

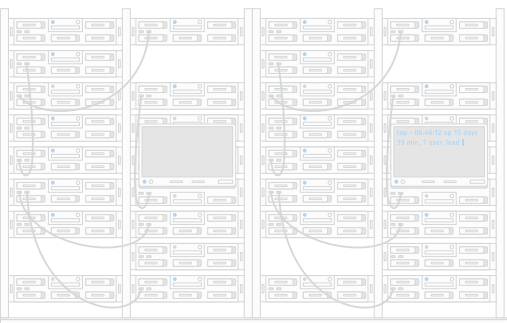
# Web Hosting Explained

## The Beginner's Guide to Small Business Website Hosting



# Table of Content

Why did I write this guide? .....	2	Promos and up sells .....	17
Who is this guide for? .....	2	Money-back guarantee .....	17
How much of this guide should you read? .....	2	Technical support .....	18
		Unlimited is not always unlimited .....	18
<b>Part 1: Getting started .....</b>	<b>3</b>	Reliability and uptime .....	18
What is web hosting? .....	3	Location of the company and servers .....	19
What else you need to know? .....	3	Web server and operating system .....	19
Think of your website as a real business .....	4	Backup security .....	19
Naming your business .....	4	Different hosting control panels .....	20
Finding the location for your business .....	5	SSL (secure server) .....	20
Understand who is going to do all the work .....	5	Programming languages and other features .....	20
Get your business and products ready .....	5	Confusion between “Web Hosting” .....	21
Additional things you need for your business .....	6	and “Web Platforms” .....	21
to operate .....	6	What type of a website are you planning .....	22
Avoid beginner’s misconceptions .....	6	to build? .....	22
What to expect from a web host .....	6	Building a website or blog .....	22
Your website is your responsibility .....	7	Hosted website solutions .....	24
Conclusion .....	7		
		<b>Part 4: Getting to know essential services .....</b>	<b>25</b>
<b>Part 2: Evaluating Available Technologies .....</b>	<b>8</b>	and how to use them .....	25
Domain name .....	8	Branded / personalized email address .....	25
What is a domain name? .....	8	Creating email address .....	26
Different types of domains .....	8	Reading and writing with email clients .....	27
What is the best domain for my website? .....	9	Email tips and tricks .....	28
Other domain tips .....	9	Forwarding mail .....	28
Web hosting .....	10	Autoresponder .....	29
The computer OS you’re using is unrelated .....	11	Managing website files .....	29
The real criteria for choosing the right OS .....	11	Installing and using FTP client .....	29
Do you need Windows hosting? .....	12	Backing up your website .....	31
Do you need Linux hosting? .....	13	Manual backup with FTP .....	31
What else do you need to know .....	13	Automated backup .....	32
about the hosting company? .....	13	Control panels .....	32
Conclusion .....	13	Overview of cPanel .....	32
		Plesk .....	32
<b>Part 3: How to choose the best .....</b>	<b>14</b>	ISPConfig .....	32
web hosting company for your needs .....	14	Kloxo .....	32
Web hosting server types .....	14	ZPanel .....	33
Shared server .....	14	Installing web tools / platforms .....	33
Virtual private server .....	14	Manual installation .....	33
Dedicated server .....	15	One-click installers .....	33
Other types .....	15	Website security .....	34
Evaluate the web hosting company .....	16	Vulnerability in software you use .....	34
and its services .....	16	Common ways sites are hacked .....	35
Checking to see if the company is trustworthy .....	16	Transferring domains .....	36
The truth about web hosting review sites .....	16	Speeding up your site .....	36
What if my website grows? .....	16	SSL certificates .....	37
Read the terms and conditions .....	17		
Price and payment options .....	17	<b>Part 5: Glossary .....</b>	<b>39</b>



## Why did I write this guide?

When I was first introduced to web hosting services in 2004, my experience was easy and painless. With the help of a good friend, who already knew hosting well, I was able to get started and begin playing with what it had to offer in no time. However, when you are a total newbie the processes and technology behind web hosting could be a bit confusing. And you will end up spending hours reading information about the technology, what services to pick, searching for the reliable company and learning what else is behind the closed door.

After 10 years of experience in web hosting and the world of online in general, I've decided to create this free guide with goal to help people with their journey online and encountering web hosting world. This guide was written to explain web hosting in detail using simple language. Regardless of whom your host is and what your desires are, this guide will show you how to get the most of the hosting account.



## Who is this guide for?

If you are reading this guide we are going to assume a few things about you:

- You are planning to make (or already have) a website or [start a blog](#)
- You have access to a computer and have a connection to the internet
- You are not a super techy person, but you want to understand the technology
- You know the basics of the Internet, Google, websites, and what a web address is

## How much of this guide should you read?

Read what you want, but to get the most value I recommend reading the whole thing! While you may not need to apply every section while getting familiar with your hosting provider today, you will get an understanding of how different technologies work.

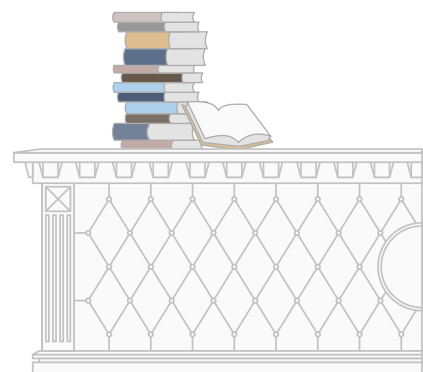
Part 1 - General web hosting terms and what each function does

Part 2 - Talking about available technologies and hosting choices

Part 3 - Helps you pick web hosting provider that is best for your need

Part 4 - Explains some basic functionality and how to use it

Part 5 - Glossary of web hosting terms





## Part 1: Getting started

**Summary:** In this section I'll look at the whole system of web hosting and explain it using real world examples. You'll learn essential terms and we'll clear some of the beginner's misconceptions.

### What is web hosting?

**Definition:** Web hosting is the activity or service of providing storage space to individuals or organizations, for the websites that are accessible via World Wide Web.

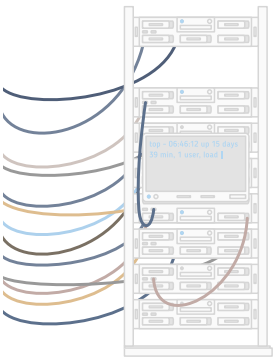
Web hosting is a huge industry, with close to a billion websites currently online and millions of people all over the world getting into this new world. The website hosting process can be intimidating and confusing at first, but once you get your head around it, you will understand how it works.

To start with, let's cover some new terminology. You might have heard different terms used to describe the process, such as: **web hosting, website hosting, site hosting, blog hosting, self hosting etc.** They all mean the same thing. You have some server space where you store your website's files and you have a complete control over it.

**Note:** Hosted website or blog. You could hear these terms and might think that this is the same thing as the website hosting. However, these terms are different from what we call "web hosting". In this case the hosting and most of its related functionalities are done by the third party company. You usually get the tool / software to create your website but restricted to the functionality offered by that company. Another downside of the hosted solutions is that you can't move your website anywhere else and it could be difficult to expand. More about that later.

### What else you need to know?

**For any website to be available online, it has to be stored on some server / computer that is connected to the Internet.** That server where you store your website is



your host. The host could be anywhere in the world but it has to have these simple things: Power, Internet connection, and Dedicated IP address.

If you are missing just one of those things, your website will not be available online.

- **Power source** is a necessary element for the website to be available online all the time. Just like with many things we use in day-to-day life, if you don't have the power supply it simply won't work.
- **Internet connection** is infrastructure that you need to connect with others. If you have your website on a computer without internet connection, it is the same as having your business on a deserted island without any connection with a land. You are existing on an island, but nobody can reach you.
- **IP address** is literally an address of your website. IP is short for "Internet Protocol" and it is a numerical set of instructions that provide communication, identification and location system for any computer that is connected to the internet. A "Dedicated IP" simply means that the address does not change with each connection.

**Note:** You might think, I could get my own dedicated IP address at home and host a website on my own computer. But what about if your power or internet goes down and you need to reboot your computer? All of the sudden your website won't be available to anyone. To solve this problem web hosting companies own and operate dedicated machines that exist solely to serve website. Servers are located in specialized building called data centers. Data centers have all necessary features to make your site available 24/7/365.

## Think of your website as a real business

Web hosting sounds like something virtual and you are probably never going to visit one of the data centers to see what is going on behind the closed doors. To make things easier we'll look at each function of the web host in the analogy of opening and running a real business. Just like when opening your new business, you will need: name, location, staff, and product. The same is true for starting a new website, you will need the following: name (domain name), location (web server), staff (you or webmaster), and product (website content).

### Naming your business

Just like when opening a business you have to name it. When signing up for your hosting account you will have to decide on a name of your website, until then you won't be able to start creating your site. More on how to choose the right domain name in the Part 2 of this guide.



**Note:** Most hosting companies also offer domain registration services. Some people keep their domain name with the registrar company, separate from the hosting account. We recommend keeping it all under your hosting account for the trouble-free management and maintenance.



### Finding the location for your business

If your website is your business, your hosting is a building where your business is located. You can think of your host providers as your landlords. They rent you a space, take care of the essentials, you pay them rent, but everything else is in your hands. Finding the right hosting company is essential for your website success and can be tricky, but more about that in Part 3 of the guide.

**Note:** You will find different web hosting offers online, starting from free hosting and as big as buying your own dedicated server. We suggest that you don't try to go too big right away (unless you know some secret of getting thousands of visitors) and stay away from free hosting offers (free cheese is only in a mousetrap). Start with basic shared / personal hosting plan and move up as needed, your web hosting plan can grow with your website.

### Understand who is going to do all the work

This part does not need much of analogy. In both cases, websites and businesses need personnel that will take care of the business, get the new products or information on the right place and keep it up-to-date. Even if you are not selling physical products on your website, you will still need to keep the content of your site updated.

**Note:** Although not all websites need to be updated daily, it is good practice to have new information on a regular basis. If you need an update once a month, maybe you alone can take care of it, but if you need to update it once a week, or even once a day, you might want to hire additional staff.



### Get your business and products ready

Getting new content on your website is the same as getting new supplies in the physical store. You need to stay current, fresh, and always stocked, or even the most faithful customers will eventually stop coming. Although you paid for hosting, filling out your website with the content is your responsibility, not your host's.



