



From Technologies to Solutions

Building powerful and robust websites with **Drupal 6**

Build your own professional blog, forum, portal or community website with Drupal 6

David Mercer

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BIRMINGHAM - MUMBAI

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David Mercer was born in August 1976 in Harare, Zimbabwe. Having always had a strong interest in science, he came into regular contact with computers at university where he graduated cum laude with majors in applied math and math (although he minored in computer science).

As a programmer and professional writer who has been writing both code and books for about nine years; he has worked on a number of well known titles, in various capacities, on a wide variety of topics. His books have sold tens of thousands of copies and have been translated into over six different languages to date.

David finds that the challenges arising from the dichotomous relationship between the science (and art) of software programming and the art (and science) of writing is what keeps his interest in producing books piqued. He will no doubt continue to write professionally in the future.

David balances his time between programming, reviewing, writing, and contributing to interesting Web-based projects such as RankTracer and LinkDoozer. When he isn't working (which isn't that often) he enjoys playing guitar (generally on stage and unrehearsed) and getting involved in outdoor activities ranging from touch rugby and golf to water skiing and snowboarding.

Visit www.ranktracer.com or find him on www.linkdoozer.com where he is generally lurking.

It is necessary to first thank my girlfriend, Bronagh. Without her gentle yet persistent encouragement this may well have turned into a Drupal 10 title. The editorial team (and Louay) at Packt, along with Larry Garfield who did a sterling review job, put in many long hours and I thank them for their efforts too. In addition, my ever supportive family were always at hand to provide a change of pace and scenery that enabled me to work with greater effort throughout.

Finally, I would like to thank my readers. The success of the first edition of this book has made it possible (and necessary) to sit down and write this book. I hope it does its job well.

About the Reviewer

Larry Garfield holds both a bachelors and masters degree in Computer Science from DePaul University, where he was a co-founder of the school's Linux Users Group. He has been writing PHP since 1999 and is a Zend Certified Engineer. He has been active in the Drupal community for over two years, working on the Drupal core, various contributed modules, and user support, and was recently named as a member of the Drupal Association Board of Directors. In mid-2007 he founded and co-organized the GoPHP5 Project to help the PHP community fully transition to modern PHP 5 environments.

Larry is currently a programmer and technical architect for Palantir.net, a Drupal-based website consulting firm in Chicago, USA that works primarily with higher education and cultural institutions such as museums. Prior to that, he freelanced for Chicago-area businesses and political campaigns. Larry also worked for three years as an IT journalist covering handhelds and mobile phones.

I'd like to extend my sincere thanks to the entire Drupal community. Even after more than two years, I am still in awe of how strong, supportive, and vibrant this community continues to be. It is a privilege to be a part of it. I'd also like to thank my colleagues at Palantir.net for putting up with my continual Drupal evangelism.

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Preface

The Internet is arguably one of the most profound achievements in human history. It has become so pervasive in our lives that we hardly even notice it—except when it happens to be unavailable! It's one of those things that make you sit back and wonder how people got along without it in the *old days*. Without the ability to surf the Internet to order groceries, do our banking, book flights and make travel arrangements, meet friends, meet partners, download music and videos, study, run businesses, trade shares, run campaigns, express views, share ideas, learn about other people... where would we be?

Fundamentally, in a world of so many people, where the sheer vastness of our societies is a hindrance to communication, the Internet has stepped up to the plate and brought everyone that little bit closer together. Utilizing a stunning array of technologies, spread out over the entire globe, the Internet has simply dropped the barriers of time and geographical distance to turn the entire world into a local community center.

Lately, the all-encompassing focus of commerce on the Internet has begun to shift. Millions upon millions of people are waking up to the possibility of sharing their lives and experiences with others through the medium of blogs and social media. Others simply want an online presence to show off their work, art, or music. Still others have important causes and need the Internet to disseminate information or provide a meeting point for like-minded people. Whatever the demands, the Internet has to find a way to efficiently meet these needs or face being superseded by something else in the future.

What the Internet needs is something that makes it easy for people to do whatever it is they want without having to pour intellectual resources into understanding the technologies on which the Internet is based. What the Internet has got is precisely this—Drupal!

Drupal is what you need to use to build anything from a static homepage, to a fully-fledged, customizable, and interactive website in several languages, with tens of thousands of users all over the world. Assuming you fall somewhere between these two extremes, this book is what you need to guide you on your way.

Building powerful and robust websites with Drupal 6 will help cut down your learning time by providing precisely the information you need when you need it. It will help to reduce the trial and error associated with learning Drupal and provide practical, methodical and efficient processes and content to help you become a knowledgeable and competent website creator and administrator.

What This Book Covers

Chapter 1 introduces you to the world of Drupal and looks at where Drupal comes from, where it's going, and what it can offer you. Because it is important to understand the nature of the tasks that lie ahead, it also discusses how to plan and build your website. Finally, we scrutinize the Drupal community and learn how to make the most of Drupal as an organized, living entity and not just a piece of software.

Chapter 2 deals with how to get everything you need up and running on a development machine and also briefly looks at how all the requisite technologies gel together to produce your working Drupal site. Once everything is up and running, and after looking over some of the more common installation problems, the chapter presents a short tour of Drupal in order to give you an idea of what to expect.

Chapter 3 sees us adding functionality to the newly created site. The focus of this chapter is really on modules and how they can be added and enabled, and also how to obtain modules that are not part of the standard distribution. This chapter ends off with a discussion on how to control blocks and menus.

