

Drupal 101

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Slides available at:
<http://slideshare.net/vacekrae>



I'm on twitter:
@vacekrae

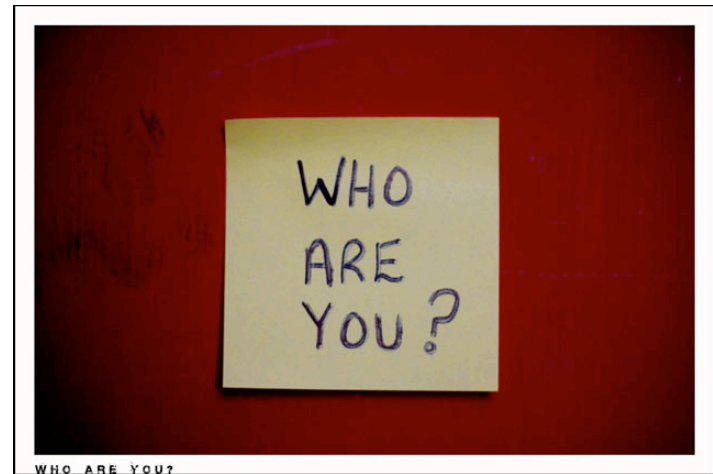


Agenda

- **Introductions**
 - Drupal Overview
 - Content
 - Regions, Blocks & Menus
 - Users, Roles & Permissions
 - Themes
 - Modules: Core, Contributed & Custom
 - Maintenance & Security
 - Tips & Tricks
 - Questions & Answers
-

30-Second Introductions

- Your name, title, affiliation
- What's your role in your library?
- What web development or content management tools are you currently using?
- What do you want to do with Drupal at your library?

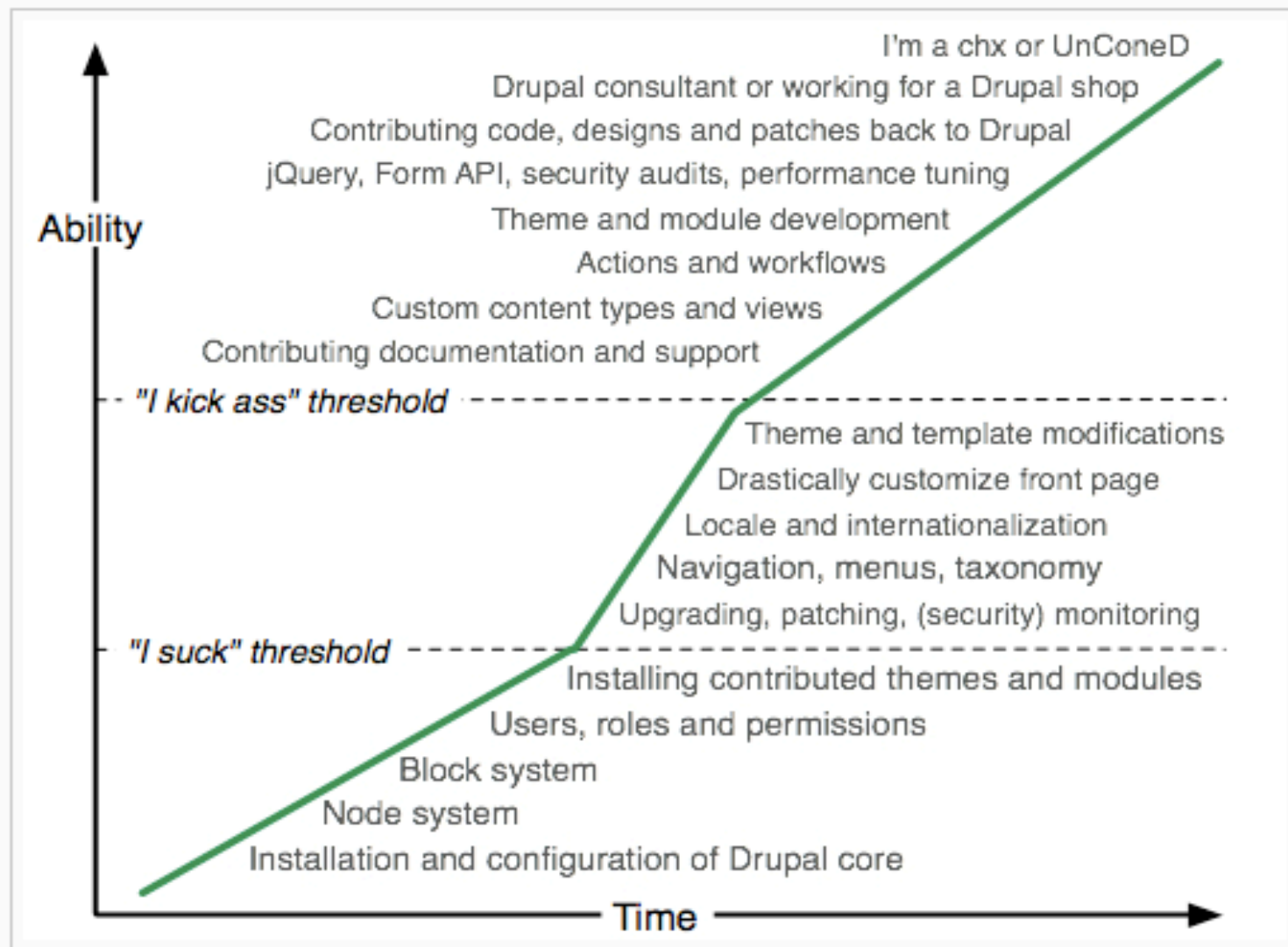


Our Objectives Today

- To become more conversant in Drupal speak
- To learn what is involved in developing, managing and maintaining a basic Drupal site
- To learn about modules most often used by libraries
- To help one another in answering questions about Drupal



Drupal Learning Curve



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

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-

Drupal: What is it?

