

Mastering Drupal:

Getting Up the Drupal Learning Curve

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January 23rd, 2010
Design for Drupal at Stanford



Off to be a Wizard

- Drupal has the power to solve your problems. So you heard...
- It often looks really easy. Wow. Bam. Surprise. Magic...
- So why doesn't my blog show on the front page?!?!?!?!?!?



“I wish I could just jump to expert mode. I wish there was a cheat code.” -- <http://drupal.org/node/684770>



Huh?

Hard to Install **.TAR.GZ**

UX!! Odd Terminology
Too Many Modules

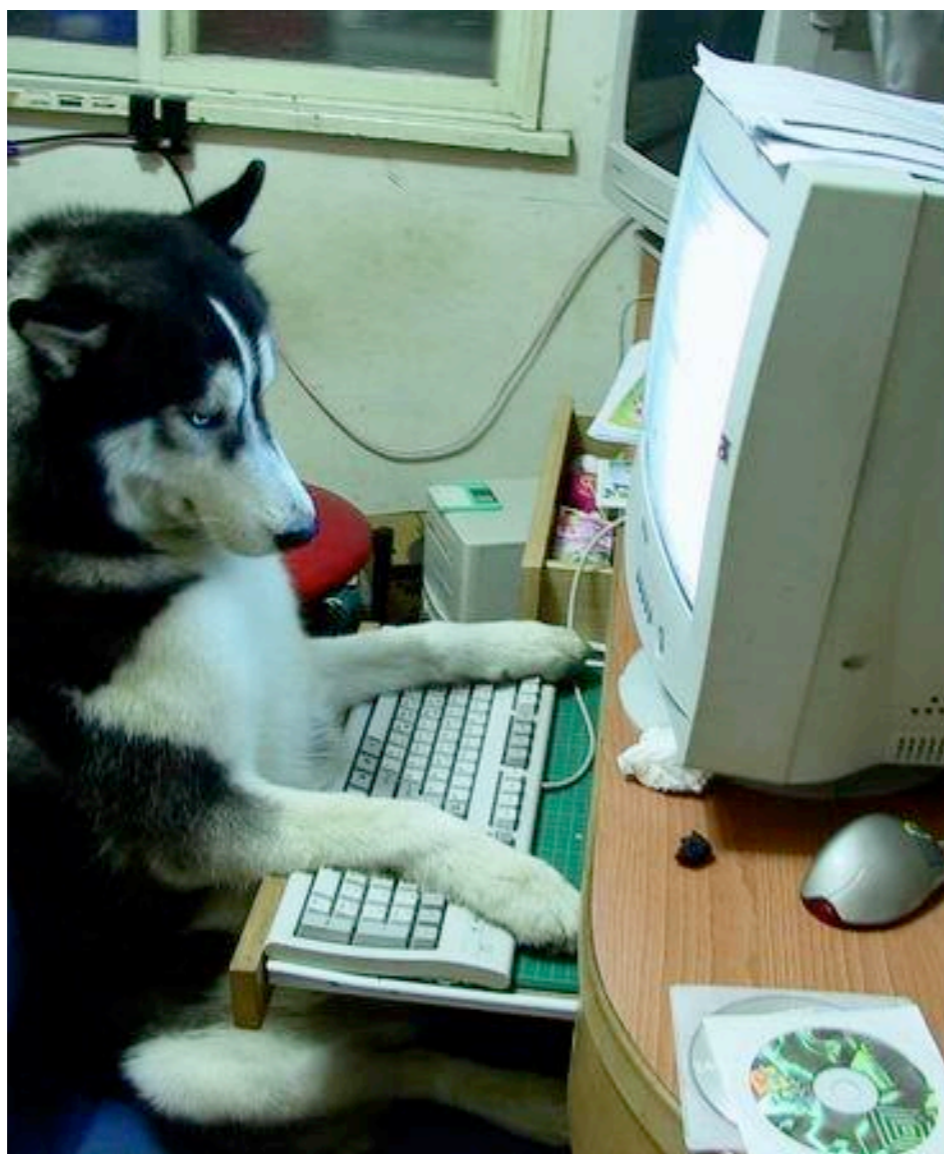
A dozen ways to do something...

29,200,000
Webpages drupal.org.....

It Doesn't Work *Support?*
Anyone?



The Problem



- This system was made for developers by developers.
- The interfaces and documentation were also done by developers
- And now off to code the next great thing.....



Through the Drupal Maze

- Understand the **different parts** of Drupal
- Find **resources** to help you on your way
- Stay **up to date** with Drupal news and announcements



