

What You Need To Know About RAM And CPU On Shared Hosting Plans



Let me guess. When choosing a shared hosting you want more CPU and RAM for your account for less money. But some shared hosts do not even display this information. So embarrassing! "What's wrong with them?!" – you may say. And your second thought is "Perhaps CPU and RAM is not what guarantees a shared host to be powerful and fast?"

Let's me show you the details.

In this article:

1. You will understand the shared hosting's business model in general. And this will help you see why advertised RAM and CPU are mostly about marketing, not about the performance.
2. On the other hand you will see when RAM and CPU matters for shared hosting.
3. Also, I will share with you my own experience proved with data. And you will see how different can be the speed of the 15 shared hosts I monitor regardless of RAM.

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By the way, here's a disclosure: There are some affiliate links on this page. In other words, I get paid if you click on the links and make a purchase. All such links open in new window/tab; no software/program will be installed to your computer. (This is a standard notice required by hosting companies.) Please note that although all hosts mentioned in this article are well-established and considered to be very good, I highly recommend not all of them. My recommended hosts are [here](#).

CPU and RAM on bad shared hosts – entertaining video

Before getting to more serious stuff, I've got a video for you. I had some fun making it on the problem of ambiguity of CPU and RAM on shared hosts. It may look not serious (until you feel the pain like this) ☺



Watch the video on YouTube [here](https://www.youtube.com/watch?v=hMrmqO80ILY&feature=youtu.be) (<https://www.youtube.com/watch?v=hMrmqO80ILY&feature=youtu.be>).

Alright, the emotional section is over, let's get to more practical ones.

The secret of RAM and CPU of shared hosting is in its business model

You just need to get a very rough understanding on how shared hosting makes money. And it will become clear to you about server resources you can get with a shared host.

Here we go.

Shared hosting business works like this (from the perspective which matters for this article):

- A shared hosting buys or rents a server. (It does not matter for this article whether it's a dedicated server, a VPS or a cloud solution).
- The server has limited resources. (E.g. 2 CPU cores and 64 GB RAM. And let's ignore other resources like bandwidth, storage etc as we are focusing on CPU and RAM).
- The hosting sells a number of shared hosting accounts to clients (i.e. people like you).
- The number of clients is limited by the ethics and management skills of the shared hosting company. To put it simply, the more clients on the server and the worse management skills, the worse shared hosting performance.
- For example, the company sells 500 shared hosting accounts (the realistic number) and places them on the server.
- Each account gets, say, 1 CPU core and 1 GB RAM.

So there are 500 users with 1 GB RAM allocated for each user. And the server's RAM is 64 GB, not 500 GB (1 gb x 500 users). This is the point of a shared hosting – the server resources are shared among the users. Well-managed shared host pay a lot of attention to limiting the server resources for each user to *avoid deliberate or unintentional abusing the server resources* and consequently overloading the server.

