Acquia training manual appendices

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This is the Appendix for Acquia's training materials. We're distributing here so you can get the latest updates and easy access to links.

This file is available at http://tinyurl.com/trainingappendix

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I. Resources

An up to date list of recommended resources for learning Drupal is maintained at: http://training.acquia.com/resources-list

Connect to the community

Create an account

- Go to http://drupal.org/user/register
- · Fill out username, password, email address, and country.
- · Create new account. Confirm your email, and login to Drupal.org

Search the forums for common questions http://drupal.org/forums

IRC also has topical and local channels http://drupal.org/irc/channels

Find a local or topical interest group.

Go to http://tinyurl.com/localdrupal - This takes you to the Groups. Drupal.org listing of regional groups. Is there one in your area? Search on a topic that interests you, such as education, arts, high performance, local government. There are also groups for languages to share translation. Join a group!

Locate resources

- Drupal Planet: Subscribe to the essential RSS feed of all things Drupal: http://drupal.org/
- Drupal Books: see a list at http://drupal.org/books
- Drupal Free Videos Tutorial Sites

Drupal Dojo community screencasts	http://drupaldojo.net
Acquia live webinars	http://acquia.com/resources/ recorded_webinars
YadaDrop Drupal Video aggregator	http://yadadrop.com/drupal-video
Drupalove.com Drupal Videos	http://www.drupalove.com/
Learn by the Drop	http://learnbythedrop.com
Mastering Drupal	http://www.masteringdrupal.com
Drupal Video Podcast	http://mustardseedmedia.com/podcast

II. Evaluating Drupal projects

With almost 7000 Drupal modules and themes to choose from, finding the one you need for a specific task can be a daunting process. Not every module is well written or even necessarily secure, and so it is important to evaluate modules carefully before you commit to using them on a live site.

And, always read the README file that should come with each module.

Find information

The first step in the evaluation process is actually finding the module you need. There are a variety of tools available to assist you with this.

Where to look	What you can find there
Drupal.org Project Pages	You find the basic information about a module on its project page, http://drupal.org/project/PROJECT_NAME
Project Issue Queues	Each project has an issue queue at http://drupal.org/project/ issues/PROJECT_NAME. Viewing the issue queue can give you a sense of the health of the project.
Groups.Drupal.org	Search for project related or topically related groups at http://groups.drupal.org These may be linked to from the project page.
Drupal.org Keyword Search	Drupal.org provides 'faceted' searching for the entire Drupal site. Typing a keyword relating to the module you are looking for is likely to point you in the right direction. Search http://drupal.org/download
Planet Drupal	This is a great way to keep up with what's going on in the community. It has a select list of posts from community members' blogs. http://drupal.org/planet
Drupal IRC rooms	Asking for module recommendations and evaluations in IRC chatrooms such as #drupal-support is an immediate way to get feedback. Visit http://drupal.org/irc for more information

Drupalmodules.com	This is an independent website that helps users find and evaluate Drupal modules. The site includes a module search engine as well as module reviews and ratings. http://drupalmodules.com ,
Certified to Rock	You can find out more about the reputation of a module developer by looking at their track record on Drupal.org itself or by looking them up at http://certifiedtorock.com

Assess modules

You should only download modules from Drupal.org, as the one trusted source. Module project pages present you with a wealth of information about the module such as its features, maintainers, bugs etc. Feel free to read through some of this information to get a feel for the module itself, and module project pages in general.

When selecting modules, it is important to assess each module you are interested in to ensure that the module is well maintained, its code is up to standard, and that it is well-used within the overall Drupal community. Check a module's project page to determine its "health". The usage statistics are listed on the page. Here's an example:

Project Information

Maintenance status: Actively maintained

Module categories: Content

Reported installs: 94277 sites currently report using this module. View usage statistics.

Last modified: October 18, 2010

Look for modules which have many installations and which are actively maintained. Later, if you become an experienced module developer, you can use modules as a starting point for your own coding and contribute improvements back to the community.

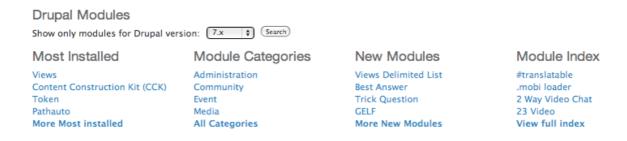
Assessment checklist

The following are items that you should check as you assess modules via the project page:

- When was the last full release of the module? Dev release?
- How many sites are running the module?
- What is the module's Maintenance status?
- Are the developers notable for contributions (multiple projects, and many comments)?
- · How active are the maintainers in the issue queue?
- · How many open tickets are there?

Popular modules

Another good way to narrow down your search is to start by looking at commonly used modules. Drupal.org tracks module usage statistics. On a project page, you are able to see how many active installations were reported for a given module. We can also see overall, some of the most commonly installed modules. Visit http://drupal.org/project/usage to see a running tally. At http://drupal.org/download you can see a list of most installed modules, filtered by version.

