WEBHOSTING FORNEWES



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Introduction to Web Hosting

The Internet or World Wide Web is a huge expanse of countless websites. These websites can range from online shopping to photo sharing, social networking to government related information. People can hop online and check their bank account balance or talk to a relative from far away, or post a photograph of the day's events. They can read the news and check their local TV listings. While big websites that are well known most likely use a dedicated web hosting service, smaller websites might use a different type of web hosting program. Essentially, the web host provides the memory needed as well as the bandwidth allowance that is used up when people click on a website.

An idea for a website might seem easy at the moment, and the layout and design could already be embedded in your mind. But none of it is possible without the web host helping it along the way. For newbies who are just venturing out into the world of web design and website publishing, choosing the right web host can be a daunting task. It is essential to understand the inner workings of web hosting as well as know what to look for when you make your decision. Otherwise, you might not get as much as you pay for, and could end up sabotaging your own website with lack of memory, bandwidth, or server capability.

For people venturing out into the world of Internet business, or for those who simply want to create a website of their very own, it's essential to know what is involved when it comes to web hosting. If you have a small business or a brand new site that you're publishing just for fun, free web hosting might be the way to go.

These services are often advertisement driven, which means you're basically at the mercy of the host's advertisers, and they can put banner ads, pop ups, and other ads wherever and however they see fit. These free sites often look a bit cluttered, and can sometimes drive visitors away but they get the job done: a free website for the publisher or customer in exchange for lots of advertising revenue. These types of web hosting programs are free of charge but they do not usually present your website in the best light possible.

A shared web hosting service is a slight step above, and is much more commonly used. This term means that the website is on the same

server as several other websites, and is sometimes hosted with a reseller.

There can be thousands of shared sites under one web hosting plan all at the same time. These plans offer more bandwidth and some more options for programming the website, but their bandwidth and memory allotment might be on the lower side. These types of web hosts are usually for people who are just starting out on the web and simply need something that works but that does not cost too much. A dedicated server web hosting plan basically means that the website is on its own stand-alone server. This is good for websites that perform a lot of volume and is often used by much larger companies who need as much server room as possible in order to host the best site they can.

Dedicated web hosting is usually what large websites run on. These have their very own servers and each website might even have its own server room where the server is kept cool and under lock and key. Dedicated web hosting allows for much more memory and bandwidth, and the web designer can change and add much more without worrying about it being too much volume for the server, which can in turn override the website and cause it to practically shut down. While the price of dedicated web hosting is usually much higher, the stability and flexibility is definitely worth it.

There are a few other forms of web hosting, and all require some sort of registration or membership, so that the website and domain being hosted is registered properly online. There is a cost for web hosting, but this cost can vary greatly depending on a few different factors. Price is important, but there really is no "one size fits all" when it comes to web hosting providers. Some of the factors for pricing include the form of web hosting, the cost of server space, any advertising costs associated with it, as well as domain name registration. For smaller companies or individuals with web hosting accounts, there is usually a monthly fee of some kind in order to maintain the site and pay for the costs. Lager companies may charge an annual one time membership fee, or can even charge usage fees that depend on how much memory and bandwidth your website requires.

Depending on what your needs are, you can opt for a higher end web hosting service that offers forms customers or visitors can complete and submit, flash presentations, and even interactive chat.

The most basic web hosting services usually only offer a simple website with graphics and links, and typically cannot or will not support the extras that a higher end hosting service would. An interface that allows the host or web designer to log in and make any necessary changes is essential to making sure you have control over the content and the amount of times the website is updated. Being able to reach customer or others whenever you like through the site is essential.

If you're new to the world of web design and maintenance, it's important to know what you're looking for when you choose a web hosting plan. Without this knowledge, you can end up with a site that crashes, slows down, is not secure, or simply does not provide you with the memory and speed you need to maintain a professional website. There are many different things that work hand in hand to make up a solid web hosting plan. Be sure you are aware of what these things are in advance, so you can make the best choice for your needs.

No matter what you choose for a web hosting provider, the amount of downtime vs. uptime is extremely important. Basically, you want to find a hosting service that has maximum uptime, which in turn means that your website is up and available for visitors any time they wish to go to the website.

Understandably, many web hosting services do require some downtime for maintenance or for them to make some adjustments, but in these cases the downtime is usually planned, and they try to choose a time that is "off" the peak visiting hours of their customers' sites. Any web hosting plan that promises 100% uptime is probably not being honest. All hosts have times where maintenance needs to be performed, and during those times your website might not be functional. It's the length of time that the site is down that really matters.

Types of Web Hosting and the Differences



(captured from HostGator.com)

No two web hosting services are alike. Free web hosting is a great concept, but it's really only designed for the novice web designer, or someone who just wants to have their own little niche on the web. Free web hosting sites are usually bombarded with pop up ads, banner ads, and other advertisements, which are all usually a turn off for visitors. If you're creating a website to make money, it's a good idea to steer clear of free web hosting services, since they will most likely cause you to lose sales. Most people see websites with tons of ads on them and click away to something else, since their first instinct is that the website must be a scam.

