Survey of web hosting options for small to medium hosts

Larry Garfeld 12 August 2005

Executive Summary

This document provides an overview of a number of Linux-based alternatives for web hosting maintenance and management. Such systems provide a web-based front end to allow system administrators and clients to manage domains, site configuration and features, site content, and mailing information from a single location. The survey was conducted by Larry Garfield during the week of 8 August 2005. The target audience is small to medium web hosts looking to offer hosting as part of a value-added package, such as web design and hosting.

In general, the survey categorizes the available solutions into three categories:

- Free (no cost) control panel software: Many of these systems are available under Free Software / Open Source licenses, although not all. Unfortunately, of the four applications surveyed only one was even remotely usable, and that one had notable interface problems due to poor or incomplete translations.
- Commercial control panel software: Commercial offerings appear to be much better-featured than the non-commercial offerings at this time. However, many are also quite expensive. Of the two surveyed here, one is prohibitively expensive for small to medium hosting providers. The other is a viable option for administrators willing to build their server around it directly.
- Virtual hosting: Virtual hosting is not hosting per se, but an agreement whereby the administrator purchases a discounted account from another web hosting service, generally one that runs its own data center, and then resells hosting space to their clients at a markup. Most large web hosts offer such a service, with varying features. All system maintenance and control panel installation and maintenance is handled by the main web host rather than by the virtual host. A full survey of such services is beyond the scope of this document.

For small to medium hosts, those looking to host 50 or fewer sites, the reviewer would recommend, in order:

- 1. **Virtual Hosting:** Saves time and effort by outsourcing the server maintenance on a fixed rate and focusing on value-added services.
- 2. **DirectAdmin:** A reasonably-priced commercial option that does not offer the widest feature set, but does offer a good "bang for the buck".
- 3. **ISPConfig:**The only free option surveyed here that was in any way usable, ISPConfig is well-documented and has a good feature set. However, translation issues and other interface problems make it a less-than-ideal option.

Further details of the options surveyed follow in the next section. All test installations were run on a Debian 3.1 "Sarge" computer, although most of the available options will run on multiple distributions.

Survey of Linux-based web hosting alternatives

Free hosting control panels

ISPConfig

http://www.ispconfig.org/ License: BSD-style

Inline documentation for ISPConfig is fairly minimal. Online documentation, however, is extensive, although not particularly insightful. It often follows a pattern of "the button marked 'Do X' does X when you click it." The program is originally from Germany, and a few notification pages or warning messages are mysteriously in German instead of English. There is, however, very extensive setup documentation for the required software under a number of different distributions, which served as the bases for the test system for most other tested software.

ISPConfig installs its own dedicated apache installation, compiled from scratch.

The interface is somewhat quirky, although not obscure. Frame-based, it has a tendency to return to a default status page after a change has been committed without further notification. Although the documentation claims that Frontpage extensions are supported only under Apache 1.3, it claims to have enabled it anyway when running Apache 2, even if Frontpage extensions were not explicitly installed. The reviewer was not able to confirm or deny whether they were properly setup.

The interface also has some inconsistencies. For example, creating a new user informs the admin that the new user has an e-mail address of larry@example.com and a username of web6_larry, assuming the user was created on the 6th web site configured in the system. However, the included webmail module requires the user to log in as web6_larry@example.com.

If used, the reviewer recommends looking into Fedora Core 4 as the hosting platform as it offers newer Apache and PHP software than Debian. ISPConfig has detailed tutorials for installation on both platforms, as well as on SuSE and other distributions.

DTC

http://www.gplhost.com/?rub=softwares&sousrub=dtc

License: GPL

Although promising due to its integration into Debian, DTC was found to be unusable. The documentation, first of all, is mostly non-existant. It requires Apache 1.3, which it will install itself via Debian's apt system, but that is not documented anywhere and in fact having Apache already installed can cause problems. The post-install configuration script also does not run properly on its own, but must be rerun manually. The script itself is also buggy, as it asks which Apache modules to load four times in sequence.

Even after it is installed and configured, there is no apparent inclusion of any configuration control panel.

At this point the reviewer opted to write off DTC as unusable.

ZPanel

http://www.thezpanel.com/ License: No-cost Proprietary

ZPanel is originally a Windows-based application, not Linux-based, and that shows in its design. The installation routine is manual, and the documentation for it disturbingly basic. For instance, it says to "edit database.php", but does not make any indication of what edits to make to that file.

