

Getting Started

Before getting started with setting up a website, it's helpful to understand some of the key terms and concepts. First off, a website is just a series of files, much like a set of files on your computer. The difference between web files and your own files is the type. You have likely seen them before too. Web files usually have extensions like "html" or "php" or some other format unique for displaying in a web browser. Without getting into the nuances of format types and what each does, it's helpful to know that a website is just a series of files that are associated with one another.

What makes website different from other files is that these files are accessible to anyone on the internet. This means that the files are set up on something called a **web server**. You can set up your own web server (although I would not recommend this for beginners), or you can set up an account with someone else who can store the files for you on their server. Companies that do this are called web hosts. They will host (or hold) your web files for you on their web server so you don't have to worry about it. There are web hosting companies that manage tens of thousands of websites. Some of the bigger ones you may have heard of include companies like Godaddy, Dreamhost, 1&1, and countless others. I'll get into the differences between companies in just a minute. Here, it's best to just say that companies can manage many different sites for many different people.

So, how do they make things unique for you? It's through your web site registration – the unique name you pick for your website on the internet. So, let's look at the concepts of domains, registration and hosting.

Domains, Registration and Hosting

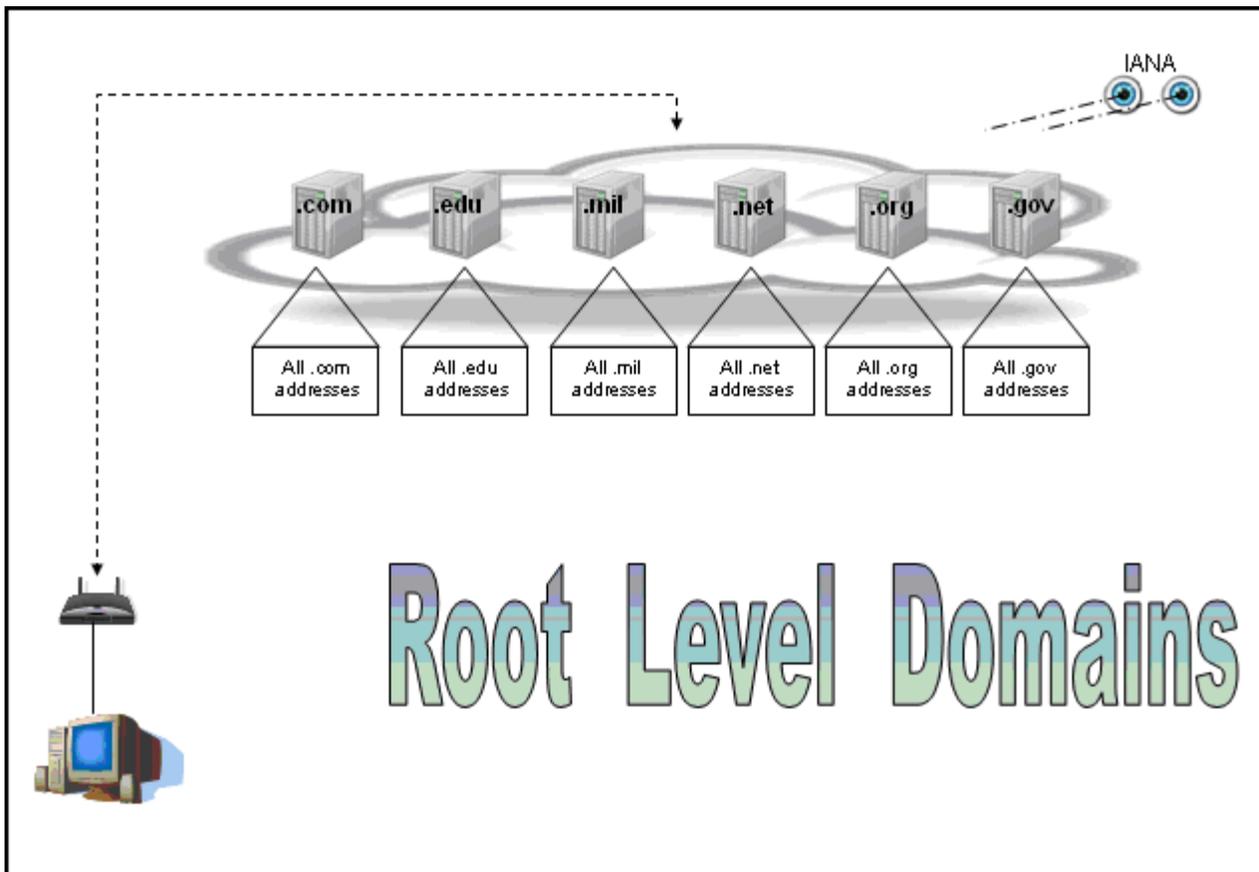
Domains

A domain is simply a fancy way of saying the name of your website. Often times, it may be referred to as your name, your domain, your domain name, your website address, web address or even just your address. These are all the same thing. Your domain is where people can find you on the internet. If people want to go to your website, they are going to type in the address to your domain. What that address consists of will be a function of how you are set up on the internet. So, let's take a look at how your address gets set up in the first place.