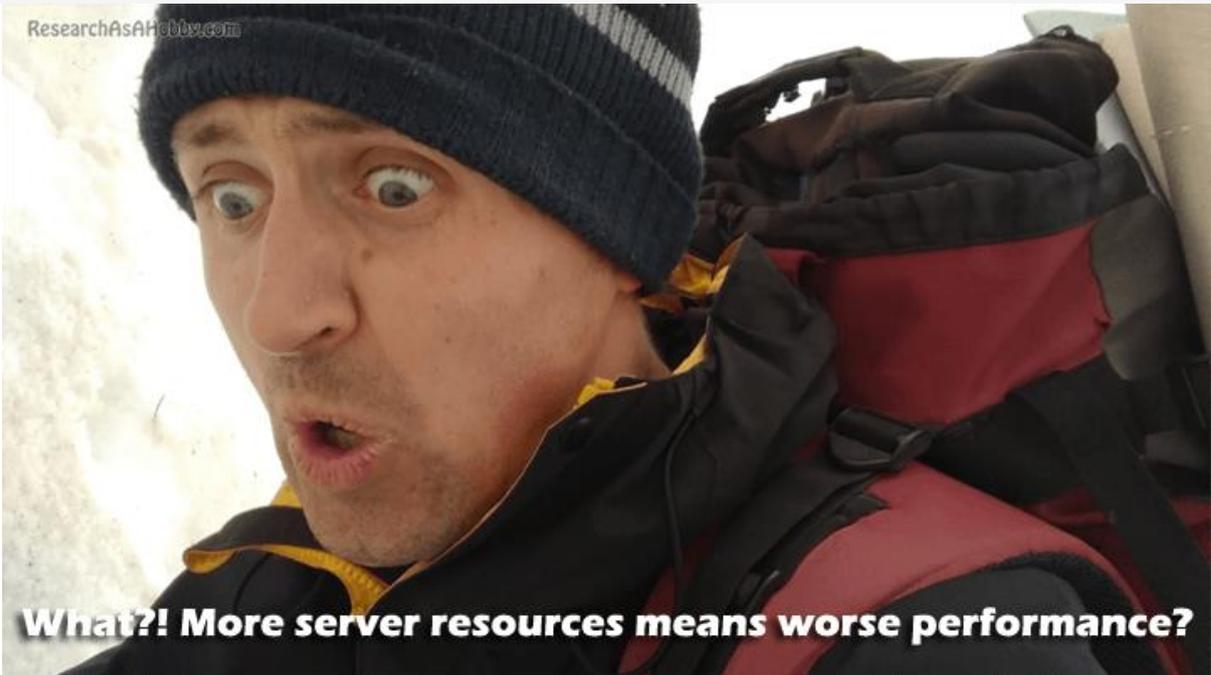


A shared hosting company simply can't afford selling a small amount of accounts on the server for a shared hosting price. **The fewer clients the hosting allocates on one server, the bigger price for a hosting account will be** (considering all other things being equal).

The reason why it's possible to host hundreds of clients on one server and their websites can still be fast is because the *websites do not load the server simultaneously*.

But **the more clients** there are on the server and **the more resource-intensive tasks** the clients run (e.g. the more bloated the websites are) the more chances that the server will become slow. If the usage of overall server resources is close to the limits, the websites of all clients on the server become slow. And as soon as the overall limits of server resources (e.g. CPUs and RAM) are exceeded, the server will give out server errors (resulting hosted websites and other applications in downtime).

Here's an interesting note. **Even if your hosting sets the fantastically generous limits for each user**, for example all 2 available CPUs and unbelievable 10 GB RAM, the overall server performance will not increase. But vice versa, the hosting performance will likely become worse. In this case just a few abusers may overload the whole server then. As a result the hosting will become slow.



That's why the management task of the hosting requires finding a balance between different factors. The most obvious factors are these ones:

- The number of clients on one server;
- The server resources;
- The allocated resources for each client;
- Keeping an eye on server abusers and resource-intensive tasks.

Thus, it's much more important to choose the hosting not by RAM and CPU limit. But by researching *how well the host manages the servers, controls the abusers and whether the host oversells the service (i.e. sell too much hosting account on one server)*.

One of the hosts which perform a strict control on server resource usage is [SiteGround](#). The hosting offers enough server resources for each shared hosting account. But thanks to the automatic monitoring and control the users can't abuse servers. As a result the hosting performance stays brilliant and clients are highly satisfied.

This host is an example when a high-quality control restrictive only the abusers whereas users with valid resource usage experience high performance. SiteGround manages to keep the balance that I've written above very well. This is one of the reasons of why this host is so popular and successful.

This is the hosting I recommend for a number of reasons (you can see my short review [here](#)).

Wait. Do you mean that RAM and CPU allocated for a shared hosting account are not important?

RAM and CPU limits are still important for shared hosting account, but not to the extent most people think.

As I wrote above, it's way much more important how hosting manages its servers and monitors resource-intensive tasks rather than the number of GB and CPU it allocates for a shared hosting account.

But still, if RAM is too low or CPU usage is too restricted, then when doing something a heavy even for a short period of time may result in failure.

One of such examples among well-known hosts was GreenGeeks. With 386 MB of RAM offered with the cheapest plan for some users it was a pain to do something in their WordPress websites filled in with lot off plugins. The dashboard could easily become too slow or even not responsive.

And although theoretically 386 MB of RAM should be enough for a WP website, the practice shows that it's recommended to have 512 MB of RAM or more.

Not long ago the minimum plan of GreenGeeks changed for the better and now it offers 786 MB. By the way, I closely monitor the performance of this host as well as of 14 others. And publish monthly reports the [here](#).

Most hosts nowadays set the limit of CPU and RAM pretty generously. But many hosts fail at managing the servers and controlling the abusers or simply oversell hosting (sell too many accounts on one server). And this results in degrading the server performance while it is filled with more and more users.

My face when a website hangs



By the way, looking at the [tables](#) with monthly average hosting speed since 2016 can let you draw some conclusions which hosts are managed better than others.

