Drupal for Fun and Profit

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DrupalCamp Toronto
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http://2bits.com

Agenda

- Introduction
- Definitions
- Open Source software licences
- Business models
- Case study: Drupal
  - Product, Project, Community
- Ecosystem and Symbiosis
- Careers
- Contributing

About Khalid

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- 25 years in software development and consulting
- Sinclair ZX Spectrum, mainframe, then UNIX since 1987
- Linux discovered 1990, using it regularly since 1995, “LAMP” since 1999
- Open source developer, contributor since 2003
- Full time open source consulting

About 2bits.com

- Founded in 1999, based in Waterloo, Ontario.
- Using and contributing to Drupal since 2003
- Full time consulting
- Services
    - Drupal development
    - LAMP performance optimization and tuning
    - Server provisioning for performance and uptime
    - Manage huge sites for various clients
- http://2bits.com

Cathedral vs. Bazaar

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- Two different cultures
  - Competition vs. Collaboration
  - Win/Lose (Zero Sum) vs. Win/Win/Win
    - **www.groklaw.net/pdf/Comes-3096.pdf** (Slide 9)
  - Closed development vs. “Its all out in the open”
  - Slow/monolithic vs. Incremental/iterative
- Catherdal and the Bazaar (Eric Raymond)
  - http://en.wikipedia.org/wiki/The_Cathedral_and_the_Bazaar

Corporatitis?

- Do you have any of the following symptoms?
  - Your work is not noticed/appreciated?
  - Tired of office politics?
  - Hit the glass ceiling?
  - Too hierarchical for you?
  - Been there too long with little challenge?

Why Open Source?

- Reduce capital costs
  - You don't need to pay licenses for anything in the LAMP stack + Drupal
- Reduce ongoing costs
  - Many choices for maintenance (in house, consulting companies, freelancers, community)
- “Total Cost of Ownership” is in favor of Open Source (FUD notwithstanding)

Why Open Source?

- Customization
  - You don't need permission, fees, know how or special licenses
- Growth market
  - Lots of opportunities
- Easier to get noticed
  - Low barrier for entry
  - Marketing by doing (meritocracy) ...

Some Definitions

- Open Source
  - More inclusive / Less strict
  - Stresses availability
- Free software
  - More strict definition
  - Stresses liberty (freedom)
- Each has pros and cons

Licence types

- BSD variants
  - “Do with it what you want, including closing it off”
  - Examples: NetBSD (Apple OS/X)
- GPL
  - “You cannot deprive users of freedoms you got”
  - Examples: Linux kernel, Drupal
- Web services “loophole”
  - Affero GPL license

Other licences

- Apache
  - GPL compatible
- Mozilla
  - “weak copyleft”
  - Can be linked/combined with proprietary code
- PHP
  - Non-GPL compatible
- Many others

Applicability

- Within the Drupal community
  - Applies to “code”
  - Does not apply to graphics (themes)
- Ask the Drupal Association if in doubt
  - Contact form

Business Models

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Many business models for Open Source

Selling services

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More on that later ...

Selling solutions

- You don't sell the software, but sell the hardware that uses the software as a total solution

Selling solutions (cont'd)

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- Many embedded devices use Linux
  - Mobile phones
    - Google Android
    - Palm Pre mobile
    - Nokia N900
  - Tvs
    - Panasonic, Toshiba, Samsung
  - Routers
    - Business routers (e.g. Vyatta)
    - Consumer routers (Linksys, ...)

Selling solutions (cont'd)

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- Or sell hardware, with a proprietary application, and the operating system as a commodity
  - e.g. Google Appliance

What is Drupal?

- Web Content Management System (CMS)
- Web Applications Framework
- PHP + MySQL / PostgreSQL
- Free Open/Source : GPL v2 or later licensed
- Founded 2001
- Very active and growing community

How is Drupal unique?

- Highly customizable
- Extremely powerful
- Infinitely flexible
- Continually Improved
- Large selections of contributions and themes

Who Uses Drupal?

- Too many to count now ...

Drupal (as a product)

- As a Product
  - A “tarball” that you download and install
- As a Framework
  - “Content Management System”
  - “Web applications framework”
    - Building block system for web sites (like LEGO)
- End product?
  - None of the above, rather the site you are building

Drupal (as a project)

- Ever evolving
- Ever improving
- Also ...

Drupal (as a community)

- Most important asset of Drupal
- Collectively, we are the ones who ...
  - Use it
  - Support it
  - Promote it
  - Improve it

Open Source community

- Open sources is also an “ecosystem”
  - Developers
  - Promoters
  - Adopters
  - Documentors
  - Trainers
  - Consultants

Types of symbiosis

- Mutualism
- Commensalism
- Parasitism
  - Organism causing harm to another giving benefit