- An open source content management system (CMS)
- Created by Dries Buytaert
- Web standards-friendly
- Timeline/history
 - Dorp → Drop → Drupal
 - derived from the Dutch word "Druppel" which in English means "Drop"
 - Drupal was born in January 2001
- Version 7 released in January 2011




Drupal: Why Libraries Love It

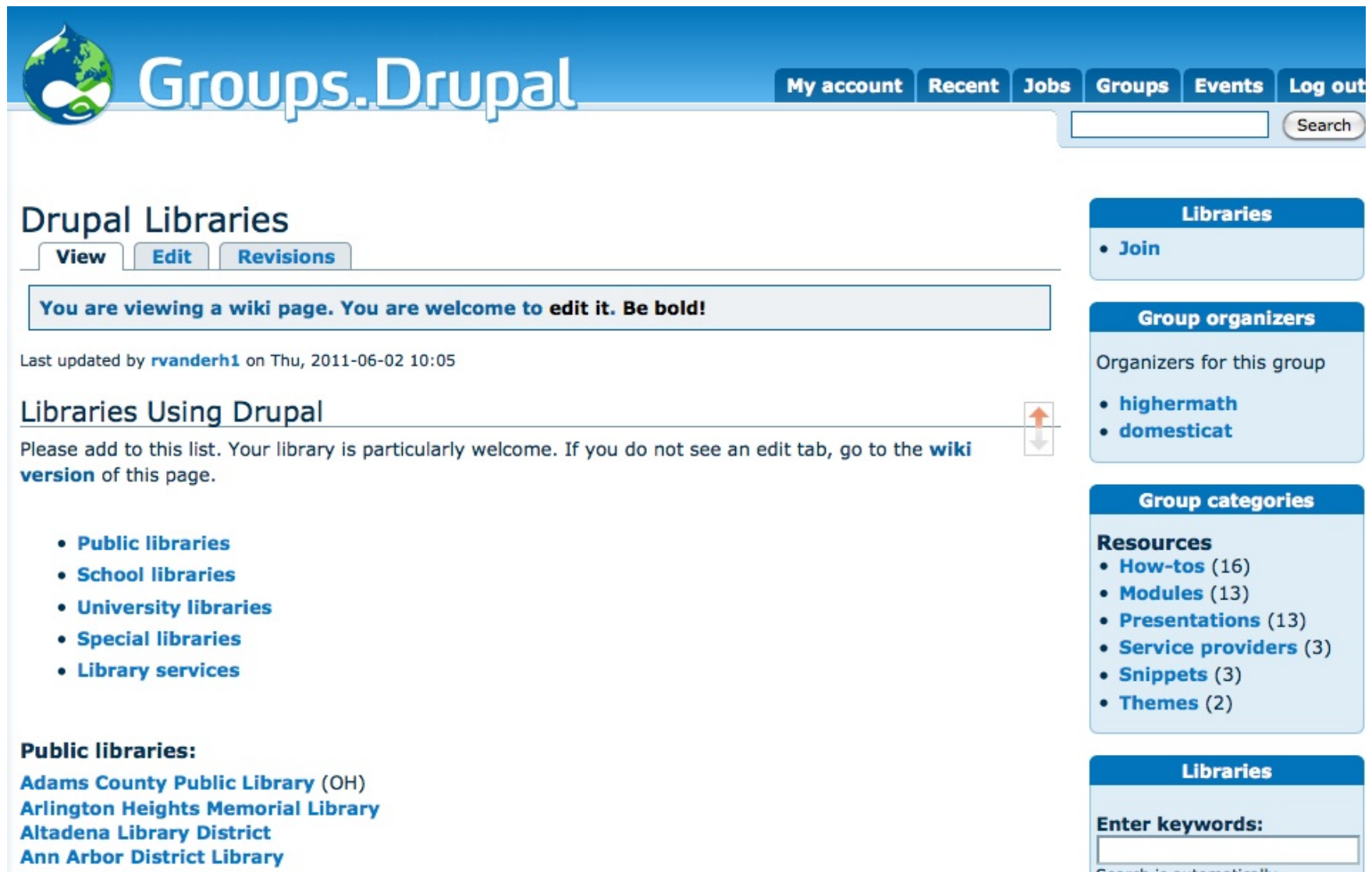
- Easy to deploy a robust web site quickly and easily
- Easy to include many elements of social networking
- Makes customizing library tools for local specifications easy
 - ILS
 - Discover Layer/metasearch tools
 - LibGuides



Open Source: Good for Libraries

- Active community of users and developers
 - Develop modules that can be shared
 - Libraries are expected to do more and more online
 - Libraries without in-house programming support can quickly deploy robust sites
 - Libraries with programmers can create and contribute modules
 - Actively participating in open source communities can save everyone time, headaches, and effort
- 

TONS of libraries are using Drupal



The screenshot shows the Groups.Drupal website interface. At the top is a blue header with the Groups.Drupal logo and navigation links: My account, Recent, Jobs, Groups, Events, and Log out. Below the header is a search bar. The main content area is titled "Drupal Libraries" and includes tabs for View, Edit, and Revisions. A message box states: "You are viewing a wiki page. You are welcome to edit it. Be bold!". Below this, it says "Last updated by rvanderh1 on Thu, 2011-06-02 10:05". The section is titled "Libraries Using Drupal" and includes a prompt: "Please add to this list. Your library is particularly welcome. If you do not see an edit tab, go to the wiki version of this page." A list of library types is shown: Public libraries, School libraries, University libraries, Special libraries, and Library services. Under "Public libraries:", several libraries are listed: Adams County Public Library (OH), Arlington Heights Memorial Library, Altadena Library District, and Ann Arbor District Library. On the right side, there are three sidebar boxes: "Libraries" with a "Join" link, "Group organizers" listing "highermath" and "domesticat", and "Group categories" listing "Resources" with sub-items: How-tos (16), Modules (13), Presentations (13), Service providers (3), Snippets (3), and Themes (2). At the bottom right, there is another "Libraries" box with a search bar and the text "Enter keywords:".

Groups.Drupal

My account Recent Jobs Groups Events Log out

Search

Drupal Libraries

View Edit Revisions

You are viewing a wiki page. You are welcome to edit it. Be bold!

Last updated by [rvanderh1](#) on Thu, 2011-06-02 10:05

Libraries Using Drupal

Please add to this list. Your library is particularly welcome. If you do not see an edit tab, go to the [wiki version](#) of this page.

- [Public libraries](#)
- [School libraries](#)
- [University libraries](#)
- [Special libraries](#)
- [Library services](#)

Public libraries:

- [Adams County Public Library \(OH\)](#)
- [Arlington Heights Memorial Library](#)
- [Altadena Library District](#)
- [Ann Arbor District Library](#)

Libraries

- [Join](#)

Group organizers

Organizers for this group

- [highermath](#)
- [domesticat](#)

Group categories

Resources

- [How-tos](#) (16)
- [Modules](#) (13)
- [Presentations](#) (13)
- [Service providers](#) (3)
- [Snippets](#) (3)
- [Themes](#) (2)

Libraries

Enter keywords:

Search is automatically

<http://groups.drupal.org/node/13473>

Open source is about sharing!