Chapter 4 looks at the most general settings that all Drupal administrators need to contend with. Everything from determining your site's name to dealing with the cache or file system settings gets treated here before we look at more focused and complex issues in the chapters to come.

Chapter 5 concerns itself with the topic of access control. Drupal has a sophisticated role-based access control system that is fundamentally important for controlling how users access your site. This chapter will give you the information required to implement proper access controls.

Chapter 6 gets to the heart of the matter by beginning the book's coverage on content. Working with content, what content types are available, administering content, and even a discourse on some of the more common content-related modules serve as a basis for moving to more advanced content-related matters that follow in the next chapter.

Chapter 7 gives you the edge when it comes to creating engaging and dynamic content. While this chapter doesn't require you to be an expert in HTML, PHP, and CSS, it does introduce you to the basics and shows how, with a little knowledge, extremely powerful and professional custom content can be created.

Chapter 8 gives you a run down of how attractive interfaces are created in Drupal through the use of themes. As well as discussing briefly some of the considerations that must be taken into account when planning your website and ends off by looking at how to make important modifications to your chosen theme.

Chapter 9 really adds the icing on the cake by looking at a host of more advanced topics. From implementing openID functionality, to working with Actions and Triggers or providing enhanced language support, all the way through to building dynamic content using jQuery and Javascript, you will find something to enhance your website and add that something special.

Chapter 10 takes a pragmatic look at the types of tasks you will need to be proficient in to successfully run and maintain a Drupal site. Whether it's setting up cron jobs or making backups of your database, everything you need to do throughout the course of running your newly created website will be covered here.

Appendix A deals with the all-important topic of deployment. Because all major work should be done on a copy of your website on a development machine, this appendix presents a sound process for taking the finished product and making it available for public consumption on your host site.

What You Need for This Book

You need to have the following:

- PHP, Apache and MySQL (Apache2triad or XAMPP)
- Drupal 6

Who is This Book for

This book is for people with little to now experience in website design, people who are not familiar with PHP, MySQL or HTML, and above all people with little to no experience in using Drupal. Intermediate Drupal users may also find this book helpful because of its broad, practical coverage of all the Drupal fundamentals.

Conventions

In this book, you will find a number of styles of text that distinguish between different kinds of information. Here are some examples of these styles, and an explanation of their meaning.

There are three styles for code. Code words in text are shown as follows: "We can include other contexts through the use of the `include` directive."



A block of code will be set as follows:



```
#header {
  background: #193547;
  border: 1px solid #aaa;
  border-bottom: none;
}
```

When we wish to draw your attention to a particular part of a code block, the relevant lines or items will be made bold:

```
#header {
  background: #FF0000;
  border: 1px solid #aaa;
  border-bottom: none;
}
```

New terms and **important words** are introduced in a bold-type font. Words that you see on the screen, in menus or dialog boxes for example, appear in our text like this: "clicking the **Next** button moves you to the next screen".

 Important notes appear in a box like this. 

 Tips and tricks appear like this. 

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1

Introduction to Drupal

Up until quite recently, the most important thing a newcomer to the Web could do in order to prepare for building a website was to buy a book on how to learn programming in any one of the major web-centric languages like PHP or Perl. The not inconsiderable task of learning the niceties of the chosen language to a respectable degree would then consume a fair chunk of time and patience. Once our hapless newcomer had sufficient mastery of the fundamentals, applying that knowledge to program efficiently and reliably, with the tenacity to stick with a job until the site was developed, could arguably be described as a Herculean accomplishment.

This state of affairs is, and quite rightly should be, entirely unacceptable to someone like yourself! It's like forcing lawyers to learn the intricacies of architecture, construction, and masonry simply because they require a courtroom in which to work. It should be quite apparent that separating the technical task of *developing the software* for a website from the *function* of that website is a very sensible thing to do, the main reason being that it allows people to focus on what they are good at without them having to devote time and energy to becoming good software developers too.

It's not surprising then, that in recent years the open-source community has been hard at work pulling the programming world out of the software dark ages by providing us with flexible frameworks for building web-based enterprises. These frameworks free website creators from the intellectual burden of learning software development ideas and concepts, allowing them instead to focus more on goal/business-oriented configuration and customization tasks.

Drupal is one such result of the software-development evolution, and this book seeks to provide you with the fundamental information needed in order to use it effectively. Because this book focuses more on beginner-level aspects of administering Drupal, you will be pleased to know that there will be little to no coding involved – you're not required to learn how to develop Drupal modules from

scratch, for example. That's not to say this book will be elementary; on the contrary, the knowledge gained here will enable you to tackle problems beyond the scope of this material with confidence.

Before we begin building anything that resembles a website, I'm sure you have plenty of questions about the how, what, where, and why of Drupal. Consequently, this chapter will not only provide a backdrop for the rest of the book, but will also serve as an introduction to the technology as a whole, incorporating a discussion on the following:

- Drupal – an overview
- How Drupal came to be
- What Drupal has to offer
- Uses of Drupal
- Building a Drupal site
- The Drupal community
- The Drupal license

Let's begin...

Drupal—An Overview

Drupal is an **Open-Source Content Management System**. If you are new to both computing and Drupal, then this probably doesn't clear things up very much. First of all:



The term **open-source** describes software whose source code is made available, most often subject to certain conditions, for use or modification by users or other developers as they deem fit.