Shared Web Hosting

Shared web hosting is one of the more common forms of hosting, but it's also not quite as effective as some others. Shared hosting basically means that the website is on a shared server that "shares" space with other sites. While this is effective for more simple sites, it might not work well for larger, database type websites or web pages with tons of visitors. Some more well known companies now sell server space for web hosting purposes, and make a good choice for people who want to set up a website but don't have the resources or funds to do so on their own dedicated server. Shared server web hosting is a good starter hosting service to get your feet wet.

Reseller Hosting

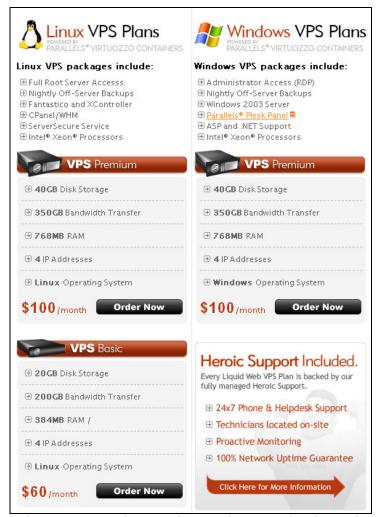
Reseller hosting has everything a shared hosting plan has, but it's only major difference is that as a reseller plan account holder can sell web space, as if they are their own web hosting company. Another major difference is that a reseller plan allows unlimited domains. A reseller is able to create accounts for them sites or their customers using the WHM (Web Host Manager).



(Reseller Webhosting Plan at HostGator.com)

VPS Hosting

A VPS, or virtual private server, is a different option for web hosting that allows each server to run on its own, with its own dedicated machine. If someone needs to perform some updates to one particular server, this can be done easily without interrupting any other servers. Most website owners also have much more detailed access to their interfaces, since on a VPS server, each one has its own operating system as well. This is also a great choice for web designers and webmasters who want to have a lot more security. Without having to share servers, the risk of information getting into the wrong hands is definitely lessened.



(VPS Hosting Plans as featured in LiquidWeb.com)

Dedicated Server

Of course, the dedicated server option is by far the best, albeit in most cases the most expensive. A dedicated server means that the Webmaster owns and controls the server completely themselves. Any updates or changes are done "in house," on site by the web designer or web designing and hosting team. Most of the time the server is stored at a data center or what is known as a collocation center. The reason for this is that servers run hot, and must be kept clean and cool. These data centers help to ensure that the servers are being stored and used at optimum temperature. The web designer or server controller can gain access to the data centers and the servers are usually kept under lock and key.

Dedicated servers can handle much larger amounts of bandwidth, which means that the website can handle more traffic and the flow of information back and forth from the end user to the server. A dedicated server usually has intrusion detection and other serious methods to help maintain the security of the server and the information it handles. Programmers can change or tweak just about anything they wish, giving the website much more power and ability to function in a large web environment.

While each of these web hosting choices are viable, some may be a better fit than others for the web designer. It really depends on the person's need for speed, ability to handle the flow of information, and the bandwidth needed to sustain the website. Some e-commerce businesses may decide to start slow, and then build their way up from a shared web hosting service to a dedicated server some day. Think of it as a seller of goods who lists their items on eBay one day, and then has their very own e-commerce web store the next.



(Typical WHM Control Panel area)

What to Look for in a Web Host

When shopping for a web host, it's important to know what your needs and goals are for the website or domain you're working on. For instance, if the website is simply informational and there for entertainment purposes, a shared web hosting service might be best. This keeps overhead costs low and if the purpose of the website is not to make a profit through buying or selling goods or services, then shared hosting is a good option. A virtual private server is also good in this case, since it allows the website to grow over time, giving it a little bit of "wiggle room."

Ecommerce websites that produce a lot of sales might need something larger such as a dedicated server. This can be costly, however, so it's very important to know what the goals are for the website, and how they will be achieved through the website's functions so that you will be able to support the higher costs of dedicated servers. High traffic websites usually need a dedicated server just to support the number of views or hits it receives, much less the amount of information being communicated to the server if there are monetary transactions being made or forms being completed by people.

Of course, the type of website is not the only factor in determining which type of web host you'll want to use. There are other specifics that should be considered. First, think about the amount of space you will be allotted. For example, regular websites use about 5MB of space, and this is generally enough to support the basic format of a site online. However, if you need more bandwidth and web space, you may need much more. Photos and video clips tend to take up more space, as do interactive features. Remember to keep in mind that plenty of space is great, but stability should take precedence. If your provider is down often, you can lose business and hits to your website, so keep this in mind.