Also, if your website experiences high short-lasting traffic peaks or server load (e.g. you run a resource-intensive tasks or plugins such as some backup plugins or security scanning services), then you may need a higher CPU and RAM resources which could handle this.

But usually the shared hosting plans with higher limits of CPU and RAM cost more. The reason is that the true way to give you more CPU and RAM is not to simply increase the quota, but to decrease the number of clients on the server. With a proper management of course.

My experience with hosting speed and RAM dependency

As you may know, I've been monitoring the performance of 15 shared hosts since 2016. I anonymously bought the cheapest shared hosting plans, installed a typical WordPress site with some content. Using a third-party monitoring service which tested the website Full Page Load Time (the speed) each 20 minutes in 24/7/365 manner (more information about how I run the tests is [here](#)).

So, I have put together the average monthly speed values for each host since February 2016 till January 2019 inclusive. And added the information about the RAM allocated for the hosting accounts (I took this information from cPanel dashboard). The results are in the table below:

Shared Host	Avg speed, sec	RAM, GB
GeekStorage	1,15	2
SiteGround	1,29	N/A
MDDHosting	1,31	1
VeeroTech	1,51	1
A2Hosting	1,51	0,512
StableHost	1,52	N/A
LunarPages	1,56	N/A
GreenGeeks	1,57	0,786
HawkHost	1,67	1
InMotionHosting	1,69	1
Squidix	1,71	2
HostWinds	1,74	0,512
Eleven2	1,94	N/A
MochaHost	1,99	N/A
GlowHost	3,15	0,512

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As you can see from the above table, there's no strict dependency between the size of RAM and the speed performance of the hosts. It's much more important how well the servers are managed.

Also you may notice that some hosts don't display the information about the RAM available for a shared hosting account. But even more hosts don't display it when you are shopping for a shared host. Apart from the reasons that I've already mentioned (i.e. server management is much more important), there's another one.

Many shared hosting clients usually don't really understand all these nuances that I'm pointing out. And technical details such as RAM, CPU etc may puzzle the clients a bit. That's why many hosts simply don't want to overcomplicate the sale pages.

But some hosts on the contrary emphasize this information, since such hosts target more technically advanced clients. For example, one of such hosts is [GeekStorage](#). This is another host that I highly recommend for performance reasons (my short review is [here](#)).

By the way, the more technically oriented the hosting, the more carefully (and precisely) the hosting displays CPU and RAM limits. The reason for that is simple and lays in basic marketing principles. More technically advanced and experienced

users can quickly determine whether the advertised server resources look real. And if a hosting is not delivering the advertised server resources, the target clients (who are technically more advanced and experienced than an ordinary user) will leave such host.

Of course it still depends a lot on how the shared hosting servers are managed. And this can be understood only by researching the reviews from knowledgeable clients, monitoring the performance and personal experience.



Conclusions

I'll put it simply and short:

- CPU and RAM limits on shared hosting are not as important as *the technical management of the shared hosting*.
- CPU and RAM resources advertised on a shared hosting are not the dedicated resources. It means not only that *you can't use more than that*. But at the same time you are *not really promised these resources to be at your disposal* at any time you may need it.
- Bigger CPU and RAM on shared hosting does not mean that your website will be faster.
- Bigger CPU and RAM on shared hosting does not mean that your website will be able to handle more traffic at *any given time*.

- Bigger CPU and RAM on shared hosting does not mean that your website will be able to handle more traffic with *proper speed*.
- The shared hosts which don't display RAM and/or CPU limits can be both bad and good.
- The shared hosts which do display RAM and/or CPU limits can be also both bad and good.

ORIGINAL BLOG POST URL: [HTTPS://RESEARCHASAHOBBY.COM/RAM-CPU-SHARED-HOSTING-PLANS/](https://researchasahobby.com/ram-cpu-shared-hosting-plans/)



I hope you enjoyed the article!

You can read my free researches on resources and tools for bloggers and small business owners on this website. By the way, if we haven't met before - my name is Michael Bely.

If you have any questions, visit my website and ask any questions in the comments or privately via the Contact Form. Don't be shy!

By the way, do you know that...

[More expensive hosts do NOT always mean better hosts?](#)

My Best Materials:

- [As full as possible list of EIG companies and brands with details \(beware EIG hosting!\)](#)
- [Non-stop hosting monitoring reports](#)
- [One best security plugin or combination of plugins?](#)
- [Protect your website from hacking step-by-step – easy, free and very effective](#)
- [How to migrate WordPress website to HTTPS the right way for free](#)
- [How to copy, clone, migrate big WordPress site easily and for free](#)
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