Custom Libhours Module

[Search](#) [Services](#) [About](#) [Help](#)

UNIVERSITY of **HOUSTON** LIBRARIES

M.D. Anderson Library
Today's Hours 7:00am - 9:45pm

[Home](#) >

Library Hours

Architecture & Art Library

M.D. Anderson Library

- Special Collections

Music Library

Optometry Library

SPRING
Jan 17 - Apr 30

SPRING BREAK
Mar 11 - Mar 17

FINALS
May 1 - May 10

INTERSESSION
May 11 - Jun 3

Spring Hours

Sunday:	12:00pm - 12:45am
Monday:	7:00am - 12:45am
Tuesday:	7:00am - 12:45am
Wednesday:	7:00am - 12:45am
Thursday:	7:00am - 12:45am
Friday:	7:00am - 9:45pm
Saturday:	8:00am - 7:45pm

Exceptions

EASTER DAY
Sunday: Apr 8, 1:00pm - 4:45pm

Library hours are subject to change

Libhours Module

- <http://drupal.org/node/1510636>
 - A custom module that lets libraries create hours and exceptions for multiple semesters at multiple branch locations
 - Submitted to Drupal community, still waiting on approval (as of April 17, 2012).
 - Created by Sean Watkins, Web Developer at UH Libraries

Libhours Module at Auraria Library

The screenshot displays the Auraria Library website. At the top, the header features the library's name and a tagline, along with the operating hours. Below this is a navigation bar with links to various library services. The main content area is divided into sections for Library Information and Library Hours. The Library Hours section is currently active, showing a table of Spring Hours for the period from January 16 to May 12, with specific hours listed for each day of the week. A note at the bottom of the hours table states that library hours are subject to change.

AURARIA LIBRARY
Engage your mind. Enrich your future.

Hours: 7:30am - 6:00pm
all library hours

Research Tools Research Guides Library Services Library Info Ask a Librarian

Library Information

- [Staff Directory](#)
- [Comments](#)
- [Library Hours](#)
- [Maps](#)
- [Jobs](#)
- [Mission](#)
- [Library Use Policies](#)

Library Hours

SPRING
Jan 16 - May 12

SPRING BREAK
Mar 18 - Mar 24

FINALS
Apr 30 - May 11

Auraria Library
- Archives

Spring Hours

Sunday:	9:00am - 5:00pm
Monday:	7:30am - 10:00pm
Tuesday:	7:30am - 10:00pm
Wednesday:	7:30am - 10:00pm
Thursday:	7:30am - 10:00pm
Friday:	7:30am - 6:00pm
Saturday:	9:00am - 5:00pm

Library hours are subject to change

Drupal UX

- Steep learning curve → takes time to get across the “I suck” threshold
- More development flexibility than other open source CMSs like Wordpress or Joomla!
- Drupal 7 improves the CMS user experience over previous versions



Drupal Terminology



A word cloud of Drupal terminology. The words are arranged in a circular pattern, with some words appearing more frequently or in larger fonts than others. The colors of the words include green, brown, blue, purple, yellow, and red. The words are oriented in various directions, some horizontal, some vertical, and some diagonal.

blocks
vocabulary
comments
themes
terms
content
modules
menus
users
roles
CCK
views
nodes
taxonomy
story
panels
permissions
pages

Drupal site examples

- UH Libraries private intranet
 - Our 1st Drupal 6 instance
- UH Libraries main website
 - info.lib.uh.edu
 - Our 2nd Drupal 6 instance
- Web Services documentation/project management
 - Our 3rd Drupal 6 instance
 - Open Atrium: <http://openatrium.com/>

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 - Questions & Answers
-

Content: Concepts

- A **node** is a piece of content in Drupal, typically corresponding to a single page on the site
- Every node also belongs to a particular content type, and can additionally be classified using the taxonomy system
- Examples of nodes are polls, stories, book pages and images



Content: Concepts

- Think of nodes as atoms
 - Building blocks of the Drupalverse
 - Think of nodes as structured pieces of content on the site, such as
 - A database listing in a directory of databases
 - A post in a library's news blog
 - The text of a library policy posted online
 - These different things, and anything you can think to create, are “content types”
- 

Content: Concepts


- Options for your home page content
 - Static content
 - Create a page that displays desired content
 - Set as homepage: Configuration → Site Information
 - Dynamic
 - Use “promote to front page” box to display content on the home page
 - A combination
 - Use blocks to display both static and dynamic content

Content: Examples

vacekrEditLogout

Staff DirectoryHelp DeskDepartmentsCommitteesEvents CalendarUH Libraries

Search



ADMIN

Site Content

Pages Owned by Site Admin

Site Building

Blocks

Menus

Modules

Themes

Views

Site Information

Site Configuration

User Management

Reports

Status Report

Available Updates

More Admin Tools

VACEKR

My account

Home / Web Services

Web Services

ViewEditRevisionsTrack

Title: *

Web Services

Vocabularies

Departments & CommitteesTaxonomy: *

-Library Development

-Library Human Resources Department

-Liaison Services

--Reference

--Instruction

--RID

-Special Collections

-Web Services

Other

Content Type:

- None selected -

Enter a term, separated by a comma.

Content: Examples

UH LIBRARIES > INTERLIBRARY LOAN > EDIT > Hello vacekr Logout

Interlibrary Loan

View Edit Outline Revisions ?

This document is now locked against simultaneous editing. It will unlock when you navigate elsewhere.

TITLE: •
Interlibrary Loan

+ Menu settings

+ Right Block

BODY:

Interlibrary Loan (ILL) supports scholarly research by:

- Borrowing materials not available from any UH library
- Scanning and delivering articles to Faculty members
- Delivering library materials to Distance Education students
- Lending UH materials to other libraries

For UH users

All UH students, faculty, and staff are eligible for ILL services. Use ILLiad to place requests, request renewals, and manage your ILL account.

ILLiad now works with your UH CougarNet account!

- New ILLiad users will now register with their CougarNet username and password.
- Users with existing ILLiad accounts who would prefer to use their CougarNet login can register for a new account using their CougarNet username and

+ CAPTCHA: no challenge enabled

Save Preview View changes Cancel

Delete

EDITOR GROUPS:

- Administration
- Catalog Stuff
- Computers & Printing
- Development
- Digital Services
- Electronic Resources
- Gov Docs
- Human Resources
- InterLibrary Loan**

Content: Tips

- Before you build your site, ask these questions:
 - What types of content do you need?
 - How many content types are appropriate?
- Don't create more than what is needed.



23 = Too many content types!

Create content

- Audio

Audio files.

- Electronic Resource License

- Event

Events have a start date and an optional end date as well as a teaser and a body. They can be extended by other modules, too.

- Excel Data

Data files in Excel, tsv, or csv format

- External Links

- Fund Code

- ILS Files

These are files which the ILS Department is making available for folks to download (batch load files, etc)

- Image

An image (with thumbnail). This is ideal for publishing photographs or screenshots.

- Library Logos

- Page

A *page*, similar in form to a *story*, is a simple method for creating and displaying information that rarely changes, such as an "About us" section of a website. By default, a *page* entry does not allow visitor comments and is not featured on the site's initial home page.

- Panel

A panel a page layout broken up into rows and columns.