**Note:** If we go back to the landlord and building analogy, your host needs to take care of your server. That means that the host is responsible for the computer, power and internet connection, just like the landlord is responsible for the building he rents. The building and business exist separately one from another, so do the server and website. Sure, they work together, but you can freely move your business elsewhere and the building will still stand. In the same manner the server will exist even if you move your website.

## Additional things you need for your business to operate

With four basic elements described above you should be able to get your website up and running. However there are a few more things that we need to mention and that might be needed to run your website successfully. These are the items: decor, office, key to get in, insurance, keep it updated, security, advertising. These same things are available for your website (more about it in Part 4 of this guide):

Decor = the design of your site

Office = hosting account control panel

Keys = username and password

Insurance = backup system

Updating = tools to update content

Security = keeping your login info updated

## Avoid beginner's misconceptions

Making a website and buying hosting things that are still new to the most people. Knowing what comes first and who is responsible for it, does not come naturally. In this section we will explain your responsibility and your host's responsibility. We will cover common misconceptions and beginner's mistakes.

### What to expect from a web host

As we already discussed, your host is your landlord. Hosting companies are responsible for the power, server space, internet connection, and making sure the server is available all the time. If one of those is malfunctioning, it is their obligation to repair it. If you are having problems with your website, it is your responsibility to take care of it. Usually, web host support will work with you to determine if the problem is on their side or yours.

Your web host's responsibility is to offer you support. Support can come in various shapes such as phone, online chat, email, community networking, FAQ base or something else. Some hosts offer more than one option, but there is a limited amount of things that they can do for you. As always, you can get the most out of your support if you know where the problem exists.

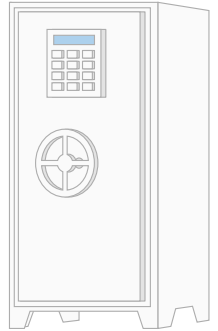
If the problem is with your website, most hosts will tell you to find someone to fix it. Some of them may refer you to someone. A few of them might have staff that will help you fix the problem, of course for some extra fee. It would be silly to think that every landlord can fix problems with every type of office, gallery or store, and it is the same with web hosts. There are a number of tools and languages that you can use to make your website and you can't expect that everyone knows how to fix everything.

## Your website is your responsibility

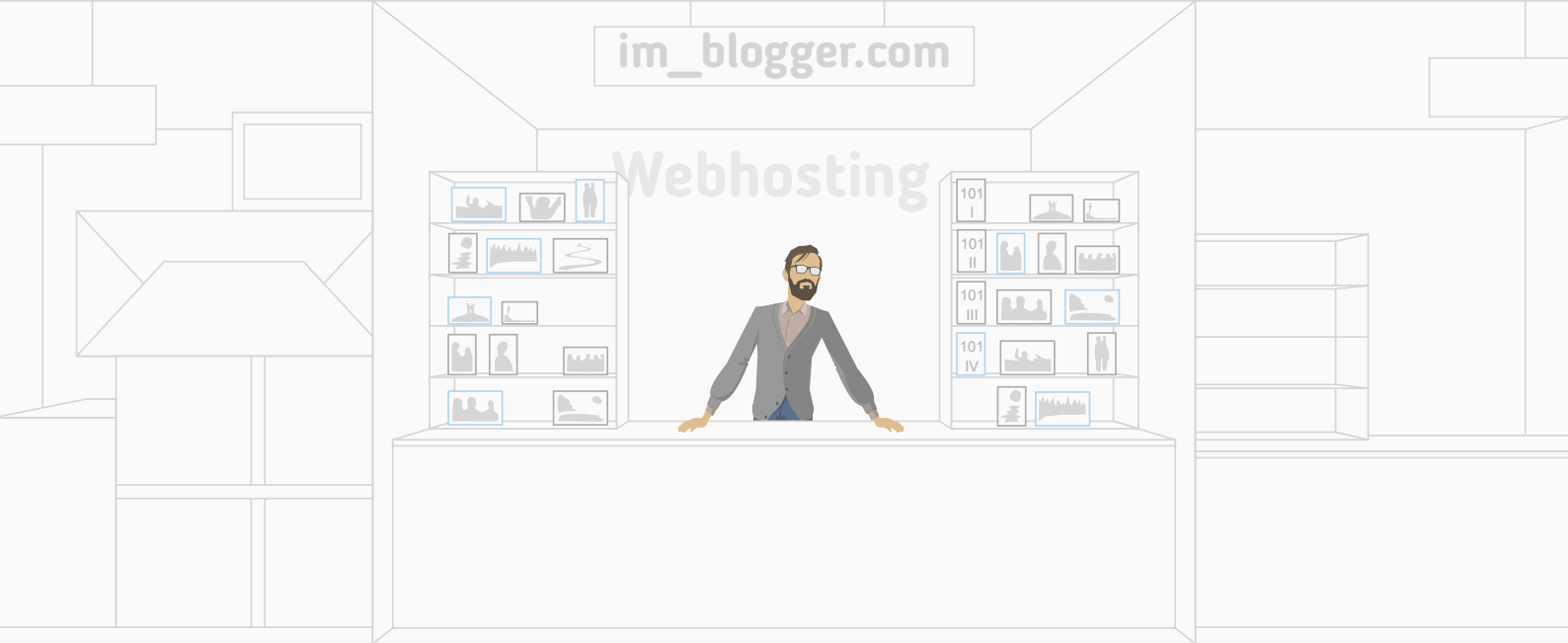
I've mentioned this a number of times, but it is worth repeating - your website is your responsibility. However, there can be thousands of ways to lose your data completely or partially and thus your website. Fire, flood, explosions or just bored hackers that decided to fiddle on the server, that your website is on, are just a few reasons things might go wrong. This is the part where we reinforce the idea and necessity of a good backup plan. Patching up a few missed details is much easier, than building your website from a scratch.

When it comes to taking care of your site, a few rules should be applied. Backup your website is always a good idea in case things go wrong. Keep your username and password in safe place and not easy to guess, so hackers can't get in. Keep the software that you will build your site on up to date.

**Conclusion:** Web hosting isn't very difficult to understand, but you have to know basic terms to be able to navigate in web hosting services field. Know what you need to host a website, know what your obligations are and learn what your web hosting provider's responsibility is.



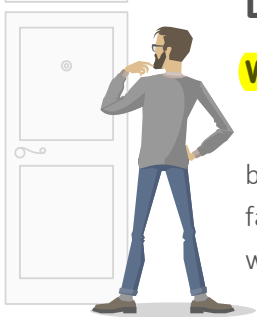




## Part 2: Evaluating Available Technologies

**Summary:** In this part, we are going to expand and explain some things in more details, tell you more about domain names and how to choose a good one, and explain web hosting technologies and available hosting plans.

Baker\_street221b.com



### Domain name

#### What is a domain name?

A domain name, also called website address, is the name that people type in the browser to open a certain website. For example, domain name for Facebook is facebook.com. It's the name by which your website will be known online and the way people can find it.

Getting the right domain name is very important. Just like the name of your business is one of the most recognizable parts of your brand identity in the real world, your domain name will be one of the most important parts of your online identity. It is the first thing that your customers will type in their browser to get to your website or discover it through search engines such as Google or Bing.

#### Different types of domains

There are many different types of domain names also known as TLD's (top level domains). We all see a few letters added at the end of your website name for example .com, .net, .org. There are also Country Code TLD's that represent code for each country, for example .uk (United Kingdom), .us (United States) and so on.

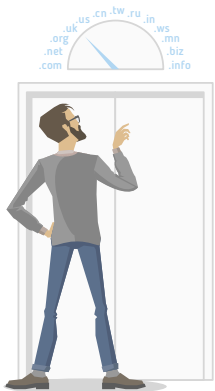
You might also notice some websites have prefix www and you might wonder if your website needs one. The prefix is simply a personal choice and it won't make

any difference if your website has one or not. You can select your preference when installing your software to build the website.

**Note:** If you choose to go with some free hosting or try one of the hosted website solutions very often you will see your website name will be in this form - yoursitename.hostedsitename.com. This means that you don't have a unique name for your website; rather it's located under a subdomain of the hosted solution provider. You let somebody else own your name and keeping your website name in this form doesn't look very professional.

## What is the best domain for my website?

It really comes down to how you want your website and business to be represented online. When it comes to choosing a domain name the possibilities are endless. But there are few rules that we suggest you follow.



- Choose ".com" first - 52% of all websites are ".com" domains.
- Pick a name that is unique - avoid naming your site similar to existing sites.
- Make it easy to type - you don't want your visitors to incorrectly type in your name.
- Try to make it brandable - your domain name will be your brand.
- Shorter is better - instead of JennyTylerFlowers.com go with JTFlowers.com.
- Avoid trademark problems - do the search before you register the name.
- No numbers and hyphens - stay away from them at all costs.
- Marry your domain name - make sure that you love your domain name.
- Check social networks - always check social networks for the same name.

## Other domain tips

You might want to protect intellectual property. Domains are relatively cheap; it's a good idea to buy different extensions of that name. If you are buying .com get .net just in case and maybe .us if you are living in United States.

You also might find that a domain name you want is already taken, but not necessarily in use. These are usually referred to as premium domain names. They are domains registered by someone else and offered for sale. There's no way of telling how much a domain is worth on the market. But you can check the auctions like: Godaddy Auction or Sedo. Or if it's not for sale through auctions, you might want to contact the domain owner to see if you can make an offer to buy it. You can use Whois Tool to find the domain owner's contact information.

**Note:** Most hosting companies also offer domain registration services. Some people keep their domain name with the registrar company, separate from the hosting account. I believe it's easier to keep it all under your hosting account for the trouble-free management and maintenance. But whatever you do make sure your domain is registered under your name, not your friend or web designer who helped you. And if you choose to use separate domain registrar you have login details to the control panel of that registrar company.

## Web hosting

Your web hosting plan / package, is a permission that specifies how you are going to use your online space. It does not matter what term you use, they mean the same thing. Very often, web hosting plan is bought together with the domain name, but they function independently, just like your business and your workspace.