Mutualism

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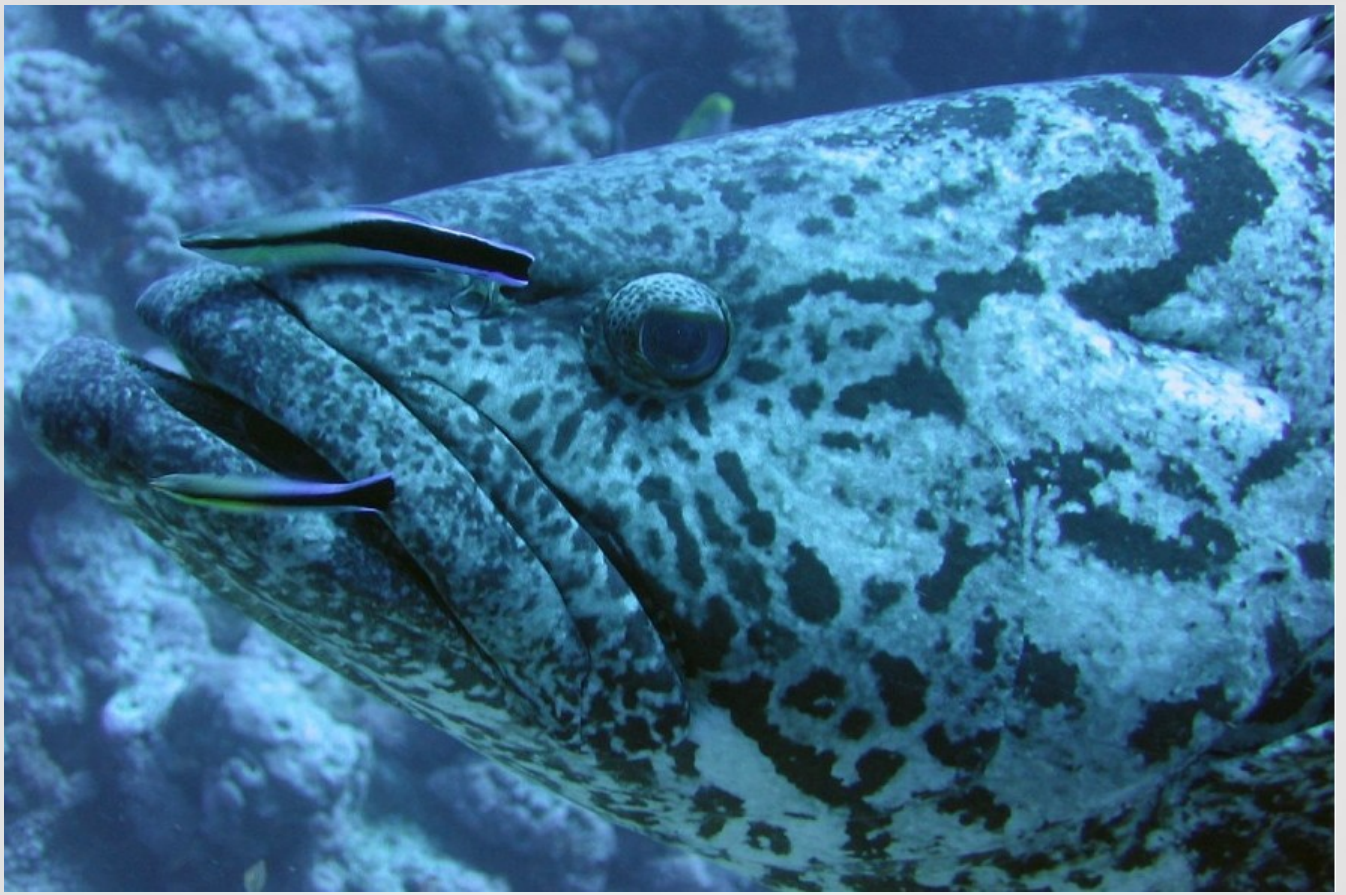
Organisms in an ecosystem benefiting each other

Mutualism



- Large fish, sea turtles seek “cleaning stations”
- Striped Cleaner Wrasse

Photo Copyright 2008 Richard Ling

Mutualism

- Cleaner shrimps
- In caves
- Distinct marking

Commensalism

- Organisms living along side, no harm or benefit
- Or one side benefits, but the other does not get harmed

Parasitism

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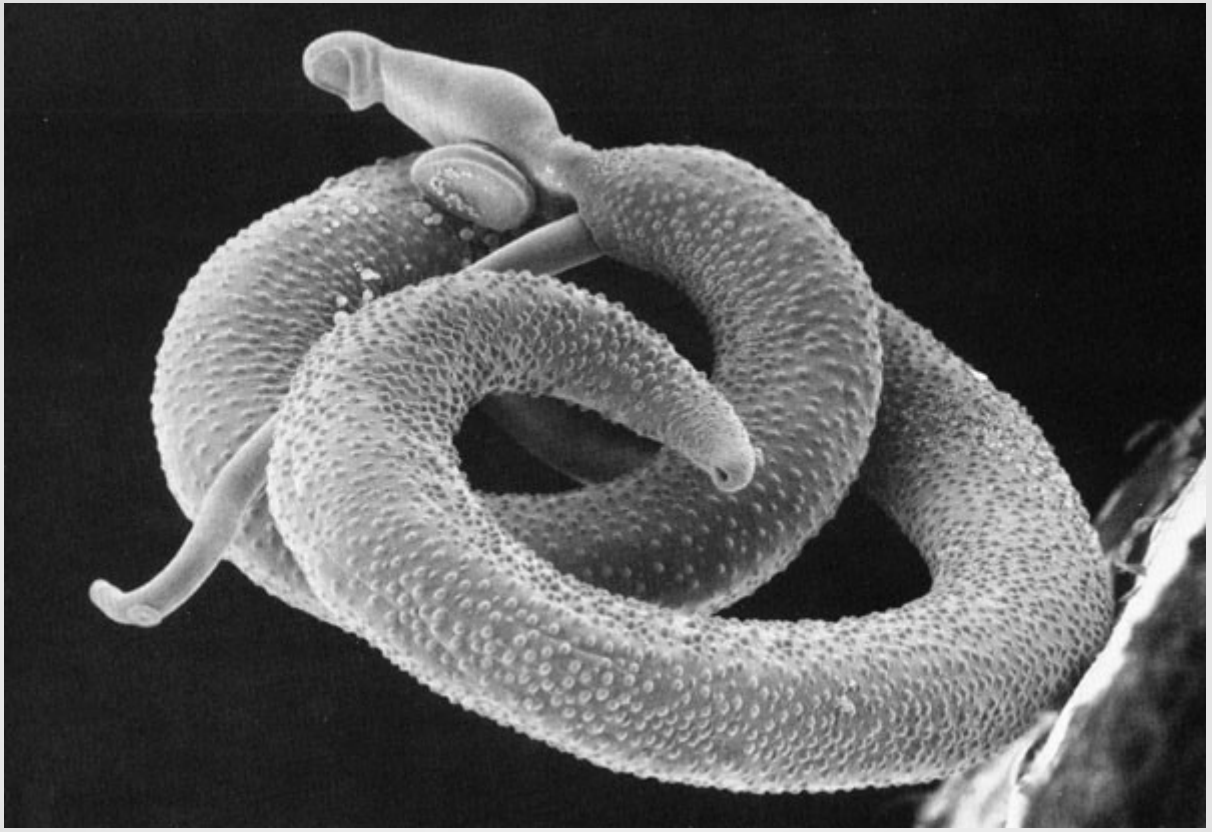
Organism causing harm to another by benefiting form it

Parasitism

- Sabre-toothed Blenny
- Deception! mimics the Striped Cleaner Wrasse
- Tears skin and flesh from unsuspecting victims

Parasitism



- Schistosoma (blood fluke)
- Hosts are: Humans and freshwater snails

Corporate marketshare

- Destructive and antagonistic competition
- Win/Lose
    - Competitors must be “defeated”
    - One vendor wins and the other loses

Open Source

- Open Source
  - Collaboration and sharing
  - Win/Win/Win situation
- “Grow the pie”: a slice for everyone
- Don't want to present an overly rosy/eutopian picture

Open Source services

Many Open Source services

Services overview (web)

