Server & Software Performance

See Also: Tutorials > Speeding Up Page Load

General Questions We Get About a Clients Hosting/Server

We continually get questions like:

- How does the server affect the performance of our software?
- When will I need to upgrade my hosting?
- Will I need to upgrade my hosting when I have 500 (1,000, 10,000,...etc) users in the database?
- Will I need to upgrade my hosting when I have 1000 ads (or 10,000 ads, 100,000 ads,....etc) in the database?
- If I upgrade my hosting will my site be faster?
- Will adding more memory to my server help?
- My site used to be so much faster than it is now but there are no more users/listings than there used to be. Why?

We hope you get the idea. Our answers to all these questions is how does your site work now? Is it to your satisfaction? Does the site react fast enough? Even in high traffic times for your time zone?

Server Environments and the Software Made For Them

One of the problems with our software (or any Internet hosted software) is that we don't control the environment the software is eventually installed in. The host controls that environment and we can only request specific minimum requirements our software needs from that environment to work. Unfortunately we can't request exactly what would be best or what we would want in the environment to operate our software or it would be too hard for you to find a host that would support that configuration. We have to code our software not necessarily to the latest and greatest of databases, of php environments, of server hardware or of Linux/Windows versions but to the most readily supported by the bulk of current hosts available.

Within our software we have created many "load saving" features such as the internal caching system of pages, internal caching of certain kinds of data, "pre-building" of data within the database to save "run-time" database calls, movement to a file-based design system and numerous other internal rewrites of features to lessen their load on the server. So our first answer when a client notices their site isn't as fast as they want it to be or used to be is to try one of the above "configurable" features first. This usually comes down to turning on caching within the software.

Specific Hosting Situations that Affect Performance

We've have created the above features in our software to help improve performance but the hosting situation can affect this performance more than any of those features. Below are some of the

situations from the server side that have affected performance. Several comments below are from experiences dealing with numerous hosts and many times reading between the lines in their responses as well as from setting up our own testing environments to test our own software.

Note that the scenarios below are just a few and just to give you an idea of SOME of the things that affect your performance is a specific situation at a host.

Your site performance can be affected by any of the following as well as numerous other Hosting scenarios

- You could be put on a brand new server to begin with. Great, as you were one of few possibly sharing a bandwidth pipe for that server and the server was sitting around waiting for the next request and executing requests to your site singly and quickly instead of juggling hundreds or simultaneous requests at once as happens of fuller servers.
- Your host could have put a new site on the same server that puts a large server load all at once. Or another site on the same server could have sent out a large email eliciting a lot of requests to their server all at once. Either way hosts try to keep these problems to a minimum by limiting bandwidth (and server loads) by specific sites but they sometimes surprise the host as well as the "offending" site owner.
- Another site on your server (or your site) could have been hacked and that site could now or had been used to spam email or some other bandwidth/server load-eating task, affecting performance of all sites on that server.
- Clients have complained about site performance and have been moved to another server...and performance increased. This is great for you but may not be lasting. You could be moved to a new server from an older server but the new "good performance" may only last until the current server becomes full itself or the problems on the old server "migrate" to the current server.
- Clients have complained about site performance to their host and blamed the software first without really checking out the situation. We see this the most and what we have to deal with the most. Many of the above features were in response to such situations and we are continually changing the software for speed purposes and will continue to do so but you can only trim down some necessary procedures down a certain amount before you have to point the finger back at some problem with the host. We have created some features in our software to specifically track down where the execution time is happening to track down these problems and so these situations have to be dealt individually at times.
- While you and several others may be on the same servers there could be several servers using the same database. Most sites do not make heavy (if any) use of the database so this is not an uncommon situation but just as your server can be overrun with sites on it database servers can be overwhelmed with the number of servers (sites) using it.
- Server hardware can have an effect. Older servers tend be slower than newer servers but this is not always true. Older servers may not execute faster than a new one but have more memory to juggle requests and execute commands. You can generally only choose a base configuration at the time of setting up your site. As a general rule newer is always better as a better motherboard and more memory is the usual result.
- A dedicated server with dedicated database and bandwidth pipe supplying it goes a long way to solving most of these problems but is out of the reach of most ventures until proved to be more successful. 😃
- The total amount of bandwidth available for a site within a month is totally different from how much bandwidth is available to your site at any one point in time. Sure you may have access to more bandwidth than you think you can or do use in a month but if your use of that bandwidth depends on the bandwidth equivalence of a straw at any given time your site would still be slow.

- And many more that we may add as time goes by…

There are too many situations to list here and we are just putting the above out there to illustrate a point. Knowledge about your hosting configuration can go a long way to diagnosing problems and what could done to improve a site's performance.

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