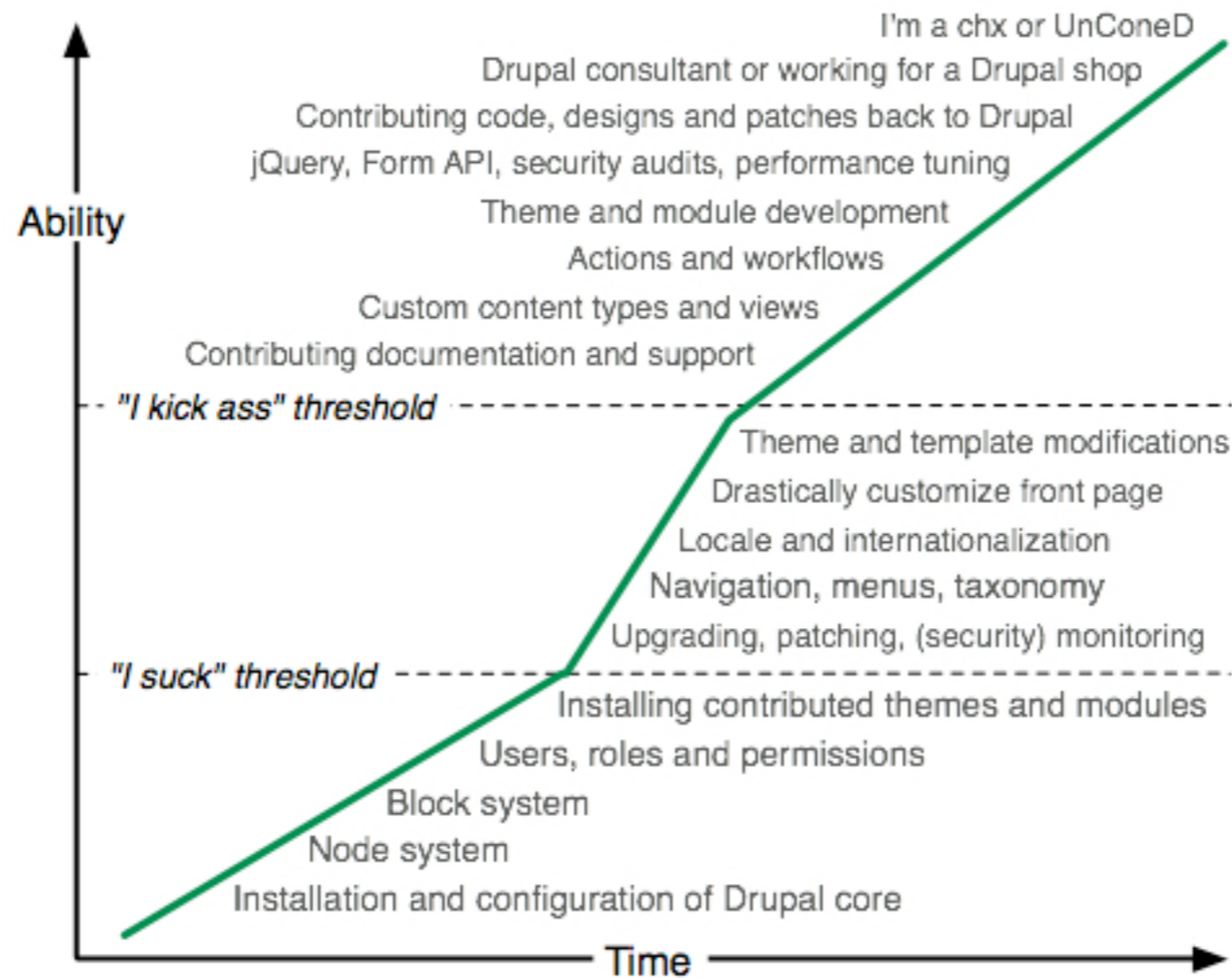
Drupal 101



- **Drupal Core** - The basic installation package.
- **Themes** - The customized look and feel. HTML/CSS.
- **Modules** - Out of the box extension functionality
- **Custom Code** - Additional customization done through code



Drupal Learning Curve



<http://buytaert.net/drupal-learning-curve>



How To Install Drupal

Download Drupal

[View](#) [Revisions](#)
Last modified: January 8, 2010 - 14:37 **Drupal 6.x** - No known problems

You can obtain the latest Drupal release from <http://drupal.org/project/drupal>.

Drupal has been translated to many different languages. Check whether a released package of the language desired is available at <http://drupal.org/project/translations>.

Drupal files, and associated modules, are compressed in the .tar.gz format and can be extracted using most compression tools.

Downloading and extracting for Linux users
If you would like to download version x.x of Drupal from the typical Unix command line, use the following commands (replacing x.x throughout the rest of these commands with the version you want to install, such as 5.7, 6.13, 7.2, etc.):
wget <http://drupal.org/files/projects/drupal-x.x.tar.gz>
tar -zxvpf drupal-x.x.tar.gz

This will create a new directory drupal-x.x/ containing all Drupal files and directories and will preserve all of Drupal's file and directory permissions. Move the contents of that directory into a directory within your web server's document root or your public HTML directory.

```
mv drupal-x.x/* drupal-x.x/.htaccess /var/www/html
```

The base URL for your Drupal installation will be set in your Web server's configuration file. You will need to know this URL before proceeding to the next step of the installation. If you are installing Drupal on your local machine the base URL may be: <http://localhost>. If you are installing Drupal onto a Web server your base URL may be a specific domain name (such as <http://example.com>).

Note for Mac users
Mac users may also want review this handbook page during installation: <http://drupal.org/node/22676>
Especially in cases where you don't understand where the "web server's document root or your public HTML directory" is on your local machine as referred to above.

Note for Windows users
A number of compression programs, such as 7-Zip, allow you to extract .tar.gz files. To use 7-Zip, right-click on the .tar.gz file and, in the menu that appears, select 7-Zip -> Extract Here. A .tar file will appear. Right-click on the .tar file and again select 7-Zip -> Extract Here. In a few moments, the final Drupal folder will appear.

Note for SELinux users
Users of Fedora or other distributions with SELinux (Security Enhanced Linux) should not move files unpacked into their home directory into the Web directory /var/www/html.

As posted at <http://drupal.org/node/50280> moving a file preserves the context with the directory in which it was created. In this case the files are incorrectly associated with the home directory (user_home_t) instead of the web directory (httpd_sys_content_t).

Instead, copying the files to the directory /var/www/html will cause them to inherit the context of the correct directory:

```
cp -R drupal-x.x/* drupal-x.x/.htaccess /var/www/html
```

If you have already moved the files you may re-associate the files using the command chcon to change the security context for the files:

```
chcon -R -t httpd_sys_content_t /var/www/html
```

[drupal.org/
node/628292](http://drupal.org/node/628292)

Grant write permissions on the configuration file

[View](#) [Revisions](#)
Last modified: November 10, 2009 - 03:21 **Site administrators** - **Drupal 6.x** - No known problems

Drupal uses a configuration file for database information and other special configurations.