- PDF

PDF file that you want to be viewed

- Poll

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-

Regions, Blocks & Menus: Concepts

- Regions
 - Preset areas on your web pages into which you may add and arrange content (i.e., blocks)
 - Determined largely by the theme used
- Menus
 - Provide site navigation, sub-navigation
 - They “live” in blocks
- Blocks
 - Think of them as widgets
 - They are chunks of content outside of the main content area of your pages
 - Their visibility on pages can be controlled very precisely

Regions, Blocks & Menus: Examples

Header

vacekr

Edit

Logout

Staff Directory

Help Desk


Departments

Committees

Events Calendar

UH Libraries

Search



ADMIN

Site Content

- Pages Owned by Site Admin

Site Building

- Blocks
- Menus
- Modules
- Themes
- Views

Site Information

Site Configuration

User Management

Reports

- Status Report
- Available Updates

More Admin Tools

Home / Administer / Site building

Right sidebar

Content top

Blocks

List

Add block


About Garland

This page provides a drag-and-drop interface for assigning a block to a region, and for controlling the order of blocks within regions. To change the region or order of a block, grab a drag-and-drop handle under the *Block* column and drag the block to a new location in the list. (Grab a handle by clicking and holding the mouse while hovering over a handle icon.) Since not all themes implement the same regions, or display regions in the same way, blocks are positioned on a per-theme basis. Remember that your changes will not be saved until you click the *Save blocks* button at the bottom of the page.

Click the *configure* link next to each block to configure its specific title and visibility settings. Use the **add block** page to create a custom block.

[more help...]

VACEKR

 acquia drupal

Getting Started with Drupal

My accountLog out

Header

HomeAbout

Featured

Home

Sidebar first

Highlighted

Sidebar second

Bartik

Help

Content

Triptych first

Triptych middle

Triptych last

Footer first column

Footer second column

Footer third column

Footer fourth column

Footer

Regions, Blocks & Menus: Examples

[Home](#) » [Administer](#) » [Site building](#) »

Blocks

List

Add block

Zen Based UH Libraries

Rubik

Zen

This page provides a drag-and-drop interface for assigning a block to a region, and for controlling the order of blocks within regions. To change the region or order of a block, grab a drag-and-drop handle under the *Block* column and drag the block to a new location in the list. (Grab a handle by clicking and holding the mouse while hovering over a handle icon.) Since not all themes implement the same regions, or display regions in the same way, blocks are positioned on a per-theme basis. Remember that your changes will not be saved until you click the *Save blocks* button at the bottom of the page.

Click the *configure* link next to each block to configure its specific title and visibility settings. Use the [add block page](#) to create a custom block.

[\[more help...\]](#)

Summon Search Box

Highlight (right box, used with summon)

left sidebar

Block	Region	Operations
navigation bar		
⛶ Superfish 1 (Superfish)	navigation bar	configure
Ticker/Messages bar		
⛶ Site Alert	Ticker/Messages bar	configure

right sidebar

Regions, Blocks & Menus: Examples

The screenshot displays the University of Houston Libraries website. At the top, there is a navigation bar with links for Search, Services, About, and Help. Below this, the header includes the University of Houston Libraries logo and the M.D. Anderson Library's current hours (7:00am - 10:45pm). The main content area is divided into several sections. On the left, a sidebar menu lists links for OneSearch, e-Journals, Databases, Catalog, Research Guides, and Site Search. The central area features a large search box with the OneSearch logo and a search button, accompanied by a search tip and links to Advanced Search and OneSearch News. To the right of the search box is a promotional banner for 'Strategic Directions 2010-2013'. Below the main content area, there are three columns of links under the headings 'Services', 'About', and 'Help'. The footer contains copyright information and a series of links for website feedback, policies, and other resources.

UNIVERSITY of **HOUSTON** LIBRARIES

M.D. Anderson Library
Today's Hours 7:00am - 10:45pm

View Edit Outline Revisions

OneSearch
e-Journals
Databases
Catalog
Research Guides
Site Search

ONESEARCH

Search for articles, books and more.

[Advanced Search](#) | [OneSearch News](#)

STRATEGIC DIRECTIONS
2010-2013

Strategic Directions

Services »

- [Interlibrary Loan](#)
- [View & Renew](#)
- [Computers & Printing](#)
- [For Faculty & Graduate Students](#)
- [Course Reserves](#)
- [More...](#)

About »

- [Hours](#)
- [Campus Libraries & Collections](#)
- [Maps & Directions](#)
- [Staff Directory](#)
- [Employment](#)
- [News & Events](#)
- [More...](#)

Help »

- [Contact Us](#)
- [Ask a Librarian](#)
- [Live Chat](#)
- [Research Guides](#)
- [FAQs for Accessing Electronic Resources](#)
- [More...](#)

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[Website Feedback](#) | [Policies](#) | [Giving to the Libraries](#) | [Contact Us](#) | [Maps & Directions](#) | [Site Map](#) | [Mobile Site](#)

[UH Home](#) | [UH System](#) | [State of Texas](#) | [Emergency Site](#)

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Users, Roles & Permissions: Concepts

- “Users” are:
 - People who will visit your site
 - People who will create content for your site
 - People who will manage your site
 - Users are placed into “roles” that allow them access to the parts of the site that they work on
 - “Permissions” are assigned to roles to control the actions that they can take on parts of the site
 - One of Drupal’s great strengths is flexibility and granularity regarding users
- 

Users, Roles & Permissions: Concepts

- To create a user, you need 3 pieces of info
 - Username
 - Password
 - Email address (verification highly recommended)
- More options: include picture/signature
 - Useful? Maybe on an intranet site or a more social library site



Users, Roles & Permissions: Concepts

- Options for user account creation
 - Unmoderated
 - Use with extreme caution!
 - Spammers WILL find you!
 - Moderated
 - Users can request accounts, but site admins have to approve requests
 - Administrative approval required
 - Recommended




Users, Roles & Permissions: Concepts

- Create roles conservatively and precisely
- Too many roles can complicate permissions management
- Always follow the “principle of least privilege”
 - Everyone should have access to exactly everything they need to do their jobs, and nothing more



Users, Roles & Permissions: Concepts

- The roles that you create will depend heavily on your environment
 - The more types of content that you have, the more roles you should have
 - Analogy:
 - Think of roles relative to job duties among various staff in libraries
 - Different staff have access to different physical resources
- 

Users, Roles & Permissions: Examples

Name		Operations
anonymous user	locked	edit permissions
authenticated user	locked	edit permissions
administrator	edit role	edit permissions
collections	edit role	edit permissions
editor	edit role	edit permissions
super editor	edit role	edit permissions
<input type="text"/>		<button>Add role</button>

Roles on our Intranet

Users, Roles & Permissions: Examples

Name	Operations	
anonymous user	locked	edit permissions
authenticated user	locked	edit permissions
admin editor	edit role	edit permissions
administrator	edit role	edit permissions
developer	edit role	edit permissions
editor	edit role	edit permissions
form editors	edit role	edit permissions
form recipient	edit role	edit permissions
senior editor	edit role	edit permissions
<input type="text"/>	<input type="button" value="Add role"/>	