- Site Building (putting together web sites)
- Theming/templates (look and feel)
- Development (extensions, new functionality)
- Customization (changing certain features)
- Training (classroom, videos, online)
- Books (paper, e-books)
- Hosting (LAMP stack)
- Performance and scalability

Development

- Writing modules to do special things, e.g.
  - “Scratch your own itch”
  - Something a client asks for
- Examples
  - Adding features
  - Integrating external sites/APIs

Development

- Two areas
  - Backend and/or Front end (user experience)
- Skills:
  - PHP
  - Drupal's API
  - MySQL/PostgreSQL
  - HTML, some CSS
  - Javascript
  - jQuery

Site building

- No programming knowledge needed
- Need to understand client requirements
- Need to know what modules are out there
- Putting them together to meet requirements
- Skills:
  - LAMP/WAMP (for deployment)
  - Keeping up to date with new modules and updates

Themeing

- Customize look and feel
- From simple to quite complex
- Artistic inclination
- Skills:
  - HTML
  - CSS
  - graphics
  - Some PHP

Performance Optimization

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- Two types
  - Make it faster for individual page loads
  - Make it handle more load (scalability)
- Backend
  - page generation time
- Front end
  - How user perceives the speed of page loading

Training

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- Courses
- DVDs
- Webinars

Your options?

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Options abound ...

Individual ...

- Freelancing / Contracting
  - Low entry barrier
- Start to partner with like minded people
  - Complementary skills (e.g. Themer and developer)
- Join a company that is open source minded
  - Your contributions can be the key

Company ...

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- Promote Open Source to clients
  - For pragmatic reasons (it works, low cost, ...etc.), not for ideology ...
- Hire Open Source people
  - Can start with subcontracting

Company ...

- Get involved
  - Contribute to a project that you use and have passion for
- Let your work be known
  - Showcase your work on a blog
  - Join the “planet” of your project

Examples ...

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An example http://drupal.org/user/4063

Drupal's Seven Principles

http://drupal.org/principles

- Modular and Extensible
- Quality coding
- Standards-based
- Low resource demands
- Open source
- Ease of use
- **Collaboration**

Contribute !

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Give a little, get a whole lot back ...

Contributing to Drupal

DrupalCamp Toronto 2010

Andrew Berry: andrew@abdevelopment.ca

http://www.abdevelopment.ca/

Drupal is big...

... and growing by the second

http://i01.i.aliimg.com/photo/v0/105303715/car_battery.jpg

Jumpstart!

Who contributes?

"drupal" faces from images.google.com

Anyone who wants to!

- Drupal users and site builders
- Companies and organizations using Drupal
- “Scratching an itch”
- Having fun!

Online Community

Get a d.o account

Browse to drupal.org, click “create new account”.

groups.drupal.org

Types of Groups

- Groups for a specific geographical region
  - Toronto, Waterloo, Montreal, etc
- Groups for specific topics
  - Contributed Module Ideas, Higher Education, Local User Group Organizers

What can I do?

- Join groups!
- Post discussions
- Wiki pages
- Jobs
- Events
- All groups are approved by site administrators

Tell me. Maybe Iz help.
ICANHASCHEEZBURGER.COM

Helping Others

Have you ever solved a problem yourself?

Tips and Tricks

- Use RSS
  - Drupal.org doesn't do forum post notifications, but page2rss.com can do it for you
- Use <code> tags
- Try to link to Issues using [#12345] syntax

IRC

(isn’t that a primitive chat program used by hackers?)

3 Steps

An IRC Client

- Windows?
  - mIRC, Pidgin, XChat
- OS X?
  - Colloquy, Adium (beta), XChat
- Linux / BSD / Toaster?
  - XChat, Pidgin, irssi

The IRC server

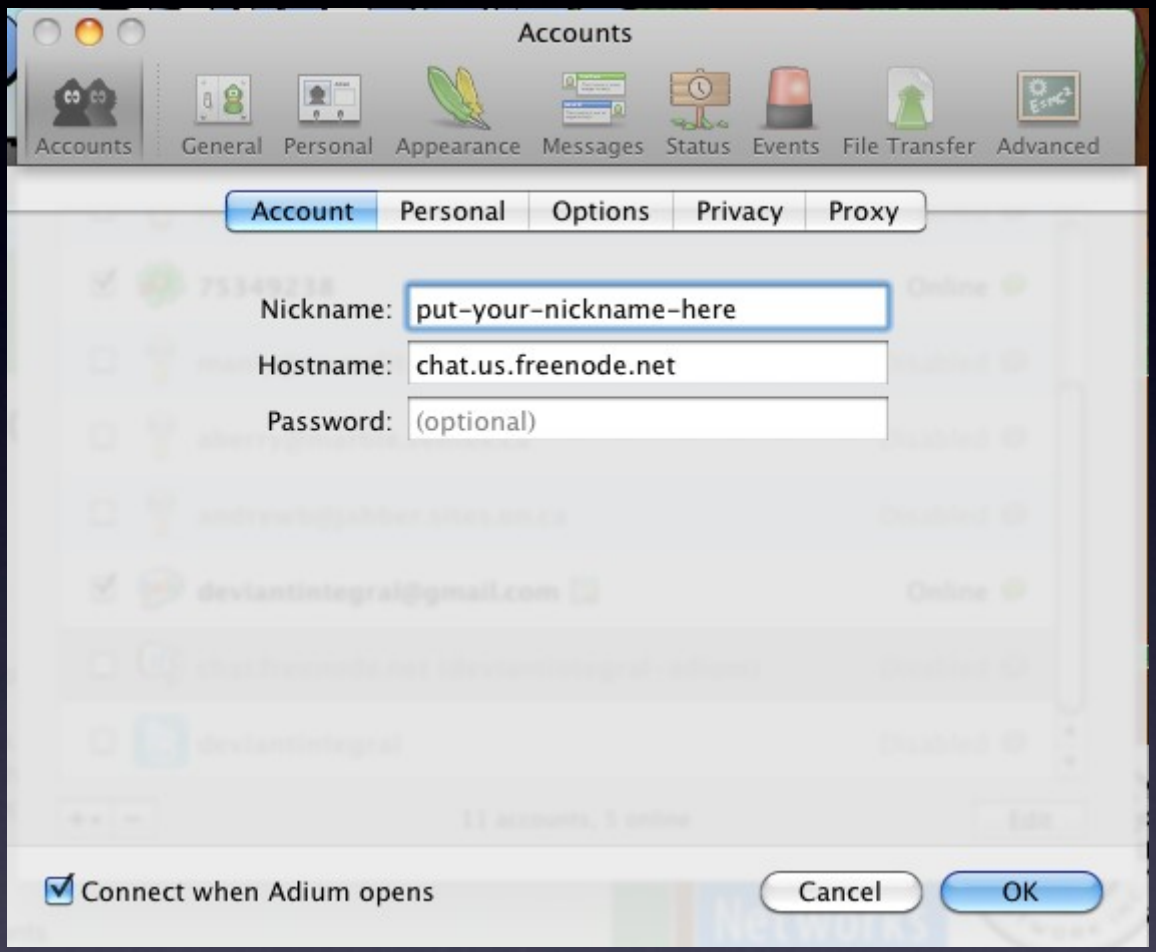
- Drupal IRC channels are hosted by freenode
- Most clients will have a preset for freenode
  - chat.us.freenode.net
- See http://freenode.net/irc_servers.shtml for more servers, SSL, etc