Your Drupal download comes with a default configuration file at sites/default/default.settings.php, within the Drupal directory that you downloaded the Drupal files to (following the [downloading instructions from the previous page](#)), which needs to be prepared so that the installer can edit it.

- Copy the default.settings.php to settings.php. You can do this from the command line using cp default.settings.php settings.php. **NOTE:** Do not simply rename the file. The Drupal installer will need both files.
cp sites/default/default.settings.php sites/default/settings.php
- You should now have both a default.settings.php and settings.php file in your sites/default directory.
- Make the settings file writeable, so that the installer can edit it
chmod a+w sites/default/settings.php
or
chmod 666 sites/default/settings.php
Both commands have the same effect. Several FTP tools like Filezilla, Transmit, and Fetch allow you to change file permissions, using a 'file attribute' or 'get info' command. In this case the octal or numeric value file permission should be set to 666.
- Drupal should set the file permissions back to read-only once the installation is done. You should make sure this is the case and manually change it yourself if it didn't happen. You can use the same command, slightly modified, to remove write permission:
chmod a-w sites/default/settings.php
or
chmod 444 sites/default/settings.php. If you are using a FTP tool the permission should be set to 444.

Windows note
On a Windows system this would be Change permission and make sure the file is not marked Read Only before running the installer and then set it back to Read Only after. For more information about modifying Windows file permissions, see the [Troubleshooting FAQ](#).

Create the database

[View](#) [Revisions](#)
Last modified: January 8, 2010 - 14:40 **Drupal 6.x**

Drupal requires access to a database in order to be installed. Your database user will need sufficient privileges to run Drupal. Additional information about privileges, and instructions to create a database using the command line are available in INSTALL.mysql.txt (for MySQL) or INSTALL.pgsql.txt (for PostgreSQL).

To create a database using PHPMyAdmin or a web-based control panel consult the documentation or ask your web host service provider.

Take note of the username, password, database name and hostname as you create the database. You will enter these items in the install script.

Create database with MySQL

This step is only necessary if you don't already have a database set-up (e.g. By your host). In the following examples, 'username' is an example MySQL user which has the CREATE and GRANT privileges. Use the appropriate user name for your system.

First, you must create a new database for your Drupal site here, 'databasename' is the name of the new database):

```
mysqladmin -u username -p create databasename
```

MySQL will prompt for the 'username' database password and then create the initial database files. Next you must login and set the access database rights:

```
mysql -u username -p
```

Again, you will be asked for the 'username' database password. At the MySQL prompt, enter following command:

```
GRANT SELECT, INSERT, UPDATE, DELETE, CREATE, DROP, INDEX, ALTER ON databasename.* TO 'username'@'localhost' IDENTIFIED BY 'password';
```

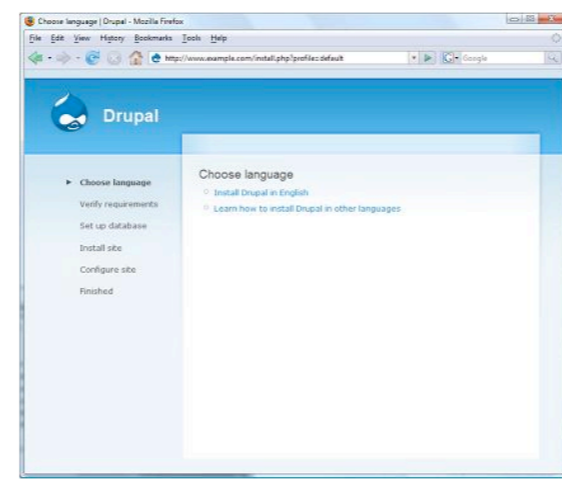
where
'databasename' is the name of your database
'username@localhost' is the username of your MySQL account
'password' is the password required for that username

Run the install script

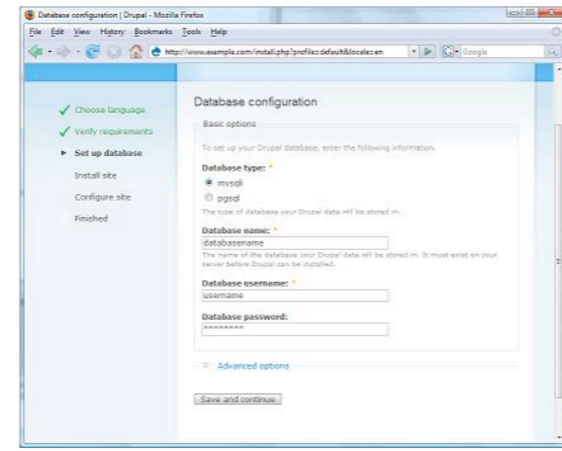
[View](#) [Revisions](#)
Last modified: January 8, 2010 - 14:37 **Drupal 6.x**

To run the install script point your browser to the base URL of your website.

The base URL is defined in your Web server configuration file and is specific to the document root where you placed your Drupal files. If you have installed Drupal on a Web server this will likely be a domain name such as <http://example.com>. If you have installed Drupal on your desktop machine this URL might be <http://localhost>.



You will be guided through several screens to set up the database, create tables,



add the first user account and provide basic web site settings.



Set up cron

[View](#) [Revisions](#)
Last modified: November 10, 2009 - 03:23

Configuring cron is an extremely important task in your Drupal website setup. Search module's indexing of your website's content, aggregator module's retrieval of feeds, ping module's notification of other sites of updates, and system module's routine maintenance tasks, such as pruning of logs, all depend a properly configured cron job.

What is a cron job?

Many Drupal modules have tasks that have to take place from time to time. Think of cron as the tolling of a bell, letting Drupal know that it should perform the appropriate tasks.