Roles on our main website

Users, Roles & Permissions: Examples

Permission	anonymous user	authenticated user	admin editor	administrator	developer	editor	form editors	form recipient	senior editor
----- permission: manage content -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
add content to books	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
administer book outlines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
create new books	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
captcha module									
administer CAPTCHA settings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
skip CAPTCHA	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
cas module									
administer cas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
comment module									
access comments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
administer comments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
post comments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
post comments without approval	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
content module									
Use PHP input for field settings (dangerous – grant with care)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
content_lock module									
administer checked out documents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
check out documents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
keep documents checked out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
content_permissions module									
edit field_event_date	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
edit field_location	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
edit field_rightblock_content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
edit field_rightblock_title	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
view field_event_date	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
view field_location	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
view field_rightblock_content	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
view field_rightblock_title	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Users, Roles & Permissions: Tips

- Before creating roles and permissions, ask these questions:

What are our internal user policies?

- Who should have access?
- What should they have access to?

What are our external user policies?

- Will you allow user-contributed content?
- Will you allow users to create their own accounts?
- Will you require user email account verification?
- Who will manage user accounts and monitor user activity?



Users, Roles & Permissions: Tips

- Helpful Modules
 - **LDAP**: integration synchs user accounts with your network accounts
 - **CAS**: allows for single sign-on into multiple systems
 - **Inactive User**: Sends notifications to and deletes inactive users



Agenda

- Introductions
 - Drupal Overview
 - Content
 - Regions, Blocks & Menus
 - Users, Roles & Permissions
 - **Themes**
 - Modules: Core, Contributed & Custom
 - Maintenance & Security
 - Tips & Tricks
 - Questions & Answers
-

Themes: Concepts

- Themes control the look and feel of your web site
 - PHP templates with HTML and CSS
 - There are currently ~955 contributed themes for Drupal sites
- Drupal 7 comes with four standard themes:
 - Bartik: named for Jean Bartik
 - Seven: administrative theme
 - Garland: an old Drupal standard
 - Stark: used primarily as demonstration



Themes: Concepts

“Build first. Then theme.”

- Stephanie Pakrul,
Drupal Enthusiast



Themes: Concepts

- Four kinds of themes:
 - Default: comes with your installation of Drupal
 - Bartik, Seven, Garland as examples
 - Starter: you have to find, download and install
 - Zen, Fusion as examples
 - Contributed: you have to find, download and install
 - 8 gazillion, or so it seems
 - Custom: requires advanced HTML + CSS skills
 - And once you build it, share it with the Drupal community



Themes: Concepts

- Default and Contributed themes:
 - Modify colors
 - Change fonts
 - Add images
 - Check configuration options for different layout possibilities, i.e., column arrangements



Themes: Concepts

- Starter and Custom themes:
 - Starter themes give a basic layout that can be heavily modified
 - Custom themes, which are beyond the scope of this workshop, can be created using HTML and CSS with a PHP template



Themes: Concepts

To find contributed themes:

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



Themes: Tips

- When looking for themes:
 - Search by:
 - Drupal version
 - Project status
 - Keyword
 - Most installed
 - Date released
 - Check for:
 - Commits
 - Maintainer
 - Community activity



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Modules: Concepts


- Modules add functionality to your cms, extending the flexibility, making it more powerful
- There are ~9914 contributed modules for Drupal sites
- If a module doesn't do what you want it to do, if you find a bug, or have a suggestion, work with the module owner/contributors
- Warning: **DO NOT HACK CORE!**
 - Upgrades will be hell




**Every time you hack core
God kills a kitten**

Please, think of the kittens!

Modules: Concepts

- Three kinds of modules:
 - Core: comes with your installation of Drupal
 - Bartik, Seven, Garland as examples
 - Starter: you have to find, download and install
 - Zen, Fusion as examples
 - Contributed: you have to find, download and install
 - 8 gazillion, or so it seems
 - Custom: requires advanced HTML + CSS skills
 - And once you build it, share it with the Drupal community
- 

Modules: Concepts

- Not everything comes in core: you'll still need to add some essential modules
 - Why?
 - As Drupal evolves, you want your CMS to remain flexible.
 - If modules that have functionality that will evolve constantly, it's better to not lock them down by including them in core.
 - If modules provide a UI, then it's better to not be in core, providing more flexibility.
- 

Modules: Concepts

To find contributed modules:

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



Essential Contributed Modules

- **Views** provide a flexible method for Drupal site designers to control how lists and tables of content are presented. This tool is essentially a smart query builder that, given enough information, can build the proper query, execute it, and display the results. It's very powerful and one of the most used modules on this entire list.



Example of Views Module

Export Clone View "Information and Access Services News Archive" View "Information and Access Services Feed"

View `access_services_news`, displaying items of type **Node**.

Defaults

Information and Access Services Headlines

Information and Access Services News Archive

Information and Access Services Date Archive

Information and Access Services Feed

Page ▾

Add display

Analyze

Information and Access Services News Archive Display the view as a page, with a URL and menu links. Remove display

Basic settings

Name: [Information and Access Services News Archive](#)

Title: [Information and Access Services News Archive](#)

Style: [HTML List](#)

Row style: [Node](#)

Use AJAX: [No](#)

Use pager: [Mini](#)

Items per page: [8](#)

Distinct: [No](#)

Access: [Unrestricted](#)

Caching: [None](#)

Exposed form in block: [No](#)

Header: [None](#)

Footer: [None](#)

Empty text: [None](#)

CSS class: [None](#)

Theme: [Information](#)

Relationships + ↑↓

[None defined](#)

Arguments + ↑↓

[Node: Created year + month](#)

Fields

The style selected does not utilize fields.

Sort criteria + ↑↓

[Node: Sticky desc](#)

[Node: Updated date desc](#)

Filters + ↑↓

[Node: Type in Poll, Event, ...](#)

[Node: Published Yes](#)

[Taxonomy: Term = Information & Access Services](#)

Page settings

Path: [news/access](#)

Menu: [No menu](#)

Example of Views Module

News

IAS Spring 2012 Update
1/9/12 Basement Water Intrusion
Library Schedule - December 2011
Recently Asked, November 15th, 2011
Leisure Reading Order October 26, 2011
Using the UH Libraries Flyer Fall 2011
Leisure Reading, September 13, 2011
Leisure Reading, 7 September 2011

[more](#)



Example of Views Module

ARCHIVES

- January 2012 (2)
- November 2011 (2)
- October 2011 (1)
- September 2011 (3)
- August 2011 (1)
- July 2011 (1)
- June 2011 (1)
- March 2011 (2)
- February 2011 (1)
- September 2010 (1)
- August 2010 (3)
- June 2010 (1)
- May 2010 (1)
- February 2010 (1)
- November 2009 (2)
- March 2009 (1)
- November 2008 (2)

Information and Access Services News Archive

IAS Spring 2012 Update

The [IAS Spring Update](#) is now available! Let me know if you have any questions and have a great semester!