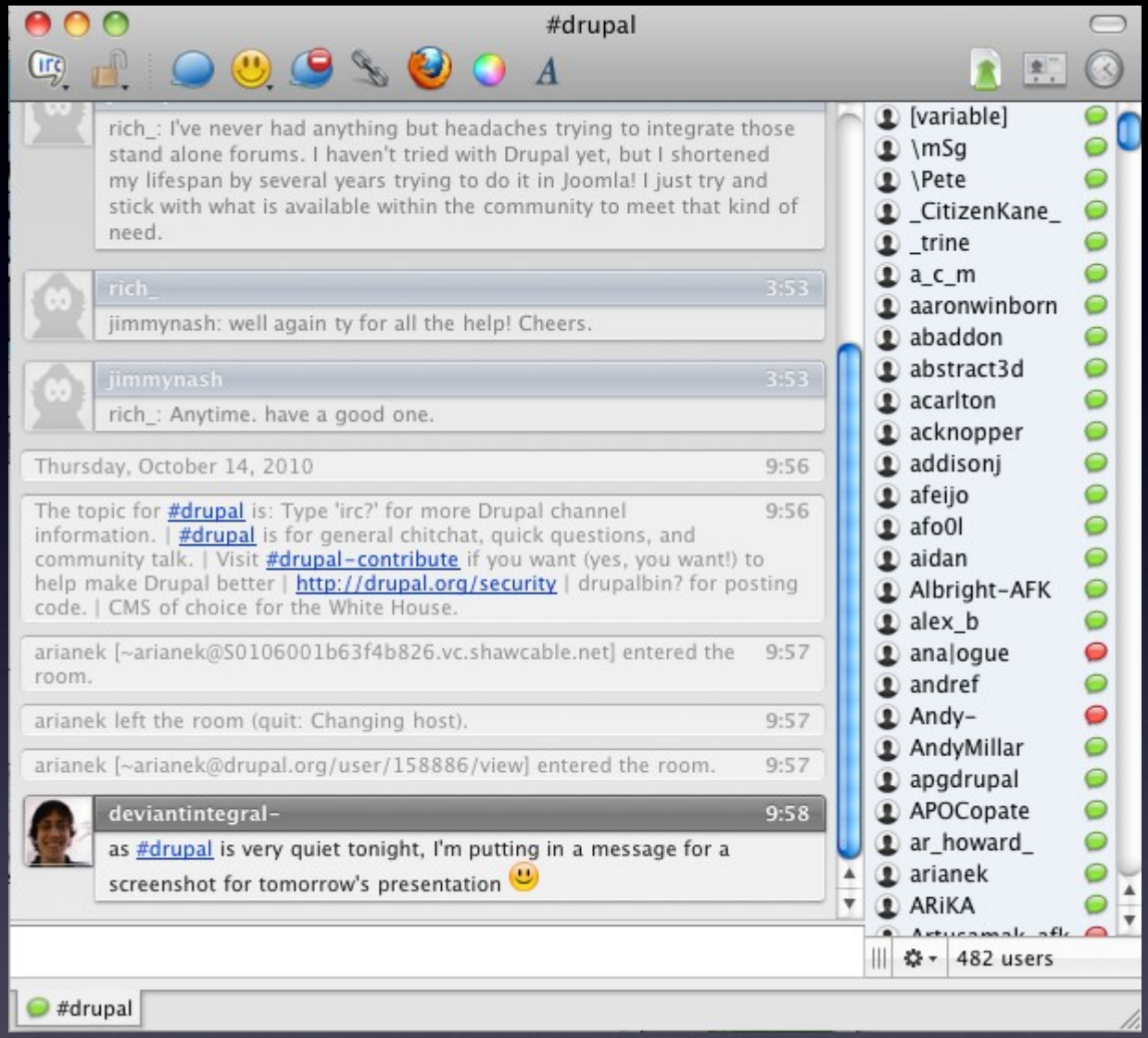
A Nickname

- If possible, use the same name as on drupal.org
- Register your nickname
- /msg NickServ help, or see freenode.net

Once you're connected

- Join a Drupal channel
  - http://drupal.org/irc
- Read the other Drupal IRC documentation
- Say something interesting!


Accounts
Accounts
General
Personal
Appearance
Messages
Status
Events
File Transfer
Advanced
Account
Personal
Options
Privacy
Proxy
Nickname:
put-your-nickname-here
Hostname:
chat.us.freenode.net
Password:
(optional)
Connect when Adium opens
Cancel
OK


#drupal
rich_: I've never had anything but headaches trying to integrate those stand alone forums. I haven't tried with Drupal yet, but I shortened my lifespan by several years trying to do it in Joomla! I just try and stick with what is available within the community to meet that kind of need.
rich_ 3:53
jimmynash: well again ty for all the help! Cheers.
jimmynash 3:53
rich_: Anytime. have a good one.
Thursday, October 14, 2010 9:56
The topic for #drupal is: Type 'irc?' for more Drupal channel information. | #drupal is for general chitchat, quick questions, and community talk. | Visit #drupal-contribute if you want (yes, you want!) to help make Drupal better | http://drupal.org/security | drupalbin? for posting code. | CMS of choice for the White House. 9:56
arianek [~arianek@S0106001b63f4b826.vc.shawcable.net] entered the room. 9:57
arianek left the room (quit: Changing host). 9:57
arianek [~arianek@drupal.org/user/158886/view] entered the room. 9:57
deviantintegral- 9:58
as #drupal is very quiet tonight, I'm putting in a message for a screenshot for tomorrow's presentation
[variable]
\mSg
\Pete
CitizenKane
_trine
a_c_m
aaronwinborn
abaddon
abstract3d
acarlton
acknopper
addisonj
afeijo
afo0l
aidan
Albright-AFK
alex_b
ana|ogue
andref
Andy-
AndyMillar
apgdrupal
APOCopate
ar_howard_
arianek
ARiKA
482 users
#drupal

Be nice!