The actual "cron job" is a time-triggered action that is usually (and most efficiently) performed by your website's hosting server, but can also be configured by a remote service or even from your own desktop.

For your Drupal site, what actually happens is that the cron job triggers an invisible visit to the site's cron.php file (<http://www.example.com/cron.php>) which, in turn, executes tasks on behalf of installed modules.

- ▶ [Configuring cron jobs](#)
- [Configuring cron jobs on DreamHost](#)
- [Configuring cron jobs on Media Temple Grid Servers \(gs\)](#)
- [Configuring cron jobs on Windows](#)
- [Configuring cron jobs on ixWebHosting](#)
- [Configuring cron on Mac OS X Server 10.5.x and later](#)
- [Configuring cron on Rackspace Cloud Sites](#)
- ▶ [Cronjobs without wget/lynx or curl](#)
- ▶ [Multisite cron](#)
- [Running cron manually](#)
- [Setting up cron on Hostmonster through the cPanel interface](#)
- [Solving cron problems](#)

Create a "files" directory for uploads

[View](#) [Edit](#) [Revisions](#)
Last modified: December 4, 2009 - 17:19 **Drupal 6.x** - No known problems

After installing Drupal, it is helpful to have a writable directory so that you can upload your own content files. If you skip this step, you may get an error message stating that "sites/default/files does not exist ..."

Here's how:

1. Make a directory called 'files' in the sites/default folder.
2. Assign write permissions to it with the following command (from the installation directory):

```
chmod -R a+rx sites/default/files
```

or

```
chmod -R 777 sites/default/files
```

Also, most FTP programs allow you to create the files directory and set its permissions. Be sure to give read, write, and execute permissions to everyone (777). FYI: chmod a+rx is equivalent to chmod 777



Let's Try That Again....

WebEnabled
INSTANT DEVELOPMENT PLATFORM

<http://webenabled.com>

STANFORD
UNIVERSITY

<http://tools.stanford.edu/>



<http://acquia.com/downloads>



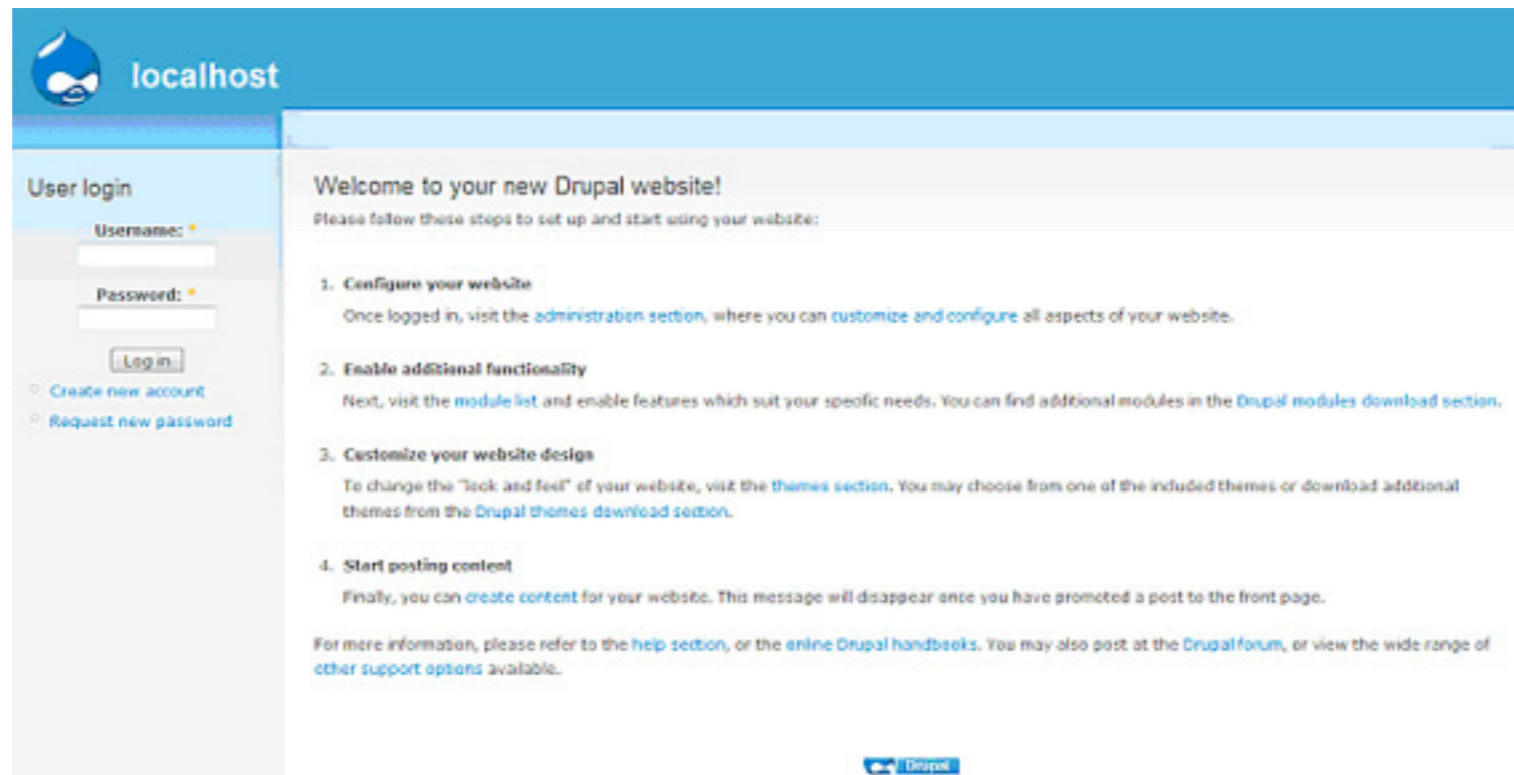
<http://www.turnkeylinux.org/drupal6>



<http://getpantheon.com/>



Alright. Now What?



localhost

User login

Username: *

Password: *

Log in

[Create new account](#)


[Request new password](#)

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](#). 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 [create content](#) for your website. This message will disappear once you have promoted a post to the front page.

