

Difference Between Dedicated and Non-Dedicated Servers

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Bottom line

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When you are about to launch your website, the first and foremost decision that you have to make relates to your website hosting. As a beginner, you might feel overwhelmed with the variety of hosting options available with different hosts. However, these hosting types can be broadly classified into two server types - dedicated and non-dedicated.

What does a dedicated server mean?

As the name suggests, a dedicated server is fully dedicated to serving the needs of your website. You have the entire server and its complete power working exclusively for your website. It is like having an in-house web server without worrying about its maintenance.

What does a non-dedicated server mean?

A non-dedicated server is the other side of the coin as it is a complete opposite of a dedicated server. In this case, your website is hosted on a server that hosts many other websites along with yours. The resources of a non-dedicated web server are shared among different websites hosted on this server. A single non-dedicated server can host hundreds or even thousands of websites around the globe.

What is the difference between dedicated and non-dedicated servers?

Dedicated and non-dedicated servers are like two opposite shores of a sea. A dedicated server hosts only your website, and all its resources are available for your use. A non-dedicated server, on the other hand, hosts multiple websites, making them share the server resources and total cost between them.

Here are some major differences between dedicated and non-dedicated servers:

Dedicated server: It hosts a single website. | Non-dedicated server: It hosts multiple websites.

Dedicated server: It is expensive as a single website owner bears the cost. | Non-dedicated server: It is an inexpensive option since multiple website owners share the total server maintenance cost.

Dedicated server: The server resources and power are available for a single website. | Non-dedicated server: Multiple websites share the server resources and power.

Dedicated server: This server type positively impacts your website's loading time. | Non-dedicated server: This server type negatively impacts your website's loading time.

Dedicated server: It offers ample storage or disc space for your website. | Non-dedicated server: It offers less storage or disc space for your website.

Dedicated server: All the server bandwidth is available for your website. | Non-dedicated server: The server bandwidth is shared among multiple websites hosted on the server.

Dedicated server: A dedicated server is a more secure option for hosting your website. | Non-dedicated server: The security of your website can be compromised by a fraudster having access to the non-dedicated server as a fellow website owner.

Dedicated server: Such servers provide better website uptime. | Non-dedicated server: Your website uptime might get affected due to bad neighbors.

Speed of dedicated server vs. shared server

One of the biggest advantages of using a dedicated server is its speed. These servers ensure faster loading times for your website as the server resources are not shared with other websites. Also, a dedicated server is extremely reliable in case of traffic spikes and still provides a good speed.

In the case of non-dedicated servers, website speed might or might not be an issue depending on your website neighbors on the same server.

A neighboring website that experiences high traffic volumes might use the majority of your website server's processing power. Therefore, speed reduction or downtime is high on non-dedicated servers.

This is very common in shared hosting. However, an important factor to consider is the size of resources allocated to each hosting plan. For instance, you can check in this [hosting comparison](#) how the number of resources differs from one hosting plan to another.

Moreover, a non-dedicated server is unreliable in case of traffic spikes and might lead to website downtime.

How much does a dedicated server cost? Why are they expensive?

Depending on your website needs, a dedicated server can cost anywhere between \$75 per month to \$550 per month. You can grab a good discount if you commit long-term with a host.

Dedicated servers are expensive especially premium dedicated servers, because you are not sharing the server resources with anyone else, unlike non-dedicated servers. You are responsible for paying the entire running costs of the server, money spent on software and hardware upgrades, and staff expenses spent on maintaining your dedicated server. Non-dedicated servers are cheaper just because these costs are divided among multiple websites hosted on them.

How do I choose a good dedicated server?

Choosing a good dedicated server for your website requires you to consider a few important factors:

Budget

The first and foremost consideration in choosing a dedicated server is your budget since a dedicated server is costlier than a non-dedicated one. Along with the short-term costs, keep in mind the long-term costs for a sustainable server solution. Always compare the dedicated server packages available from different web hosts.

Available bandwidth

Though a dedicated server is exclusively available for your website, it does have limits. Every server has a maximum bandwidth limit, so you will have to check the bandwidth available with the dedicated server you choose for your website. Then, compare it with your website bandwidth requirements and choose accordingly.

Server performance

Each server is different, and its capabilities decide the performance of your website. You must determine your website needs before choosing a dedicated server from a web host. The number of website visitors you expect, server storage space you will be utilizing (preferably a high-performing storage), expected spikes in traffic and other factors must be considered beforehand. Comparing these requirements with the capabilities of the dedicated server offered by your preferred web host will significantly improve your server performance. It is also recommended to reconsider your website needs from time to time as your website grows.

Functional effectiveness

Along with the performance capabilities, determining the functional effectiveness plays a major role in choosing a good dedicated server for your website. The options available in the control panel and ease of navigating them are two important factors that decide the functional effectiveness of a dedicated server. Therefore, it is highly recommended to choose a dedicated server with a control panel that is easy to use as it will significantly enhance your productivity at work.