- Sometimes many conversations are happening at once, or people AFK
  - “hilight” someone in your conversation by tab-completing their name
- Don’t PM without asking
- Don’t spam the channel (or individuals)

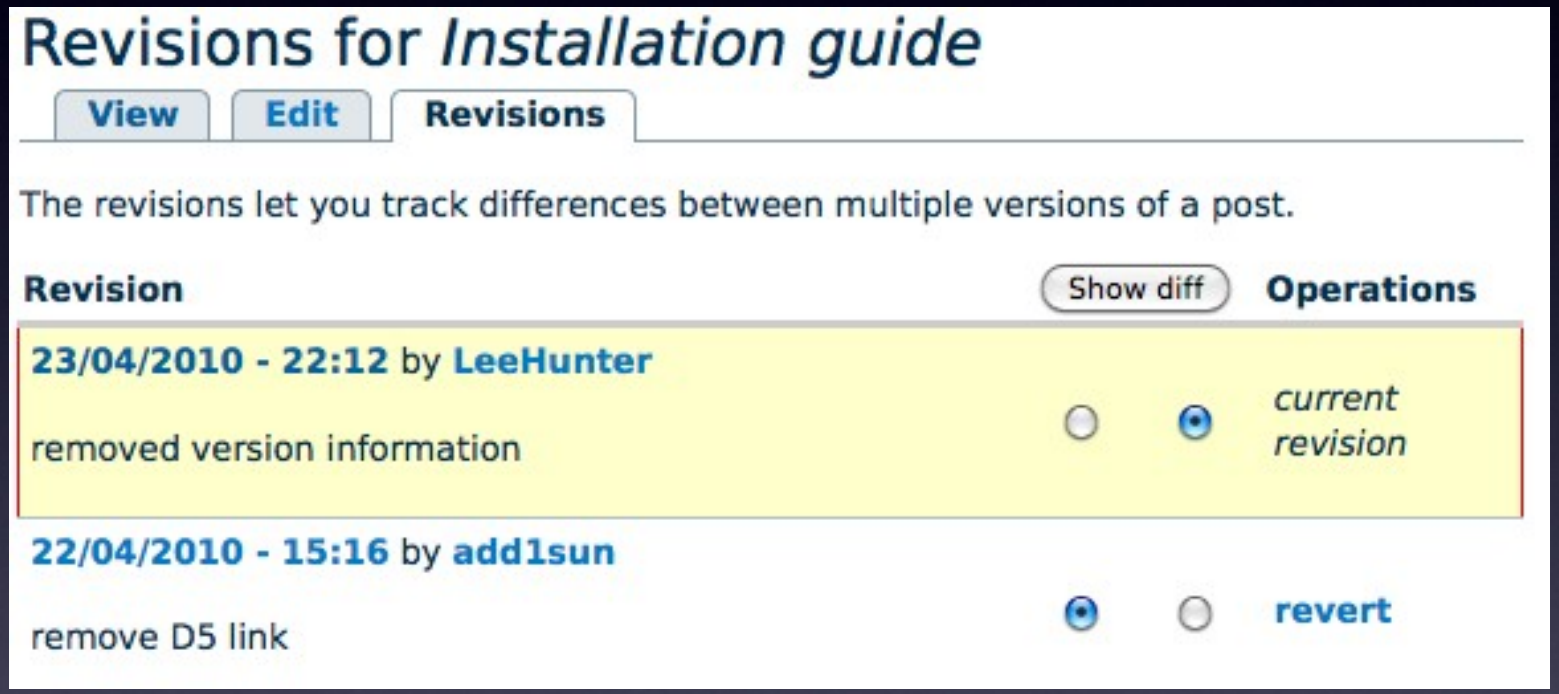
botsnack!

Documentation

We're all on the documentation team

Editing the Handbook

- Core, contrib, and community pages
- Go to a documentation page...
- ... click “edit”!
- All you need to know is basic HTML
- No test pages please!


Revisions for Installation guide
View
Edit
Revisions
The revisions let you track differences between multiple versions of a post.
Revision
Show diff
Operations
23/04/2010 - 22:12 by LeeHunter
removed version information
current revision
22/04/2010 - 15:16 by add1sun
remove D5 link
revert

Revisions for *Installation guide*

April 22, 2010 - 15:16 by add1sun	**April 23, 2010 - 22:12 by LeeHunter**
remove D5 link	removed version information

< previous diff

Changes to *Taxonomy*

- Drupal 6.x	

Changes to *Body*

Line *1*	**Line *1***
- The following pages cover the installation of Drupal 6.	
-	
Drupal provides an installation script that automatically populates database tables and configures the correct settings in the settings.php file. This section covers preparing for installation, running the installation script itself, and the steps that should be done after running the installation script has completed. It also explains how to do a "multi site" installation, where a number of different Drupal sites run off the same code base.	Drupal provides an installation script that automatically populates database tables and configures the correct settings in the settings.php file. This section covers preparing for installation, running the installation script itself, and the steps that should be done after running the installation script has completed. It also explains how to do a "multi site" installation, where a number of different Drupal sites run off the same code base.

Translations

- You can join a translation group and translate projects through a web interface
- Or, you can import and export translations to use a desktop application
- http://localize.drupal.org/

Patches

- Patches are how contributors propose changes
- Patching is easy on everything other than Windows
- $ diff -up views.tpl.php.orig views.tpl.php > 12345_fix_missing_close_tag.patch
- $ patch -p0 < 12345_fix_missing_close_tag.patch