Lee

 Add new comment 17 reads

1/9/12 Basement Water Intrusion

On January 9, 2012 the heavy rains caused a water intrusion into the basement of the M.D. Anderson library. A remediation & recovery plan is in the works.

Basement collections---Bound Journals, Current Journals, Microforms, Government Documents, and the remaining piece of the Reference Collection, are currently inaccessible. A plan for partial access will be in place at a later date.

The copiers, 2 flatbed scanners, all microfilm readers, and the Shelving Services walk up public service site located in the basement are unavailable.

 Add new comment  Read more 32 reads

Library Schedule - December 2011

The [December calendar](#) is now available with the 24 hours periods and short holiday hours marked.

Modules: Tips

- Tutorial: Intro to Views
 - <http://lin-clark.com/blog/intro-drupal-7-intro-views-pt-1>
- Drupalove: 100 Drupal Views Tutorials
 - <http://www.drupalove.com/article/100-drupal-views-tutorials-and-resources>
- Book: Foundation Drupal 7, by Robert Townsend,
 - Appendix D: Views Recipes



Essential Contributed Modules

- **Organic Groups** enable users to create and manage their own 'groups'. Each group can have subscribers, and maintains a group home page where subscribers communicate amongst themselves.



Essential Contributed Modules

- **Pathauto** automatically generates human-friendly URL path aliases for content nodes.
- **Google Analytics** offers more options and is cleaner than just pasting google analytics code in your site.




Essential Contributed Modules

- **Mollom** is an "intelligent" content moderation web service. By monitoring content activity on all sites in the Mollom network, Mollom is in a unique position to determine if a post is potentially spam; not only based on the posted content, but also on the past activity and reputation of the poster.
- Also provides CAPTCHAs



Essential Contributed Modules

- **Millennium Module** works with Ill's Millennium catalog to import data to create a mini nextgen catalog in Drupal
 - OPAC items are imported as a nodes
 - Amazon can be used to provide cover images
 - Import a few items for a featured list, or recreate your whole catalog
 - Similar modules (not yet available for Drupal 7):
 - SOPAC
 - eXtensible Catalog
- 

Modules: Tips

- When looking for modules:

- Search by:

- Drupal version
 - Project status
 - Keyword
 - Most installed
 - Date released

- Check for:

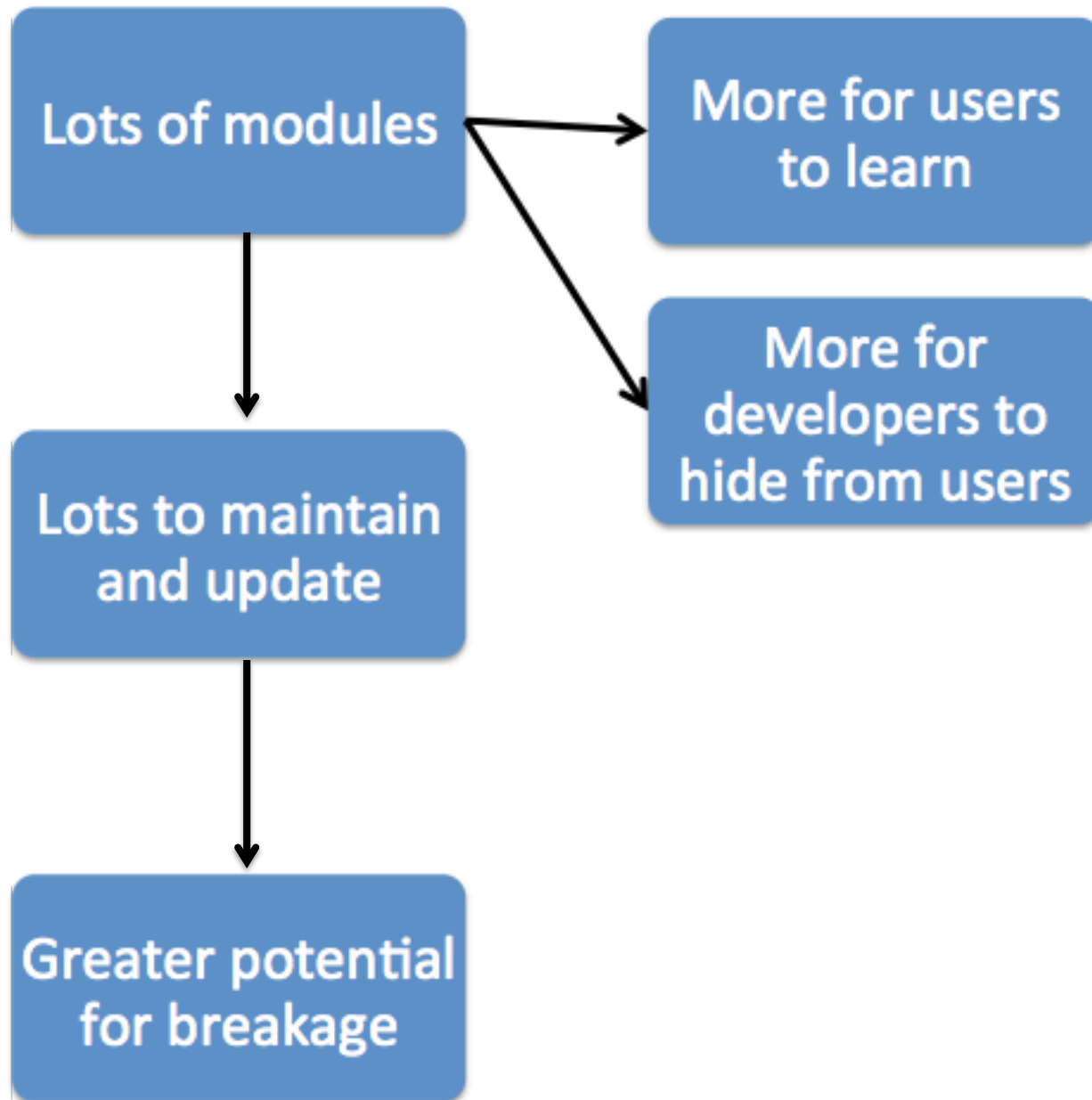
- Commits
 - Bug reports
 - Maintainer
 - Community activity



Modules: Tips

An investment in CMS simplification and respect for the user experience can yield an extremely powerful system run by satisfied, happy users.