The specific conditions under which Drupal is made available will be scrutinized more closely in the section *The Drupal License*, later in this chapter.

Above and beyond that, what open source means for someone who intends to make use of Drupal, is that there is no obligatory payment required for this unquestionably valuable software. You also join a large community (also to be discussed later in this chapter) of Drupal users, developers, and administrators who subscribe to the open-source philosophy – in other words, someone out there will probably be willing to spend time helping you out should you get stuck.

That's a pretty good deal for those who are still not convinced about open-source technologies as a whole – not only do we not have to develop the entire site ourselves, but we also get to take advantage of the collective wisdom of thousands of other people.

Is there anything else we can say about open source? Sure; with an active community like the one associated with Drupal, development advances rapidly and flexibly because any problems can be spotted early and dealt with effectively. This means that you can expect a high level of stability, security, and performance from Drupal websites.

OK, but what is the Content Management System (CMS) part all about?



A content management system is software that facilitates the creation, organization, manipulation, and removal of information in the form of images, documents, scripts, plain text (or anything else for that matter).

If you have a need to organize and display fairly large amounts of information, especially when it is likely that content will be created or delivered from a variety of different sources, then a content management system is undoubtedly what you need.

That's basically all you have to know. Drupal provides a free platform, along with its attendant community, for satisfying a wide variety of content-management requirements. Precisely, what type of things one can achieve is the subject of the section entitled *What Drupal Has to Offer* later in this chapter. For now though, let's turn back the hands of time and take a look at how we ended up with Drupal as we know it today.

How Drupal Came to Be

As with so many modern success stories, this one started in a dorm room with a couple of students needing to achieve a specific goal. In this case, Dries Buytaert and Hans Snijder of the University of Antwerp wished to share an ADSL modem connection to the Internet. They managed this via the use of a wireless bridge, but soon after, Dries decided to work on a news site, which would in addition to the simple connection the students already shared, allow them to share news and other information.

Over time the site grew and changed as Dries expanded the application and experimented with new things. However, it was only some time later in 2001 when it was decided to release the code to the public in the hope this would encourage development from other people that Drupal became open-source software. It's clear that releasing the source to the public was the right choice, because today Drupal

has a well organized, thriving community of people ranging from contributors, administrators, a security team, and a global presence, to plenty of users who make invaluable additions to the Drupal project on a regular basis through bug reports and suggestions.

In only a few years, Dries and others have taken a small inter-dorm-room application and turned it into a technology that is contributing to the way in which the global society communicates through the Web. This is embodied in their brief mission statement that reads:

By building on relevant standards and open-source technologies, Drupal supports and enhances the potential of the Internet as a medium where diverse and geographically separated individuals and groups can collectively produce, discuss, and share information and ideas. With a central interest in and focus on communities and collaboration, Drupal's flexibility allows the collaborative production of online information systems and communities.

Ultimately, where Drupal is going and how it came to be are also driven by the philosophies that guide those responsible for developing this technology. As you will see throughout the course of this book, it is fair to say that the Drupal community has so far succeeded in meeting its lofty targets.

What Drupal Has to Offer

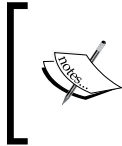
As users of technology and software, we should never be lax in what we demand from the technologies that serve us. It is fitting, therefore, at this stage, to discuss what we expect from Drupal in order to ensure that it will satisfy our needs.

There are three different aspects of Drupal we need to consider when looking at whether it is a *good* technology to use in general. Will it be:

- **Reliable and robust:** Are there a lot of bugs in the code? Will it affect my site if I have to forever add patches or obtain updates for faulty code?
- **Efficient:** Does the code use my server's resources wisely? Am I likely to run into concurrency problems, or speed issues early on?
- **Flexible:** If I change my mind about what I want from my site, will I be able to implement those changes without redoing everything from scratch?

While Drupal will always be a work in progress, it can be taken for granted that the source code used to build your website has been meticulously crafted, and well designed. In fact, the previously listed points are taken so seriously by the developers of Drupal that they are written into their set of principles that are available at <http://drupal.org/node/21945>.

While it won't influence us much for the moment, it is worth noting the following:



A great advantage of Drupal is that the code itself is very well written, which makes modifying it easy. This means that as you attempt more advanced tasks, the very way in which Drupal is written will lend an advantage over other platforms.

The next thing we need to consider is what Drupal is like for us, as administrators, to use. Naturally, things should be as easy as possible, so that we don't spend time bogged down with problems or complicated settings, or worse yet, have to modify the source code on a regular basis. Ideally, we want a system that is:

- **Easy to set up and run:** Can I start creating a site with the minimum of fuss? Do I have to learn about other technologies before I am able to use Drupal?
- **Intuitive to work with:** Once I have begun finding my way around, will it be easy to learn new things? If I am not a particularly technical person, will I struggle to administer my site?
- **Flexible and easy to extend:** I know I can make a basic site, but I really want to create a unique and sophisticated, ground-breaking site—can it be done with Drupal?

Again, these are precisely the attributes that Drupal is known for. If you have other questions about Drupal that are not specifically mentioned here then try to relate them to the bullet points. If you still struggle, try looking through the Drupal forums.