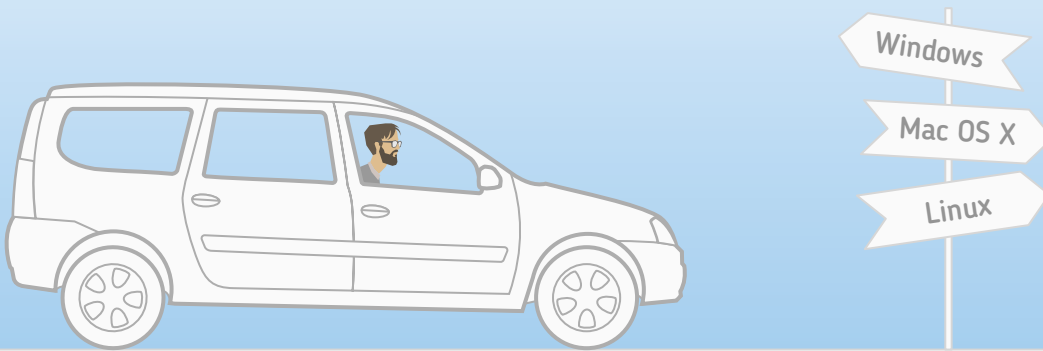
To make things more clear, if you think of your web host as your landlord, then paying for your web hosting plan is like paying your lease. Domain name is a part of your business and you can move it any time you want, so you can look at renewing your domain name as renewing your business license. You need them both, and although very often you can take care of them both at the same time, they are two separate things.

New webmasters who are trying to choose a web host often find that they are confronted with a plethora of web hosts that are offering a wide variety of packages. Some web hosts give you a choice of packages using the Linux Operating System (OS) and still others Windows. As a newcomer you might wonder whether the operating system of the package matters, and whether you should choose a Linux or a Windows.

What kind of web hosting plan you choose depends on what your website needs and what kind of technology your website rely on ( or will be built on). Just like you would first choose a building, depending on your needs and then pay the rent, so you should decide on your hosting needs and then buy it. With this guide we will try to clear up the confusion that some people might have.

**Note:** I often hear people say that they are using a Mac, and ask whether there is such a thing as a web host offering Mac packages. By the time you are done with this part, you'll realize that you don't really need to get a web host offering a Mac OS X web hosting just because you're using a Mac. For what it's worth, I don't know of any web host with Mac packages at the time we wrote this guide.





## The computer OS you're using is unrelated

Let me start by eliminating a common misconception among newcomers. Just because you are using Windows or Mac OS X or something else, it does not mean that you need to get a web host that happens to be running the same platform. Your web host system has nothing to do with the computer you're using. They are two different things altogether. Let me break this down into the two aspects that new webmasters worry about, where this issue is concerned.

- Some people are concerned that if they use a system that is different from that of their web host, the two systems will not be “compatible”. This is a needless worry. Things that run on your web host have to be specially crafted for your website, and they won't be run on your own computer.
- Perhaps you're thinking to yourself, “I'm familiar with Windows (or Mac) systems, so it'll be easier to get a Windows (or Mac) web hosting account”. The interface you are dealing with will be similar whichever operating system your web host offers. How easy or hard the user interface depends on the company not the OS.

## The real criteria for choosing the right OS

Now you know that the computer you use has nothing to do with your web hosting package. But why do you need to decide whether to go with a Windows or a Linux hosting.

The reason why you need to choose a system first is because hosts are also running on some sort of software. What you want to avoid is building a website or getting it built for you, buying a hosting plan and in the end finding out that those two are not compatible. Thus your decision will be rather, on the basis of what your website needs (we will talk more about that in Part 3).

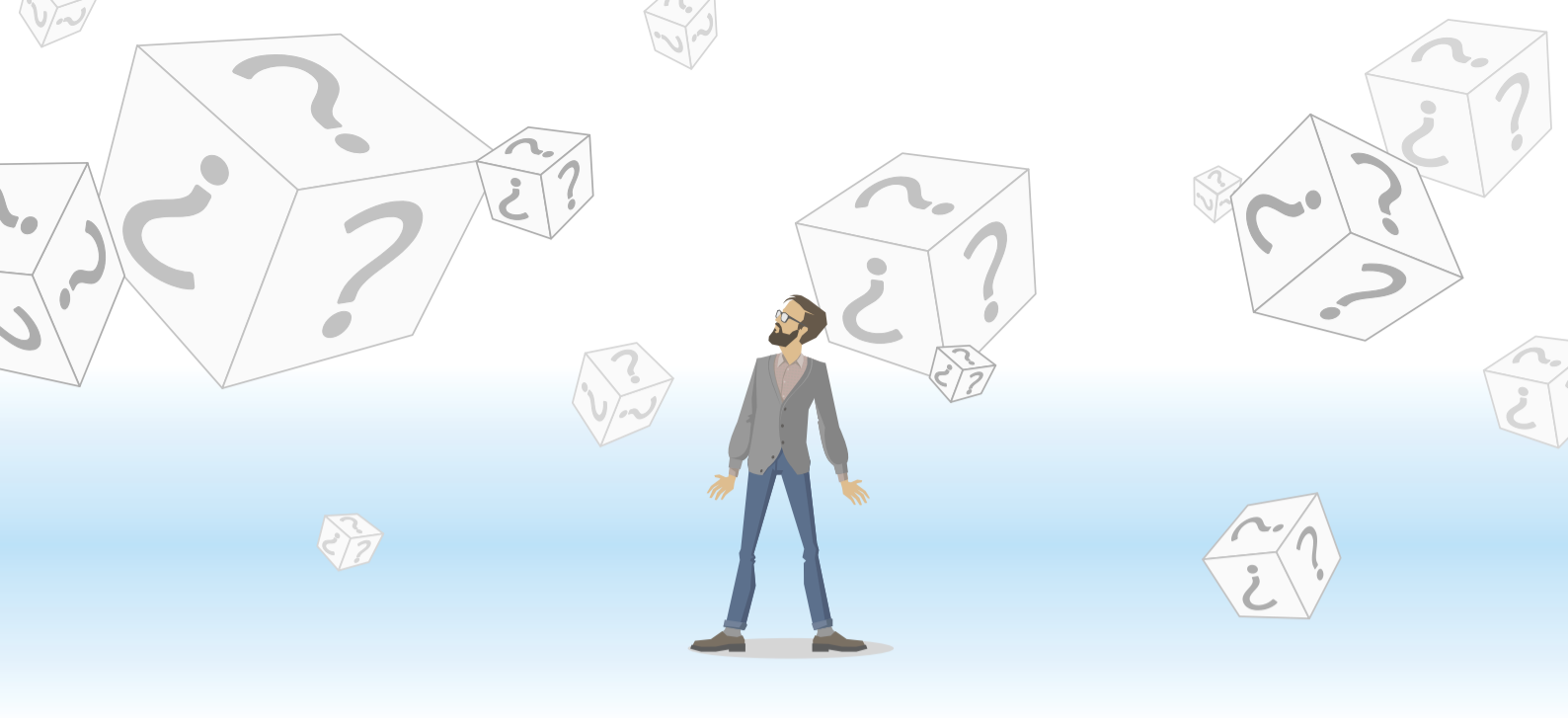
## Do you need Windows hosting?

Basically, the question is, will your website rely on Windows-specific technologies like ASP, or .NET or Microsoft Access, or Microsoft SQL Server (MSSQL)? We're not asking whether you need these technologies on your own computer, but whether your website will be coded using ASP or .NET. If you don't understand any of this, chances are small that you're going to use them. If someone is helping you to create a website you can ask them what technology they use, so you understand your hosting needs.

## Do you need Linux hosting?

At this point, some of you are probably shaking your heads. All you want is to create a simple website, or start a blog, or to sell something online. What's up with all these web jargon anyway? For the person looking to just setup a blog, or sell things with a shopping cart, or just create a standard website like firstsiteguide.com, and don't have any special requirements, in 99% of the cases you will find it easier to use a Linux based host.

**Note:** The majority of free / open source and commercial software (WordPress, Joomla, Drupal, etc.) that most websites are made of today, be it small business, blog, or ecommerce site, build using a Linux based system. Likewise, the majority of tutorials on the web, especially those on configuring your web server, assume that your website is running on a Linux based system.



## What else do you need to know about the hosting company?

To pick a good reliable host you will have to go through a number of questions and decide if it's a good fit. Below we will provide you with the list of some general and **technical questions you should ask to check company's legitimacy.**

- Can you trust the company and is it legit?
- What kind of customer support do they offer?
- What is the availability of the support?
- Where is their customer support located?
- Is their customer support outsourced?
- What is the average uptime?
- Where are the servers located?
- Can you choose server location?
- Do they offer any additional technical services and to what cost?
- What kind of features do they offer?
- What are their security measures?
- What are their backup measures?
- How do they upgrade their servers?
- Do they have any software limitations?
- Can you expand/reduce your hosting plan?
- What do they offer under their "unlimited" plan?
- Are they a hosting provider or just reselling?
- What payment plans are available?
- Are there any offers for new customers?
- Do they offer a free trial period?
- What are the renewal terms and fees?
- What is their refund policy?
- What are requirements for cancelling web hosting plan?
- What is their privacy policy?
- How do they manage personal data?
- What are the terms for bandwidth and space?
- How long has the web host been in business?
- How many customers they serve?
- What are current customer's testimonials?

**Conclusion:** You might have more questions, but the ones above will make sure you sign up with a good host. In the next part we will help you answer these questions and make sure you know how to choose the right hosting provider.



## Part 3: How to choose the best web hosting company for your needs

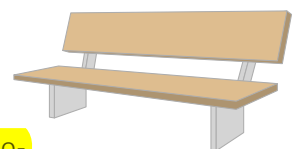
**Summary:** In this section we are going to help you choose the right hosting solution. We'll talk about different types of web hosting, show how to choose the right hosting plan, and finally clear up any confusion you may have.

### Web hosting server types

We previously discussed the different types of operating systems, but there is more to learn. We are now going to take a look at different hosting types that are offered. Like we've briefly mentioned in Part 1, hosting can be roughly separated in following categories: shared, VPS and dedicated servers. These options differ by the server space size and hardware packages, unlike previous Windows and Linux choices.

#### Shared server

On a shared server you share space with other users. It is the equivalent of doing your business at a farmers market, meaning that you have some restrictions and what you do may affect others and vice versa. However, it is cheaper than a dedicated server and everything you need for a small business website is included in the plan. The price of a shared hosting plan is very affordable and may vary between \$5 and \$15 with the good providers.



#### Virtual private server

A "virtual private server" (VPS) is a hybrid of dedicated and shared servers, but you can also look at it as a higher class of shared server. It is equivalent of having your business in a mall. Unlike shared servers, where you share all of the resources, a VPS is divided into sections and each website resides within its assigned section. Each section is separated and they act independently of one another. Pricing is somewhere in between dedicated and shared hosting (from \$15 to \$100) and might be a good solution if you run a high traffic website.



