Running A Successful Web Hosting Business

By Frank DeChellis



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What is a Web Hosting Service?

An entity that maintains a web server, a dedicated Internet connection and hosts web sites for residential and corporate customers. Revenues may be drawn directly from the web sites or through another business model (eg. advertising).



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Why Become a Web Hosting Service?

- Adds another revenue stream for your ISP operation
- Takes advantage of already existing Internet infrastructure
- Provide expertise in an area that may be able to serve specific web host clients (eg. PHP, payment gateway)



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Why Become a Web Hosting Service? (cont'd)

- You feel you can run an operation that would be attractive to a potential buyer
- You would like to generate extra revenue to fund the real reason you needed an Internet connection and server
- You enjoy going to bed wondering if your system will survive the night ©



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Basic Needs for a Web Hosting Service

- Dependable Internet Connection
- Server running Apache HTTP Server, of course
- · Data backup system
- Electrical backup (ie UPS, external generator)



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Basic Needs for a Web Hosting Service (cont'd)

- Customer Support system
- "System monitoring" tool (eg. WhatsUp)
- Billing System
- Protection against outside world (firewall, etc)



How Should My Server Be Set Up?

- Plenty of RAM
- Lots of drive space (SCSI)
- · Dependable, supported OS
- · Backup drive
- Apache HTTP Server
- Apache SSL
- PHP
- MySQL



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How Should My Server Be Set Up? (cont'd)

- FTP
- Secure Shell
- · Very limited or NO telnet access
- Close services that you don't need
- Avoid Shell Access
- Avoid MS Extensions in UNIX



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How Should My Server Be Set Up? (cont'd)

- Web based log file analyzer for clients (ie Analog, Webalizer)
- For smaller operations, automatic and dependable monitoring and paging system (to wake you at 3:27 AM)



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How Should My Server Be Set Up? (cont'd)

- Reboot automatically on panic (for some versions of Unix)
- Limit server to being a web server only if possible
- · Solid network adapter



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Apache Server Setup for Web Hosting

- Install mod_php to add very powerful server-side scripting language (http://www.php.nei)
- Add mod_vhost_alias which allows additions of new vhosts without restarting server



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Apache Server Setup for Web Hosting (cont't)

- Install mod_perl to allow faster execution of CGI scripts (http://perl.apache.org)
- Streamline complex conf files by installing mod_macro (http://www.cri.ensmp.fr/~coelho/mod_ macro)



Apache Server Setup for Web Hosting (cont'd)

- · Set aside swap space
- For your platform, adjust fstat, netstat, maxusers, vmstat
- In Apache, adjust MinSpareServers, MaxSpareServers, StartServers, MaxClients, etc



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Apache Server Setup for Web Hosting (cont'd)

- Disable DNS lookups
- Avoid unneeded I/O (logging, content)
- Keep logs on separate drive/bus



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Security Issues for Apache

- Stay up to date on issues regarding Apache and security!!!!!!
- · No shell access
- · No clear text passwords
- FTP setup
- Disable unneeded daemons (smail/gmail/sendmail)



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Security Issues for Apache (cont'd)

- Run server as an unprivileged user
- Log files and PID file locations avoid file overwrites
- Protecting file access symbolic links and document root
- Monitor your server and Apache



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Security Issues for Apache (cont'd)

 Protect server from the risks of multiple users and CGI scripts by installing cgiwrap which runs CGI scripts as the actual user. Also prevents against users over-writing others files (see http://www.umr.edu/~cgi-wrap)



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What Should be Standard with User Accounts?

- Full details for publishing and updating sites
- Web based log file summaries updated periodically (preferably daily)
- Email forwarding for mail sent to their domain
- Minimum 10 Meg Disk Space



Service Level Agreements

- What can you comfortably guarantee? Think about financial flexibility and liability.
- What does your insurance cover? (review your policy...you'll probably find that it does not cover much)



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Service Level Agreements (cont'd)

- Do you have SLA's with your suppliers?
 If upstream provider goes down, will they help you with lost revenues?
- Before proceeding, see your lawyer and see what your competition does.



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Other Services/Options to Offer

- · NT Hosting with MS Extensions
- Secure server access
- · Payment gateway services
- Domain Registration Services
- Web/Application development
- Server collocation
- Advertising on home/user sites



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What a Server I've Set Up!!! Now What?

- · Develop a pricing structure
- · Have a working billing system
- Have a clear procedure for clients on how to upload and update their web sites
- Develop a procedure for adding new accounts and domains that will allow you service new customers quickly



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Attracting Users/Customers

- If you own an IPS, up sell your clients
- Affiliate yourself with ISPs and service their clients
- Offer services for Web Designers and help them service their clients
- Contact marketing firms who include WWW presence as part of a marketing plan



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Attracting Users/Customers

- Conventional advertising (Print, Radio, TV, Direct Mail, Internet)
- · Referral incentive for current customers



Questions



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For More Information

- "Web Hosting for Fame and Fortune" presented by Jim Jagielski at Apachecon 2000 in Orlando, Florida
- "Workshop for Small to Medium Size ISPs Entering the Web Hosting Industry" developed by 14 attendees at Apachecon 2000 in Orlando, Florida



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