

Drupal Web Profiles

The background of the cover is a complex, abstract composition of overlapping, semi-transparent planes in various colors including red, orange, yellow, green, and blue. These planes are oriented at different angles, creating a sense of depth and movement. Thin, straight lines in blue and yellow are scattered across the composition, some intersecting the colored planes. The overall effect is a dynamic, modern, and somewhat futuristic aesthetic.

Timi Ogunjobi



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Timi Ogunjobi



CRC Press

Taylor & Francis Group

Boca Raton London New York

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AN AUERBACH BOOK

CRC Press
Taylor & Francis Group
6000 Broken Sound Parkway NW, Suite 300
Boca Raton, FL 33487-2742

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Version Date: 20120611

International Standard Book Number-13: 978-1-4665-0382-3 (eBook - PDF)

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Preface

This is a book about how to create effective business web solutions using Drupal. The book provides instructions on the primary aspects of the Drupal framework; from basic installation, configuration and administration to creating new functionality, look and feel through custom modules and themes. It also shows how to rapidly prototype and build powerful web applications using Drupal builds or profiles; which are Drupal distributions that have already been pre-configured with the required modules for the creation of specific types of web applications.

Overview

The first five chapters of the book contain instructions to install, configure and administer a basic site in using either version 6 or 7 of Drupal. The next five chapters introduce Drupal profiles and gives basic information on how to get them set up and working. The last chapter gives advice on how to monitor, analyze and optimize the performance of your Drupal installation.

Chapter 1 Introduction to Drupal

This chapter shows the basic Drupal terminologies and terms of interest to both users and developers. It also shows how to create an installation environment for Drupal and how to carry out the actual installation. The reader is given information on where to get further online resources for working with Drupal.

Chapter 2 Adding, Classifying and Viewing Content

In this chapter, the user learns how to add new content to a Drupal site and how to describe, classify, and organize content on the site by using the *Taxonomy module*. Users will also learn how to create an effective taxonomy

structure, as well as how to port an existing static HTML site into the Drupal framework.

Chapter 3 Administering Drupal

This chapter gives an overview of the administrative tools available on a Drupal site. It briefly explains the administrative features of Drupal and how to use these features to ensure your site performs optimally. These features cover security and performance issues that a live site will contend with on a daily basis along with hints on how to prevent them. The user will also learn how to backup a Drupal site and how to migrate it from one server to another.

Chapter 4 Drupal Themes

This chapter demonstrates how the theme system functions. The various components of a Drupal theme are explained here along with how to determine the required/optional theme components. The chapter shows how to proceed with the construction of a new theme from scratch, using the default PHPTemplate theme engine. This chapter examines the typical structure of the component theme files and gives advice on how to create similar structures for a custom theme.

Chapter 5 Drupal Modules

In this chapter, the user learns the structure of a Drupal module, how to create a Drupal module, and where to find resources to develop a custom Drupal module. The user will also learn how to test and troubleshoot the resulting module if necessary.

Chapter 6 Creating a Community Site with Drupal Commons

This chapter shows how to install and perform the basic configuration of a community site built with the Acquia Commons development framework. It demonstrates the various stages of the installation process and identifies available features.

Chapter 7 Building a Conference Site with COD

This chapter shows how to create a conference site with the Drupal COD distribution. It shows how to install the software and takes the user through

the basic configuration. The chapter identifies the salient features of an installed COD site and shows how to administer the features to create a functional and effective conference management framework.

Chapter8 Creating a News Publishing Site with OpenPublish

This chapter shows how to create a news publishing site with the Drupal OpenPublish distribution. It shows how to install the software and takes the user through the basic configuration. The chapter identifies the important features of an installed OpenPublish site and shows how to administer the site to create a functional and effective news publishing framework.

Chapter 9 Creating an Intranet with Open Atrium

An intranet facilitates communication between people or work groups to improve the knowledge base of an organization's employees. It typically consists of an internal email system, a message board service, internal web sites, a database, and a document management system. This chapter shows how to create an intranet site with the Drupal Open Atrium distribution. It shows how to install the software and takes the user through the basic configuration. The chapter identifies the important features of the installed Open Atrium site and shows how to administer them to create a functional and effective intranet framework.

Chapter 10 Creating an online Learning Management System with ELMS

This chapter describes how to create an online learning management system with the e-Learning Management System (ELMS). It shows how to install the software and takes the user through the basic configuration. The chapter identifies the important features of an ELMS site and takes the reader through the basics of how to create and administer the features of a functional ELMS framework.