Custom Modules: Examples

- Custom modules
 - Beyond the scope of what I'll cover today
 - You need a programmer
 - Examples at the University of Houston Libraries
 - Staff Directory System (SDS)
 - Electronic Database System (EDBS)
 - Libhours → has been submitted to Drupal community, awaiting approval as of April 2012

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 - Tips & Tricks
 - Questions & Answers
-

Maintenance & Security

- Maintenance
 - Backing up your site
 - Keeping your site up-to-date
- Security
 - Keep your site safe from spammers and other baddies
 - Use the correct file permissions settings to prevent manipulation via the web server (Apache)

Maintenance: Concepts

- Backups are an important part of your maintenance and security routine
- What needs to be backed up?
 - The MySQL database (most content)
 - The site file structure, especially the “files” directory (uploaded images and files)
- Backup routines can be automated (cron) to save time and circumvent forgetfulness



Maintenance: Concepts

- When you opt to use a robust CMS such as Drupal, you are committing to a maintenance regime
- A site that is not maintained becomes a security risk not only to itself, but to the environment hosting it
- A site that is not maintained will eventually become obsolete and /or broken beyond repair



Maintenance: Concepts

- Modules and themes need to be updated
 - View available updates: Reports → Available updates
 - Your “Available updates” page should look like a healthy lawn, not look like a Christmas tree
- Your overall version of Drupal core needs to be updated as well
 - Requires (hopefully a small amount of) down time

Maintenance: Concepts

- Your underlying web environment (OS, Apache, PHP, and MySQL) need to remain up-to-date as well
- Create a regular backup and maintenance schedule
- Regular updates of both the web server and Drupal components keep the update process shorter and simpler and minimize down time



Maintenance: Concepts

- Update vs. Upgrade
 - Update: moving from one minor version to another
 - Drupal 6.18 → Drupal 6.20
 - Upgrade: moving from one major version to another
 - Drupal 6 → Drupal 7



Maintenance: Tips

- Helpful Modules
 - **Backup and Migrate:**
Provides interface in Drupal admin screens to create and restore databases. It's also a command line alternative.



Php myAdmin

The screenshot displays the phpMyAdmin web interface. On the left sidebar, there is a list of databases: `acquia_drupal` (75), `information_schema` (28), and `mysql` (23). Below this list, a message says "Please select a database". The main content area is titled "View dump (schema) of databases". It contains two primary sections: "Export" and "Options".

Export Section:

- Buttons: [Select All](#) / [Unselect All](#)
- Database list: `acquia_drupal`, `information_schema`, `mysql`
- Format selection (radio buttons):
 - ☐ CodeGen
 - ☐ CSV
 - ☐ CSV for MS Excel
 - ☐ Microsoft Word 2000
 - ☐ LaTeX
 - ☐ MediaWiki Table
 - ☐ Open Document Spreadsheet
 - ☐ Open Document Text
 - ☐ PDF
 - ☐ PHP array
 - ☒ SQL
 - ☐ Texy! text
 - ☐ Excel 97-2003 XLS Workbook
 - ☐ Excel 2007 XLSX Workbook
 - ☐ YAML

Options Section:

Add custom comment into header (\n splits lines):

☒ Comments

☐ Enclose export in a transaction

☐ Disable foreign key checks

SQL compatibility mode:

Database export options:

☐ Add DROP DATABASE

Structure:

☒ Structure

☐ Add DROP TABLE / VIEW / PROCEDURE / FUNCTION / EVENT

☒ Add IF NOT EXISTS

☒ Add AUTO_INCREMENT value

☒ Enclose table and field names with backquotes

☐ Add CREATE PROCEDURE / FUNCTION / EVENT

Add into comments:

☐ Creation/Update/Check dates

Data:

☒ Complete inserts

☒ Extended inserts

Maximal length of created query:

☐ Use delayed inserts

☐ Use ignore inserts

☒ Use hexadecimal for BLOB

Export type:

Maintenance: Examples

Views Bulk Operations (VBO) 6.x-1.9		Security update required! 	
Recommended version:	6.x-1.13 (2012-Feb-06)	Download	Release notes
Security update:	6.x-1.11 (2011-Sep-21)	Download	Release notes
Security update:	6.x-1.10 (2010-Oct-06)	Download	Release notes
Includes: <i>Views Bulk Operations</i>			
Webform 6.x-2.9		Security update required! 	
Recommended version:	6.x-3.17 (2012-Mar-07)	Download	Release notes
Security update:	6.x-3.17 (2012-Mar-07)	Download	Release notes
Security update:	6.x-3.10 (2011-May-18)	Download	Release notes
Security update:	6.x-3.5 (2011-Jan-10)	Download	Release notes
Includes: <i>Webform</i>			
Wordpress Import 6.x-1.0		Security update required! 	
Recommended version:	6.x-2.2 (2011-Apr-04)	Download	Release notes
Security update:	6.x-2.1 (2010-May-18)	Download	Release notes
Includes: <i>Wordpress import</i>			
Workflow 6.x-1.4		Update available 	
Recommended version:	6.x-1.5 (2010-Oct-27)	Download	Release notes

Maintenance: Examples

Views Bulk Operations (VBO) 6.x-1.9		Security update required! 	
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Security update:	6.x-2.1 (2010-May-18)	Download	Release notes
Includes: <i>Wordpress import</i>			
Workflow 6.x-1.4		Update available 	
Recommended version:	6.x-1.5 (2010-Oct-27)	Download	Release notes

THIS IS BAD!

Maintenance: Examples

Diff 6.x-2.1		Update available 
Recommended version:	6.x-2.3 (2011-Aug-07)	Download Release notes
Includes: <i>Diff</i>		
Email Field 6.x-1.2		Up to date 
Includes: <i>Email</i>		
Global Redirect 6.x-1.2		Update available 
Recommended version:	6.x-1.4 (2011-Dec-20)	Download Release notes
Includes: <i>Global Redirect</i>		
Google Analytics 6.x-3.0		Update available 
Recommended version:	6.x-3.3 (2011-Mar-28)	Download Release notes
Includes: <i>Google Analytics</i>		
jQuery UI 6.x-1.4		Update available 
Recommended version:	6.x-1.5 (2011-Jun-17)	Download Release notes
Includes: <i>jQuery UI</i>		
Menu Breadcrumb 6.x-1.3		Up to date 
Includes: <i>Menu breadcrumb</i>		
Pathauto 6.x-1.5		Update available 
Recommended version:	6.x-1.6 (2011-Oct-31)	Download Release notes
Also available:	6.x-2.0 (2011-Oct-31)	Download Release notes
Includes: <i>Pathauto</i>		
reCAPTCHA 6.x-1.4		Update available 
Recommended version:	6.x-1.7 (2011-May-04)	Download Release notes
Includes: <i>reCAPTCHA</i> , <i>reCAPTCHA Mailhide</i>		
Superfish 6.x-1.6		Update available 

Maintenance: Examples

Diff 6.x-2.1	Update available 
Recommended version: 6.x-2.3 (2011-Aug-07)	Download Release notes
Includes: <i>Diff</i>	
Email Field 6.x-1.2	Up to date 
Includes: <i>Email</i>	
Global Redirect 6.x-1.2	Update available 
Recommended version: 6.x-1.4 (2011-Dec-20)	Download Release notes
Includes: <i>Global Redirect</i>	
Google Analytics 6.x-3.0	Update available 

THIS IS BETTER!

