What is the difference between Cloud, VPS & Dedicated Hosting?

Choosing the right host server for your business website is one of the most important technology decisions any entrepreneur faces, especially since the arena has evolved at a rapid rate recently. If you’ve already started your search, chances are you’ve probably come across the terms Cloud, VPS and Dedicated hosting. But which is right for you?

The truth is, the right answer is different for everyone. The deciding factor being the server’s ability to be tailored to the requirements of your company most effectively. This means a little analysis of each option is essential, so here’s what you need to know.

What Is Dedicated Hosting?

Dedicated hosting is the solution that you’re most likely to associate with a traditional approach. A dedicated server means that you have a physically isolated solution that isn’t linked to other clients. The physical server will offer storage, processing, and hardware specifications that have been agreed upon prior to implementation and will be charged at a set recurring fee.

Dedicated hosting is ideal for web applications with high-load expectations like e-commerce sites or interactive apps that rely heavily on exceptional speeds and security. These servers are typically more practical for larger companies that do not expect to require upscaling and major growth in the short-term future. This type of hosting also relies on vendor support for management and provision updates. With the wrong vendor, these configurations can lead to wasteful downtime, so let one of GigeNET’s highly-responsive and experienced experts manage your dedicated servers to get the immediate support you need.
VPS & Cloud

Both VPS and Cloud hosting are terms that are often inaccurately interchanged due to the fact that they both utilize virtualization. While they do share similarities in functionality, there are some significant differences too.

The base design of both Cloud & VPS hosting is really just a virtual machine (VM) hosted on one or a pool of physical servers called Hypervisors. This methodology is even changing to group these terms with advanced container systems as well, but that is a story for another day. These virtual machines have dedicated resource allotments (RAM, processors, and storage) and to the end user function very much like a dedicated server. However, some of the advantages of VMs are quick and easy deployment times, near-instantaneous scalability, and robust hardware redundancy to virtually eliminate hardware problems and single points of failure.

The term Cloud hosting has been changing over the past decade to describe a platform of services. While VPS and Cloud hosting both share the same underlying technology the cloud is now more of an ecosystem. This ecosystem generally provides more than just a raw virtual machine, but also a suite of tools used to manage your VMs. You have the power to configure the storage design, network design, and actions on the virtual machine itself. Often times this is controlled through your own software via an API (At GigeNET we have a boto-compatible API), but also managed through tools like Ansible. This opens up a vast array of automation possibilities that is only limited by your imagination.

VPS (Virtual Private Server) hosting, on the other hand, is typically built upon a single dedicated server platform and is often referred to as a Private Cloud. While the underlying dedicated server can be built with redundant hardware, it typically does not compare to the resiliency of most Cloud hosting environments. The tradeoff is that you get complete control of not only the virtual machines but also of the underlying server that is hosting them.
The Final Thoughts

While all three server types are designed to provide a similar function, they each set out to achieve it with a unique approach. Which solution is right for you depends on your specific business needs. Let us help you determine the right fit for you, be it Dedicated Servers, VPS, or Cloud Hosting — or something custom and in-between.

To discuss the needs of your project and unlock the best solution for your needs, call GigeNET’s dedicated team of experts today.

Call us today or Chat with a specialist