Chapter 11 Analyzing, Monitoring and Optimizing

The purpose of this chapter is to show how to improve the performance of a Drupal website for the benefit of users as well as other stakeholders. This can be effected by following good practice suggestions that help to effectively monitor, optimize and analyze the performance of a live site. The chapter also provides suggestions for required and optional core features. It

advises on where to get additional tools for performance enhancement, primarily by means of contributed modules as well as third party monitoring, optimization and analysis services.

Who is this book for?

The typical user of Drupal Website Profiles will be an IT manager or staff who will be seeking to develop complex web based applications without having an outside developer. The general aim of Drupal Website Profiles is to assist the user to achieve maximum productivity within a short time frame through prototyping preconfigured distribution profiles.

Drupal Website Profiles is written for users with average web design skills. While the contents of this book may greatly assist the user to rapidly develop useful business application with Drupal, it must be emphasized that this book does not endorse the creation of web development of live web applications from profiles primarily because of possible issues of performance. The user is reminded that current Drupal good practices for development and deployment are always recommended.

Acknowledgements

- Many thanks to my entire family who have been a great source of emotional support even though they are so far away
- Many thanks to my agents Carole Jelen McClendon and Zach Romano of Waterside Productions
- Many thanks to my publisher CRC
- Finally thanks to Derryfield Publishing Services for their production work

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About the author

Timi Ogunjobi is a software developer, technical author and open source evangelist. Timi has been developing web applications using a variety of frameworks for nearly a decade and has written on a broad range of topics for more than twenty years.

Timi balances his time between programming, reviewing, writing, and contributing to interesting community projects especially those relating to wildlife conservation. When he isn't working, he enjoys playing jazz guitar and getting involved in outdoor activities—principally cricket, golf and swimming.

Timi is the Chief Executive Officer of Xceedia Limited (www.xceedia.co.uk), a software development and training company. Timi has written two other books on Drupal that are currently in print (*Drupal 6 Site Blueprints* and *Drupal 6 Site Blueprints: Lite*). He has also published several fiction and non-fiction books, and has been featured in several anthologies. One of his fiction books has been nominated for the Commonwealth Book Prize.

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Chapter 1

Introduction to Drupal

This introductory chapter is to get the reader acquainted with Drupal, its main terminologies and features, as well as how to get a new Drupal site up and running very quickly. It shows various means of acquiring scripts, and how to install Drupal on different computing platforms. It also gives some information about how to get more help and assistance in upgrading your Drupal skills. Following are the highlights:

- What Drupal is and how it is being used?
- What version of Drupal to use
- The basic concepts and terminologies of Drupal
- How to install Drupal
- Where to find additional learning resources for Drupal

1.1 What is Drupal?

Drupal is a free software package that enables users to publish, manage, and organize their content on a web site. It is a web application framework, blogging engine, content management system and framework, originally developed as a bulletin board system by Dries Buytaert, and is today used by many high-traffic web sites and has especially been popular for building online communities. Drupal comes from the Dutch word “*druppel*” which means “*drop*”, as in, “*a drop of water*” (Figure 1.1).



Figure 1.1 Drupal logo

1.2 Who is using Drupal?

Drupal is used for many different web applications, and by many of the top ranking companies all over the world. As a web development tool, Drupal has some basic built-in functionality, which if combined with the scores of free contributed modules, may be used to create quite powerful web applications.

- **Community portal sites.** In a typical community portal, people share content such as images, video, audio and stories with other users.
- **News publishing.** These days it is becoming common for newspapers and magazines to enable online editions to increase their reach, readership and revenue potential. Drupal supplies the advantage of simplicity of use and upgradeability of functionality. Therefore, Drupal is quickly becoming the most popular tool for newspapers and other news organizations to publish their content online.
- **Aficionado sites.** This is a type of web site used by groups of people to share their expertise and enthusiasm for a topic. Typical examples include web sites for discussing automobiles or motor bikes.
- **Corporate web sites.** Since it is web based and has a flexible permissions system, Drupal works well for company intranets. With Drupal, it is very easy to allocate roles and permissions for publishing and accessing content. Key staff no longer has to publish new projects.
- **Resource directories.** Drupal enables registered users to suggest new resources for editors to screen, approve add those resources. Directories are typically used to aggregate similar information.
- **International sites.** The localization features within Drupal enable developers to create sites implemented in a wide range of languages.
- **Education.** Several educational institutions use Drupal. It enables the creation of online learning communities as a supplement to the brick wall classroom.
- **Art, music and multimedia.** As a development framework for community art sites, Drupal provides the means to create multimedia rich websites where users may share, discuss, distribute and rate their work with friends and colleagues.