Finally, and perhaps in some respects most importantly, it is important to consider whether or not Drupal creates a good environment for site users. Obviously, a technology that is well designed and easy to administer would still not be very helpful if, for example, its use is prohibitively complex. The best way to find out what type of environment Drupal can provide is to go ahead and check out the Drupal home page at <http://drupal.org>—since it is built with Drupal and is a good example of what one can do.

It's a good idea to register an account if you have a moment or two. It's not absolutely necessary, but believe me, it will be of great benefit in the long run. Perhaps treat your registration process as a quick and easy way to see a bit of the site.

It stands to reason that if the main site that is developed in Drupal is easy to use, then you in turn will be able to create an easy-to-use site for your users.

Uses of Drupal

Any enterprise that requires a fair amount of working with content is a likely candidate for Drupal, but, because of its extensibility and flexibility, you are really not very limited in any sense. The following list shows the most common uses at present and comes from the case studies page (<http://drupal.org/cases>) on the Drupal site:

Community Portal Sites: If you want a news website where the stories are provided by the audience, Drupal suits your needs well. Incoming stories are automatically voted upon by the audience and the best stories bubble up to the homepage. Bad stories and comments are automatically hidden after enough negative votes.

News Publishing: Drupal is great for newspapers and other news organizations.

Aficionado Sites: Drupal flourishes when it powers a portal website where one person shares their expertise and enthusiasm for a topic.

Intranet/Corporate Web Sites: Companies maintain their internal and external web sites in Drupal. Drupal works well for these uses because of its flexible permissions system, and its easy web-based publishing. No longer do you have to wait for a webmaster to get the word out about your latest project.

Resource Directories: If you want a central directory for a given topic, Drupal suits your needs well. Users can register and suggest new resources, while editors can screen their submissions.

International Sites: When you begin using Drupal, you join a large international community of users and developers. Thanks to the localization features within Drupal, there are many Drupal sites implemented in a wide range of languages.

Education: Drupal can be used for creating dynamic learning communities to supplement the face-to-face classroom or as a platform for distance education classes. Academic professional organizations benefit from its interactive features, and the ability to provide public content, member-only resources, and member subscription management.

Art, Music, Multimedia: When it comes to community art sites, Drupal is a great match. No other platform provides the rock solid foundation that is needed to make multimedia-rich websites that allow users to share, distribute, and discuss their work with others. As time goes on, Drupal will only develop stronger support for audio, video, images, and playlist content for use in multimedia applications.

Social networking sites: Drupal has many of common the features used in social networking sites. You can build a collection of social networking applications for your site or use Drupal as a white label social networking service.

Drupal can be thought of as the Internet's Jack-of-all-trades – it excels in many areas, but at heart it is a generalist. So while you can use Drupal for a great number of things, perhaps limit its use to those things that complement its design – like those mentioned in the previous list.

Building a Drupal Site

Unlike building a house, development of a website takes place on a *copy* of the site instead of the real site. This means that while the site is being built, it is not available for the public to view and use on the Internet. With a bit of thought, this should make sense. Any potential community member who comes across a site under construction would probably become frustrated with bits and pieces that don't yet work, error messages, untidy presentation, or any other thing that could scare people away at the drop of a hat.

Some readers may well be wondering what to do with their domain in the meantime, assuming one has already been purchased. The best solution is to put up what is known as a **placeholder page** that delivers a simple message to the effect that this is the right site, the development is in progress on the working site, and that potential members should visit again in the near future.



It is a good idea to install Drupal on your host site at the start of the process to ensure that the platform you are using on the live site will meet your needs (i.e. does it have PHP5, is the database suitable, can you use clean URLs, and so on). Drupal has the option to be switched to offline status in order to prevent people from making use of it – this effectively turns the site into a *placeholder page*.

Appendix A on *Deployment* outlines the process of moving a fully functional website onto a live web domain. The process for doing the whole site and a single page is more or less the same, but naturally, moving a single page is a lot less involved.

Planning Your Site

It is important that as the creator of a new site you spend some time gathering information on the needs of the community you intend to serve. Doing this now will help in the long run because having a thorough understanding of a site's requirements allows you to develop it with specific goals in mind. This in turn enables a more focused and coordinated approach to the site's development.



It's tempting to dive straight into building your site, but spending some time planning everything now will save you time in the long run!

One of the best ways to determine what you will need is to build a list of tasks that the site must be able to perform. Effectively, after creating a list of the various requirements, the site's administrator (most probably yourself) should have a clear enough idea to go ahead and begin working. Unfortunately, it is often hard to predict exactly what is needed by simply sitting down and writing, so a good way to start is by looking at similar sites. Go ahead and take note of everything that is useful and desirable on other sites and add this to the list.

If you get stuck, or run out of ideas, it's helpful to try a little thought exercise as follows. Split yourself into two people:

- The community member who knows what his or her needs are
- The Drupal administrator who needs to find out what to build

Use the administrator persona to question the community member about what has to be done. Approaching the problem from two perspectives often helps mimic real-world situations where software developers try to find out exactly what their clients need by asking probing questions before they start working on a project.

Try and get to a stage where you feel comfortable with at least 80% of what is required from your site, from there it is probably more efficient to go ahead and begin building, rather than waste time scraping out more information. As Drupal is extensible and flexible, it is quite easy to modify it at a later stage.