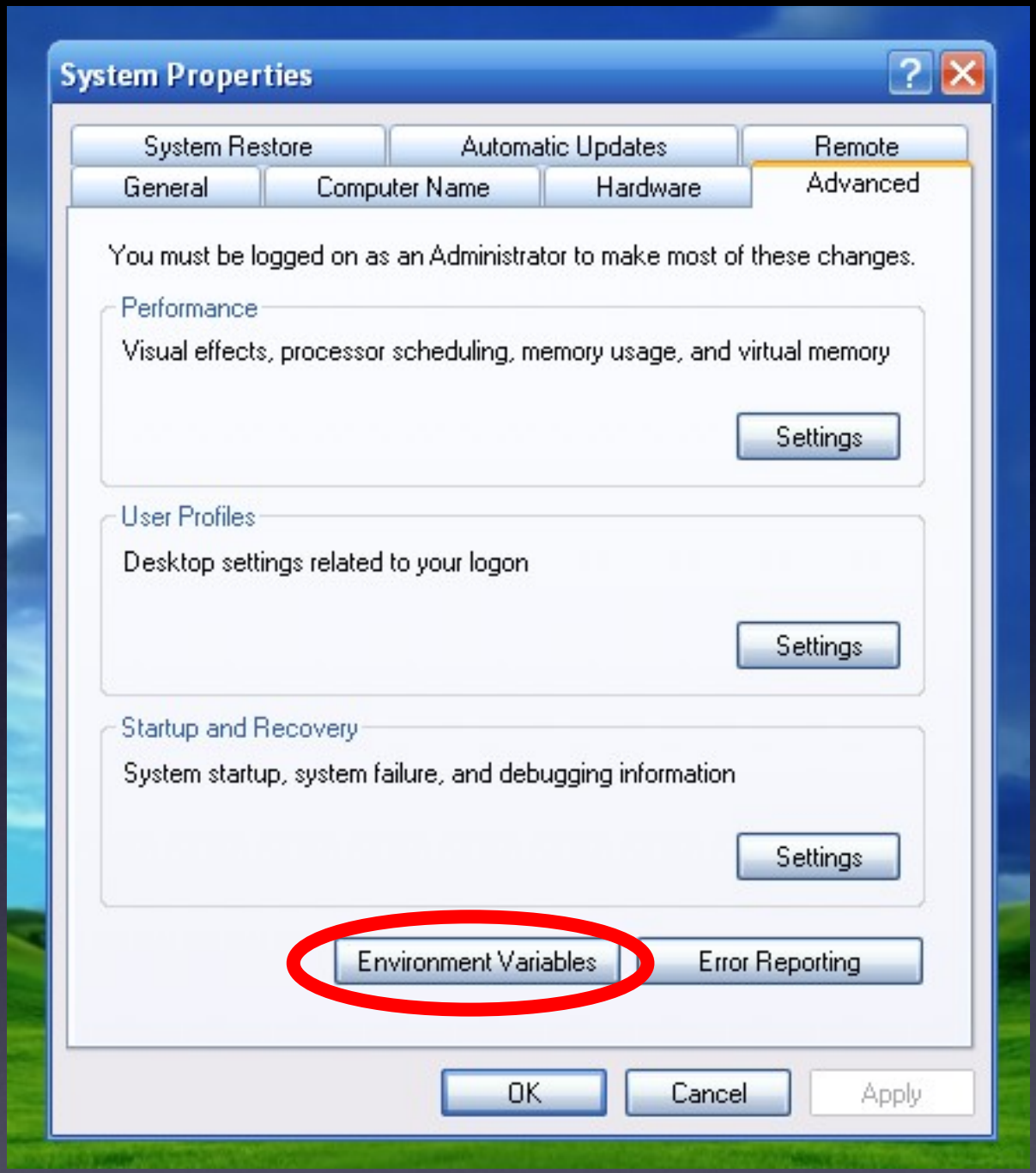
Reading Patches

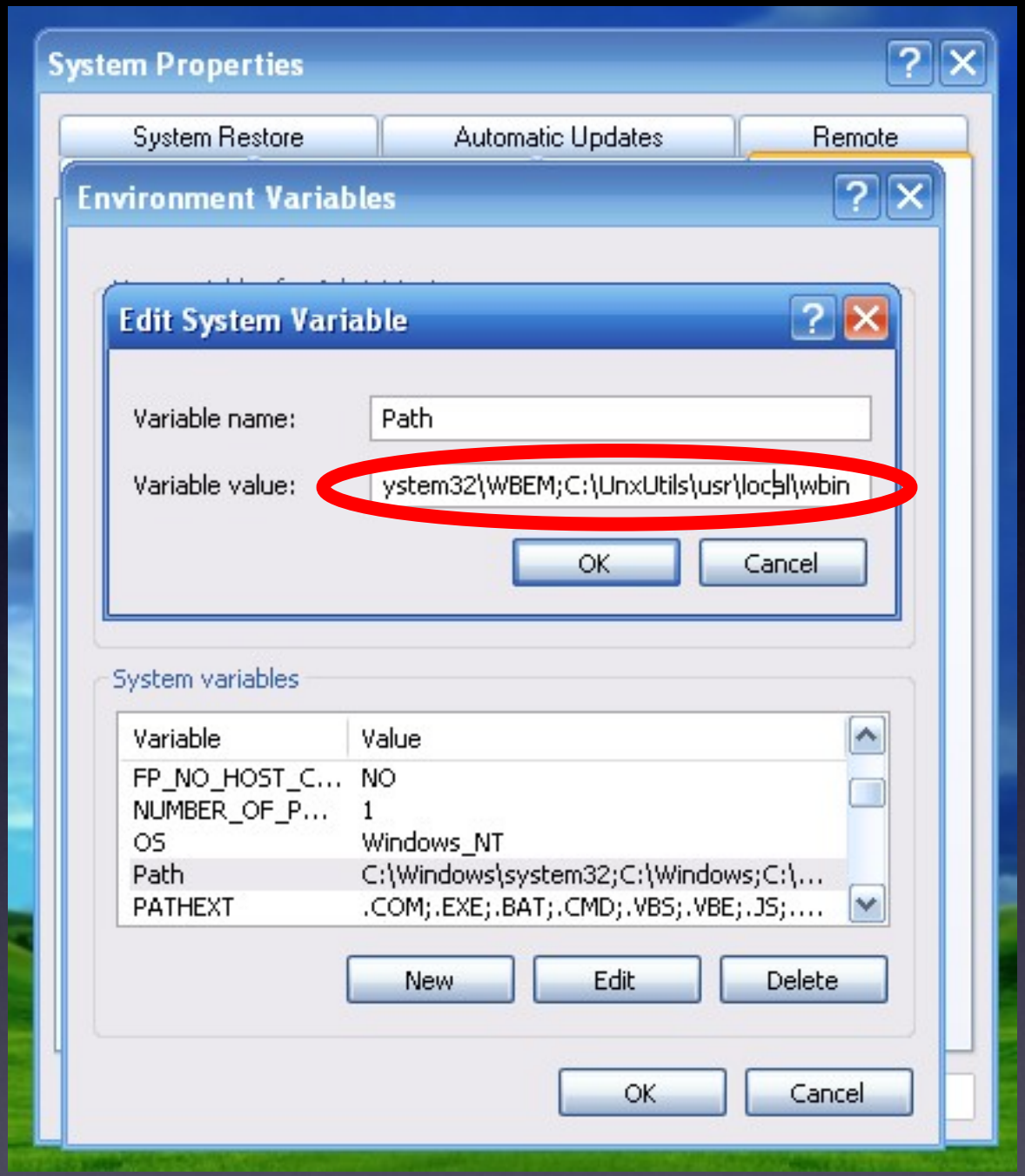
(Lets use http://drupal.org/node/368006)

```
Index: modules/system/system.admin.inc
===================================================================
RCS file: /cvs/drupal/drupal/modules/system/system.admin.inc,v
retrieving revision 1.235
diff -u -p -r1.235 system.admin.inc
--- modules/system/system.admin.inc     9 Dec 2009 15:40:06 -0000     1.235
+++ modules/system/system.admin.inc     10 Dec 2009 01:29:55 -0000
@@ -928,7 +928,7 @@ function _system_modules_build_row($info
   if (!isset($info['core']) || $info['core'] != DRUPAL_CORE_COMPATIBILITY || empty($info['files'])) {
     $compatible = FALSE;
     $status_short .= t('Incompatible with this version of Drupal core. ');
-    $status_long .= t('This version is incompatible with the !core_version version of Drupal core. ',
array('!core_version' => VERSION));
+    $status_long .= t('This version is not compatible with Drupal !core_version and should be replaced.',
array('!core_version' => DRUPAL_CORE_COMPATIBILITY));
   }

   // Ensure this module is compatible with the currently installed version of PHP.
@@ -2546,7 +2546,7 @@ function theme_system_themes_page($varia

       // Make sure to provide feedback on compatibility.
       if (!empty($theme->incompatible_core)) {
-        $output .= '<div class="incompatible">' . t('This version is incompatible with the !core_version
version of Drupal core.', array('!core_version' => VERSION)) . '</div>';
+        $output .= '<div class="incompatible">' . t('This version is not compatible with Drupal !core_version
and should be replaced.', array('!core_version' => DRUPAL_CORE_COMPATIBILITY)) . '</div>';
       }
       elseif (!empty($theme->incompatible_php)) {
         if (substr_count($theme->info['php'], '.') < 2) {
```

