <!-- /logo-title -->
      <?php if (!empty($search_box)) { ?>
        <div id="search-box"><?php print $se
  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 $front_page; ?>" title="<?php print t('Home') ?>">
  91           " />
  92         </a>
  93       <?php endif; ?>
  94
  95       <?php if ($site_name || $site_slogan) { ?>
  96         <?php if ($site_name) { ?>
  97           <u href="<?php print $front_page; ?> rel="home"><span><?php print $site_name; ?></span></u>
  98         <?php endif; ?>
  99         <?php if ($title) { ?>
 100           <div id="site-name"><strong>
 101             <a href="<?php print $front_page; ?>" title="<?php print t('Home') ?>">
 102               <?php print $site_name; ?>
 103             </a>
 104           </strong></div>
 105           <?php else: /* Use h1 when the content title is empty */ ?>
 106             <h1 id="site-name">
 107               <a href="<?php print $front_page; ?>" title="<?php print t('Home') ?>">
 108                 <?php print $site_name; ?>
 109               </a>
 110             </h1>
 111           <?php endif; ?>
 112         <?php endif; ?>
 113       <?php endif; ?>
 114     </div>
 115   </div>
 116 </body>
```

Stark: Naked Drupal

[Skip to main content](#)



[Drupal 7 demo](#)

User login

Username *

Password *

[Log in](#)

- [Create new account](#)
- [Request new password](#)

Welcome to Drupal 7 demo

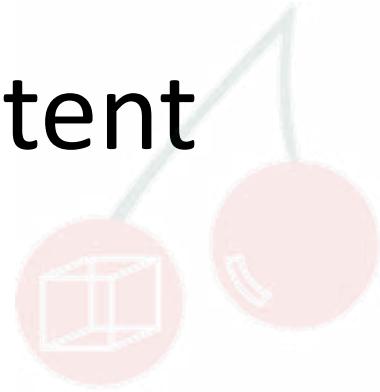
No front page content has been created yet.

Powered by [Drupal](#)

Granular theming of content

Drupal 6

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



- \$content was a big string of XHTML
- Fine-grained control over where ***one*** part of content goes means being responsible for ***all*** parts of content
- Security averse
- Even comments are in this mix

Granular theming of content

Drupal 7

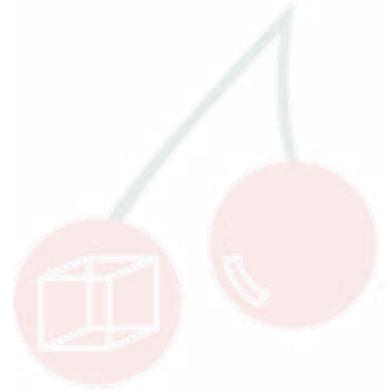
```
<div class="content clearfix">
  <?php
    // We hide the comments and links now so that we can render them later.
    hide($content['comments']);
    hide($content['links']);
    print render($content);
  ?>
</div>

<?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.

RDFa

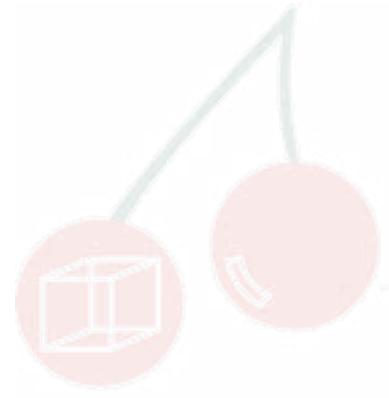


Default mapping for nodes:

```
<?php
  $type->rdf_mapping = array(
    'rdftype' => array('sioc:Item', 'foaf:Document'),
    'title'   => array('dc:title'),
    'created' => 'dc:created',
    'changed' => 'dc:modified',
    'body'    => 'content:encoded',
    'uid'     => 'sioc:has_creator',
    'name'    => 'foaf:name',
  );
?>
```

JavaScript improvements

- jQuery 1.3, jQuery Forms 2.2, jQuery UI 1.7
- drupal_add_library() for adding related js/css files
- New AJAX framework (from cTools) in core
- drupal_add_js/css() improved
- Use jQuery alongside other JS frameworks
- Form API dependencies (show box B when box A is checked)



Changes for coders

SimpleTest

Home > Administer > Site building

Testing

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	

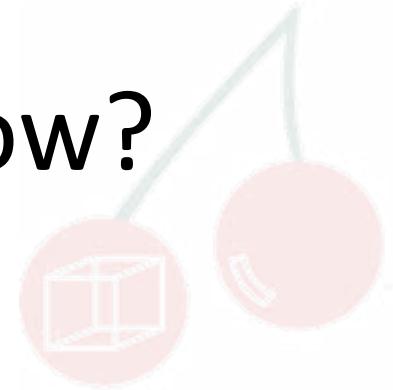
testing.drupal.org

- “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

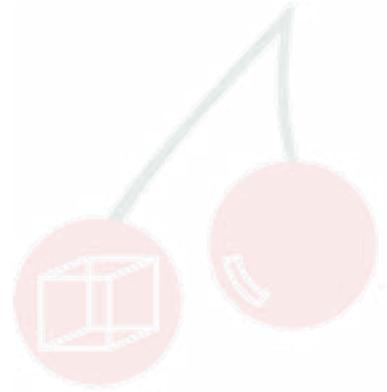
The next generation

The who in the what now?