- **Social networking sites.** Drupal has the features required to build expandable social networking web sites. The modules that enable this are available, adaptable, and free. Many companies presently run their web sites using Drupal (Figure 1.2).



Figure 1.2 Websites using Drupal

1.3 How is Drupal different from other content management systems?

Actually, Drupal may not quite accurately be described as a content management system, but rather a content management framework. A system gives the impression of a rigid, clunky structure, while a framework can be viewed as efficient, extendable, and stable, and this is the basic difference. Drupal is adaptable for any type of dynamic site, and the general view is that any web project that can be conceived, can be built in Drupal.

1.4 How much do you need to know to use Drupal?

Drupal is written in the PHP Hypertext Processor (PHP) language—a high-level programming language used for developing web-based applications. If you need to take greatest advantage of the powerful features of Drupal, it might be worthwhile to learn a bit about PHP and either MySQL or PostgreSQL, which are two of the relational databases used with

Drupal. Having said this, there are thousands of Drupal users who cannot write a line of code.

Drupal has been criticized in the past about its usability. Indeed, new users may find some aspects of Drupal's administration interface confusing and intimidating. It is quite possible to master many competing content management systems in a few days, but it could take you considerably longer to achieve the same level of proficiency using Drupal. The administrative interface of Drupal have been regarded as rather cryptic. This is a problem, which successive versions have strived to solve. Drupal nevertheless offers a sophisticated programming interface for developers. No programming skills are required for basic Drupal web site installation and administration.

The steep initial learning can be daunting but once it is learned you can manipulate Drupal in almost any way you want to.

1.5 What do you need to run Drupal?

Any computing platform that supports the following, will run Drupal:

- Web server able to run PHP (version 4.3.5 or above), as well as Apache, IIS, Lighttpd, and nginx
- MySQL or PostgreSQL database, to store settings and content.

1.6 What version of Drupal should you use?

Drupal comes in several versions and releases, corresponding to the current state of development and updates. Drupal 7.x or Drupal 6.x are the main versions currently used and recommended for download and adoption. In description, 7.5 means, Drupal version 7, release 5. Both version 6.x and 7.x are presently supported.

Modules are regarded as quite critical for determining what version of Drupal to use—considering that a module written for one version will not work with another version. At the time of writing this book, if you are new to Drupal and decide to build a site using Drupal 7.x, you will probably find that a lot of the modules available to download are only for version 6.x, and very few or fewer for version 7.x. So one question you may be asking is which of the two main versions to choose

1.6.1 Drupal 6.x or Drupal 7.x

On the matter of selecting what version of Drupal to use, some people think that it really boils down to the functionality you will wish to achieve on an immediate basis. Many modules to extend the functionality of your web project presently exist in Drupal Version 6.x, however an infinite amount of modules cannot actually be used because each module takes up memory and other resources. Most web sites will probably only be able to use 20 to 30 modules. So the questions that ought really to be asked should be:

- Which 20-30 features are most desirable?
- Which of those features are provided in Drupal 6.x and with no module released for Drupal 7.x?

1.6.1.1 Must have or nice to have

If the Drupal 6.x modules that attract you are just “nice to have” and nonessential to your application, it seems quite easy to say go with Drupal 7.x. However, early versions do have great merit, primarily because they and the modules which they employ have been tested. Before deciding to use a module it might be wise to check its history—the activity and dates of its issues queue, and its popularity; unless you can support the upgrade yourself.

Looking down the road, several solid modules for Drupal 5.x were never ported to Drupal 6.x, and some of the Drupal 6.x modules have partially had their functionality absorbed into the core modules of Drupal 7.x.

1.6.1.2 Beware of obsolescence

It is generally advised that if it is possible for you to build your site using the present stable modules and Drupal 6.x, go with that solution if you can live with the consequences. As explained previously, there is the possibility that a site built using outdated versions may not be upgradeable in the future with modules being produced for newer versions. So if an upgrade is seriously needed you may need to code again from scratch.

Often you may find for example that modules, which have been newly written for Drupal 7.x, are no longer upgraded to a later version of Drupal merely because the developer has lost interest, thus leaving you with an unsupported and unusable module when you upgrade Drupal in the future.