Applying Patches

- If you use a VCS or an IDE, you'll have a good diff and patch tool built in
- Otherwise, try UnxUtils, but it's highly, highly recommended to use some sort of IDE for patching
  - (or don't use Windows)


System Properties
System Restore
Automatic Updates
Remote
General
Computer Name
Hardware
Advanced
You must be logged on as an Administrator to make most of these changes.
Performance
Visual effects, processor scheduling, memory usage, and virtual memory
Settings
User Profiles
Desktop settings related to your logon
Settings
Startup and Recovery
System startup, system failure, and debugging information
Settings
Environment Variables
Error Reporting
OK
Cancel
Apply

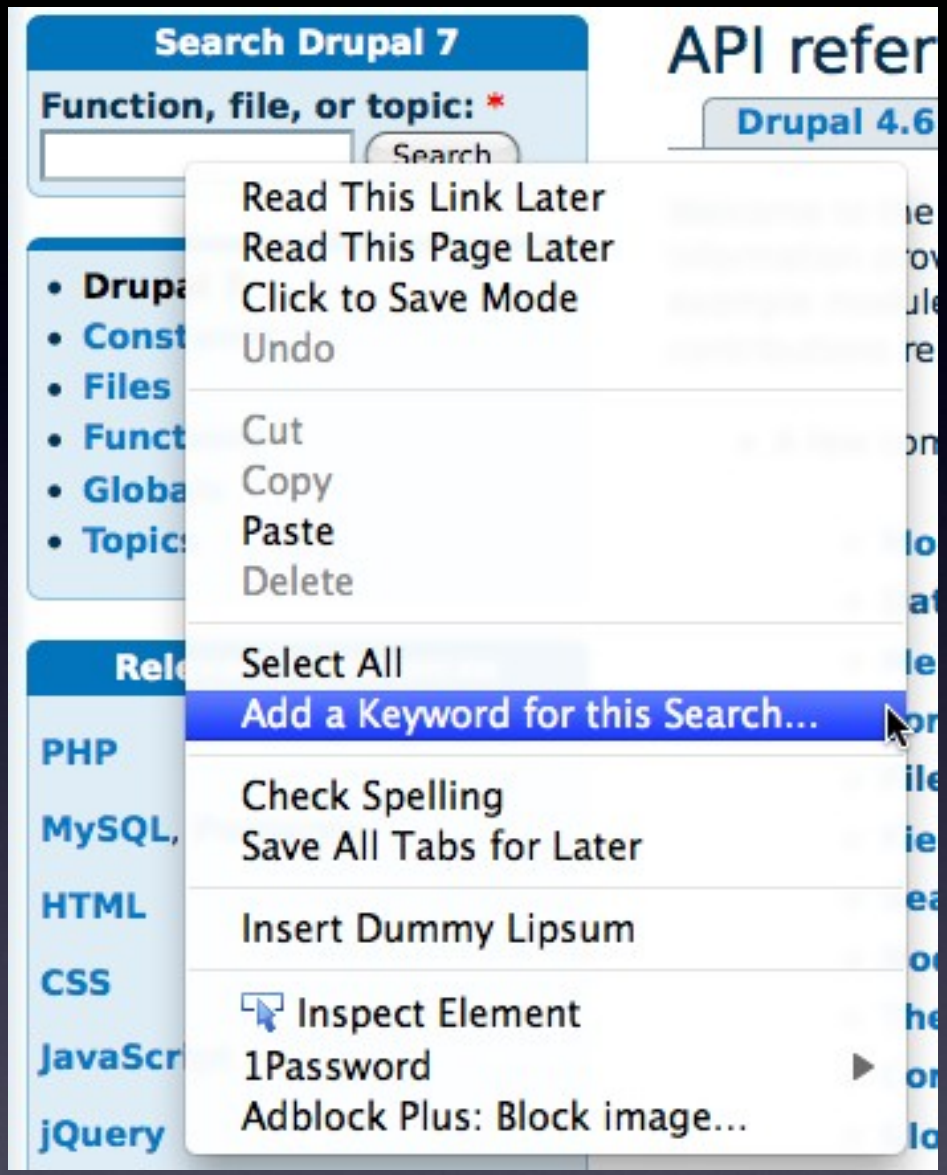

System Properties
System Restore
Automatic Updates
Remote
Environment Variables
Edit System Variable
Variable name:
Path
Variable value:
ystem32\WBEM;C:\UnxUtils\usr\local\wbin
OK
Cancel
System variables
Variable
Value
FP_NO_HOST_C...
NO
NUMBER_OF_P...
1
OS
Windows_NT
Path
C:\Windows\system32;C:\Windows;C:\...
PATHEXT
.COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;....
New
Edit
Delete
OK
Cancel