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



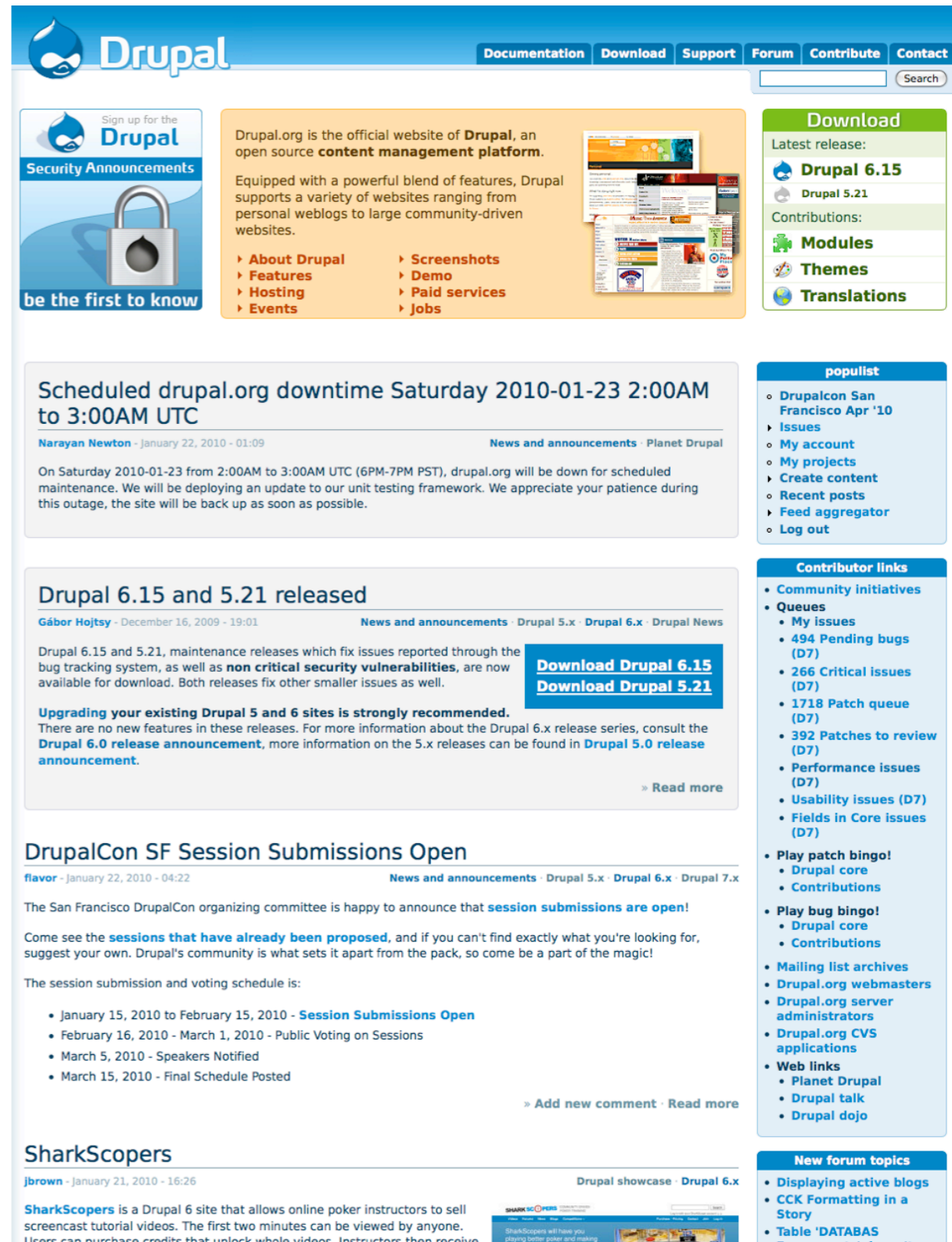


Maybe Just Experiment?



A few words about drupal.org

<http://drupal.org/handbook>



The screenshot shows the Drupal.org homepage with a blue header containing the Drupal logo and navigation links: Documentation, Download, Support, Forum, Contribute, and Contact. A search bar is located on the right. The main content area features several sections:

- Security Announcements:** A blue box with a padlock icon and the text "be the first to know".
- Download:** A green box titled "Download" with "Latest release: Drupal 6.15" and "Drupal 5.21". It lists "Contributions: Modules, Themes, Translations".
- Scheduled downtime:** A grey box announcing "Scheduled drupal.org downtime Saturday 2010-01-23 2:00AM to 3:00AM UTC" by Narayan Newton.
- Drupal 6.15 and 5.21 released:** A grey box by Gábor Hojtsy with buttons for "Download Drupal 6.15" and "Download Drupal 5.21".
- DrupalCon SF Session Submissions Open:** A grey box by flavor announcing session submissions.
- SharkScopers:** A grey box by jbrown describing a Drupal 6 site for selling poker tutorial videos.