## Dedicated server

Dedicated servers are the easiest to explain. They are, as their name says, dedicated. It is a physical server that you do not share with anyone else and no one else has access to. You can host one or more websites, it is up to you. It is the equivalent of having your own business on your own piece of land. They are the most powerful option, you can do virtually anything, but also the most expensive option, ranging from \$50 to \$2,000 per month. Unlike the other options you will need to have some IT skills, or hire someone who has them, because everything you do with your website is up to you.



## Other types

- **Cloud hosting** essentially means that multiple servers are joined together to provide better and faster hosting performance. Having cloud hosting means that websites load faster and their workload is balanced. There is a small question of security for the most conscious users, because multiple websites share the same cloud. However, for the majority of users, the pros outweigh the cons.
- **Colocated hosting** is similar to dedicated hosting, it literally means co-located hosting. It allows you to place your own server on the service provider's location. It is the same as having a server in your own office, but located in a place specifically designed for servers.
- **Managed hosting** is almost the same as the dedicated hosting. You get your own server; the only difference is that you do not have full control over it. This way service providers prevent users from potentially changing configuration or modifying the server. But don't worry, you can still manage all of your data.
- **Reseller hosting** is where you (as a client) can become a web host yourself. What it means is that you buy a provider's services and sell them (for a profit) to third party. This option can include any other type of hosting, but it requires that you have IT knowledge since you will become a host, meaning that you will have to solve all hosting problems.
- **Clustered hosting** is where you have multiple servers that host the same content. That way even if one server needs a reboot or goes down, your site will still be online. This option is for sites with very high traffic.
- **Grid hosting** utilizes several server clusters that act like a grid and is composed of multiple nodes. That way multiple servers serve to one cluster or in this instance one site and different parts of the website can operate independently of each other.



**Note:** In the most cases a “shared server” hosting plan would be enough to run your small business website or blog. But it is always good to keep in mind what other options exist, in case your site starts to grow and you start getting 1,000s of visitors per month.



## Evaluate the web hosting company and its services

Occasionally, we receive emails from our readers asking us which web hosting company and plan / package they should choose for their upcoming website. Most web hosts that you will find offer different plans/packages to choose from. You also might be asking, “Can I trust a certain hosting company? What will happen with my website if it attracts a lot of visitors? Should I sign up for the biggest package right away? Etc.”. Let’s answer these questions and look at the most common questions you should have in mind when choosing a hosting plan.



### Checking to see if the company is trustworthy

The most important thing you have to check is whether you can trust the company. A good reputation is paramount. The rule of thumb is to check the website of the service provider for general signs of trust such as physical address, phone number, general company information, and testimonials. Ask yourself “Would I trust and give this company your personal information?”.



### The truth about web hosting review sites

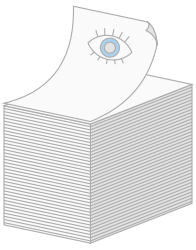
Let’s talk about web hosting review and “top 10” sites. If you do your search for specific company reviews you will find many sites providing this information. As a newcomer you might find this info useful and decide to go with one or the other company based on the information found. But this is not always the case as many times the recommendations are fabricated by the website owner. These are sometimes based on the compensation he is getting from specific hosting providers, and not by actually displaying reviews from the real customers who are using the services. Simply put, you will see a lot of fake reviews and “top 10” lists, so be careful with that info.



### What if my website grows?

Many newbies don’t want to agree with the fact that their new website will hardly have any traffic. We’re not saying that you won’t be there one day; we simply say that it will take some time. If you are not some celebrity or planning to spend big money on advertising, we recommend you go with the basic shared plan. When your traffic exceeds your current site’s allocation, and you’re certain that this new traffic level is going to be permanent, simply upgrade to a higher package that meets your needs. Don’t rush to upgrade on the first hint of traffic, sometimes that burst of traffic is just where some popular website or blog notices your site and talks about it, sending some of their visitors to you. In other words, as long as your web host allows you to upgrade your packages without issue, you don’t have to worry about your site’s future expansion. We have upgraded packages numerous

times since we've launched FirstSiteGuide, without any problems or intervention on our end.



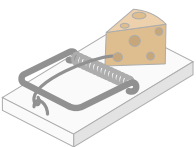
### **Read the terms and conditions**

We all do it, check the box with the fine print that says, "Terms and Conditions" without ever opening it. Nobody has time to read these endless pages. Web hosts' terms and conditions can be slightly different from one another but they all usually sum up to this: By reading this, you agree to our terms and conditions, where we listed an enormous number of things that we find illegal and/or unacceptable, and if we find you in any kind of violation of any of those, we will take actions and suspend and/or even delete your account without any upfront notice." The good news is that usually this won't happen.



### **Price and payment options**

As in any industry, you can find extremely cheap and extremely expensive offers. The trick here is to make sure you get a web host that lets you upgrade or downgrade your web hosting package without any problems. If your web host requires you to pay an additional fee simply because you need to switch your shared hosting plan, I suggest you look for another host. Obviously if you upgrade to a new plan, you will have to pay some extra for the new package. I'm referring to some sort of penalty or transfer fee that is charged simply because you want to change from one plan to another. As a rule of thumb you will end up paying somewhere around \$5-15 per month for your shared hosting plan plus your yearly domain registration fee.



### **Promos and up sells**

If you do your research online you will find amazing deals and offers that go as low as \$1.00/mo for web hosting. If you read the Terms and Conditions for this kind of offer you will understand that this is just a promo price to get you in and after the first year with the company that rate will usually go up significantly. I've seen people caught by surprise when the renewal date comes so we want you to be aware of that. Also with the low offers, watch for the up sells that company might offer to get more money out of you. Keep this in mind, search for the company that will suit your needs and don't rush to buy the cheapest plan out there or even go with free option.



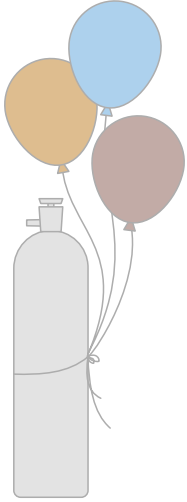
### **Money-back guarantee**

Most companies offer certain full money back periods (30, 45, 90 days) and in that period you will get a full refund. You might see "Anytime money back guarantee" claims from some companies. This usually means that you will get the prorated amount back after the suggested period passes. Make sure you read their "Terms of Services".



### Technical support

Does the company's technical support function 24 hours a day, 7 days a week? Note that I will not accept a host which does not have staff working on weekends or public holidays. You will be surprised at how often things go wrong at the most inconvenient of times. Incidentally, just because a host advertises that it has 24/7 support does not necessarily mean that it really has that kind of support. Test them out by emailing at midnight and on Saturday nights, Sunday mornings, etc. Check out how long they take to respond. Besides speed of responses, check to see if they are technically competent. You wouldn't want to sign up with a host that is run by a bunch of salesmen who only know how to sell and not fix problems.



### Unlimited is not always unlimited

Web hosts usually offer "unlimited" plans for your website. However, nothing is unlimited and it's just a simple math formula where the host knows what the average customer uses. Two main things that you need to know here are: disk space and bandwidth. Hosts know that while one customer might be using more than average space and bandwidth of the server (basically being unprofitable to them) there are hundreds of customers that are using very little to none.

Disk space is a space for your website and you can think of it as a size of your business place. You can get "unlimited" disk space because web hosts know that web pages are very small, 40-50 KB in average. 20 MB is more than enough for average websites. To put things in perspective, today you can buy fairly cheap external disk drive, and on one that is 1 TB in size you can store 500,000 average sites.

Bandwidth is the amount of data that can be transferred from the web server your website is on to the browser of a person that is viewing your website. You can look at it like the number of customers that can go through your business space. Majority of websites use less than 2 GB of bandwidth a month. Those are the ones without uploads and/or downloads of software, audio or video material. If you do that, your consumption will probably be around 50 GB. Of course, here we do not take in account websites that are designed specifically for upload and download.

There are many websites that are under-performing. By under-performing we mean websites that don't use up too much server space and don't get too many visitors. When you take that into account there is always some free space if somebody needs a bit more than average disk space or bandwidth.



### Reliability and uptime

What is uptime? It is a measure of time that tells us how much a machine, in this case server, is available and working. The opposite of that is called downtime and it is a measure of time when the machine is not working. **Any web host that offers below 99.9% uptime should not be considered.** But why should you not ask for a

100% uptime? The reality is that every server needs a time to reboot and fix eventual hardware fails.

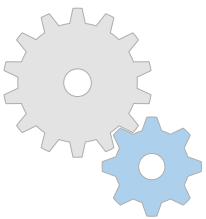
0.01% of downtime means that your server could be unavailable about eight and a half hours over the course of a year. If we take in account that servers should be rebooted every month for maintenance, and let's say that reboot takes about a half an hour that leaves about four more hours. Maybe this does not sound terrible, but for some business websites each minute counts. The reality is that servers are pieces of hardware and, though quite reliable, need maintenance from time to time.



### Location of the company and servers

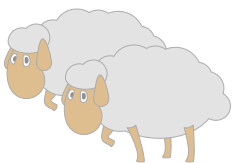
If you don't stay in the USA, you have the option of hosting your site with some local provider. The advantage here is the ease of dealing with them (they are after all easily accessible by phone call or a visit), your familiarity with the local laws and easy recourse to those laws should it be necessary. It should be your choice if your target audience is local (e.g. a local fast food delivery service). On the other hand, hosting it in USA has the advantage of faster access for what is probably the largest number of your overseas visitors (particularly if you have an English-speaking audience). You also have a large number of hosting companies to choose from, and as a result, cheaper prices.

The Internet is global and you can see everything on it no matter where the servers are located. For example if a website has a French web address that does not mean that the website is actually on a server that is located in France. Although data is traveling at exceedingly high speed, there will always be a bigger time delay with a bigger geographical distance of a server and user's computer. The best solution would be to locate your website on a server that is geographically closest to your audience, so do not forget to check where web host actually locates their servers.



### Web server and operating system

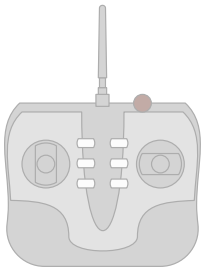
We have discussed this issue in the previous part of this guide. In general, most people will want to sign up for a web host offering a Linux based system and running the Apache web server. Most web-based software assumes your website is running on such a system, and you will usually experience fewer compatibility issues with it. In my opinion, the only time you want to use a Windows server is if your site will be running Windows specific programs, like ASP.