Another important factor when deciding on a web hosting plan or company is the **number of domains** that you will be allowed to have. For example, if you sell shoes but you want to do so at shoes.com and coolshoes.com, you'll need to make sure the hosting provider allows multiple domain names. It's very important to register these domains ahead of time before you pay for a "reserved spot", otherwise you might end up paying for something you're not allowed to use. The more domain names you can have, the more exposure you'll get. Promoting multiple sites gets more visitors and increases the odds of traffic to your website. Many web hosting companies charge a perdomain name charge each month, while some may charge a flat fee for each, so do your homework.

When choosing domains, remember that web hosting plans usually offer the buyer a set amount of space, and then it's up to the webmaster to decide how much space to allocate to each domain. For example, if you have 500MB of space and domains, you can opt to designate 100MB of space to each, or split them up in other ways. FTP, or file transfer protocol, is another factor to consider when looking for a web host. Essentially, the FTP transfers files and information via the Internet and allows the data to communicate to and from the server. There are many versions of FTP server software available, and each has different features such as variations in licensing and platforms (i.e. Windows vs. Mac). Make sure the web hosting plan you choose will work with the FTP software you end up using, or else there will be problems integrating.

As a Webmaster, it's very important to be able to have as much control as possible over the operation of your site. Regardless of whom you choose for the web hosting, the ability to manipulate your site and make changes or adaptations when needed is essential. **cPanel** is an excellent choice when it comes to web hosting control panels. This

program allows the web designers to log in and make changes quickly and easily, all while communicating effectively to the web hosting server you choose. cPanel runs on the Linux, CentOS, FreeBSD, and Windows Server 2008 platforms, giving users a fairly wide range of choices of server platforms to choose from.

If cPanel is something you want to use, it's absolutely essential that the web hosting plan you choose is compatible. Otherwise, you will not have the ability to control your site through this interface. Server administration is very important, so it is definitely a feature that brings more options to the table when it comes to making any changes or upgrades to your website. There are some other very important factors to consider when shopping for a web hosting choice other than the price alone. Don't bank on a cheap provider to give the best service; sometimes, a little extra cost can go a long way in making sure you get the most stable server available.

Look into some things before you make a final decision on a web hosting provider. Ask questions, and see what kind of answers you're getting. Does the collocation center have physical security such as locked servers and password protected access? How many lines are running to each server? What kind of cooling procedures do they have in place to help prevent overheating? Is the generator tested often, and what kind of back up power is in place? What about fire suppression methods? All of these things are extremely important factors that a lot of newbies don't think about when looking for a web hosting provider, but they can mean the difference between a working, smooth website and one that "crashes" often or has security issues.

Make sure the web hosting company has experienced, **helpful support** staff that is easily accessible when you need to make contact. Be sure you can call someone and get a real, live person if you need help or have questions. Otherwise, you could get left in the dark without any help if something goes wrong. Check out some referrals and see if you can get customer reviews, so you have better insight as to how they treat their other webmasters. **Check into extra hidden fees** as well. Some providers may try to hit you with usage fees and other miscellaneous charges after you've already signed up or gone into some kind of agreement.

When looking for **disk space**, try to get as much as possible for your money. Even if you think your site won't use even close to that, it's good to have it as a backup so you can expand your website in the future without worrying about running out of space. A typical graphic

or picture usually takes up about 150-200KB, so multiply that times however many graphics you'll have, and you can quickly see how much this adds up. A video clip uses around 1-4MB, so keep this in mind when determining what kind of space you'll need.

Bandwidth is also essential to a successful website. In fact, this determines how many visitors, or hits, your website can support. Some web hosting providers charge people fees if they go over their allotted bandwidth, so look into this as well. Many newer companies are now offering unlimited bandwidth as part of a package deal, so try to find this feature to avoid problems later on down the road. The possibilities and available web hosting companies out there seem endless, so make a checklist with the features you need, price range you're looking for, and feedback that others have given. This will help to serve as a guide in making a decision.

Speed is another very important issue when it comes to web hosting services. You want your visitors to be able to see the website almost immediately. A good server will provide this without any problems. Lost time is lost business, so speed is very important. You can ping your website to get a better idea of how fast it's moving. When you ping a website, information hits the server and then refracts it back. The speed shows you how much time has gone by before the data comes back to you after going to and from the server.

More advanced web designers use scripting when creating their site. Be sure your web hosting provider does not have any kind of script limitations or is not able to process certain scripting programming language. Php and cgi are two common scripting formats, and most web hosts are able to process these. See about how many SQL databases you can use as well. Databases are really helpful for storing your scripts and programming for easy access later on.