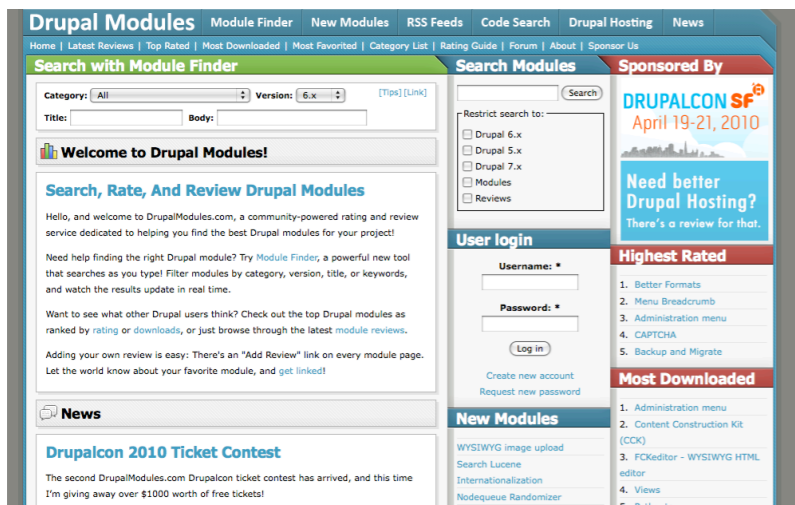
On the right side, there are two vertical navigation menus:

- populist:** Links to "Drupalcon San Francisco Apr '10", "Issues", "My account", "My projects", "Create content", "Recent posts", "Feed aggregator", and "Log out".
- Contributor links:** Lists "Community initiatives", "Queues" (494 Pending bugs, 266 Critical issues, 1718 Patch queue, 392 Patches to review, Performance issues, Usability issues, Fields in Core issues), "Play patch bingo!", "Play bug bingo!", "Mailing list archives", "Drupal.org webmasters", "Drupal.org server administrators", "Drupal.org CVS applications", and "Web links" (Planet Drupal, Drupal talk, Drupal dojo).

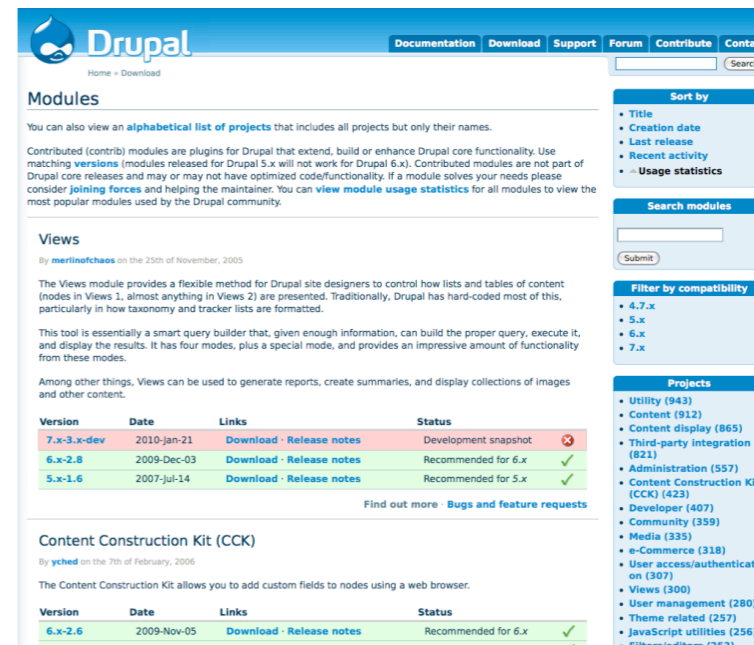
At the bottom right, a **New forum topics** box lists "Displaying active blogs", "CCK Formatting in a Story", and "Table 'DATABAS'".



Find Modules



<http://drupalmodules.com/>



Version	Date	Links	Status
7.x-3.x-dev	2010-Jan-21	Download · Release notes	Development snapshot
6.x-2.8	2009-Dec-03	Download · Release notes	Recommended for 6.x
5.x-1.6	2007-Jul-14	Download · Release notes	Recommended for 5.x

<http://drupal.org/project/modules>

What makes a good module?



What Modules Do I Need?

VIEWS Administration Menu

Content Construction Kit

PATHAUTO Fieldfield/Imagefield/Imagecache

WYSIWYG: What You See Is What You Get

But of course it all depends....



Module Anatomy

Drupal
Documentation Download Support Forum Contribute Contact

Home » Download » Modules

Maintainers for ImageCache

- **drewish** - 129 commits
last: 14 weeks ago, first: 1 year ago
- **quicksketch** - 39 commits
last: 2 years ago, first: 2 years ago

[View all committers](#)

Issues for ImageCache

To avoid duplicates, please search before submitting a new issue.

[Advanced search](#)

All issues
268 open, 996 total

Bug reports
118 open, 427 total

[Subscribe via e-mail](#)

[Issue statistics](#)
Oldest open issue: 14 Mar 07

Recent issues

- **Doesn't display image. Navigating to image path in browser displays index.php code.**
- **imagecache doesn't**

ImageCache

[View](#)
[CVS instructions](#)

drewish - June 7, 2006 - 17:34 Modules

#D7CX: The goal is to deprecate some or all of this module once we get **#371374: Add ImageCache UI Core**. Please review the patch there to help us achieve this goal.

ImageCache allows you to setup presets for image processing. If an ImageCache derivative doesn't exist the web server's rewrite rules will pass the request to Drupal which in turn hands it off to ImageCache to dynamically generate the file.

ImageCache requires that you:

- Install and enable **ImageAPI module** ***and* one of its toolkits** (GD or ImageMagick)
- Install and enable **Transliteration module**
- Clean URL support or Private Files ([more info](#))

Some cool modules which work with ImageCache:

- **ImageCache Profiles** - manipulate user profile images
- **iTweak Upload** - Enhances the upload.module and comment_upload.module's upload forms.
- **Taxonomy Image** - Upload images for taxonomy terms
- **Ubercart** - An excellent E-Commerce system for Drupal
- **Imagecache Actions** - provides additional, advanced actions like watermarking
- **ImageMagick raw action** - lets you create custom ImageMagick actions
- **Imagecache javascript crop** - JavaScript interface for selecting image crops

You are strongly encouraged to read the [Documentation](#) and [Troubleshooting Guides](#) if you are experiencing any issue with ImageCache.