### Backup security

One thing that we mentioned before and we will mention again is backup. There can be huge difference between web hosts' backup options. It is important to have a good backup plan, so the best option would be a host that performs daily backups. The worst option would be to go with a host that has no backup plan. Many web hosts offer backups for some additional fee, so check that out. If price seems reasonable then it is most definitely worth the cost. Remember, if your website

goes down and you have no backup, there is no way you can get it back. To repeat once more: regular backups are a must!



## Different hosting control panels

With hosting control panels, you do not manage content of your website, but you manage everything administrative that is associated with your web hosting plan. Inside a control panel you will find sections to manage email accounts, users, file management, security and different applications. There are number of variations, but for now we are going to mention a few of the most popular and describe them in detail in Part 4:

- **cPanel** - the most popular and widely used, very customizable
- **Plesk** - similar in functions to cPanel but with different layout
- **ISPConfig** - open source, with the ability to manage multiple servers
- **OpenPanel** - open source, very user friendly and easy to navigate



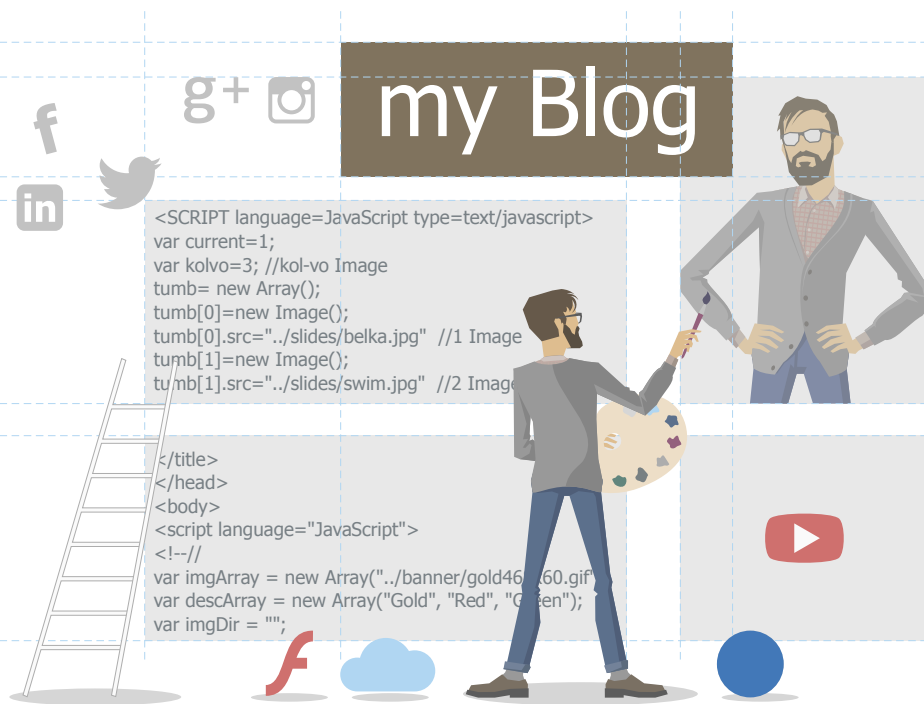
## SSL (secure server)

If you are planning on selling any goods or services through your website, you may want to see if the web host lets you set up SSL (a secure server). You may have seen this on other websites where their web address begins with an "https://" instead of "http://". Setting this up will normally involve additional charges or a higher priced package. At this point, the main thing to do is to check if they are available at all before you commit to the host. You will definitely need to have as SSL if you plan to collect credit card payments yourself. If you're relying on a payment gateway instead, like PayPal, and are not otherwise collecting sensitive or private information from your customers, it's possible that you don't need this facility.



## Programming languages and other features

If you are paying for a web hosting account, you want to make sure it supports multiple programming languages and other features. Some of the most common are: FTP, PHP, Perl, SSI, .htaccess, SSH, MySQL, Cron. If you are not planning to develop a custom website from scratch you probably won't be dealing with many of these. However, if you are hiring a developer to help you with some of work he might need some of these features.



## Confusion between “Web Hosting” and “Web Platforms”

To add another important dimension to web hosting, we must talk about platforms or web tools. Sometimes, they are also called apps, applications, scripts, programs, widget, etc. but they all mean the same thing. “Web platforms” are the software that you install on your hosting account to build your website. The term “platform” usually refers to the script that makes a whole site, while the rest of the terms are used for smaller programs. A platform is the basic skeleton that will help you in designing your website. Essentially, it is a group of multiple files and one or two databases that work together.

Like your domain name, your platform is not tied to your web host. If you change your location, you can take all of your stuff with you. This means if you change your server, you can take all your files and databases with you. The domain name, platforms, and host make your website available online, but you can change each one of them independently of one another any time you want. We will talk about different platforms later in this section.

Ultimately, when designing and publishing your website, the user interface that you’ll be working with most is the tool that lets you design your website. If you get one that doesn’t work the way you’re accustomed to, then you’ll probably struggle to create your website. In other words, the “easy-to-use” aspect that newcomers are looking for lies not with your web host’s operating system, but with the tools that you choose to use to build your website.

## What type of a website are you planning to build?

In order to pick the perfect tool to build your website, you first need to know what type of website you want. Keep in mind that you can create whatever you want. Maybe you need a portfolio or a blog website, or you just want to primarily sell your goods. To make it easier for you we have the following recommendations:

### Creating a standard website or a blog

- Wordpress - recommended!
- Joomla - recommended!
- Drupal
- Web builders (not offered by every host)

### Creating an ecommerce website

- PrestaShop - recommended!
- OsCommerce
- OpenCart
- Magento

What kind of website you need depends on what are you trying to do with it. For authors, an informational / blog hybrid is one of the most popular choices. If you are an artsy individual, a portfolio / e-commerce with a hint of blog could be a way to go. If you are working on a project with a team, a directory / community hybrid can make things go smoothly. The possibilities are endless. We'll describe the most popular choices below.

## Building a website or blog

Once you have settled your domain name and web host, the next step is to build the website itself. The possibilities of creating a website are endless and it can be done from scratch using HTML and CSS or by using design tools and then apply it to the web. However, as a business owner you probably don't have time to learn how to code. In this section, I will assume that you will be doing this yourself and using one of the recommended tools. If you are hiring a web designer to do it for you, I recommend you still get familiar with it since you are going to manage it.

The tool that you will be working with called CMS (Content Management System). It is a platform that will allow you to publish, edit, modify, organize, delete and maintain your content on your website from one central interface. Although essentially all of them do the same thing and have many similar features, it is up to you to choose which one suits you the best. Think of a CMS as a car. They will all take you from point A to point B, but you will choose the one that you feel most comfortable with. Let's look at the most popular.

**WordPress** - there is no CMS list that exists without having this entry. It started in 2003 as a blogging platform, but in over a decade it became one of the most popular open source CMSs in the world. Approximately, it is used by whooping 60% of users. The main reasons are that it is really easy to use and it is very flexible. It is completely free with hundreds of templates and thousands of plugins. The visual editor allows you to immediately see all the changes that you have made. WP Community is huge and very helpful, meaning that it is almost guaranteed that you will get an answer to your troubling question, within hours of you asking.

**Joomla** - depending on whom you ask, it is the second most used CMS in the world. It is open source, free and one of the most user friendly solutions out there. It is powerful and good choice if you are planning on having a heavy article content. Joomla is a CMS that is somewhere in-between WordPress and Drupal.

**PrestaShop** - is a free open-source ecommerce solution used by over 165,000 online stores. It has support in 160 countries and 63 languages. Any graphic tool that you will potentially need is integrated. It presents the tools clearly, and the rest of the dashboard is easy to use. A big plus is seamless integration with PayPal. There are many free modules and templates, but you may need to pay for specific upgrades.

Beside the above recommendations, there are other CMSes that are somewhat less popular, but that does not mean that you shouldn't considering them.

- **Drupal** - free and open source, originally created as a community based website
- **MODx** - very versatile, good SEO management tools, but interface is not the simplest
- **Concrete5** - quite unique visual interface, but it takes some time to get used to it
- **TextPattern** - very flexible and fast, open source, but has a learning curve
- **TYPO3** - for advanced users, very versatile, with great modularity and expandability
- **Magento** - very powerful with steep learning curve, but excellent for e-commerce
- **OpenCart** - for beginners in e-commerce, easy to set up, SEO friendly

**Note:** There are also web builders, tools that will allow you to build pages without any knowledge of coding. They are separated in two categories: Online proprietary tools which are provided by your web hosting company, or third party apps that you can install. Offline builders sometimes require basic understanding of HTML and CSS. They work on a principle of creating a page offline on your computer and then publishing it to your host server.





## Hosted website solutions

Hosted website solutions, both free and freemium, are something different and have nothing to do with getting a hosting account. In this case the hosting and most of its related functionalities are done by another company. You usually get the tools to create your website but are restricted to the functionality offered by that company. Another downside of the hosted solutions is that you can't move your website anywhere else and it could be difficult to expand. If your goal is to make a personal website, perhaps you do not need more than the most basic option. Usually you will have an access and do everything from the online dashboard.

### Most popular hosted website builders

- **Wix** - once known as a flash website builder it changed to HTML5, very flexible, editor is simple drag-and-drop, there are multiple templates, there is an app store, however SEO is not integrated as it should be and there are hiccups with mobile versions.
- **Weebly** - drag and drop editor with multiple templates, integrated solid e-commerce tool and multimedia tools, it is easy to use even for the total beginners and extremely flexible, but beware, there is no "undo" button.
- **Squarespace** - flexible, but a bit more complex editor, although minimalistic, sometimes it takes time to figure it out, however, it is visually stunning, features are very well integrated with each other and they have excellent customer support (14 days free trial)

All three tools are popular on the web. You can sign up for free and pay a premium later if you want to get rid of the subdomain addition to your site name (free version will look like this yourwebsite.wix.com or yourwebsite.weebly.com). The SquareSpace offers 14 days free trial option after that if you are planning to keep your website you will have to pay a set fee. Again with these tools you will be limited to the features offered by each company.

### Most popular hosted blogging platforms

- **WordPress.com** - not to be confused with previous WordPress.org CMS, although they come from the same place. Its dashboard is easy to use but it has far less options than its CMS counterpart.
- **Blogger** - now owned by Google. A bit elementary and design options are somewhat crude for today's standards; however, it is very well integrated from programming standpoint.
- **Tumblr** - youngest, and popular because of its reblog option. Now owned by Yahoo it is popular among blog beginners. Simplistic in design, it is great for art display and community buildup.