There is a configuration wizard, although its actual effect on configuration files is not apparent. Once installed, however, there is not readily apparent method for actually making configuration changes. Whether due to improper install or deficiency in the software is unclear, but there was not obvious way to edit domain information, mail records, etc.

There were also two other show-stopping bugs. First, one page pertaining to billing had the line to include the database connection commented out. As a result, it would not function until that line was restored. Secondly, other pages errored-out on a failed include, as they were apparently still hard-coded for Windows path names (e.g., c:/inetpub/).

At this point the reviewer opted to write off ZPanel as unusable.

Webmin

http://www.webmin.org/

License: GPL

Despite Webmin's apparent popularity with some users, the reviewer again found this application unusable. Whether installed via Debian's apt system or manually via a downloaded tarball, the system would generate an Access Denied message when attempting to log in, but before it even asked for login credentials. Examination of log files revealed that it was missing the Perl Authen::PAM module. Even after that was installed, though, it still gave the same result. These observations were confirmed by another user upon request.

At this point the reviewer opted to write off Webmin as unusable.

Commercial hosting control panels

CPanel

http://www.cpanel.com/

CPanel is widely popular with medium to large web hosting services. Its feature set is extensive, and its interface, while still somewhat quirky, is better than ISPConfig's. It is also themeable, both in style and in layout. The reviewer did not run a local install but was granted a provisional account at a hosting company with which he is familiar in order to test out the interface.

The main drawback to CPanel is cost. The license cost for a single IP address is \$1250, with unlimited domains and one year of support. Additional years are \$200 each. Alternatively, it can be licensed for a limited number of years for a lower price: \$400 for one year, \$800 for two years, \$1100 for three years. For a small web host (under 100 sites), that is a considerable cost. As a result, many CPanel-based hosts are in fact virtual hosts (see below under Resellers).

DirectAdmin

http://www.directadmin.com/

The reviewer did not run a local install, but was granted a provisional account by a hosting company for the purposes of testing out the interface. This program was the simplest but most easily approachable of those reviewed.

According to the company, DirectAdmin supports Fedora Core 1-3, older versions of Red Hat, Red Hat Enterprise Linux, and various versions of FreeBSD only. The majority of software is installed by DirectAdmin itself. Specifically, it installs: Apache 1.3.33, FrontPage Extensions 5.0.2.2510, PHP 4.3.11, phpMyAdmin-2.6.1, MySQL 4.0.23, Exim 4.50, Majordomo 1.94.5 (mailing list manager), vmpop3d 1.1.7f, WU-IMAP, Proftpd 1.2.10. That is somewhat older versions of some packages (most notably Apache and PHP), but not out of line with many other hosting services.

Although it does not include Webalizer, it does incorporate a simple statistics display into the control panel directly. Data is limited to bandwidth usage and hit counts.

Pricing for DirectAdmin is considerably lower than for CPanel. A lifetime license costs \$299, although it includes only 90 days of technical support. It can also be rented for \$29/month or \$200/year (works out to \$16/month). All plans include free updates/upgrades. The company also provides extensive online documentation and tutorials for customers of their customers.

Virtual Hosting

Alternatively, many small to medium web hosts do not run their own servers but are resellers for some other service. There are dozens of such reseller-targeted services offering Linux-based or FreeBSD-based hosts, and in fact most control panel software has reseller-targeted features for exactly that purpose.

A full survey of resellers is beyond the scope of this document. However, a brief informal survey of several resellers showed an average price of \$30-\$40 per month for a reseller account, which offers multiple gigabytes of storage (to be parcelled out to clients as the reseller chooses) and 50+ gigabytes of transfer per month. Some hosts allow an unlimited number of domains to be hosted on a single account while others have a limit between 20 and 40, depending on the reseller account in question. Most offer free setup, and all naturally handle all server maintenance tasks and provide a web-based control panel front end. Many use CPanel, while others use some other system or a home-grown solution.



This paper is released under the Creative Commons Attribution-Noncommercial-Share Alike license. Redistribution is permitted for non-commercial purposes provided that proper attribution is included. http://creativecommons.org/licenses/by-nc-sa/2.0/