- Database abstraction layer utilizing PHP's Data Objects (PDO)
- Theoretical support for any PHP supported database
- mysql, sqlite, and pgsql drivers included
- Support for master/slave replication, transactions, multi-insert queries, delayed inserts, and other features

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');
```

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;  
  }  
}
```

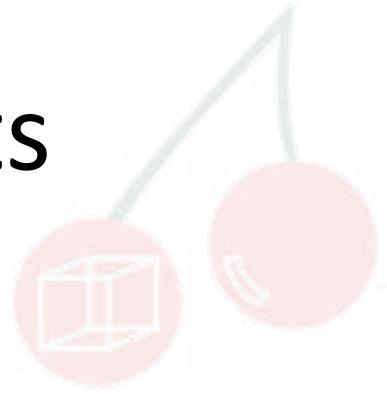
Drupal 7:

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

File System



File API improvements

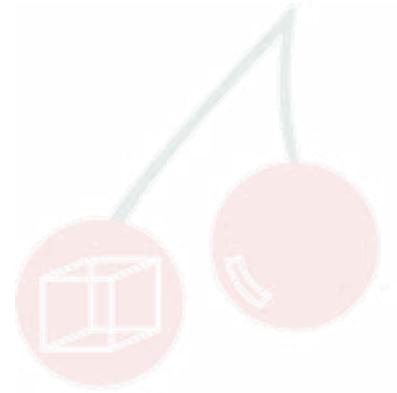


- Files are now first-class objects
- `hook_file_load()`, `hook_file_save()`,
`hook_file_move()`, etc.
- Files are managed automatically; no
need to deal with `{files}` table yourself
- `hook_file_url_alter()` for CDN support

Stream wrapper support

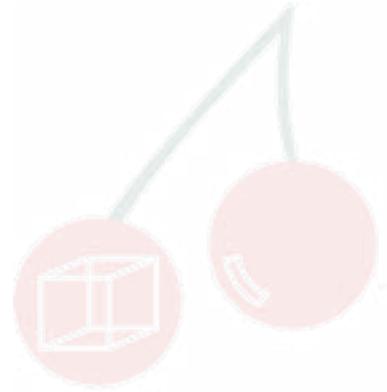


- Rather than referencing files by path, you now reference them by URI:
`schema://file/path/file.ext`
- Allows you to change location of files directory without a database update.
- `public://`, `private://`, `temp://` supported in core.
- Contributed modules can also create `s3://`, `flickr://`, etc.



APIs

APIs



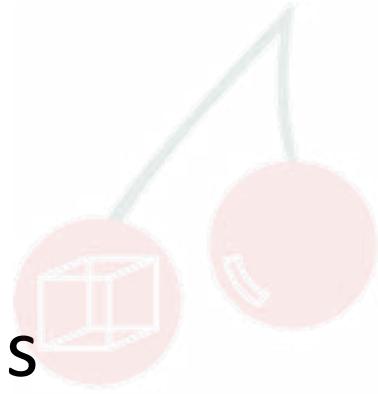
- Roles/Permissions API
- Filter/Format API
- Centralized static caching mechanism
- Locking framework
- Job queue

Field API



- Not node-specific
- Declare any entity in Drupal as “fieldable”
- Swappable storage back-ends (currently, SQL but potentially web services, etc.)
- Supports translatable content.

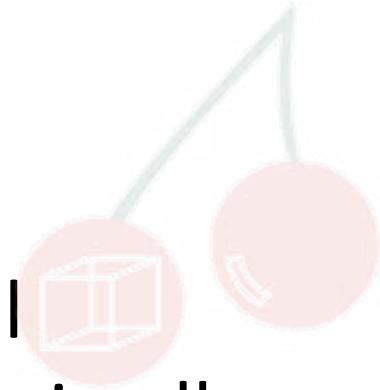
Image API



- 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...)

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



Class registry

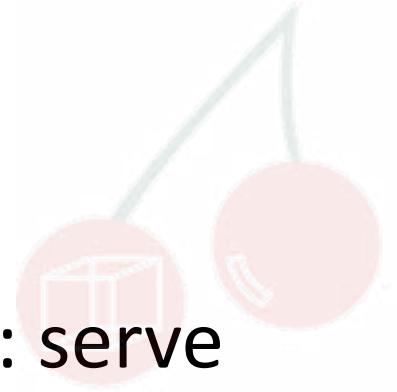


- Auto-parses and caches list of all classes and interfaces in all files
- Allows you to do:

```
$foo = new Foo;
```

- ...from anywhere

Speed and scalability



- Proxy and reverse-proxy support: serve anonymous page requests entirely via proxy
- Many micro-optimizations through XDebug profiling
- Smarter look-ahead system for grabbing path aliases
- InnoDB default storage system (MySQL)
- CDN support for files

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



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...
}
```

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...
}
```

#D7CX



Backup and Migrate

By [ronan](#) on the 3rd of November, 2007

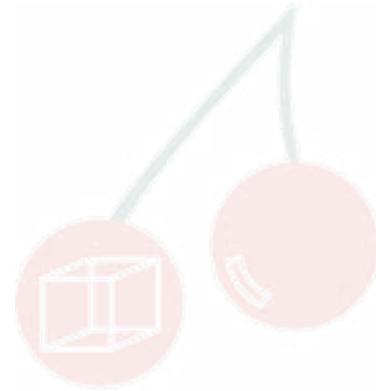
#D7CX: I pledge that Backup and Migrate will have a full Drupal 7 release on the day that Drupal 7 is released.

[Backup and Migrate simplifies the task of backing up and restoring your Drupal database](#)

The bottom line

- Easier to get started
 - Check requirements
 - Download Drupal 7
 - Create database
 - Install
 - Add themes & modules from interface
- Easier to build out
 - Improved administration
 - Themer friendly
- Easier to develop
 - More consistent and flexible
- Easier to integrate
 - RDFa





Thanks to”
Angela “webchick” Byron
for many of the slides!



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