On all three blogging platform products you can pay a small premium to get rid of the wordpress, blogger or tumblr addition in your hosting name. There are many more, but these three are excellent if you wanna have some fun. If you are serious about your business, you should go with self-hosted website options.

**Note:** A web builders and blogging platforms are really popular options among newcomers. If you just want a simple personal website or blog, you might have fewer complications with one of the options mentioned above. They are also great for newbies, where you have the ability to play with these tools and get comfortable with building a website for free. If you are serious about your website, it is better to invest a little more financially and learn a bit more about CMSes, in the long run.



## Part 4: Getting to know essential services and how to use them

**Summary:** In this part, we are going to explain how to install and use some of the essential services like personal emails, FTP, SSL, auto installers and more.

### Branded / personalized email address



When it comes to personal and business correspondence, there are very few things that can compare to email. There are other means of video, sound and text exchange, but when it comes to everyday use of important and less important things, we all overuse and love/hate email. It almost completely filled in for the regular snail mail in the areas of personal and business correspondence and the only area that is safe is delivery of physical packages. The rest can be handled over the email.

Most people know how to use email and what the address looks like. You are familiar with the popular email extensions that are named after some of the popular free email client providers, like @gmail.com; @aol.com; @yahoo.com; or @hotmail.com. They are logical choices when you are starting out because they are free and easy to use.

However, when it comes down to you owning a domain, a whole new world of possibilities opens. You may have hosted emails with your own email extension. For example, if your domain is mydomain.com your email address can be yourname@yourdomain.com. It is much more personal than having an extension of any of the popular email providers (gmail, yahoo, aol, etc.).

**Note:** Branding not only gives a boost to your professional image, it gives your customers confidence that you believe in your business and are here to stay. Even if you do not have a business site, personalized email extension gives you instant recognition and a certain amount of legitimacy.

## Creating email address

You can create your email address in your web hosting control panel. With some web hosting plans, you can have more than one email address. This is useful if you have a need for multiple email addresses. It allows you to assign unique email addresses to each of your employees, family members or whomever you want to give it to. To create an email address you need to determine:

- **name of the email address**
- **password**
- **mailbox size**

There is usually a section dedicated to email in the web hosting control panel. There you will have a few simple steps for creating an email and be asked to enter the three things we mentioned.

**Name** - when choosing a name for your email address there are few things to consider. Make your address memorable, concise and simple. Do not make it too long or complicated because people will not remember it. The most obvious email address is yourname@yourdomain.com. You can also have more than one email address in case if you have more than one employee or different addresses for different purposes (customer support, billing, etc.)

**Password** - this is a word or string of characters used to prove the user's identity or to gain access to a resource. It's important not to use a simple password because it can be easily guessed and cracked. You may have the option to use a password generator to create highly secure passwords. Remember to save your password in a safe place. In the worst case if you lose it you can always replace it.



**Mailbox size** - will depend on your hosting plan. Each email that comes or goes has a physical size that depends on its structure. Let's say that your mailbox size is 200MB. If it is pure text, average email may be about 10K in size, but if it has one picture it may grow to an average size of 2MB. The size limit you will pick is up to you and your needs. You can also select "unlimited" to have a big inbox, but do not forget that the "unlimited" is usually limited by your web hosting plan space. No matter what size you choose, do not forget to delete unnecessary emails.

## Reading and writing with email clients

After you are finished creating an email address and want to use it, you have two options:

- **webmail**
- **email client**

**Webmail** - is quite popular and widely used. In short, it is a browser interface for your email. You usually go to `webmail.yourdomainname.com` or some variation of it and log in with your username and password. There are some advantages and disadvantages. Most hosts have several interfaces. After you login in your webmail, you can choose between them. You are not bound to one and it is nice to have a choice. Since your mail is stored on a server, you can use your email on any computer that has internet connection. The biggest disadvantage is that you cannot use your email account if you do not have internet connection.

Email client - there are many email clients, but choose carefully because most of them are built to work with a certain operating system. Additionally, you will have to configure it to be able to connect it to your server. One advantage of email client over webmail is that it has the ability to download your email onto your computer, so you can access it even if you are not online. There are two ways in which email clients work and they essentially do the same thing in a different way:

- **POP3**
- **IMAP**

**POP3** (Post Office Protocol 3) - downloads your emails on your computer and removes it from the server by default. However, the drawback of this configuration is obvious if you use more than one device. The other devices would not be able to see the emails since they have already been removed from the server. Each client has its own records of what have you done, and they do not synchronize with each other. That means if you have two email clients connecting to the same email account, for example one at work and one at home, their inboxes can be completely different. Each client will not synchronize with each other. POP3 is not recommended if you use more than one device to connect to an email account. You can configure POP3 to leave the email on the server so this configuration can be a handy



failsafe. This way, if you accidentally deleted an email, all you have to do is to login on your server and re-download the email.

**IMAP** (Internet Message Access Protocol) - synchronizes your email client with your server. The client acts as a window displaying the contents of the email account located on the server. This is great if you have more devices, but it is also less of a failsafe. The synchronization means when you delete an email in your client, IMAP will also delete it from the server. In short, once you delete an email, it is gone and you will not be able to retrieve it from any device or server. IMAP is the preferred method for checking an email account from multiple devices.

**Note:** Do not forget about your mobile devices. No matter if it is a smartphone, tablet or whatever they invent in the future, it is handy to have fully fledged email functionality on the go. Checking emails on your mobile device is the primary way to check your inbox nowadays. Some devices come with pre-installed email clients but you can download any client you want. Just remember to check if they are compatible with your device. If you prefer webmail, most of providers have already developed official apps, so be sure to search for them in your application store.



## Email tips and tricks

Now that you know how email works, here are few helpful tips and tricks that you may want to use in your email.

### Forwarding mail

There are many reasons why you should use mail forwarding. The main thing is that it will definitely simplify your email experience. You should use forwarding when:

- **You have multiple domains/email addresses** - you have multiple domains (mydomain.com, mydomain.net etc.). It is handy if you are having one primary inbox, for example yourname@yourdomain.com. People can send you emails to other addresses, like name@mydomain.net but you will still get them all in your primary inbox.
- **You prefer to use your personal email inbox, but you want a domain email address** - Simply forward all of your mail from your business domain email address and deal with it in your private inbox.
- **You change email address** - Perhaps your older customers are not aware of your address change and still send emails to the old one. This way you will not miss any mail that is sent to your old address.
- **You want to forward emails to certain address** - This is useful if you have multiple personnel and business hierarchy that demands certain people see certain emails. For example, you have a customer service but as a boss, you want to be informed of every complaint. You can set up so that each email addressed to customer support be forwarded to your mail.

**Note:** The best part about creating additional forwarder addresses is that they do not have to occupy any physical space on your server unless you want them to.

## Autoresponder

Another time-saving tool is an autoresponder, which will automatically reply to every mail with a previously composed reply. You should compose an email that is neither too long nor gives too little information. Be short and concise with auto-responding emails. You would want to activate this option if you:

- **Go on a vacation/business trip** - You want people to know how long you will be out of reach.
- **Have a project that takes a lot of your time** - You can inform your correspondents that you will answer with a little bit of delay.
- **Have a customer service** - You want to inform our customers in what time they can expect an answer.

**Note:** There are many more reasons to set an autoresponder, but do not forget about them after you activate it. You want to deactivate it when it is no longer needed.

## Managing website files

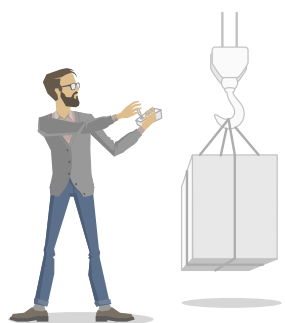
When it comes to managing your website files, two things that you want to pay close attention to are uploading files and downloading backups. This is where FTP (File Transfer Protocol) will be helpful. It simply allows your computer and server to transfer files without displaying or executing them. To connect to your FTP client you will require username and password, thus this form of connection is pretty secure.

## Installing and using FTP client

FTP is the standard for transferring files. To use it you need four things:

- **FTP login username and password**
- **FTP address for your server**
- **Port for connecting through FTP**
- **And FTP client**

FTP login details are provided by your web host, usually via email. If by any chance you lose that email, there is usually a section for FTP in your hosting control panel with that information. After you get the login details, you should download and install an FTP client. There are free and commercial options and the most popular ones are:



- **FileZilla** - Free, open source client for Windows, Mac OS and Linux, one of the most used ones and highly recommendable for beginners.
- **Cyberduck** - Free, open source client for Windows and Mac OS, one of the best features is remote editing with your text editor of choice.
- **WinSCP** - Free, open source FTP and SFTP client, for Windows users, relatively simple to use without diminishing some of the more advanced features.
- **Transmit** - Commercial client for Mac OS, sleek and very fast, packed with options that are outside standard Mac centric features.
- **SmartFTP** - Windows client, free for non-commercial usage, but somewhat overwhelming for beginners.

Again, it is up to your preferences and compatibility. After you open your client, besides your username and password, you will need the FTP address for the server. It usually comes in one of these variations:

- **Your domain address**
- **Your domain FTP address** - Your domain preceded with ftp, for example ftp.domainname.com
- **Your server's IP address**
- **Your host's FTP address** - Your host's domain preceded with ftp, for example ftp.hostname.com

Lastly, you will need a port number to connect to. Ports are simple connections that programs use to connect to your server. FTP configured ports are used only for FTP and are open only while you transfer data via FTP. If your host has not designated specific port, it is usually number 21 for FTP and 22 for SFTP. That is not always the case, so check that out with your hosting provider.

After you made a FTP connection with your server you will be able to see exactly what files you have on your server and on your personal computer. Usually, you will see two columns, one on your server and one for your computer. There, like in your OS, you can copy, paste, move, delete and create files and folders that you need. Many hosts' control panels have a section that is dedicated to FTP but they are usually limited when it comes to some more advanced features and have them labeled in various ways. However, you will need to use the control panel if you want to create additional FTP accounts or give someone else FTP access to manage (part of) your site.