Now that you know the basics of what to look for, here are some key elements you should keep in mind when choosing a web hosting service:

What kind of security is provided? Find out how to know if
unauthorized users attempt to access their server or internal
websites. Come up with some scenarios that you feel might be a
threat to security, and then ask the provider what they would do
in that situation, or how they would go about preventing it from
happening. Getting an insider's look at how the service provides
proper security is a good way to tell how they will deal with

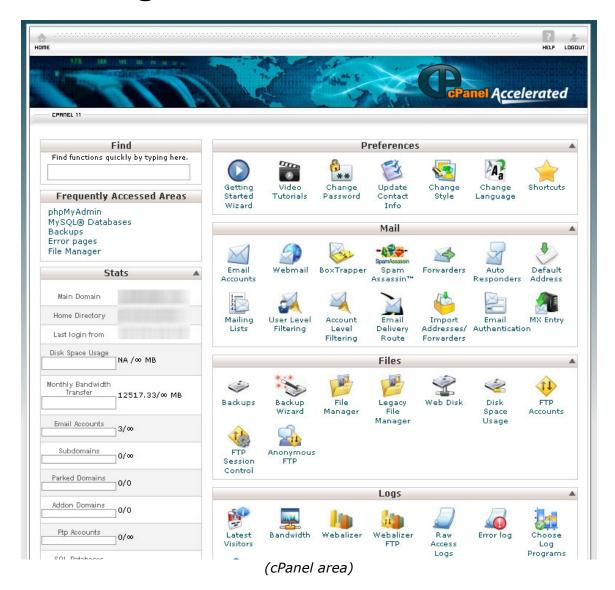
potential problems. It also speaks volumes about how advanced they are, and what they have to offer their clients and customers.

- Technical support is essential. Look into the types of technical support that is provided, as well as how accessible it is. If you run into an issue with your site at two o'clock in the morning, will someone be available to call that can help you get it up and running again? What level of support is provided? If you call and only get vague answers, or if the response is, "sorry, I can't help you with that," then you're not getting the support you are paying for. Find this out in advance so you can prepare for the worst or be aware of how to get the help you need.
- Compatibility is the key. Know in advance what platform and operating system you plan to run your website on. Also, determine how much memory and/or bandwidth will be needed. These things are the absolute key to making sure you choose a web hosting service that will fit your needs. If you end up signing onto a year contract with a provider who charges overage fees, or who does not function with your FTP software or other platforms, you're paying for something that is essentially useless to you. Make a list of must haves, and include things that would be nice perks, and then base your decision from there.
- **Domains rule the domain.** Look at how many domain names you're allowed. Some e-commerce sites like to use a few different domain names in order to garner more business. If your web hosting provider allows multiple domains, make sure you know how much memory is included with each. Some will split the memory up per domain, while some offer unlimited domain names. Be aware of the different requirements ahead of time, so you can fit the website's needs in with your plan.
- Value, pricing, and contracts: Find out if you have to sign a contract over a one year period, or if your plan allows you to pay month to month, or by usage. Different companies have different policies, so be aware of this before you sign on the dotted lined. You don't want to get locked into something if it doesn't turn out to be the plan you want. Also, make sure you're getting the most for your dollars. While price is important, the quality of service and the capability of the web hosting provider's

servers is also important. Look into other factors like penalty fees if you cancel an account, any maintenance fees that might appear to be hidden, and what happens to your web content if you do leave the provider. Be sure that your website information and content are private and that they remain your property, regardless of the web hosting service that you choose.

- **Emails**: A professional website has emails that fit their domain (for example, Tim@ebay.com looks much more professional than Tim@hotmail.com if he works for eBay). Look into how many domain based emails you are allowed. If you have a staff of several people, you want to be sure that you can provide each of them with an individual email address that goes with your domain or website. Find out if there are additional costs for each email address over a certain limit, or if you can even add those email addresses over the limit at all.
- The type of web hosting matters. Shared web hosting can be inexpensive, but it can also cause a lot of problems. For one, this type of hosting often doesn't offer the web designer much room to expand and grow. These are also more apt to be victims of security breaches or even fraud. This is why it's so important to look into the security measures offered by your web hosting plan. Dedicated servers are absolutely the way to go if you're planning on having an e-commerce business website. Since you will hope to have a lot of traffic on your website, you will need the best bandwidth you can get to avoid crashing the website. In addition, if financial transactions are taking place, it's essential that the web hosting plan has the best security measures available to avoid any problems.
- Price is not everything. While you obviously want to save as much money as possible with your web hosting plan, remember that price does not always dictate the level of service you will receive. For example, if you find an unlimited plan for \$19.95 per month, it may offer everything you need and more. If you find a plan that costs \$400 per year, it might not have the same required memory and support that you received from the less expensive plan. In other words, price does not always determine the quality of the services you will get. Be wary of free hosting, however, as this is almost always advertisement driven and won't give you what you need.

Working with cPanel



Out of all the options for web hosting control panels, cPanel is by far the most popular, and the most user-friendly. It's also the most well known version of web hosting panels available on the market today. While this program is useful and can really do wonders for your website, most newbies are not familiar with how to use it, and so it often goes to waste for the web designer. It can sometimes take hours or even days to figure out how to use a cPanel account, and some people even have difficulty logging in just to use it! Fortunately, there are some tips and tricks to get into the cPanel control and use it to the best of its and your ability.