If you use **Lighttpd** see: <http://nordisch.org/2007/2/6/drupal-on-lighttpd-with-clean-urls>

Downloads

Recommended releases

Version	Downloads	Date	Links
6.x-2.0-beta9	Download (62.5 KB)	2009-Apr-17	Notes
5.x-2.5	Download (49.95 KB)	2009-Aug-19	Notes

Development releases

User login

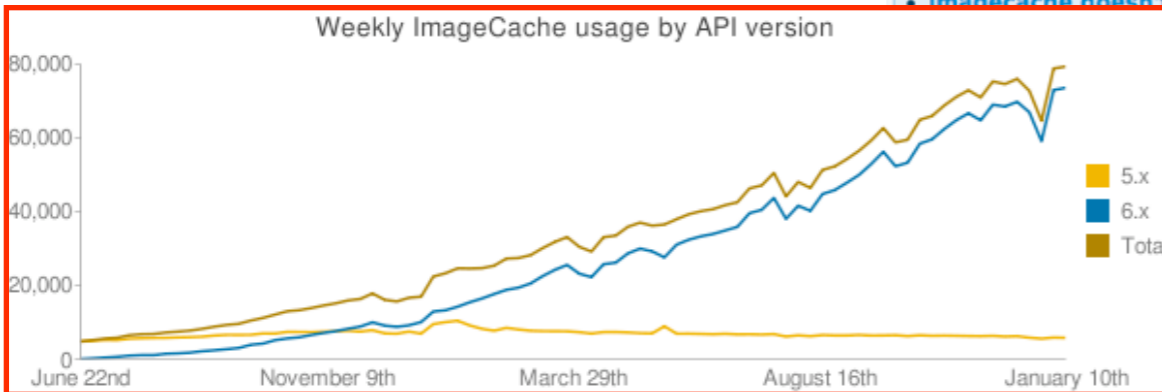
Username: *

Password: *

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

Contributor links

- [Community initiatives](#)
- [Queues](#)
 - [My issues](#)
 - [493 Pending bugs \(D7\)](#)
 - [266 Critical issues \(D7\)](#)
 - [1718 Patch queue \(D7\)](#)
 - [392 Patches to review \(D7\)](#)
 - [Performance issues \(D7\)](#)
 - [Usability issues \(D7\)](#)
 - [Fields in Core issues \(D7\)](#)
- [Play patch bingo!](#)
 - [Drupal core](#)
 - [Contributions](#)
- [Play bug bingo!](#)
 - [Drupal core](#)
 - [Contributions](#)
- [Mailing list archives](#)
- [Drupal.org webmasters](#)
- [Drupal.org server administrators](#)
- [Drupal.org CVS applications](#)
- [Web links](#)
 - [Planet Drupal](#)
 - [Drupal talk](#)
 - [Drupal dojo](#)



Start Small. Follow the Recipe.