Here is a list of some of the most important topics you will need to decide on:

- The type of site—is it a forum, or a blog, or something else entirely?
- The way you are going to run the site—stats, logging, or performance issues
- The security, roles, and permissions involved
- The need for integration—syndication, aggregation, or alerts

Apart from your site's functionality, start thinking about how the site should look. Obviously, an attractive and unique interface for users to work with is your ultimate goal in this respect. The use of themes to create a visually appealing site is a fairly important topic that we discuss later in the book in Chapter 8, but please do give some thought to this aspect of your site early on, regardless.

Not only do you want to design an interface that looks pretty, but it also needs to be intuitive and easy to use. This is very important as studies have shown that users will often base their opinion of a site on how easy it is to use and not always on other criteria that you might think important, such as speed. People often *believe* that a slower running site is faster if they manage to accomplish their tasks on it more easily.

By observing similar sites and anticipating the needs of potential users, you can develop a specification for your own site. Having a site outline or specification to work towards is valuable in itself as an exercise.

Analyzing the Proposed Solution

Once there is a specification to work with, we know *what* is needed. It is time to look at *how* to deliver it. To do this, we really need to go back over all the points listed and find out *what is involved* in getting each one done. Knowing what lies ahead is the best way to handle problems preemptively!

The three main areas of concern that we need to deal with are discussed next...

Feasibility

Having a wish-list is a great way to decide on what you want, but that doesn't mean it is feasible. In order to be feasible, the criteria should not involve an inordinate amount of effort relative to the benefits it will return. For example, if the site specification calls for a feature that requires a hundred hours of brutal, frustrating programming, then it is probably not in your interests to waste time doing it if it is not going to affect your community significantly.

Ultimately, it may be better to look for a cheap and elegant alternative, either amongst the plethora of contributions (also called contribs), or from third-party software providers. One of the old programming mantras, *There's more than one way to do it!*, holds true here.

Phone a Friend

Look at the requirements very carefully. Are you sure you can actually provide everything that is required? If not, spend some time looking over this book and the Drupal site to see if you can learn anything new. If you are absolutely stuck, then get on the forums and lists and ask for help.

Critical versus Desirable Criteria

In order to determine the priority of tasks during your site's development phase, it is a good idea to divide all requirements into two categories—those that are fundamentally necessary to the success of the website, such as finding a service provider, and those that are not, such as deciding on whether to make hyperlink color dark blue or light blue.

There are a couple of reasons for this:

- Doing so will help you allocate time and resources to certain tasks while putting others on a backburner.
- You are aware of those features that do not necessarily need to be included at all in the event that time is short.

In both these cases, it is important to know what has to be finished and what can perhaps be left out or left for another day. With your plans laid out and ready to implement, it is important to recognize that you are not alone and that Drupal and its community will prove to be a most useful companion in the coming days, weeks, and months.

The Drupal Community

Drupal has coherent and in-depth support structures that are fairly easy to learn your way around. There are a host of categories ranging from information, polls, forums, and news to support, which can be found at the home page: <http://drupal.org>.

It is strongly recommended that you regularly make use of drupal.org and constantly use different elements and sections in order to become proficient at extracting the information and software you require – especially because the Drupal site will change from time to time!

All the information contained in the site is well organized, and easy to access from the main navigation bar at the top of the page, as shown here:



Each and every tab in the navigation bar has a host of its own links and pages, although there are some categories that contain inter-related topics. At any rate, let's go through each one quickly to see what they have to offer.

Documentation

This section is a great repository of information, catering for a wide variety of different needs. The content is gathered into five main sections, as shown here:

Getting Started	About Drupal
<ul style="list-style-type: none"> • Projects and Features • Before You Start • Drupal 5 • Drupal 4.7 and earlier • Core Modules • Troubleshooting FAQ 	<ul style="list-style-type: none"> • Welcome • Drupal.org FAQ • Is Drupal right for you? • Books about Drupal • Support and professional services • Donating to the project • Mailing lists • Marketing Resources
Customization - Tutorials, Snippets and HowTo	
<ul style="list-style-type: none"> • Tutorials • HowTo • Snippets 	<ul style="list-style-type: none"> • Theme Snippets • Videos and slides • Contributed modules
Theme Developers' Guide	
<ul style="list-style-type: none"> • Theming overview • Regions in themes • PHPTemplate theme engine • Contributed themes • Making a theme customizable • Troubleshoot your theme • Updating your themes 	<ul style="list-style-type: none"> • Using Theme Override Functions • Using Theme Override Functions For Forms • Theme screenshot guidelines • Theme HowTos • Other theme engines • Adding your theme to Drupal.org
Developing for Drupal	
<ul style="list-style-type: none"> • Contributing to Development • Coding standards • Writing secure code • CVS • Patches • Drupal's APIs • HowTo: Benchmark Drupal code • Setting up a development environment 	<ul style="list-style-type: none"> • Usability research • Join forces with others • Install profile developer's guide • Module developer's guide • Translator's guide • Updating your modules • Drupal test suite • Migrating from other software

Each of these categories contains a series of links to informative pages (that in turn, often contain links to other pages) that do a good job of explaining their respective topics. It's worth pointing out that a block appears on the left-hand side of these pages, containing links to related topics under the same category heading in order to help you navigate through the information with ease. The following screenshot shows the **Is Drupal right for you?** page:



You are urged to look through at least the first section before moving onto the following chapter in order to learn as much about Drupal as possible. It is also a good idea to use these handbooks in tandem with this book, so that you can complement the practical advice and experience you gain here with reference-type material presented on the site.