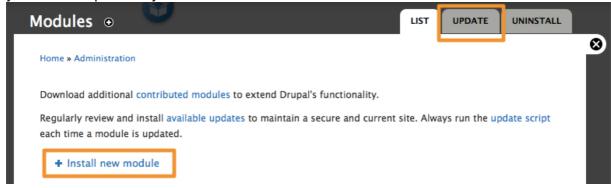


III. How to Install a module

Drupal has a tool to make updating and installing modules easier from the browser. In this example we'll download and install the Link module.

1. Enable the Update Manager. Go to Modules and select the **Update Manager** module. **Save configuration** to enable.

Check for updates. Click the new **Update** tab. At this point, you can check manually to see if you have to update any modules.



Get the URL to the compressed module archive. In another browser window, locate a path to a module. Use the tips above to select a popular module. For example Link. http://drupal.org/project/link

Scroll down to locate the project download links.

Downloads Recommended releases Version Downloads Date Links 7.x-1.0-alpha3 tar.qz (27.07 KB) | zip (36.09 KB) 2011-Feb-07 Notes Open Link in New Tab 6.x-2.9 tar.gz (39.65 KB Notes Open Link in New Window 5.x-2.7 tar.gz (20.3 KB) 01 Notes Bookmark This Link Save Link As... **Development releases** Send Link... Version **Downloads** Links Copy Link Location **Dummy Images** 7.x-1.x-dev tar.gz (28.06 KB Notes 6.x-2.x-dev tar.gz (27.71 KB Add to Evernote 15 Notes Inspect Element View all releases

The appropriate Drupal 7 version. Right click the link to the tar.gz or .zip file and "Copy the link address". Now return to your website's Module listing.

- Click the new option to + Install a new module.
 Paste in the link to the compressed module directory. (Double check: The file should have an extension such as zip tar tgz gz bz2. You can of course upload a file as well.)
- 3. Now, click Install.



- 4. Visit your Modules listing. You will find your module there. Select the appropriate module and any dependencies or UI modules.
- 5. Click Save configuration.

Where is the module?

You can locate your module within your sites/all/modules folder.



Dependencies

When you go to enable the newly added module, you may notice a series of dependencies. These are highlighted in red as (missing) or (disabled). If missing, you will need to install the modules. The titles of the modules, with underscores if they have spaces, can help you get a quick link to the related project. For example, just add the name to the end of the URL for projects: drupal.org/project/form_builder If they are just disabled, you will only need to enable them.

If you need to, repeat the steps for installing a module for all the dependencies.

IV. Module maintenance best practices

With great power comes responsibility

We've seen how selecting and configuring modules extends what Drupal can do. Keep in mind each new module comes with a price. First, each enabled module increases the memory required for Drupal to run. Then, each module must be updated and maintained.

Make sure, after your testing and development phase that you disable, uninstall and delete any modules which are not in use on your site. It's not uncommon to see many unused modules enabled and hogging up resources on a legacy site.

- Disable: Stops that module loading when Drupal is run.
- Uninstall: Removes any data and runs any other uninstall processes the module has.
- Delete: Removes it from your file system, thereby lessening chance for confusion later.

When you are not developing or doing heavy configuration in Drupal, turn off (disable) modules that are not needed. The Admin Menu module has a button to help with this, as well as being a great tool for administrators. These are some examples listed below.

- Views UI
- · Imagecache UI
- Devel
- SEO Checklist

V. Site Testing checklist

Here's a quick list to check over when you are building your site.

- Upload an favicon icon for your site. This is the small branded icon which appears in the browser tab and on bookmarks: Go to Appearance > Your enabled theme > Settings > Shortcut icon. Deselect "Use default shortcut icon" and upload your own. You can create your own Favicon and add it to your theme. See http://tools.dynamicdrive.com/favicon/
- Aggregate your CSS and JavaScript to increase greatly the site speed: Configuration > Development > Performance
- Enable caching of content on your site. Configuration > Development > Performance.
 Enable page and block cache. Note, some modules such as Views have their own cache options.
- Delete all the placeholder and test content in your site.
- Do a browser test: what are your target web browsers and what does your site look like?
- Test site behaviors for each role configure on your site (e.g., what content is viewable, what actions can the role perform); don't forget anonymous access!
- · Check all enabled forms: do they behave as expected?
- If you took your site offline using Drupal's maintenance mode, now you can re-enable it: Go to Configuration > Development > Maintenance
- Check and fix site for broken links: http://validator.w3.org/checklink/
- Optimize your site for search engines and track site traffic statistics. Tip: consider excluding your IP address or domain name within Google Analytics so you are not counted in the stats if applicable (consult their documentation for more information).