In order to manage and update your website, you must first be able to log into cPanel. The first thing you'll need to do is enter the address of your cPanel account into your web browser, as if you were going to visit a website.

For example, if your domain is groovyshoes.com, you'd need to enter it in this format: http://www.groovyshoes.com/cpanel. Sometimes you are given a user access ID number or something similar to notify cPanel that this is an official account, and that it's your account. In cases like this, you'd enter: http://www.groovyshoes.com:9088 if your user ID number was 9088. This is just an example of course, but it gives you an idea of how to get to the log in screen or prompt quickly.

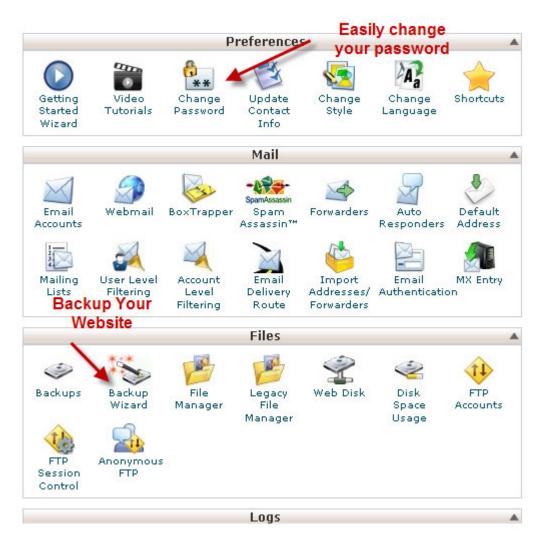


(You will be prompted to enter your user name and password to access cPanel)

Once you enter the cPanel domain name into the browser, a prompt screen will pop up that asks for your user ID and password. Simply enter your user ID and password into the corresponding fields. This should allow you access into the cPanel account that you have set up. Once you've logged in, there are a plethora of options to choose from that allow you to manage your website, emails, and much more. For example, there is an option to manage all of the domain related email accounts you have set up. This will allow you to add and remove email accounts, set up web mail, create an auto responder, and filter out emails and email content. There is also an option to create email lists and manage them, as well as use Spam filters to prevent the spread of viruses both to you and from your customers or other contacts.

Another great feature of cPanel is the ability to manage your site with just a few basic commands such as the FTP manager, a simple

password change tool, sub domains and domain management, creating backup, and managing IP addresses. In other words, you will be able to block certain IP addresses from accessing your website, and you can also use the web protect tool as well. There is an error log which comes in handy for troubleshooting in the event your website runs into any problems. A bandwidth checking tool allows you to see how much is being used, if you've gone over your limit, or how the website's bandwidth usage has progressed over time.



If you're into watching who visits your website, cPanel also has a log that shows all visitors, as well as highlights the visitors or IP addresses that visit your website the most. This can really come in handy when it comes to tracking customer bases or finding out where most of your business is coming from if you operate an e-commerce website.



(logs and stats tools)

For scripts, there are tons of options with cPanel. The web master can manage Apache, Cron jobs, FTP transfers, Java and CGI, as well as shopping cart software. There are also mods for language and themes, so the web designer can alter or edit these as much as they see fit.

The index manager allows you to determine how the web indexes are used. In other words, you can control how the information in each index is displayed to the visitor or viewer, and you can also control whether or not this information is displayed at all. With the Web Protect feature, you can password protect different directories. This means that only you and certain other people can access the websites' directories and they must be accessed using a private password.

Another excellent feature of cPanel is the custom error pages option. You can change the error message to customize your needs so that visitors can get a more detailed idea of what is going on with the website. For example, if you're taking the site down due to maintenance or upgrades, the error customization tool allows you to tell this to your visitors in your own words. It makes for a much more personalized and personable experience and it can also give visitors an idea of when the website will be back up and running so they will return. Instead of the old "404 error-Page Not Found" message, they will see your own words and updates, giving them a sense of confidence that someone is working to bring the website back up as soon as possible.

When you register your website, you'll most likely choose a main domain name. This will be the "parked domain" that you host most of the data on the server onto. This domain will serve as the root of your account, so be sure that you choose a domain that will be the main URL. There is also an option for sub domains, which is basically the

secondary domain names that can help to separate different areas or parts of your website, as well as the choice to create separate accounts.

The term hotlinking refers to when someone puts links to your files on their own website and it ends up eating or using up your bandwidth. In addition, it does not give your website credit for the files being displayed or used. This can usually cause problems with images and pictures since people tend to hotlink to these. You can prevent this with cPanel, and block access to hotlinking so that other web masters and website owners are not stealing up your data or bandwidth.

Another great feature is the option to manage redirects. Basically, this means that you can determine what link or web page will redirect people to another site. Often, this is important when you've updated a page and want the users to see the new website. Managing the redirect gives you control over what people click on and how it leads them to go to another site or page.

