

Comparing Open Source CMSes: Joomla, Drupal and Plone

By Brett Bonfield and Laura S. Quinn

Open source content management systems can make creating and managing your website a lot easier - and there's no licensing fee involved. But which should you use? We look carefully at Joomla, Drupal, and Plone to compare their strengths and weaknesses.

Every website needs up-to-date content, intuitive navigation, and a great design. And every site administrator wants to be able to get a website up quickly, make changes easily, and add new content with a minimum of effort. That's where a Content Management System (CMS) comes in. A CMS does three things:

1. Makes it easier to get your website up and running – once you've designed exactly what will best serve your site visitors, of course;
2. Promotes good website practices; and
3. Allows your non-technical staff members to easily make site updates.

You can do all of this without a CMS, just as you can stay in touch with people without using email. But like email, a CMS can make your life a lot easier.

Open source CMSs have been getting a lot of attention recently. Much of this is due to an attribute which nonprofits find very attractive: they're free. Typically, they are free both in the sense of "free beer," as there is no license cost for the software, and in the sense of "free speech" —meaning the product and the code behind it are available for you to do with what you will. The tools are developed and supported by a community of developers.

Three particular tools have been dominating nonprofit's open source CMS discussion in the last year: Joomla, Drupal, and Plone. All three of these tools provide solid, useful functionality for building and maintaining a website. Which is the right one for you?

We talked to champions of each system in order to learn more about each tool. Each champion demoed the CMS they advocate and answered detailed questions to allow us to understand the strengths and weaknesses of each system. As usual, there are no

simple answers, but in this article we look at the key attributes and tradeoffs of each system.

A Common Set of Core Features

These tools have perhaps more similarities than differences. All are useful, sophisticated content management systems that will support most of the tasks that your content editors and your site visitors care about. They can:

- Help you set up a useful site structure and navigations system
- Allow non-technical editors to update content, add new pages or change navigation menus
- Support a completely configurable graphic design—there is no reason for your site visitors to know what CMS you are using, or even that you're using one at all
- Facilitate internal work sharing by allowing some staff members to update only one set of things and other staff members to update others
- Automatically pick the appropriate content items to show site visitors based on rules—for instance, your home page could automatically display only the four most recent news stories or the events you have upcoming over the next four weeks
- Provide accessible sites, search engine optimization and human readable URLs
- Offer lots of plug-ins to support a wide range of common needs—and plenty of not so common needs as well
- Allow a good programmer to modify the website and CMS so that it does exactly what you want
- Answer your questions, provide updates, and supply plug-ins through a strong user and developer community

But there are certainly differences between the tools. Let's delve into each CMS in more detail.

Joomla

URL: www.joomla.org

Marquee nonprofit clients:

[Al Gore's website](#)

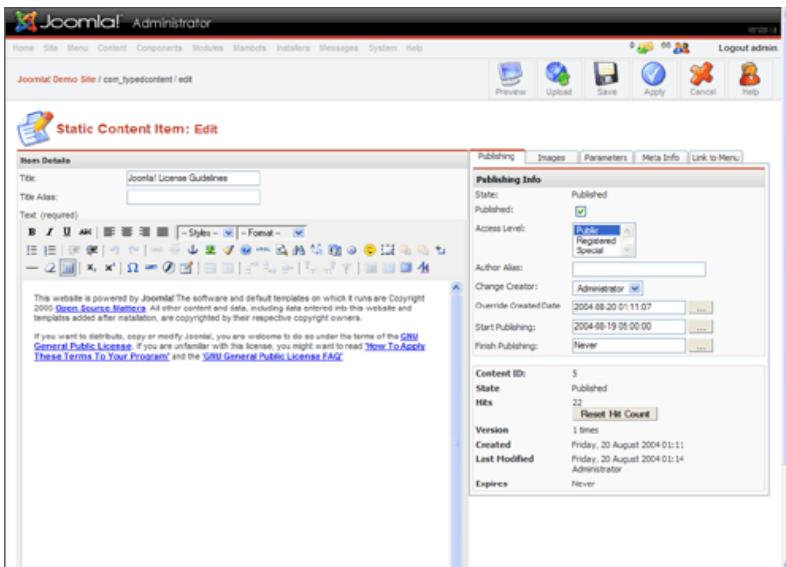
[Women's Edge Coalition](#)

[United Nations Regional Information Centre](#)

Joomla strives for power in simplicity. Its programmers believe that anyone with a bit of technical know-how should have no problem setting up and maintaining a website. They have created a tool that is friendly, comparatively easy to get started with, and prioritizes ease of use.



A website that uses Joomla in a state not too far from out-of-the-box



Editing this page in Joomla

Joomla is designed to work just fine in basic shared hosting environments (the least expensive, most common web hosting package). Its installer looks much like the simple installers used for common desktop software, and the administrative interface that content editors use looks much like a desktop program as well. There are few barriers to entry with Joomla, which means it should not take a web developer much time to get you up and running, and if you're technically savvy you may be able to do it yourself.