Download

We will be visiting this section again in the following chapter when we begin to set up everything in preparation for site development. However, there are a few interesting points to note before we get there. The first is that you need to be quite careful about the Drupal version—or indeed modules and themes—you download, because each successive version makes changes and improvements on previous versions, and also sometimes messes up compatibility with other features.

If you decide to add a module (by this I mean that at some stage you *will* want to add a module), then viewing the projects page at <http://drupal.org/project>, or by clicking the **Downloads** tab, gives the following page.

Project types

- **Drupal project**

Get started by downloading the official Drupal core files. These official releases come bundled with a variety of modules and themes to give you a good starting point to help build your site. Drupal core includes basic community features like blogging, forums, and contact forms, and can be easily extended by downloading other contributed modules and themes.

- **Installation profiles**

Installation profiles are a feature in Drupal core that was added in the 5.x series. The Drupal installer allows you to specify an installation profile which defines which modules should be enabled, and can customize the new installation after they have been installed. This will allow customized "distributions" that enable and configure a set of modules that work together for a specific kind of site (Drupal for bloggers, Drupal for musicians, Drupal for developers, and so on).

- **Modules**

Modules are plugins for Drupal that extend its core functionality. Only use matching versions of modules with Drupal. Modules released for Drupal 5.x will not work for Drupal 6.x. These contributed modules are not part of any official release and may not be optimized or work correctly.

- **Themes**

Themes allow you to change the look and feel of your Drupal site. These contributed themes are not part of any official release and may not work correctly. Only use matching versions of themes with Drupal. Themes released for Drupal 5.x will not work for Drupal 6.x. Many of these themes can also be previewed on the third party site [the Theme Garden](#)

- **Theme engines**

You can see from the notes presented on this page, if you happen to need a module that was developed for Drupal 5.x, and you are using version 6.x, then you are shortly going to experience no small amount of frustration – this is especially valid at this time given that 6.x is brand new, and hence many modules have yet to be updated.

Problems like this can occur because modules are developed separately from the core, which means that it is up to the individual module developer to keep up to date with any changes coming from the main development team.

Naturally, not everyone will keep their modules up to date in a timely manner, because often these developers are not getting paid and are under no obligation to do the work at all. They are simply providing us with the best code they can deliver when they can deliver it.

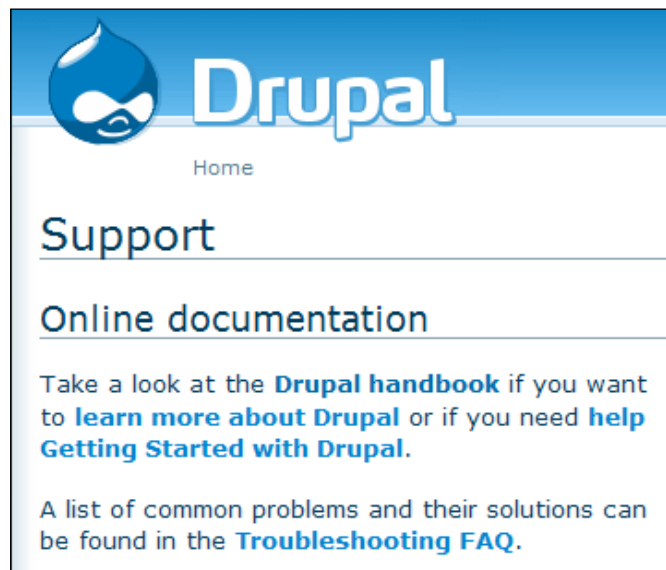
In terms of how to use the download pages, it is worth noting that there are four main links given in each downloadable item's box (for example, click on the **Themes** link to view a list of downloadable themes). These are: **Download**, **Release notes**, **Find out more**, and **Bugs and feature requests**. The first option is pretty self explanatory, but you should always take a look at the **Find out more** option before downloading anything, to ensure that you are getting precisely what you want.

For example, the **Find out more** page for the **Acidfree** project contains information on history of **Updates**, and plenty of material on **Releases**, **Resources**, **Support**, and **Development**—all pretty useful if you are not sure what **Acidfree** does to begin with.

That aside, the point of this section is that you should try to *think carefully* about what you want before downloading everything. In the next chapter, we will put words into practice and make use of this section to obtain a copy of Drupal.