MySQL is one of the most commonly used databasing solutions for online and is easily compatible with both Perl and PHP, making it a very user friendly and adaptable database software.



Within cPanel, you can set up new databases and also manage the ones that already exist. It is also nice to know that each database within your account has your account name as a prefix so you can easily identify and track them. You can also browse, modify, delete, and create new databases. All changes within this tool are not able to be reversed once they're made, however, so be especially careful when making changes within your database. Also, there is no command to save these changes; they just happen as you make them, so it's important that only experienced users are able to access the MySQL database information.

As mentioned earlier, you can ban IP addresses within the IP Manager command area. This is an important tool for protecting your website from potential hackers, or from people who want to cause a problem for your website. You can ban the IP address within the manager, but

note that once it's been banned, anyone with that exact IP address will not be able to get access to any area of your website whatsoever. It's a nice feature but it should be used with caution.

The error log displays the last 300 errors that people have received when they visit your website. It includes all access related errors, permission errors, and any other possible errors they might experience. It provides great insight to where potential problems are coming from, and what you can do to fix or prevent them in the future. The raw log manager allows you to schedule a raw log backup or removal at the end of each month so you can keep or delete important information.

CPanel offers many more options for the web host and web designer. Its interface is simple to use once you've logged in and can understand how to use each of the commands. Having the ability to log in and make changes as necessary can make running and operating a website much easier and faster than imagined. With a little bit of practice and some know how, cPanel can do wonders for your website, and make operating it on a daily basis so much easier.

How to Point Your Domain Name to Your Web Host

Here are the steps in order to point your domain to your web host.

- Step 1) Log into your domain registrar.
- Step 2) Select the domain you want to point to your web host.
- Step 3) Look for a setting called "Nameserver" or "DNS Settings".



You can change the existing domain name server (DNS) information below. This option is typically used when you change your web hosting company etc. Please note that it will take up to 24 hours for the changes to take effect.



Add More Nameservers

Please note that you are also free to <u>Transfer the DNS back to us</u> * to take advantage of our free features like e-mail & url forwarding, dynamic dns etc.

Save Changes

(Namecheap.com DNS setup)

Step 4) Enter in your two DNS addresses in the "1." And "2." Fields. If you don't know your DNS addresses, contact your webhost. They should have provided this information when you registered.

Step 5) Save changes.

The DNS, or Domain Name System is a hug database that stores all information communications that exist on the Internet. In fact, it is the

largest database in the world. One person or one Internet user can complete hundreds of DNS entries per day, depending on how many times they click on something or how much information they transmit online. The DNS server is huge, and each DNS entry relates to an individual domain name, which is why domain name registration is so important. Each machine or computer has an identifying IP address. The IP address is important since this is how the DNS recognizes which location is collecting or transmitting information across the World Wide Web.

When someone types a URL or web address into the Internet browser, the domain name and host name is converted to an IP address, so that the browser knows to direct the user to the web page. The browser actually has a virtual conversation of sorts with the domain name's server. On some computer and Internet systems, the DNS is transmitted to the machine's memory once you connect to your Internet Service Provider (or ISP). Some machines are actually hard wired to read the DNS and know how to talk to the domain server via the operating system. What basically happens is that the browser contacts the server and asks it to convert the domain into an IP address. Once this happens, the browser converts it over to the website, allowing the user to see it on their PC.

Some servers search for an IP address by looking for the root name server. These root servers know about the IP address already, and know what servers it handles under the top level, or main domains. Once that happens the server asks the root director for the website. It is essential that you've already created a master domain, had it registered, and created the root directory so that the domain name knows to go directly to your web host's server. Registering and creating a domain name is essential to ensuring that the host communication is performed properly.

Each web hosting server can have several physical PCs or computers that each has their own IP address, and this can make up the entire server infrastructure. There can be nicknames, or aliases for the hosts which all point to the actual, physical machine. There can be a nickname of alias for different websites that point to the master domain. This can go on and on, depending on the root directory and how many name servers there are. In effect, they can all point back to the main domain name in some way or another. It's important to remember that the DNS can handle millions of Internet transactions every minute of every day. Knowing how the DNS operates is helpful

when learning how to make sure your domain name points back to the host or server.

Be sure your website has a good root directory that knows where its origins are. This means that any information using the DNS will ultimately point the user or person visiting the website right back to the web host. In return, you are able to better track where your visitors are coming from, what they are looking at, and how information is being transmitted from your website to the web hosting server and then back again. The DNS is the world's largest database and is constantly changing, but with a good root directory or name server, all URL hits will bring everything back to the origin of the site, which is the host.

Getting Your Website Up

Of course, all of this important information is no good if you are unable to get your website up and running. Learning about FTP (file transfer protocol) and how it works is essential to making sure the website works so people can view and use it. FTP is a file transfer program that transfers data from one PC to another through a network, namely the World Wide Web/Internet. You must be able to upload files to your web host in order for them to be viewable for your visitors. There are several different FTP programs available, and all should be able to allow you to upload or transfer data, images, video, music, and other items to your website easily.