Potential server downtime

Though the chances of your website experiencing downtime are pretty low in the case of a dedicated server vis-a-vis a non-dedicated one, the danger still exists. You must consider the potential server downtime in case of an unexpected technical glitch. It is important to have assurance in advance from the web host to solve such issues quickly and when they arise to maintain high uptime for your website.

Suppose the nature of your business does not allow you to experience any downtime at all, and you don't have any budget constraints. In that case, you can opt for multiple dedicated servers to completely avoid website downtime.

The physical location of the dedicated server

Determining the network quality of the dedicated server is an important consideration when choosing one for your website. The physical location of the dedicated server directly impacts the network quality. The same dedicated server can be good for one website and bad for another, depending on its location and your website's target audience.

The farther your dedicated server is from your audience, the poorer the user experience. So, if you have your business and customers in the UK, using a dedicated server located in the US won't be a good choice. However, a UK-based dedicated server will enhance your website's performance in such a case.

Availability of technical support

Choosing a dedicated server hosting plan with 24/7 technical support is the best bet for any business. Since a dedicated server is hosting only your website, you will be the only one experiencing a technical issue if a server problem arises. So you must always get a dedicated server backed by reliable technical support round the clock to ensure uninterrupted website functioning. It will also be helpful in case of any technical query that might arise while creating and managing your website.

Server scalability

If you plan to grow your website, it is advised to keep server scalability in mind when choosing a dedicated server. Your website will soon grow with increased use of server storage space and an increase in website visitors. Signing up with a host with limited scalability options will leave you with no other option than to change your host when you are ready to take a big leap forward. Thus, choosing a dedicated server plan that can be scaled easily as your website grows is advised.

Consider server security

Securing customer information must be the priority of every business since the success of a business is completely dependent on the trust of its customers. Even if you are not running an e-commerce store, you have to protect the emails of your website subscribers from getting into the wrong hands. Choosing a dedicated server protected by a powerful firewall ensures minimizing security breaches. The dedicated server host's physical and virtual security measures must be considered in such a case.

Choosing a reliable host

You might come across a good dedicated server from a brand you have never heard of before. A quick online search informs you that the host is new, thereby taking away your opportunity to read reviews posted by old customers. What if you buy a dedicated server from this host, and the company can't survive even for the next six months? To prevent such a situation, it is advised to choose a reliable dedicated server host with thousands, if not millions, of satisfied customers.

Server backup

Even an excellent dedicated server is useless if you suddenly lose all of your website data. Therefore, server backup is very important when choosing a dedicated server for your website. In addition, a backup server can be useful if your hard drive fails to restore your website data after a technical glitch. Therefore, choosing a dedicated server hosting plan that offers automated backups in real-time to keep your website data safe is recommended.

What is a semi-dedicated server?

A semi-dedicated server is a hybrid of a dedicated and non-dedicated server. Again considering dedicated and non-dedicated servers two opposite shores of the sea, a semi-dedicated server can lie anywhere within the sea. It completely depends on the web host to mix and match the different features of these two hosting types to make a suitable semi-dedicated server plan. One thing, however, is certain in the case of a semi-dedicated server - your website will have fewer neighbors than it will have in the case of a non-dedicated server.

Put, a semi-dedicated server hosts a handful of websites to provide better power and flexibility than a non-dedicated server. Also, it is cheaper than a dedicated server since the overall server costs are shared among these websites.

Though different web hosts offer different types of semi-dedicated servers, generally, you will find them in a cloud server, a hybrid of a dedicated server, and a Virtual Private Server (VPS).

Is a cloud cheaper than a dedicated server?

Yes, a cloud server is always cheaper than a dedicated server. You can buy a cloud server hosting plan for as low as \$4.50 per month. It can go up to \$850, depending on your website needs.

Cloud servers are cheaper than dedicated servers since your website doesn't occupy a whole server. This helps the web host reduce costs by sharing them among different websites across the globe. In the case of cloud hosting, your website is not hosted from a single physical server but from multiple virtual servers that are part of the cloud. This hosting considerably reduces the chances of website downtime by virtually shifting your website from one server to another instantly if and when a server goes down.

Conclusion

Choosing a good dedicated server for your website might initially appear like a huge task, but if you begin your plan by determining your website needs first, you will find it relatively easy. Then, consider your current website requirements and the growth you expect in the coming months to select the most appropriate dedicated server for your website. A dedicated server that takes care of your long-term growth without compromising your present needs will be the best for you.

References

1. webhostingadvices.com - hostgator-hatchling-vs-baby-plan - <https://webhostingadvices.com/hostgator-hatchling-vs-baby-plan/>
2. ovhcloud.com - en-gb / bare-metal - <https://www.ovhcloud.com/en-gb/bare-metal/dedicated-server-uk/>
3. en.wikipedia.org - wiki / Hybrid_server - https://en.wikipedia.org/wiki/Hybrid_server