If you need to extend Joomla in a way not covered by its extensions—which happen to be beautifully documented and easy to find at extensions.joomla.org—you should not have to pay too much for a programmer, because Joomla is written in PHP, a widely-used general-purpose scripting language that is especially suited for Web development.

As is usually true, this ease of getting started comes with a tradeoff. Joomla can be a great choice to build a sophisticated website with hundreds of pages, solid navigation, and common content types such as news items or events. However, it has limited out-of-the-box functionality for dealing with sophisticated dynamic content structures. For instance, the site navigation is limited to no more than two levels of hierarchy, and you can only link one page to another (for a “you might also be interested in” type of structure) based on free-form page tags, rather than more rigorous metadata and rules.

The next major release of Joomla, version 1.5, should be out by year-end. This version will be a rewrite of the underlying code, in order to make it easier for programmers to extend certain functionality and organize underlying frameworks, but it is not expected to change the way that content editors interact with Joomla. Site visitors should have no idea that anything has changed.

Joomla is fully integrated with CiviCRM and integrates well with common packages like DemocracyInAction and GetActive.

Drupal

URL: www.drupal.org

Marquee nonprofit clients:

[American Cancer Society's Relay for Life](#)

[Participate.net](#)

[Science Buzz](#)

Drupal walks the line between power and ease of getting started. Like Joomla, it is built in PHP, can be hosted in a basic shared hosting environment, and provides a number of tools to allow non-techies to setup a website. In general, it requires more of a learning curve than Joomla, but offers more functionality for sophisticated websites out-of-the-box as well as a richer platform for programmers to extend. One of Drupal's strengths is its wide variety of a nonprofit-centric plug-ins, such as event registration, email newsletter and online donation functionality.



A website that uses Drupal in a state not too far from out-of-the-box



The Drupal Admin menu

Drupal, like Joomla, will work fine in a shared hosting environment. Also, like Joomla, it is fairly easy to get started—if you are technically savvy, you may be able to install Drupal yourself and begin customizing it. It likely will not be quite as easy to get a simple Drupal site set up as it is to get a simple Joomla site set up (compare [Joomla's installation guide](#) to [Drupal's](#) or the website interface for [Joomla's extensions](#) with [Drupal's modules](#)), but an experienced web developer should not have much trouble with either.

Drupal offers extensive and powerful tools for content editors or web developers to create websites without having to delve into the code, and serves standards-compliant, accessible pages out of the box. Its native workflow makes life easier for content editors who require multi-level approval processes. Those looking to build complex custom applications, though, may find that Drupal, in comparison with Plone has not yet been as widely deployed and proven in mission-critical applications and large institutions.

Drupal has a pragmatic and integrated approach to functions that are not core to a CMS, such as email newsletter and online donation functionalities. While Joomla and Plone emphasize a “best-of-breed” approach, which involves integrating other specialist tools (for instance, Democracy in Action or Salesforce), Drupal offers deeply integrated (but often less powerful) plug-ins for many of these tasks. The CivicSpace distribution of Drupal provides a set of nonprofit-specific add-ons that address a number of common requirements. This project takes advantage of Drupal's full integration with CiviCRM.

By the way, Drupal doesn't rhyme with “RuPaul” but rather is pronounced “droople.”

Plone

URL: www.plone.org

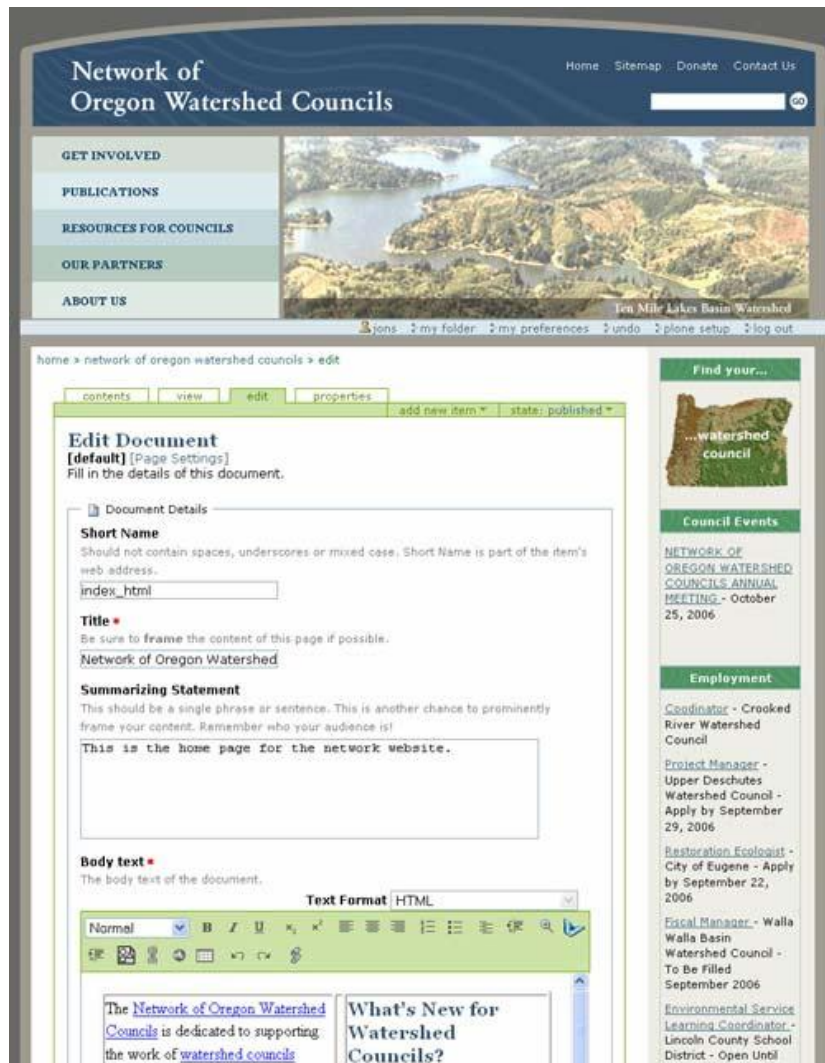
Marquee nonprofit clients:

- [Creative Commons](#)
- [Oxfam America](#)
- [Church of England](#)

Plone is the product of careful, well planned programming. It provides a powerful, mature platform for complex, world-class applications, combined with strong ease-of-use for the content editors responsible for maintaining sites on a day to day basis. However, the learning curve for web developers responsible for creating a site is substantial, and there are special hosting requirements. Plone can be a great choice for meeting sophisticated website needs, but may not be the best one for someone with no Plone experience who is looking to get a straightforward site set up quickly.

A website that uses Plone in a state not too far from out-of-the-box





Editing this site in Plone

Plone is rarely used by hobbyist web developers because its barriers to entry for small projects are higher than those for Joomla or Drupal:

- It requires a more unusual, and thus typically more expensive, hosting environment.
- The learning curve for understanding how to create and tailor a new site is steeper than with other tools. Configuration is done in a number of different layers in the system, requiring a fair amount of understanding of Plone's structure in order to setup a basic site, though documentation, books, and training classes are widely available.
- It is written in Python, which is a powerful but less commonly used language than PHP. While many highly skilled programmers prefer Python, it is likely to be more difficult to find a Python programmer to extend Plone— if extension should be needed—than a PHP programmer to extend Drupal or Joomla.

What this boils down to is that unless you hire someone with Plone experience, you will likely have to spend more time and money than with the other two CMSs.

However, of the three tools here, Plone is the most robust and proven application, with implementations in major institutions and organizations world wide. It offers powerful functionality and customization features, while still

providing strong ease-of-use so that non-technical staff can be easily trained in how to update content once the site has been setup. Like Drupal, it provides standards-compliant, accessible pages out of the box, and strong support for administrative workflow.

Plone's developer community strongly emphasizes software quality and reliability – and has built thousands of automated “unit tests” to help demonstrate that it continues to function as intended even as it rapidly evolves. Plone also excels at more complex content management tasks such as versioning (the CMS equivalent of Word's “Track Changes” feature), internationalization/multilingual content, permissioning, and custom workflows.

Plone has a regular release schedule: its next major release is scheduled for March, 2007, and the one after that is scheduled for October, 2007. The March release is focused on out-of-the-box usability, which should make it even easier for web developers to give content editors exactly what their site's visitors want.

Plone is being integrated with Salesforce and already integrates with DemocracyInAction and GetActive. Plone also integrates smoothly with systems found in larger organizations such as Microsoft Active Directory and LDAP servers.

The investment—particularly the learning curve—is substantial, but the result is a powerful, flexible platform on which to build world-class websites.

In Summary

So which tool do we recommend? That depends on your circumstances. Are you going to install and configure the tool yourself, or are you going to hire a web developer to do it for you? What's your budget for setup and ongoing hosting? In general there's a tradeoff: do you want something that is less expensive and more focused on getting a basic site up quickly, or do you want something that focuses more on powerful features, stability and extensibility?

For simpler requirements or lower budgets, Joomla, or possibly Drupal, should suit your needs. If you need something powerful and proven, and are willing to commit the resources to make it happen, Plone is likely to meet your needs, but Drupal is also worth a look. Do you want tool that serves groups that are somewhere in the middle, that need a straightforward setup but also a fair amount of power? That's where Drupal excels. Of course, this may change over time. Joomla is getting more powerful (and, as our examples show, it is already serving large, highly visible organizations), Plone is learning from Drupal and Joomla, and Drupal is getting both easier to use and more powerful with each release.

There is no doubt that all three of these tools are ready for prime time. You may need a web developer to help you get your website to look the way you want and do what you want it to do, but these three projects' feature set and maturity all provide a reliable base for building useful, attractive, secure websites. Any of the three CMSs in this article will make it easy for you to post images, keep your design clean and consistent across all the pages on your site, update your site's text any time you need to, and make it easier for you to help your site's visitors easily access and interact with your organization.

Ultimately, that's the major benefit of having these three great open source CMS available: your site's visitors will have a better experience with your organization.

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