While the web hosting protocol is important, it means nothing if you cannot get your files sent over to the domain to have people look at them. Without the data such as images and other forms of media, the website you have worked so hard on would be useless. Data has to be transferred from the hard drive where it is stored physically to the virtual world or website, so that the information is viewable to anyone who looks at it on the website. This is where FTP comes in. You can find a free service called Filezilla (http://filezilla-project.org), which allows you to use FTP software and commands free of charge. The program can be downloaded online onto your PC or server free of charge, with no hidden fees.

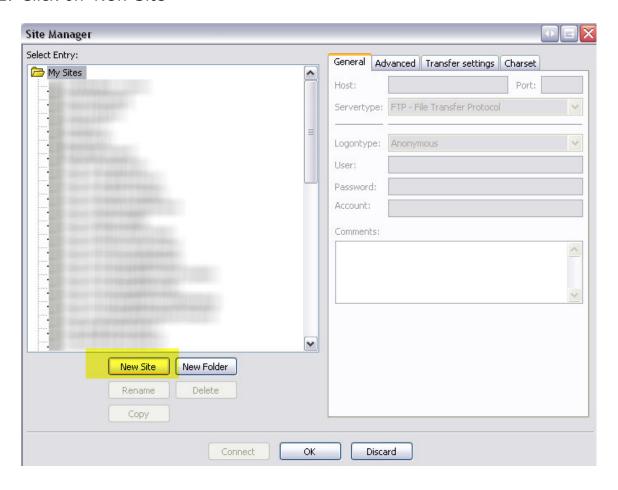
The Filezilla program operates like a Windows program, so you can see folders and files as well as the different directories where your data is stored. It also has a site manager feature that lets you manage information or more than one website, all in one place. Filezilla works on Windows XP, MAC OS X and Linux, so it's pretty diverse for users of different operating systems. The premise of FTP is that it uses one type of connection for various commands, and another for actually sending and receiving files, data, and information. There are different ports that are used for different file transfers, and these serve as connection points for the Internet Protocol addresses.

To upload your website and files using Filezilla, follow the steps below:

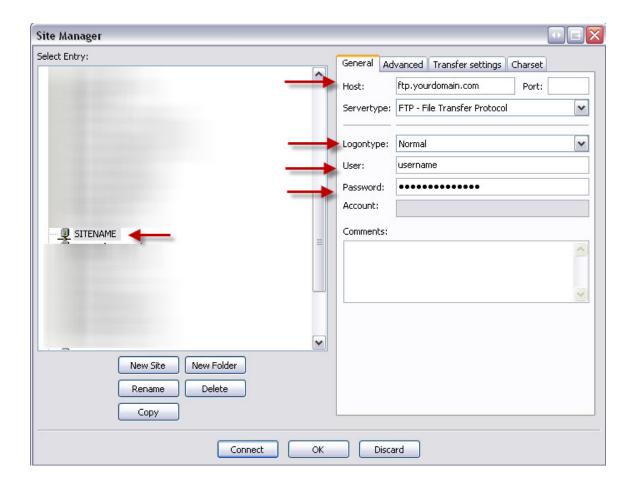
1. Open Filezilla and click on File > Site Manager



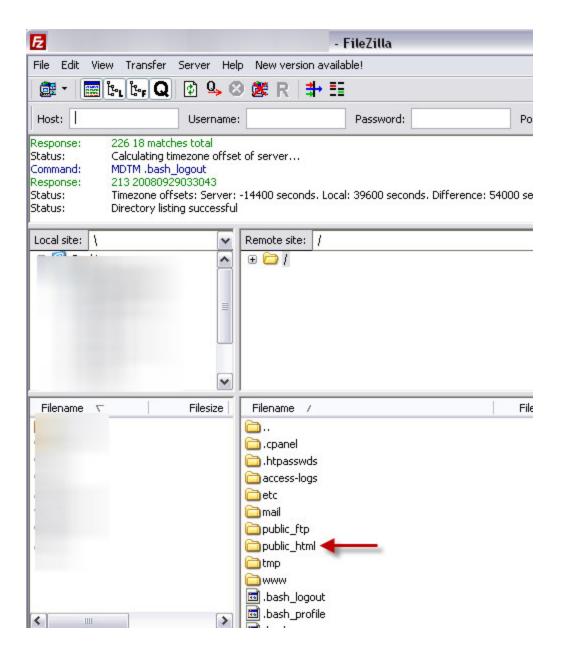
2. Click on 'New Site'



3. Type in your site, enter your host address, change 'Logontype' to 'Normal', and fill in your User and Password.



- 4. Click on 'Connect' once you've completed step 3.
- 5. Click on 'public_html' to access the main website's directory



6. Next, all you need to do is transfer any files and folders and you're done.

When it comes to the Internet, the FTP server sends a list of all of the files and file folders to the FTP client. The port that is used in this case is known as a data port. The number of the data port depends on the mode of the connection, which is usually either active or passive mode. Filezilla is a very flexible program that lets the user or author transfer information via the data port quickly and easily.

