### Find a Web Hosting Service

In this section, we will learn about the different tools we need to make our website visible on the internet. Let's start by describing what web hosting is.

#### WE'LL COVER THE FOLLOWING

- Types of Hosting
  - Dedicated Servers
    - Managed Hosting
  - Virtual Private Servers (VPS)
  - Shared Hosting
  - Cloud Hosting
- Test your knowledge!

At this point, we have picked the domain name for our website. However, our site still runs only on a local machine. To make it visible on the vast world of the internet, we need a **web hosting service**.

In a nutshell, a web hosting service stores your site on a *server* and posts it online for public access. It acts as a platform which provides us the resources needed to run a website.

We can host a website by ourselves as well, but we'd need to have a powerful web server which can handle user traffic. A web hosting service solves this problem, along with many others. Selecting the appropriate service plays a crucial role in web deployment.

# Types of Hosting #

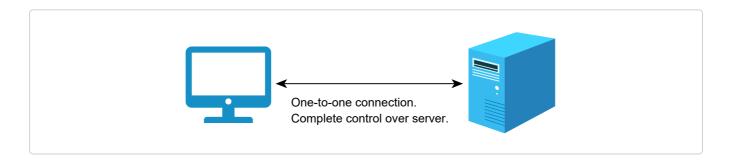
Before we can pick a web host which suits our needs, we need to understand the primary web hosting strategies available to us in the market.

### **Dedicated Servers**

A dedicated server will place all of its resources to host our website only. We never need to share the server's computing power with anyone else's website as it is dedicated to us. A dedicated server is also referred to as a **bare metal server** as it is a piece of machinery which serves only one tenant.

This approach provides a high degree of freedom since we can customize the environment of the server as we see fit. Basically, a dedicated server is a server we own. We can even use it to manage multiple sites and softwares.

The power of a dedicated server does not come without a cost. This is the most expensive type of web hosting with the monthly cost ranging roughly from \$50 to \$100. Bluehost and HostGator are popular dedicated hosting services.



#### Managed Hosting #

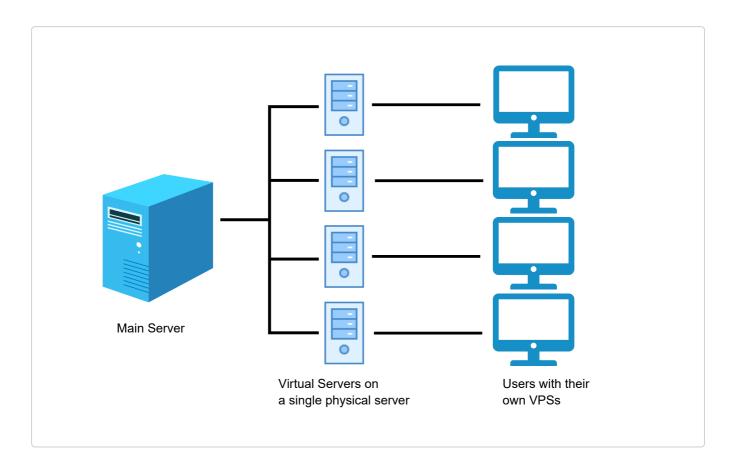
Managed hosting is a sub-category of dedicated web hosting where the service provider manages our server for us. This ensures better security measures and reduces the chance of server failure. We still have the freedom to do whatever we want with the server's resources. Usually, a service that provides dedicated hosting provides managed hosting as well. LiquidWeb is a fairly reliable option when opting for managed hosting. However, it is a bit pricey.

### Virtual Private Servers (VPS) #

The VPS model acts as a toned down version of dedicated hosting. A server will run multiple **virtual servers**, each dedicated to one website. So even though our website will work on a shared host, we would have our private environment with all the flexibilities of a dedicated server.

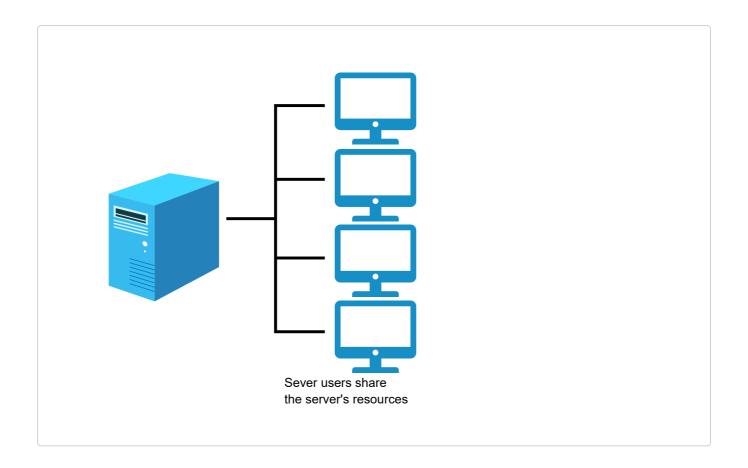
The performance wouldn't reach as high as that of a dedicated hosting environment, but the level of safety and reliability is higher than pure shared hosting.