Before you manage your files you should know about file permissions. They are tools that give you the ability to determine who can read, write and execute any file. There are three user levels of permissions:

- **Owner** - Highest level of permission, usually the creator of the file and/or administrator.
- **Group** - Equal or less permission level than the owner, depending on your settings.
- **Public** - Anybody who has access to your system, meaning all users are in the public group.

Each file has its own permissions. All three of them are applicable on mentioned users and they are:

- **Read** - Permission to read the contents.
- **Write** - Permission to write, overwrite or delete the file.
- **Execute** - Permission to execute the file (permission to activate the file to do what it is made for)

There are textual and numeric forms of assigning permissions, but we are going to skip them because FTP clients have a simpler way of setting them up in 99.99% of the cases.

## Backing up your website

Once again, backups. There is no better failsafe for your website. It is best to do the backups daily, but let's be honest, nobody has time for that. It is not enough to have a backup of your original site. Weekly or monthly full website backups are sufficient and easy to do. A backup may take a while, but after it is finished, if possible, make a copy on your backup drive or USB stick. It is never too soon to make a backup and there are never too many backup copies.

## Manual backup with FTP

You just simply login into your FTP client and drag everything from the document root to a folder on your computer. But what is a document root? Simply, it is a folder that is open to the internet and is protected from the view of anyone online. It is usually named html or public\_html. Most of the hosts automatically take you there after you login into your FTP client.

## Automated backup

If you do not have time to make a manual backup, you can get an automated backup solution. They usually work through FTP, SFTP or MySQL and are efficient. There is a question of a small fee and usually hosting providers will offer automatic backups. So check with the provider or search for a third-party solution.





## Control panels

A control panel, in web hosting, is a web-based interface provided by the hosting company that allows customers to manage their various hosted services in a single place. One of the widely used and well known control panel is cPanel. There are also other alternatives that you could consider such as Plesk, ISPConfig, etc., depending on your needs.

### Overview of cPanel

cPanel is one of the most widely used control panels for web hosting. It is easy to use, highly customizable and majority of the hosts are configured to serve its multiple layouts that are available. It comes with various pre-installed options, and from it you can manage email and FTP accounts, your add-on and subdomains, MySQL database, applications, security, and statistics. Everything that we've talked about in this guide you can find in cPanel.

After installing and answering a few questions to customize your cPanel, you are ready to use it. It has an interface for website owners and server owners. Besides the already mentioned pre installed options, you can add almost anything you want to.

In the Web Host Manager part of the cPanel, you can do all things that are related to administrative server hosting. There you can add and manage your accounts, create hosting plans, reseller accounts, change security features, configure server, scale your hosting capabilities and much more.

While it is easy and intuitive enough for beginners, cPanel is powerful enough to meet the needs of more advanced users.

### Plesk

It is most probably the most used control panel tool after cPanel. It is also a commercial control panel and similar in many aspects, from versatility to robust options. There is a number of people that will recommend Plesk over cPanel because of somewhat cheaper price in the long run, but in the end it all comes down to user interface and whether it suits you or not.

### ISPConfig

Unlike previous two, ISPConfig is a free open source control panel. It is stable, massive and mostly aimed at internet service providers, but it is suited for other users too. Its main selling point is managing several servers from one control panel. It is secure and fast enough with numerous options that are attractive to regular customers, including multi language support.

### Kloxo

With different terminology, Kloxo is visually similar to cPanel, but it is free and open source. Although there are some that say it is buggy, there have been a lot of updates and patches that solved them. Considering that, it is still one of the

best free alternatives to cPanel. It not only covers the basics, it is equally robust, advanced and easy to use.

## ZPanel

ZPanel is one of the most often updated control panels. Besides the developers, the user community is also quick to help out. Free, open source and written in PHP, it is very versatile and easy to modify. Probably not the first choice or recommendation for beginners, but great for personal items and once you figure it out, it allows you to do quite a lot.

Other web hosting control panels that you should also consider are:

- **OpenPanel**
- **Webmin**
- **Ajenti**
- **Virtualmin**
- **Vesta**
- **DirectAdmin**
- **InterWorx**
- **ServerPilot**
- **Froxl**



## Installing web tools / platforms

While CMSs refer to the platforms that makes the whole website, like Wordpress, Joomla or Drupal that we've mentioned in Part 3 of this guide, there are number of smaller and bigger web tools that are built to do a specific thing on your website. When it comes to installing any tools you will have two option: manually with FTP and with the use of third party installers. Most web hosts offer easy to use installer inside their control panels which will help you upload any tools / platforms you need.

### Manual installation

If you are installing a tool that you downloaded from the internet manually you will need to use your FTP client. You should find installation instructions for the tool. It is usually a text file labeled readme.txt or install instructions.txt that you can find after you downloaded the files. If there are no instructions, you should probably skip the script because it is probably badly written or potential dangerous. Usually the process involves uploading the files to your server via FTP client to a certain folder. There may be some additional instructions, so look for them in the installation instructions text files that you downloaded with the script.

### One-click installers

To make your life faster and easier, there are one-click installers. They will enable you to install almost any tool / platform fast and easy so you can dedicate more

time to learning how a certain tool works, rather than spending time on installing them. These one-click installers are free third party software that is incorporated into your host control panel. You just need to follow the instructions for installing the tool of your choice (WordPress, Joomla, Drupal, etc.). The installation process is really simple and with one-click any software can be easy uploaded to your website. There are numerous one-click installers and each hosting provider offers different options. The most popular are:

- **Softaculous**
- **SimpleScripts**
- **Fantastico**
- **Installatron**

Those are the most popular and they all have dozens of dozens of free tools that could come in handy.

**Note:** Any tool / platform can be installed on your server manually with FTP but these one-click installers were specifically created to make your life easier.

## Website security

Website security is a concern for many people. If you search the web for How to hack a website, you will literally get millions of hits. Taking the necessary precautions now with your website will help prevent a big headache later on in the event anything does happen to your website.

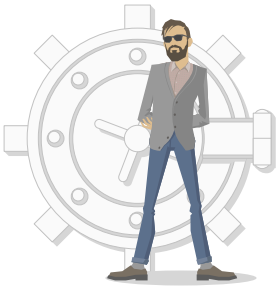
While it is not possible to cover every security issue for every program and case, we'll talk about the main areas you should focus on in order to prevent any problems.

### Vulnerability in software you use

The security of your hosting account is very important. Having a totally secure system would be impractical, so there are few things that you should look after.

**Limited access** - At some point you will probably add another person that could use your account. Make sure that they are to be trusted and give them a unique username and password that are not easily deciphered. Limiting access means limiting possible entry points and restricting the user's database privileges.

**Stable versions of the software** - It is not advisable to immediately download the latest version of any software, because they may have bugs and flaws in them. They may be minor hiccups, but it is best to wait for patched-up version so you don't have any problems. However, exceptions are security updates, you should update those immediately.



**Trusted sources** – Choose only trusted themes, plugins and apps, meaning that they are certified and that you can identify who or what is behind its creation. Getting them from untrusted sources can lead to various problems.

**Username and password** – A strong password and username will help avoid much vulnerability. For username do not use any variation of your real name, company name, or website name. For passwords do not use only numeric or only letters and don't make it too short.

### **Common ways sites are hacked**

**Injection** - These happen when untrusted data tricks the system to execute it without proper authorization so it can access and manipulate the data. They usually occur through SQL or OS and the most sensitive parts for this kind of intrusion are login screens, search forms and browser address fields. You can avoid this by sanitizing your user inputs.

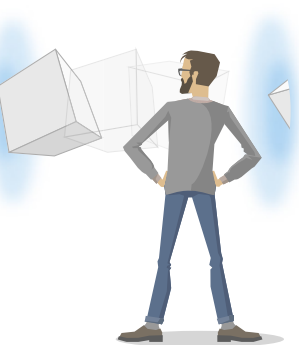
**Cross Site Scripting (XSS)** - Another major issue happens when an app receives and sends untrusted data to the browser and that data then bypasses proper validating. It can redirect users to malicious websites, hijack sessions, steal personal information and much more. It is hard to detect and stop, so it is used by malicious hackers to mess up things and by good hackers to check security and help in repairing the weakness.

**Broken authentication and session management** – By exploiting weaknesses in your authentication system, somebody can literally steal your identity. They obtain passwords, session IDs, cookies and other things that can allow hackers to access your site from any computer. It is one thing when you forget to logout from social networks, but a whole other thing when it is your bank account. You can prevent this by setting sessions to expire after a specific time, so users are logged out after some inactive time automatically.

**Distribute Denial of Service (DDoS)** - although not technically a hack, it is a method of bringing a website down. It will make the system unusable or very slow for legitimate users by overloading the resources so no one can access them. It can be used to compromise part or the entire website. To prevent this, plan ahead, strengthen your network and application infrastructure and especially DNS, since DDoS attacks are large and often sending tons of URL requests in a very small time frame.

**Brute Forcing** - Also known as password cracking. This happens if you have your encrypted usernames/passwords floating on the internet in the unprotected file. That means that everyone with access to Google and password deciphering tools for encoding passwords can find your sensitive information. There are many methods for preventing this kind of attack and some of them are account lockout or throttle requests like typing in captcha.

## Transferring domains



The instructions to transfer a domain from one hosting company to another are different for each company. It is best to contact the new hosting company for their specific instructions. The same thing applies if you want to change your domain registrar, meaning that you want to change your domain name.

If you are transferring hosts, be sure that you transfer and download all of your website files, because you do not want to leave something behind. As a precaution, it is wise to download all of your files to your computer or a backup drive. However, do not forget about password protected folders or hidden files because you will need those too. Also, this is a good time to get rid of unwanted things, like additional or unused email or FTP accounts or applications.

Schedule your move when you have least traffic. It would not be wise to have your move during your busiest hours, because there will be some hiccups and delays until everything is set up. You probably want to warn your customers too.

Before you make an actual move, make a checklist so you do not forget something. Usernames, passwords, all kinds of accounts, subdomains, databases, SSL certificates, applications are just a few to name. If you want to have the same website on your new host, you can't forget anything!

If you are transferring registrars, the move is somewhat easy because it is usually less invasive. In short, you will have to obtain the authentication code from the old registrar and deliver it to the new registrar. Then the old registrar will ask you for the authentication and after you confirm it, it will release the authority to the new registrar. Then you will be notified when the transfer is complete. If you are using cPanel, you can do all of this in the "Domain Manager" section.

However there is one thing that you should be aware of. A domain transfer could take up to several days, so do not wait for the last day of your domain registration. If you do that, it could result in incomplete transfer before the registration expires, which could result in loss of the domain name registration and failure of the transfer.