Your web address is just like your street address. If you told people you lived in New York, it would take forever for mail to find you. But if you say you live in Cortland, NY, it gets a little easier. You can also make things even easier by giving street names and house numbers to get mail quicker. Web addresses work the same way. If you were to tell someone you had a .com web address, they would be able to find you – eventually. So, you give them the rest of the address – your website is at www.canonblogger.com. They can find that! They know it's on the web because of the "www", and they know you are canonblogger, so then it's just a matter of limiting their query for canonblogger to the right region, in this case, the .com address. Notice that I referred only to an address that has a ".com" at the end. While this is the most common, there are several more types of domain names available for purchase on the internet. Here's just a sampling of some of the domain extensions that you can register under:

- .aero
- .asia
- .biz
- .cat
- .com
- .coop
- .int
- .jobs
- .mobi
- .museum
- .name
- .pro
- .tel
- .travel
- .mil
- .edu
- .gov
- .org
- .net

These are all classified as **root level domains**. These are the ones managed by IANA - the Internet Assigned Numbers Authority. This is the organization that provides oversight and makes sure the same domain name is not used twice. Take a look at the following chart, as it may give a little added visual clarification of what root level domains are, how IANA fits into all this, and how you access these domains.



So, when you log on to the internet and you go to a website, you are actually sending a query to your internet provider “find me this domain name on this root level.” Your provider then sends its request to the computer monitored by IANA that houses all the addresses with that extension. While this is an over-simplified explanation, and is not *exactly* how it works, this does give you an idea of what is involved in connecting to a domain/domain name/name/website address/web address/address on the internet.

Free Registrations

There are many free resources out there for us to take advantage of. We can often get free domains from our internet providers (Road Runner, Comcast, etc.). If you have an email address through a company like Google, Microsoft or Yahoo, you can also get free domains from them as well. As with anything though, there are pros and cons to these types of environments. The biggest thing in favor of something like this is primarily that it is free. You don’t have to register anything. It’s all taken care of by the company that is providing you the space on their web server.

There are some major downsides to this arrangement though. First and foremost among these is storage space. Storage space refers to how much space you can occupy on their web server. A web server is just like any other computer – it only has a certain amount of space available. It consists of hard drives, just like your desktop, laptop, or PDA. Granted, it has a lot more space than any of those, but it still has limits. As a result, the companies that offer free storage cannot offer too much. Typically free services will have limits anywhere between 5-50 megabytes of storage, with Google

being the notable exception. With things like pictures involved, your storage allotments can be maxed out very quickly.

Another limiting factor in the free scenario is bandwidth limitations. Bandwidth refers to the amount of data you are permitted to both send and receive. This is often referred to as “traffic”. So, let’s take a hypothetical example. Let’s say you have a picture that is 5 megabytes in size, and you put it on your website. Every time someone calls up that picture, they are transferring those 5 megabytes of data from the web server to their computer. If you get 20 people looking at your picture, you can rapidly use up 100 megabytes of bandwidth. Bandwidth allotments for free services often range between 100-500 Megabytes of traffic, although more recently, these services have increased bandwidth to measure in gigabyte levels. Again, this is not exactly how it works and is an oversimplification, but you get the idea. While it’s a good trend for the consumer, the minimal bandwidth of a free solution will never match what you can get from one where you spend a little money. An age old saying holds here that “you get what you pay for.” Free in general means you won’t get a lot.