<http://drupal.org/handbook/site-recipes>



Ask Someone Round Here



Stanford Drupallers Email List

<https://mailman.stanford.edu/mailman/listinfo/drupallers>

Mornings of Code (MoC) @ Stanford -
Twice a Month Gathering of Drupallers



Local User Groups



San Francisco DUG

<http://groups.drupal.org/bay-area>

East Bay University DUG

<http://groups.drupal.org/bay-area>



South Bay + Santa Cruz

<http://groups.drupal.org/south-bay-california>



Camps and Conferences



<http://badcamp.net/>



<http://sf2010.drupal.org/>

DO IT WITH 
DRUPAL

A 3 DAY SEMINAR
NEW ORLEANS, LA
DECEMBER 9- 11, 2009

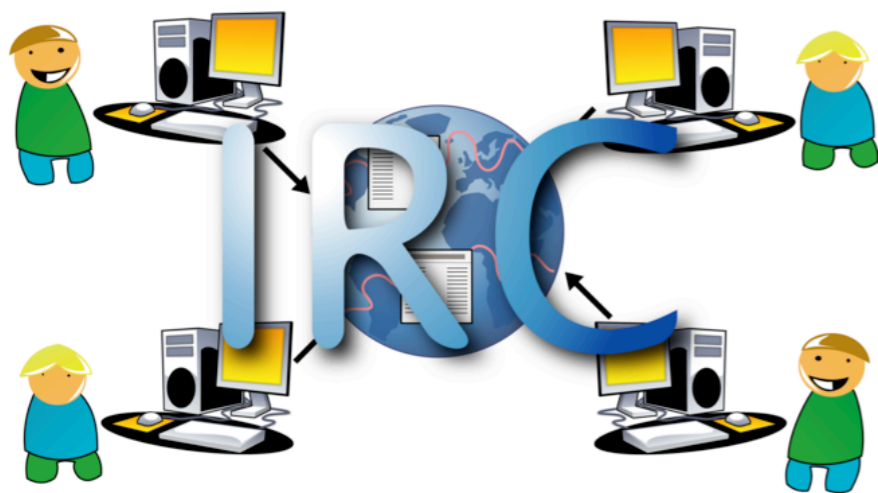
<http://www.doitwithdrupal.com/>



<http://stanford.design4drupal.org/>



or Someone Online

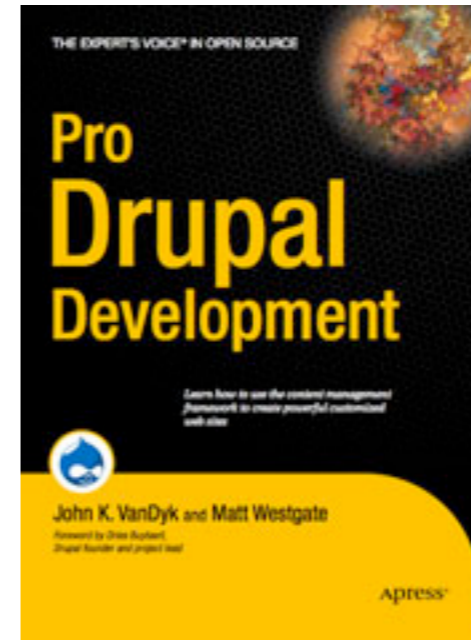
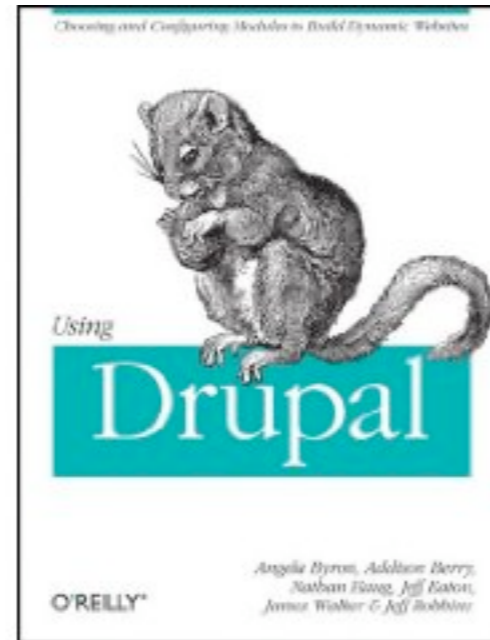
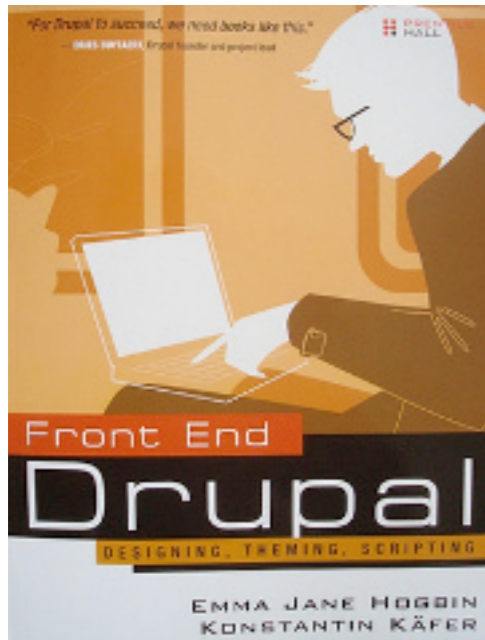
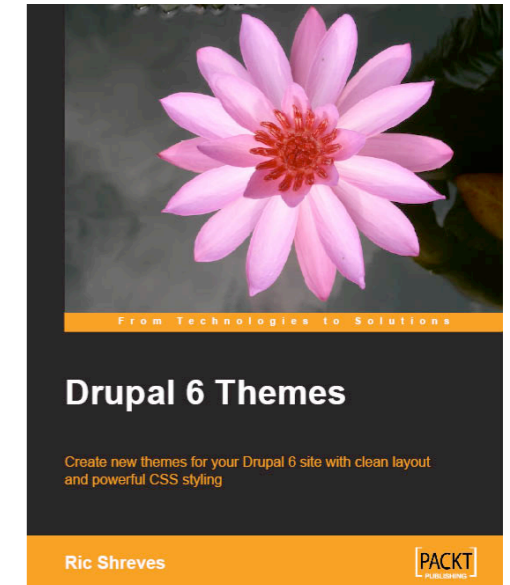
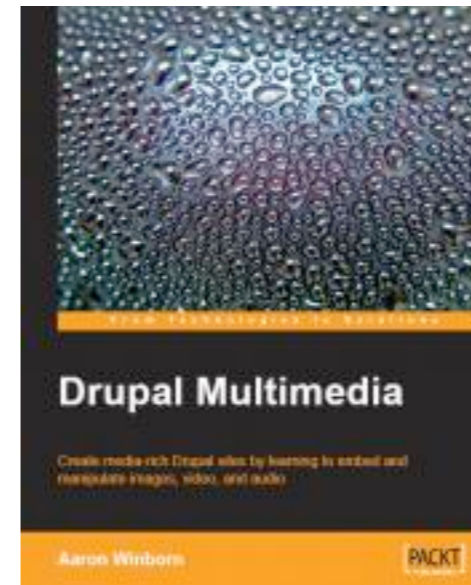


irc.freenode.net
[#drupal, #drupal-support](#)

<http://drupal.org/forum>



Read Some Books



<http://drupal.org/books>



Learn Online



<http://drupaldojo.net/>



<http://www.lullabot.com/>



<http://mydrupal.com/>



<http://learnbythedrop.com/>



<http://www.masteringdrupal.com/>



<http://www.drupaltherapy.com/>



Take a Class



<http://sf2010.drupal.org/conference/pre-conference-trainings>

<http://www.drupaltherapy.com/therapies>
<http://www.lullabot.com/training>
<http://www.chapterthree.com/training>

INFORMATION TECHNOLOGY SERVICES

<http://www.stanford.edu/services/techtraining/>



Roll Your Own

- **May Not Be Needed** - Drupal does a LOT out of the box or with configuration.
- **But There is Magic** - You can make Drupal do anything (within reason).
- **It is All About Hooks** - This is the key to Drupal coding. *API.DRUPAL.ORG*
- **Use Examples** - Good artists copy. Great artists steal.



Stay Informed

twitter



<http://twitter.com/drupal>

<http://twitter.com/webchick/drupal-universe>



<http://groups.drupal.org/>



<http://drupal.org/planet>



Questions?