## Speeding up your site



Having seconds, or even milliseconds shaved off your site's loading time can be crucial. Sluggish pages are an annoyance to both repeat and new visitors, and can certainly cause you to lose customers. Here are few tricks to speed up your site.

**Optimize homepage** – The first page your customers see is your homepage and should load as fast as possible. Reduce the number of posts, show excerpts instead

of full posts and remove unnecessary widgets and plugins. Incorporate them only where they are necessary, because they slow the site.

**Optimize images** - Simple, yet a lot of people forget about it. Scale and crop the images to the actual size, remove comments and adapt the color depth. Acceptable formats are JPEG, PNG and GIF. You can even use one of the image optimizer plugins that reduce size, but not the quality of images.

**Remove redundant code** - Code can sometimes get messy with useless extra parts. You should remove them whenever possible, including line breaks and empty spaces because they add up to the size of the page. There are a lot of tools that can help you with that, and if you cover HTML, CSS and JavaScript, you will cover the majority of your code.

**Enable caching** - With caching, elements of the pages are stored on visitor's hard drive in a cache, so the next time you visit that page, it loads quicker. This is useful if you want to have returning visitors and it shaves off seconds.

**Minimize HTTP requests** - A big part of loading of the page falls under downloading different pieces of the page. HTTP request is made for each and every one, so more elements you have, more time it takes to load. Have a simple design and framework, optimize and use CSS instead of images whenever possible, reduce scripts and redirects, etc. In this case, minimalistic is better.

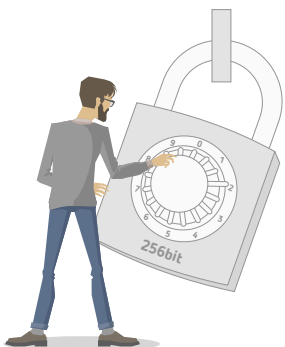
**Use Content Delivery Network (CDN)** - It essentially takes all your static files, like images, and lets visitors download them from the physically closest server. There are many tools for this, and as we already said, the closer the server, the faster the download.

**Stylesheets at the top, scripts lower/at the bottom** - Putting stylesheets at the top of your pages will make them appear to load faster, because they will load progressively from top to bottom. Scripts are tricky because they block parallel downloads so, if they start early, the page will take longer to download than the rest of the content.

**Note:** To have a fast loading page, you should remove all unnecessary and redundant parts, optimize what you can, minimize the size where you can without the suffering of the quality and have as little parts as you must. More isn't always better.

## SSL certificates

SSL (Secure Socket Layer) certificates are useful if you have a website that requires personal and/or confidential information. They prove that you are a trust-



worthy and legitimate person or business. They encrypt the data, so they can prevent the interception and stealing of that data. You do not require a SSL certificate if your website is purely informational, however, if you require name or username, ID, phone number, address or credit card information, you definitely need one.

It is easy to see if the website is using an SSL certificate. Since it uses connection protocol known as Hypertext Transfer Protocol Secure. The web address starts with `https://` instead of `http://`. If the website is using the protocol, but their certificate is expired, not valid or not recognized, `https://` will be colored red. So beware because the connection may not be secure. Sites with lower level verification will have a padlock after the `https://` and higher level verification websites will have a company name or a whole address bar colored green.

There are different security levels and you should choose the one that serves you and your customers. They vary from Basic to Extended Validation (EV). Consider your customer size and the sensitivity of the data you require. If you are only requiring a name and address, EV level of certificate is overkill.

Buying SSL certificates is easy and you can buy them from different places. However, buying a certificate from your host is sometimes the most practical, because you will usually get help with installing them. Installation can be tricky and sometimes you will not be able to install it without your host. Installation is different for every Certificate Authority (CA), brand and certificate level. By making it complicated, it makes it difficult for fake websites to trick browsers into believing there is a valid certificate where there isn't one. There is no one universal guide for certificate installation and you should follow the certificate provider's instructions to the last letter or your certificate won't work.

And there you have it. You made it to the end. Well, almost, because there is also a web hosting glossary for refreshing your memory. In this guide we presented essential things that you should know about web hosting. Now do not be afraid and take on the journey called website hosting!



## Part 5: Glossary

In this glossary, you will find an alphabetic list of terms and abbreviations that were mentioned in this web hosting guide, and a brief explanation.

**App** - abbreviation for application; see: script

**Auto-responder** - automatic email reply. It is an email response to an email that you received on your email account, usually used for “away” or “delayed answer” notifications

**Bandwidth** - amount of data consumed by a hosting plan in a certain time frame, usually a month

**Blog** - shortened for weblog, a web based journal usually in a form of a website that consist of posts, typically displayed in reversed chronological order

**Cold** - abbreviation for Country Code Top-Level Domains, a group of domain extensions for the countries that are associated with it, for example, .uk for the United Kingdom; see also: TLD

**Cloud hosting** - web hosting service where multiple server computers are joined together to provide better and faster performance in delivering your website; see also: server, dedicated server, shared server, VPS

**CMS** - abbreviation for Content Management System, a computer application that allows publishing, editing and managing content of a website from one central interface

**Control panel** - central place for managing your hosting account, sometimes called dashboard. In web hosting terms it usually refers to a place where you manage and control web hosting aspects of your website such as installing scripts, creating new users and emails etc., do not mix web host control panel with FTP control panel where you control FTP related actions

**Dedicated IP address** - unique IP address that is used only by your website on a particular server; see also: IP address

**Dedicated server** - server that is entirely owned by one person or organization and is not shared with anyone else; see also: cloud hosting, server, shared server, VPS

**Disk space** - amount of space allocated to you on the server to store any kind web-site related data

**DNS** - abbreviation for Domain Name System, it is a system that controls, translates and assigns domain names and IP addresses

**Document root** - the beginning of a file system, it contains all other files and folders and it is a folder that is open to the internet

**Domain name** - unique name that identifies different internet resources, like web-sites

**Download** - receiving data from another computer; see also: upload





**Downtime** - a time frame when a system or a machine is unavailable; see also: uptime

**Dynamic IP address** - IP address that is assigned to a computer each time it connects to the internet; see also: IP address

**E-commerce** - trading in services or products using computer networks

**Email** - shortened for electronic mail, a communication system for sending messages online, includes text and pictures primarily, but it can send other type of files

**Email client** - computer program used for accessing and managing email; see also: webmail

**Folder** - place for files and other folders on a server

**Forum** - also known as message board, it is an online discussion website where users can post messages or questions and receive answers from other users

**Forwarding** - service that redirects something or someone to another location; web page forward sends user to another page; email forwarding automatically sends or copies emails to another email address

**FQDN** - abbreviation for Fully Qualified Domain Name, a full domain name that specifies all domain levels and exact location in the DNS

**FTP** - abbreviation for File Transfer Protocol, a protocol that enables networked computers to transfer files between them

**Geld** - abbreviation for Generic Top Level Domains, a group of domain extensions that do not include a country code, for example .com; see also: TLD

**Hosted email** - email address located on a server where you located your website and all its functions are delivered through mail server; see also: email

**Hosting** - service that provides individuals or organizations with disk space on servers for managing websites and emails

**Hostname** - label that is assigned to a certain device connected to a computer network, used for identifying one specific device

**IDN TLD** - abbreviation for Internationalized Top Level Domain, it is a group of domain extensions that are in the specific character set that is not in Latin, used for specific languages and their alphabets, for example in Greek; see also: TLD

**IMAP** - abbreviation for Internet Message Access Protocol, a way to retrieve and store emails, it allows different mail clients to connect to the same mail account, it leaves a copy on the server until you delete it permanently; see also: POP 3

**IP Address** - numerical label assigned to each device, serves as network identification and location address; see also: dedicated IP address, dynamic IP address

**Linux** - free and open source version of UNIX OS; see also: UNIX

**Mailing list** - collection of email addresses used for mailing multiple recipients at once

**OS** - abbreviation for Operating System, software that manages computer hardware and software and provides services for programs

**Platform** - framework on which applications may run, it is software used to develop your website; see also: script

**POP3** - abbreviation for Post Office Protocol (version) 3, a way to retrieve emails from the server; see also: IMAP

**Port** - script or protocol specific software contraction that serves as a communication point in a host's OS

**Protocol** - system of rules for digital data exchange between networked computers, understood by multiple devices to enable them communication with each other.

**Redirect** - see: forwarding

**Script** - also known as app, application, program, widget, platform, etc., piece of code or a program that contains one file or a number of files, that are designed to do a specific job

**SEO** - abbreviation for Search Engine Optimization, a process that modifies a webpage or website to affect the visibility in a search engine's results, its objective is to have your webpage or website ranked high or at the top of the search results page

**Server** - computer that delivers information to other networked computers, a physical machine that contains all data related to your website, see also: cloud hosting, dedicated server, shared server, VPN

**SFTP** - abbreviation for Secure File Transfer Protocol, a protocol that uses SSH and enables encrypted transfer of files between networked computers; see also: FTP, SSH

**Shared server** - When a web host places more than one client site on a single server, that server is classified as a shared server because its resources are shared on a first-come, first-served basis to all the sites on it. See also: cloud hosting, server, dedicated server, VPS

**SSH** - abbreviation from Secure SHell, it is a cryptographic protocol for secure access between two networked computers

**SSL** - abbreviation for Secure Socket Layer, it is encryption protocol that provides secure communication for sending information online; see also: TLS

**Subdomain** - domain that is part of a larger domain

**TLD** - abbreviation for Top Level Domain, it is also known as domain extension, made up from characters that are typed after the period that comes behind the domain name in DNS hierarchy, for example .com or .uk; see also: Cold, Geld, IDN TLD

**TLS** - abbreviation for Transport Layer Security, successor for SSL an encryption protocol that provides secure communication for sending information online; see also: SSL

**UNIX** - OS designed to be used by multiple users at the same time, see also: Linux

**Upload** - sending data to another computer see also: download

**Uptime** - a time frame when a system or a machine is available and working, see also: downtime

**VPS** - abbreviation for Virtual Private Server, it is a virtual machine created on a server that has a certain percentage of disk space and shares hardware with other VPSs, see also: cloud hosting, server, dedicated server, shared server

**Webmail** - way to manage your mail accounts through your web browser; see also: email client

**Website** - series of related Web Pages that are contained at least on one web server accessible via Internet and typically served from a single web domain

**Widget** - see: script

**Windows** - OS developed by Microsoft