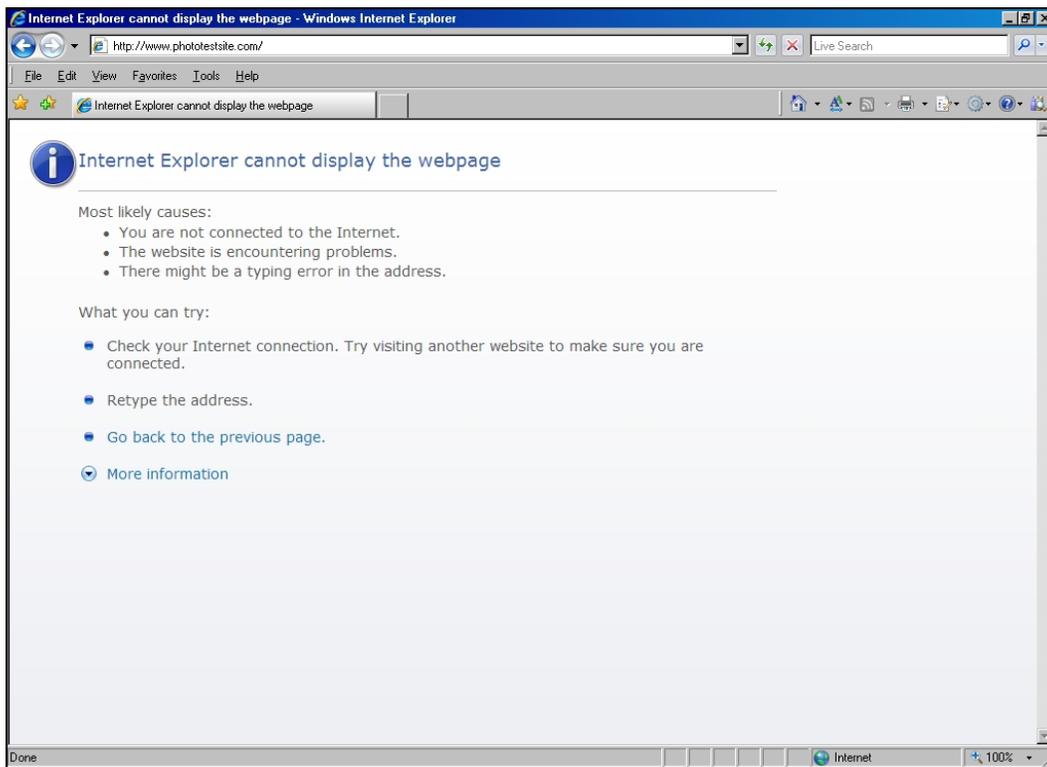
Finally, getting a website set up through a free provider means that your website address will be part of their domain. So, if you set up an address of “myphotosite” and you go through Google, your full address will look something like “myphotosite.google.com”. Your site is what is called a **sub-domain**. Your name is added to the front of the root domain name (here it’s Google). This can be a pain if anyone wants to visit your site, they have to type in a big long web address. It also makes it more difficult to say, remember, and keep track of. Which would be easier to remember: www.myphotosite.com or www.myphotosite.google.com? (*Note* These are not valid addresses.)

One last bit about free solutions – you can also be limited to certain types of content. What if you wanted to put a few music files on your site to play? Some free providers have restrictions on what they allow you to present, primarily due to liability clauses for content available on the internet – they can be held responsible for any content associated with their domain. In essence, you have “big brother” watching over the amount, type, and activity of your web space. This is not to say that free alternatives are a bad idea – it’s just that they will be limited, and often restricted in what is allowed.

Registration

So, if a free solution is not your cup of tea, then that means you need to get your own domain set up on the internet. Just like Microsoft, Apple, Dell, and everyone else, you must get your name registered through a valid registration authority. Not only is it easy to do, but it also lets people can find your site easily. While it’s fairly easy to get your domain name registered, there are some things you have to think about before actually getting the deed done. First, you have to think of a name for your site. Do you want a catchy name like “Shutterspeed” or “Lensworks”, or some other name? Alternatively, many photographers would like their website to mirror their own name (like “Joes Photos” or “Sarah’s Snaps”). Either way, deciding on a name is a one-time deal – you can’t change it once you get it registered, the one you have is the one you have. (Well, this isn’t always the case, but it’s a good idea to go into things by thinking in these terms, so you can get it right the first time around!)

Once you’ve decided on a name for your site, and how you want it registered, you need to check the name against what is already registered on the internet. This can be tricky because there are a lot of website names that are already in use. One way to find out if the name you want is available is to try entering it into your web browser. If a page is displayed with content on it, then that site is taken, and you will need to figure out a different name. However, if you get a page that looks something like the one shown below, then you’re in luck:



Another way would be to use a utility called “Whois” that can query to see if a name is in use. A universal whois utility can be found here: <http://www.internic.net/whois.html> or you can use any one of a number of other lookup services available from third party companies.

Once you find a name that you want, and determine that it is available, it is best to act relatively fast to get the name registered. If you wait too long, the name you want could be snatched up by someone else. So, hurry up! Quick! Get out there and get registered! Wait a minute, what’s that? You still need to know where to go? Glad you asked!

A common initial thought would be that you have to go to IANA to get your domain registered, since they provide the oversight for domain registrations. While this makes sense, it’s not exactly how things work. Most of the time, you will go through a company that provides registration services, and they will submit the request to IANA on your behalf. They typically charge for this service anywhere from as little as \$2 to around \$10. These companies are often also the ones that provide hosting services for the files that you’ve created. Different companies will offer many different types of hosting services and packages for a wide variety of customer needs. Commonly referred to as web hosts, these companies are the ones where you can find a domain name, get it registered, and get hosting set up all in a one-stop-shop environment. So, with that in mind, let’s look in more detail at what this idea of hosting is all about.