A typical VPS costs around \$30 per month. Two of the most popular VPS services today are Namecheap and InMotion Hosting.



## Shared Hosting #

In shared hosting, a server will divide its resources between our site and many others. We are neither in control of the server, nor do we have any association with the other sites running on it.



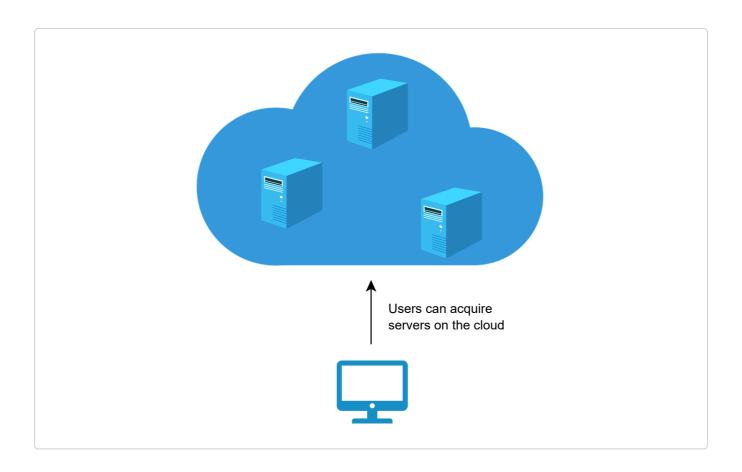
Naturally, shared hosting is not as efficient as dedicated hosting since the server's power is distributed. Heavy traffic on one site could greatly effect the performance of ours. However, a very logical reason for choosing a shared server is the significant ease in cost.

You can find a shared host service for less than \$10 per month. This makes shared servers more suitable for smaller sites with lesser data to store.

InMotion Hosting and Bluehost are reputable platforms for shared hosting.

### **Cloud Hosting**

This is the latest development in the world of website hosting. In cloud hosting, the resources for our website are spread across multiple virtual servers which are part of the *cloud*. We can acquire as many virtual cloud servers as we need, and we call also specify their technical power (RAM, storage, etc.).



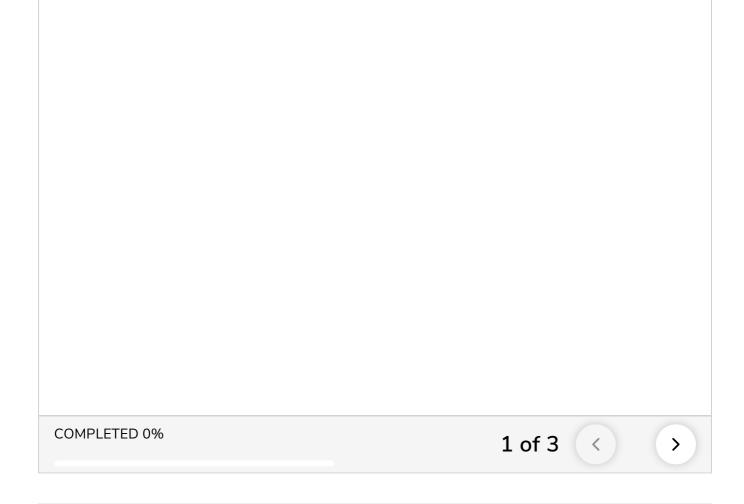
One of the biggest problems solved by cloud hosting is that we are finally free from the risk of a server shutdown. In case one server fails, the data load can be moved to any of the servers spanning the globe.

Bandwidth limitations have also been greatly reduced since our website's speed does not depend on a single server.

In terms of costing, we only have to pay for what we use. As we scale up or scale down (which has also been made very easy), our costs adjust automatically. That's really convenient! Due to such reasons, more and more people are opting for cloud hosting.

Modern tech giants such as Amazon, Google and Microsoft have become pioneers in this rapidly growing technology. Hence, there are very reliable services available to everyone.

## Test your knowledge! #



In the next lesson, we will look at some factors to keep in mind when selecting a web hosting service.