Support

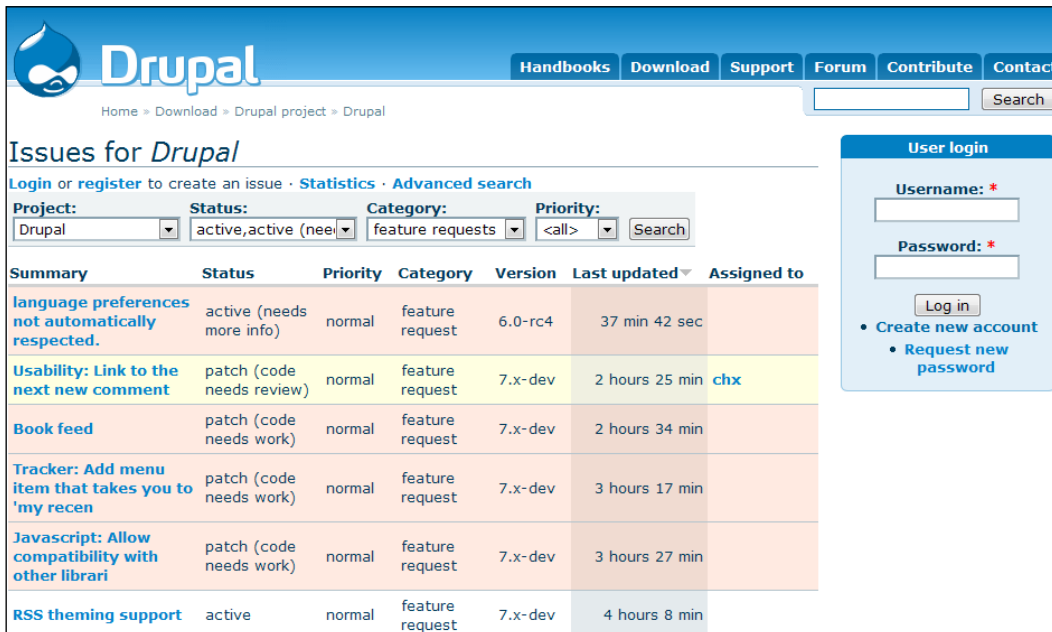
The **Support** section can be regarded as a kind of catch-all page, and actually contains a number of links to the various other community pages, many of which can also be opened by using their tabs in the main navigation bar. For example, you can navigate to the **Drupal handbook** (to be discussed shortly) from the **Online documentation** section to find out some basic information on Drupal, as shown here:



Briefly, in this section:

- Documentation and help facilities are provided in the **Online documentation** section, and include help on some common problems as well as installation and general information.

- Links to security advisories and announcements as well as the option to subscribe to the security announcement mailing list or RSS feed are provided under the **Security** section.
- Links to the forums, in case you need help, are provided under the **Forums and Support** section, as well as archives and a **Tips for posting to the Drupal forums link**.
- If you are not an English language speaker, or your community predominantly speaks some other language, then it is worthwhile checking out some of the other language sites under the **Other languages** section, which includes German, French, Spanish, and Afrikaans.
- Links to a number of professional services related to Drupal, including hosting and consulting, are provided under the **Professional services and hosting** section.
- Bug reports can be sent in by visiting the **Bug reports** section. Please be aware that you should always check whether or not a bug has been reported before submitting a report. Any submission incurs a cost in terms of man-hours because someone has to look over it, and the time wastage can be substantial if everyone keeps reporting the same bug over and over again.
- The **Feature requests** section gives you the opportunity to look over what other people would like to see incorporated into Drupal as shown here:



The screenshot shows the Drupal website's 'Issues for Drupal' page. The header includes the Drupal logo and navigation links: Handbooks, Download, Support, Forum, Contribute, and Contact. Below the header, there's a search bar and a breadcrumb trail: Home » Download » Drupal project » Drupal. The main heading is 'Issues for Drupal', with links for 'Login or register to create an issue', 'Statistics', and 'Advanced search'. A filter bar allows users to search by Project (Drupal), Status (active, active (needs more info)), Category (feature requests), and Priority (<all>). A table of issues is displayed with columns for Summary, Status, Priority, Category, Version, Last updated, and Assigned to. The table lists several feature requests, including 'language preferences not automatically respected', 'Usability: Link to the next new comment', 'Book feed', 'Tracker: Add menu item that takes you to my recent', 'Javascript: Allow compatibility with other libraries', and 'RSS theming support'. A 'User login' sidebar on the right contains fields for Username and Password, a 'Log in' button, and links for 'Create new account' and 'Request new password'.

Summary	Status	Priority	Category	Version	Last updated	Assigned to
language preferences not automatically respected.	active (needs more info)	normal	feature request	6.0-rc4	37 min 42 sec	
Usability: Link to the next new comment	patch (code needs review)	normal	feature request	7.x-dev	2 hours 25 min	chx
Book feed	patch (code needs work)	normal	feature request	7.x-dev	2 hours 34 min	
Tracker: Add menu item that takes you to 'my recent	patch (code needs work)	normal	feature request	7.x-dev	3 hours 17 min	
Javascript: Allow compatibility with other libraries	patch (code needs work)	normal	feature request	7.x-dev	3 hours 27 min	
RSS theming support	active	normal	feature request	7.x-dev	4 hours 8 min	

Of course, you can also submit your own requests.

- There is also an interesting option to obtain support over an **IRC channel**. IRC, or Internet Relay Chat, allows for real-time, typed discussions over the Internet. Joining a group like this is obviously a great advantage in that it immediately gives you access to many other Drupal people.
- There is a support **Mailing list** section that you can join, a **Developer support** section, and a forum to raise issues about the actual Drupal website under the **Drupal.org problems** section.
- Other sections include **Books about Drupal** and, following in the ever popular social bookmarking trend, a **Tags** section has been added too. There is a **Web watch** section as well.

If in doubt as to where to go, the **Support** page is probably the best place to start. More often than not though, you will have a fairly good idea of what you need, and should be able to go straight there.

Forum

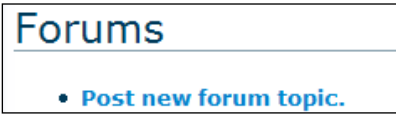
The forums are probably the single greatest problem-solving resource and information-based asset. Unlike the other types of information on the site (with the exception of the Freenode Drupal IRC), which are largely static, written answers or guides, the forums provide you with an interactive environment in which to learn. Of course, they also provide you with a medium for sharing whatever you have learned as well.