Hosting

Congratulations! If you’ve gotten this far, then that means you have made the biggest two steps in setting up your website. First, you’ve decided to go the route of a paid solution, **and** you’ve picked a name that is available for registration. So, now you are ready to get it registered. You can get a domain registered through any one of a number of registration authorities. As already mentioned, the companies that act as registration authorities also act as hosting companies as well, so you can accomplish both the registration and the hosting with one fell swoop. This is the recommended course of action for new registrants wanting to set up a website quickly and easily.

While you can register a domain and then host it yourself through your own web server, the whole idea of this section is based on the premise that you are not well-versed on server setups and configuration. If you are, then my question is: why are you reading this? If you're not well-versed, then it means we've come to the point where we need to pick a company to provide our registration and hosting needs. Which one do we pick? Again, excellent question!

Honestly, there are so many choices out there, any one of dozens to hundreds of options are available to you. With that in mind, as previously mentioned, remember that you get what you pay for. Be wary of companies that offer seemingly dirt cheap registration and hosting – they can (and often are) fly-by-night organizations that do nothing more than take money from unwitting people who are new to the field of hosting and web services. Other times, they may provide the registration and hosting service, but expect you to do everything else. Well, if you don't know how to install and/or configure IIS or Apache and how to park domains or anything like that, you could be up a creek without a paddle if you pick the wrong company.

So, the best recommendation I would have for someone new to websites is to pick an established company. Companies like Dreamhost, Godaddy, and 1&1 are excellent choices with great customer service. Another great way to find a website is to ask a friend who they use. Hosting companies often give discounts to customers for referrals. If you have a friend with a website, see if they'll refer you. Maybe they'll even give you a portion of their discount. If you don't have anyone who can refer you, the company I use is Dreamhost, and there is a link at the end of this chapter that you can follow to give up 50% off your setup costs (of up to \$50).

There are some things that you should look for in any web hosting provider though, and any provider worth their salt will have all of these features available. If they do not, that should raise red flags in your mind. Here are some of the bare bones things to make sure your provider offers in even the most basic of plans:

- Monthly/Annual Rates around \$5/\$50
- At least one free registration
- 10 Gigabytes of Storage
- 300 GB of Bandwidth
- SQL Database Support
- Unlimited Email Addresses
- One-Click Installs – more on this in a moment
- Email Forwarding
- Free sub-domains (25 and up is common)
- Multi-OS/Language Support
- A customer service telephone number
- Have been around for at least 5 years (look at www.resellerratings.com and www.bbb.org)

One-Click Installs

One-click installs are very handy utilities to have. As mentioned in the introduction, I will later be discussing some photo gallery software that you can install and configure to display your images. If you get a hosting company that has things like one-click installs, you will likely have a photo gallery option available to you where you don't have to do anything except click a button or two. Other software that may be included with some hosting providers includes forum software, blogging software, and shopping cart software (for web purchases of your photos). This is pretty handy to have if you aren't familiar with Linux and Unix-based operating systems, where a certain amount

command prompt expertise is required. (If you don't know what chmod, tar, or zgrep mean, one-click installs would be a required component for any hosting company!)

So, what if you do have a little bit of Linux/Unix familiarity? Well, in that case, the one-click install option is merely a convenience so you don't have to find the photo gallery software you want to install online, download it to your computer, then upload it to your web host, then decompress it, then install and configure it, then patch and secure it. For the website virgins of the world, this can be pretty daunting set of tasks when all you want to do is host some images on a website. Even for those with web hosting experience, the convenience of one-click installs is well worth it in my opinion. My provider (Dreamhost) has this option and any time there is an update, I get notified of those updates, I click a button and the software is updated for me – no hassles, and my time is left to do more important things, like writing articles and taking pictures! Sometimes I may have to re-load some customizations, but most of the time, they carry over pretty seamlessly.

One of the great things about Dreamhost is that once you sign up, your storage and bandwidth allotments grow with you as your needs expand – at no additional charge. Another nice thing about them is they have a very easy-to-use interface. Their customer service is stellar, and best of all – they have more one-click install options than I could ever hope to use, including forum software, blogging software, checkout software, photo gallery software, wiki software, and much much more! If anyone is interested, their website is www.dreamhost.com. Feel free to visit the website and check what they have to offer. As promised, for those who would be interested in taking advantage of a referral discount from me, enter the code “CBDiscount” or follow my link to: [Dreamhost Website Hosting](#)

Now, on to Chapter 2 – *Web Design Software!*