Includes: <i>jQuery UI</i>	
Menu Breadcrumb 6.x-1.3	Up to date 
Includes: <i>Menu breadcrumb</i>	
Pathauto 6.x-1.5	Update available 
Recommended version: 6.x-1.6 (2011-Oct-31)	Download Release notes
Also available: 6.x-2.0 (2011-Oct-31)	Download Release notes
Includes: <i>Pathauto</i>	
reCAPTCHA 6.x-1.4	Update available 
Recommended version: 6.x-1.7 (2011-May-04)	Download Release notes
Includes: <i>reCAPTCHA</i> , <i>reCAPTCHA Mailhide</i>	
Superfish 6.x-1.6	Update available 

Maintenance: Tips

- Updates to Drupal Core require downtime
- Clone your environment and test before upgrading to a live site
- The more complicated your site, the more complicated the upgrade process
- Customizations should be checked



Security: Concepts

- Controlling user behavior
 - User settings:
 - As mentioned earlier, require user account creation by admins
 - Or, at the very least, require email verification
 - Comment settings:
 - Always set comments for “moderated”
 - IP blocking: somewhat limited in use
-

Security: Concepts

- Ensure that file permissions settings are secure and not writable by the server
- Untrusted users are prevented from inputting dangerous code
- Errors are written to the logs, not the screen
- Unsafe file extensions are not allowed



Security: Tips

- If you hacked core:
 - You have to un-customize and re-customize all of your modifications before and after each update/upgrade
 - You won't be able to find support or documentation to help you solve problems created by the ways you developed



Security: Tips

- Have a full disaster recovery plan that covers your server environment, your Drupal installation, and your content (database)
- Document and practice the restoration procedure
- Train others in the process as appropriate
- Don't wait until an actual disaster to test your plan



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 - Questions & Answers
-

Tips & Tricks

- Do research on themes and modules FIRST
 - Pay attention to your peers
 - Follow the “use only what you need” philosophy
 - Find balance between usability and functionality
 - Don't give users too many options
-

Tips & Tricks

- “Remove” the extraneous stuff
- Create templates for multiple page layouts
- Create roles for basic users as well as advanced users
- Documentation
 - How certain tools work
 - Reasoning for choices
- Create and embed self-help within CMS
- Conduct usability testing on the CMS



CMS Pain Assessment Tool

Choose the face that best represents how your CMS makes you feel



Hearts!
Rainbows!
Puppies!



Meh, it could
be worse.



Is it happy
hour yet?



What did I do
to deserve this?



CMS stands
for Cruel,
Maleficent,
Sadist.



THIS IS WHY WE
CAN'T HAVE
NICE THINGS.

http://www.isitedesign.com/insight-blog/10_11/cms-pain-assessment

Further Resources: Books

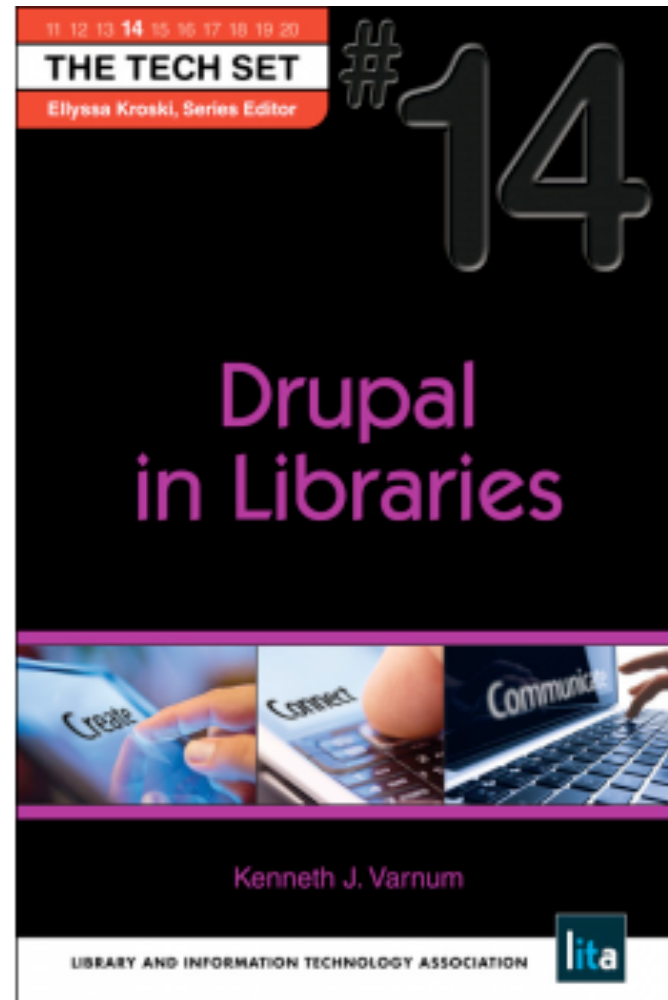
- **Foundation Drupal 7**, by Robert J. Townsend
- **Cracking Drupal: A Drop in the Bucket**, by Greg Knaddison
- **The Definitive Guide to Drupal 7**, tons of authors, published by Apress
- **Beginning Drupal 7**, by Todd Tomlinson



Further Resources:

Books coming soon!

- **Drupal in Libraries**,
by Ken Varnum
 - #14 in The Tech Set
 - June 2012



Futher Resources: Tutorials


- Lynda, <http://www.lynda.com/>
 - Some free tutorials, full access requires subscription
 - Drupal offerings
 - 7 Essential Training
 - Lullabot, <http://www.lullabot.com/>
 - Drupal Easy, <http://drupaleasy.com/>, Free podcasts on Drupal
- 

Further Resources: Drupal Communities

- ALA LITA Drupal Interest Group
 - <http://connect.ala.org/node/71787>
 - Meetings and programming at ALA Midwinter and Annual
 - drupal4lib email list
 - Level: Beginner → Advanced
 - Don't have to be a LITA member to go to meetings or participate in activities
 - Presentations about uses of Drupal in libraries
 - Coming soon: Online training



Further Resources: Drupal Communities

- Drupalib
 - <http://drupalib.interoperating.info/>
 - a place for library Drupallers to hang out that lists library specific modules
 - Drupalcons
 - Conferences for Drupallers, different cities every year
 - Drupalcon, Portland, Oregon, May 20-24, 2013
 - Drupal Meetup Groups
 - <http://drupal.meetup.com/>
- 

Thanks!



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