For the active connection, the server actually opens up a data connection so that information is passed from one server to the other. The number of the port is usually at 20 or higher. For a passive connection, the client asks the FTP server to create a port that is passive. This port number can be anything higher than 10,000 and once the number is chosen, it is basically "bound" to the port for that session. Information is then communicated to and from the client.

It is very important to note that the web server is always running quietly in the background, and is simply waiting for a command in order to decide which port number to use or assign. Once the client requests a certain connection, the server then asks to verify the user name and password, and then waits for the next command. Once the user logs on, the access to the host folders will help to determine which port is going to be used. The FTP client program is how this is determined, or really how the communication gets across from the web server to the client and back again. Without the FTP client, the user would not be able to move data back and forth or store files whatsoever. Therefore, the website you create would never be up and running or viewable to others.

Remember that the client is what determines the FTP connection, NOT the server. Having good FTP transferring software can help you determine which ports to use immediately without having to change configuration settings each time you use it. Look for freeware such as Filezilla, which is an efficient, easy to use program that is also very secure. The program allows you to upload as much information as possible and then transfer this information over to your website whenever you wish. The added security provided ensures that your information and files are kept secure and are not open to hackers or people trying to sabotage your website. It's a great program for using file transfer, and is simple and easy to use for beginners and experts alike.

Conclusion

As you can see, there is a lot involved when it comes to web hosting. It's not just simply a matter of dreaming up a website and then publishing it online. Making an effective, workable website takes creativity, but it also takes a real knowledge of web hosting and how it works. There are more factors involved than just a creative logo and some catchy music. You must make sure that the web hosting service you've chosen will suit your needs as well as help you to achieve your goals. Remember that memory is important when it comes to publishing a website, so think about how much memory will be required to publish your site ahead of time. This should be the very first thing on your list of needs for a web hosting service.

Next, don't forget the importance of bandwidth and its availability to you. Users can take up lots of it, so be certain the web host will allow you the bandwidth needed to get as many hits or views as possible without charging you an overage fee, or cutting your website down when it has been exceeded. Look for the best service possible when it comes to troubleshooting problems with your website, as well as the frequency of updates and downtime with the server. Think about the different types of web hosting. Note that shared web hosting can be cost effective, but dedicated hosting is definitely the way to go if you can afford it. This is especially pertinent when it comes to e-commerce websites, who cannot afford too much down time or too many problems, because it can cause lost business.

Price is important when you're looking at a web hosting service, but remember quality is also very important as well. Price is great but it does not always have an effect on the amount of memory you're allowed or the effectiveness of the server. Look into where your server is being kept, and how secure it is also. Think about the many threats out there today, and make sure that your web host is protected so that you and your potential customers are protected as well from things like hackers, fraudulent transactions, identity theft, and other problems that can occur. Be sure that the place your web hosting server is stored is under strict security requirements, so that not anyone can simply gain access to it.

Do not forget about the importance of domain name availability. Come up with the master (or main parent) domain name, and then make sure to register that name immediately so that no one else takes it. Next, come up with a few sub domains, and find out if the web hosting

service you're interested in allows for multiple domains. If so, get them registered as well as quickly as possible. Having more than one domain is a great way to get more exposure and urge more people to visit the main website. Learn about DNS and how it points the users who click on your website to the host, so that everything is communicating effectively and properly.

When looking for a web host, think about the stability of their service, as well as how long they have been in business. Ask friends, fellow web masters, coworkers, and do some research by reading online reviews. If a service has a good, solid reputation, then it's a good change they will provide you with the same high quality service they have already been providing others. A good name and a good reputation is very important when it comes to web hosting, since you're looking for someone that can provide stable service that lasts.

Knowing how web hosting and web design works can give you great insight and help you run a smoother operating website. Getting the inside scoop on the best FTP programs, as well as web hosting control panel programs such as cPanel, will help you to gain more control over the operations of the site. A program such as cPanel is excellent, because it allows you the flexibility needed to make sure you are able to change the look and feel of your website with just the click of a button or a few easy commands. Having full control over your site is absolutely essential to making sure it appears and operates the way you want it to. A true web master should be able to get into the control panel at any time and update, upgrade, change, move, or do anything they wish whenever they want to.

All of the elements mentioned are important, and they all work together simultaneously to ensure that your website has an important place in the vast expansion of the World Wide Web. Getting that URL or domain noticed is important, and a good web hosting service will help you to get the exposure you need. Whether you've been hosting a website for many years, or whether you're brand new to the world of web hosting, these elements are all essential to getting the most bang for your buck, and for making sure the website you've created stays stable and gets the most hits and visits possible.