Useful checklists

- There are a number of useful tips for making the final checks on your site at http://www.drupal-check.org/
- Site building checklist and pitfalls outlined here: http://poplarware.com/articles/ drupal_cheat_sheet#checklist
- Review your site for accessibility http://drupal.org/node/465106
- There are a number of problems outlined in the Troubleshooting FAQ http://drupal.org/
 Troubleshooting-FAQ and best practices outlined here: http://drupal.org/node/17557

VI. Security

As a rule, only download modules from Drupal.org, unless you can trust the source. Though this isn't a guarantee of security. Before you download contributed modules you can review code on http://drupalcode.org/

Recommended modules:

Install Security review http://drupal.org/project/security_review

- This module identifies mistakes in configuration and code.
- · You can also identify "untrusted roles"

Keeping up to date

- Core Security Advisories http://drupal.org/security
- · Contributed Project Security Advisories http://drupal.org/security/contrib
- Drupal Security on Twitter: http://twitter.com/drupalsecurity

Additional reading

- Security white-paper at http://drupalsecurityreport.org/
- The Drupal Security Team http://drupal.org/security-team
- Secure configuration of your Drupal site http://drupal.org/security/secure-configuration
- Writing secure code http://drupal.org/writing-secure-code
- Cracking Drupal The Drupal security book http://crackingdrupal.com/

VII. Common Terminology

A complete list of Drupal terminology is listed on Drupal.org: http://drupal.org/glossary

Block	Blocks are a method for positioning data within a page.
Book	A Drupal module to connect pages in a hierarchical sequence, perhaps with chapters, sections or subsections.
Core	Drupal default files and modules included with the project download.
Field	Fields are elements of data that can be attached to a <i>node</i> or other Drupal entity. Fields commonly contain text, image, or terms.
Input format	These are settings that define the filtering of user-entered text before it is displayed This can be used to control formatting or malicious input.
Menu	Refers to the navigation elements on a page, and to Drupal's internal system for handling requests. When a request is sent to Drupal, the menu system uses the provided URL to determine what functions to call.
Module	A module is software (code) that extends Drupal features and functionality. Contributed modules can be downloaded from Drupal.org. They are not backward compatible. Modules for Drupal 6 will not work on Drupal 5. But often upgrade paths are available that don't break data.
Node	A piece of content in Drupal, typically corresponding to a single page on the site, that has a Title an optional Body, and perhaps additional fields. Every node also belongs to a particular content type for example polls, stories, and book pages.
Path	In Drupal terms, path is the unique, last part of the URL for a specific function or piece of content. For instance, for a page whose full URL is http://example.com/?q=node/7, the path is node/7.
Path alias	This changes default paths such as node/7 into user-friendly paths such as about/contact. With certain modules these can be automated.
Permissions	Controls user access to content creation, modification and site administration at the application level in Drupal through roles. This also refers to security settings for files at the operating system level.
Taxonomy	Enables authorized users to categorize content using both tags and administrator-defined terms.
Template	A file that is mostly HTML with some special PHP code to substitute in values provided by an engine.
Users and Roles	Everyone using your site is a user with a user ID. The first user ID (uid) of a Drupal site (uid=1) automatically receives all permissions, no matter what role that user belongs to. Any anonymous user has uid=0. Users are assigned <i>roles</i> that control what they can do. For example 'editor' or 'member', and permissions can be set for those roles.
Views	Popular contributed <i>module</i> allowing site developers a simple graphical interface for modifying the presentation of content. Views permits selection of specific fields to display, filtration against various node attributes, choice of basic layout options (ie. list, full nodes, teasers, etc.), and other advanced details.
WYSIWYG	WYSIWYG is an acronym for What You See Is What You Get, used in computing to describe a method in which content is edited and formatted by interacting with an interface that closely resembles the final product.

VIII. Technology Stack

The Drupal Stack

Depending on your previous experience, you may be knowledgeable about web servers, or you may be completely new.

Drupal is most widely tested on a LAMP (Linux, Apache, MySQL, PHP) stack. However, as of Drupal 7 the only firm requirement out of these technologies is PHP. With that said, sticking with LAMP ensures that you'll experience the fewest bugs, as many more developers and organizations use it.

Linux Linux is an open source operating system that was developed in the early 90s and is still in wide use today due to its reliability. Drupal will run on any operating system that supports PHP. **Apache** Apache is an open source web server that is notable for playing a primary role in the initial growth of the Internet. The Apache web server, developed by Robert McCool, was publicly released in 1995. Apache is the web-server most widely used with Drupal, though other web-servers may be used. **MySQL** MySQL is an open source relational database management system. Drupal interfaces with the database through a database abstraction layer. The most widely tested databases for use with Drupal are MySQL and PostgreSQL, though other databases may be used. PHP PHP: Hypertext Preprocessor was developed by Rasmus Lerdof in 1994. It is a widely used, easy to learn, server side scripting language that was originally designed to produce dynamic web pages. Drupal is written in PHP. Drupal Drupal is made up of open source code and mark-up files written in PHP, CSS, JavaScript, and HTML. The software has its own API (Application Programming Interface) - a PHP framework, and its codebase consists mainly of modules and themes, each of which can be either core, contrib, or custom.