At the time of writing, there were in excess of 200,000 support-related posts alone. This should give you a good idea of how widely used these forums are. The following screenshot shows the **Forum** home page as well as the first few forum categories. From the large number of posts, you can tell that this is already a fairly large repository of knowledge, and hopefully you will take the time to add to it yourself.

Forums			
<ul style="list-style-type: none"> • Login to post a new forum topic. 			
Forum	Topics	Posts	Last post
General			
Important: no support questions here!			
News and announcements For news and announcements to the Drupal community at large.	1173	12498	29 min 16 sec ago by slimandslam
General discussion For less technical discussions about the Drupal project. Not for support questions!	13216	55470	17 min 1 sec ago by sepeck
Drupal showcase Showcase your site to others, maybe share a little about it - modules, theme, why you used Drupal.	2948	14187	47 min 24 sec ago by elsterama
Events For events, conferences and other Drupal happenings.	251	1357	5 days 44 min ago by saneangel
Usability feedback For interface guidelines, mockups, and usability feedback.	792	3756	1 day 1 hour ago by secgeek
Support			
Try searching the forums first or a specific project's bug reports . Remember all support on this site is on a volunteer basis, so please visit the forum tips for posting hints.			
Pre installation questions Is Drupal a viable solution for my website?	2676	11060	1 hour 9 min ago by Steven_NC
Installation problems For problems with installing a new Drupal site.	8017	33679	37 min 41 sec ago by Slaven
Upgrade problems For problems with upgrading an existing Drupal site.	2157	8581	1 hour 37 min ago by jared.lenover
Post installation Drupal is up and running but how do I ...?	46451	168578	13 min 19 sec ago by ilabs
Converting to Drupal Need help migrating your site to Drupal?	927	3671	4 hours 36 min ago by remst
Hosting companies For questions about commercial Drupal hosting.	559	4348	1 hour 10 min ago by crucialx

Looking at the entire page, there are three main forum categories – **General**, **Support**, and **Development** – that in turn have a number of subcategories to make navigating the structure fairly easy. Notice too that there is a block on the right-hand side of the page containing a list of the most recent posts. As well as this, you can also use the search tool, shown at the top right-hand side of the page or at <http://drupal.org/search/node>, to search for relevant information or users.

Finally, assuming you are a registered (and logged-on) Drupal user, you can also post new topics to the forum using the link given under the page's main heading, as shown here:

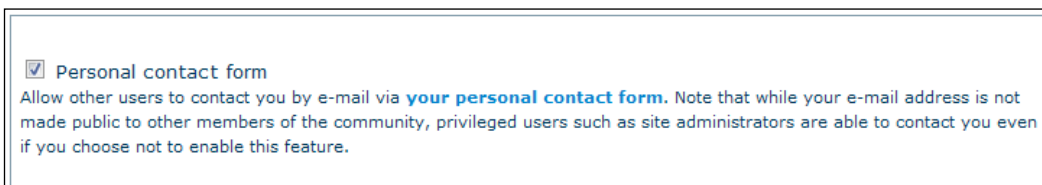


Before posting off hundreds of questions and salutations, please be aware that there is a certain etiquette to using these forums, and it should be followed at all times. Look at the following page before you begin writing any posts to the site:

<http://drupal.org/forum-posting>

A quick summary is as follows:

- Search the forums for your intended topic and use those posts instead of creating redundant information.
- Make forum post titles informative and meaningful.
- Submit a good amount of system-specific information in your support queries – for example, mention the Drupal version along with the database and database version.
- Bear in mind that not everyone using the forum is a native English speaker; so some posts may be construed as rude or abrupt when that is not the intention.
- Remain polite and reasonable – even if you are frustrated over a particular problem.
- Donate some time to responding to and helping other posters.
- If you would like, enable your contact tab so that people can offer support via email. Do this by editing your contact information as shown here:



Some of you may have noticed the link entitled **Recent posts** on the right-hand side of the page. Clicking on this link brings up a list of the topics that have recently been active, as shown here:

Recent posts				
All recent posts		My recent posts		
Type	Post	Author	Replies	Last updated
Issue	Duplicate entry errors in search indexer <small>new</small>	Gábor Hojtsy	³⁴ 34 <small>new</small>	8 sec ago
Issue	Can't specify content type at import <small>new</small>	rubinsta	¹¹ 10 <small>new</small>	17 sec ago
Issue	Getting everytime somebody login errors! <small>new</small>	softtouch	0	25 sec ago
Forum topic	IMCE - no "browse server" button <small>new</small>	stevekerouac	¹ 1 <small>new</small>	30 sec ago
Issue	Link to referring nodes appear only after manual update of reffering node <small>new</small>	Zbyna	0	1 min 7 sec ago
Issue	How does this work? <small>new</small>	spatz4000	² 2 <small>new</small>	2 min 2 sec ago
Forum topic	ASPO International (Peak Oil org.) goes Drupal <small>new</small>	Samuel Lampa	⁷ 7 <small>new</small>	2 min 28 sec ago
Issue	Doesn't work for me or bug ? <small>new</small>	chazz	0	3 min 9 sec ago
Issue	I can not log in ... <small>new</small>	Drunkensailor	⁵ 5 <small>new</small>	3 min 54 sec ago
Project	Codes <small>new</small>	Pasqualle	0	4 min 26 sec ago

If you would prefer to view the discussions that you personally have contributed to, then click the **My recent posts** tab instead.