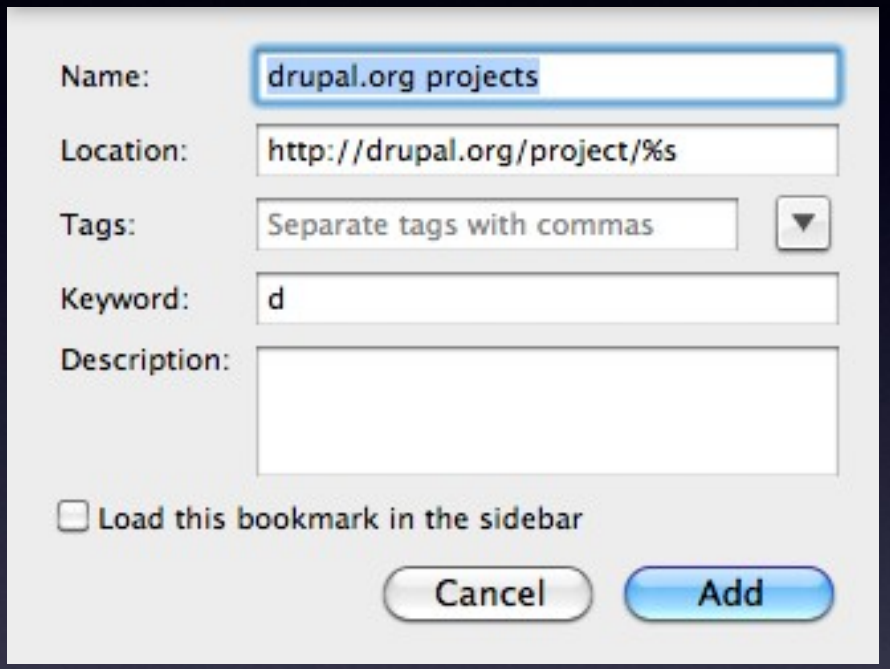
Be sure to test and report!

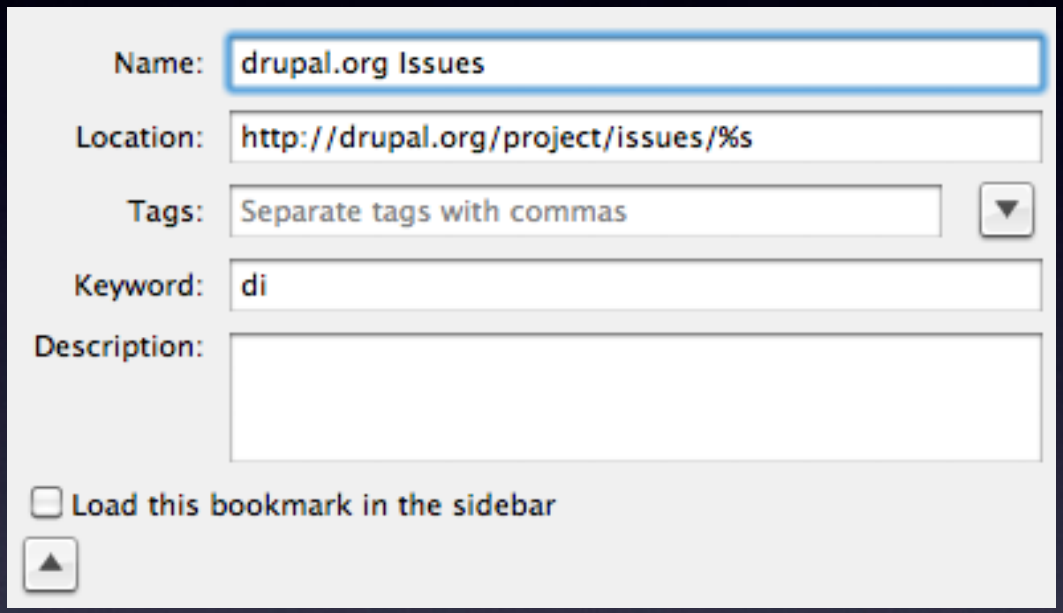
http://drupal.org/patch

Browse Fast!

Custom searches


Search Drupal 7
Function, file, or topic: *
Search
API refer
Drupal 4.6
Drupa
Const
Files
Funct
Globa
Topic
Rele
PHP
MySQL,
HTML
CSS
JavaScr
jQuery
Read This Link Later
Read This Page Later
Click to Save Mode
Undo
Cut
Copy
Paste
Delete
Select All
Add a Keyword for this Search...
Check Spelling
Save All Tabs for Later
Insert Dummy Lipsum
Inspect Element
1Password
Adblock Plus: Block image...


Name:
drupal.org projects
Location:
http://drupal.org/project/%s
Tags:
Separate tags with commas
Keyword:
d
Description:
Load this bookmark in the sidebar
Cancel
Add


Name:
drupal.org Issues
Location:
http://drupal.org/project/issues/%s
Tags:
Separate tags with commas
Keyword:
di
Description:
Load this bookmark in the sidebar

Dreditor

- Patch Reviewer
- Commit message generator
- Embed images in issue bodies
- http://drupal.org/project/dreditor

Drupal Association

- Donations and membership
- Redesign
- Conferences

What else?

- Modules
- Themes
- Advocacy
- Accessibility
- Upstream and downstream projects

I Promised Cookies!

- 3 cups flour
- 1 1/2 teaspoons baking powder
- 1/2 teaspoon salt
- 1 cup white sugar
- 1 cup butter
- 1 egg, beaten
- 3 tablespoons cream
- 1 teaspoon vanilla extract

1. Preheat oven to 400° F
2. Sift together flour, baking powder, salt, and sugar
3. Cut in butter and blend until the mix looks like cornmeal
4. Stir in egg, cream, and vanilla. Blend!
5. Roll onto a floured surface.

Decorate!

- Druplicon is **Wilton Sky Blue 610-700** with white
- Bake 8 minutes