

GETTING YOUR PAGES ON THE WEB

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Learning Web Design, 5e

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Because your browser can display documents right from your hard drive (in other words, you can view them [locally](#)), you do not need an internet connection to design web pages. However, eventually, you'll want to get them out there for the world to see. That's the point, right?

Putting a page on the web is easy: just transfer your files to a web server and *ta-da!*—you're on the web! But what if you don't have a web server? In this chapter, we'll talk about the process of getting access to a web server.

You might also want your own domain name (I have *littlechair.com* and several others), so that's where we'll start.

WWW.“YOU”.COM

Your home page address is your identity on the web. If you are posting a just-for-fun page and want to save money, having your own personal corner at some larger domain (such as *littlechair.tumblr.com* or *littlechair.wordpress.com*) might be fine. For professional sites, you'll want your own domain name that better represents your business or content. For a small yearly fee, anyone can register a domain name.

What's in a Name?

A [domain name](#) is a human-readable name associated with a numeric IP address (the “IP” stands for “Internet Protocol”) on the internet. Although computers know that my site is on a server at internet point 198.54.115.100, you and I can just say it's at “*littlechair.com*.” The IP address is important, though, because you'll need one (well, two, usually) to register your domain name.

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Registering a Domain

Registering a domain name is easy and fairly inexpensive. There are two ways to go about it: have your hosting company do it for you or get one directly from a registrar.

It has become common for companies that provide web hosting to register domain names as part of the process of setting up an account. They offer this service for your one-stop-shopping convenience. But be sure to ask specifically—some still require you to register your domain on your own. With hosting services offering to register domain names, and domain registrars offering hosting services, the line has blurred between these two services. But be aware that getting your domain name and finding a server for your website are indeed separate tasks. It is fine to get hosting from one company and your domain from someone else.

You can also register a name yourself directly from a domain name registrar. Domain name registries are regulated and overseen by ICANN (Internet Corporation for Assigned Names and Numbers). ICANN also makes sure that domain names are assigned to a single owner. There used to be just one domain name registrar, Network Solutions, but now there are hundreds of ICANN-accredited registrars and countless more resellers.

You'll have to do your own research to find a registrar you like. A few of the most reputable are Network Solutions (www.networksolutions.com), the original domain registrar; Register.com (www.register.com), which has also been around a long time; Hover (hover.com); and NameCheap (www.namecheap.com). I'm sure that you have seen others advertised on web pages and on TV (see **Note**).

NOTE

To see the complete list of accredited registrars, go to www.icann.org/registrar-reports/accredited-list.html. It's ridiculously long.

All registrars in the United States can register domain names ending in .com, .net, or .org. These suffixes, called **top-level domains** (TLDs), indicate the type of site (see the sidebar “**Dot What?**”). There are hundreds of other TLDs, which may vary in availability from registrar to registrar.

How Much Does a Domain Cost?

While it may seem overwhelming to choose from all the competing domain name sellers, the upside is that competition has resulted in lower prices. The base price for registering a domain is about US\$35 per year; however, there are usually deep discounts for registering for more than one year. The longest any domain can be secured is 10 years.

There are domain registries that offer rock-bottom rates, but you may pay the price of being bludgeoned with advertising for their other services, such as web hosting.

There are also optional additional fees to be aware of. For instance, registrars now offer a service in which they keep your contact information private for about \$10 a year (as of this writing) with discounts when you register for multiple years. Without that service, the information you provide for your domain account (including your address) is accessible to the public.

A domain registration company will ask you for the following:

- An administrative contact for the account (name and address)
- A billing contact for the account (name and address)
- A technical contact for the account (generally, the name and address of your hosting service)
- Two IP addresses

If you don't have IP addresses, most domain registry services will offer to “park” the site for you for an additional fee. **Parking** a site means that you have reserved the domain name, but you can't actually do anything with it until you get a real server for the site. Basically, you're paying for the privilege of borrowing some IP addresses. Be sure to shop wisely. In addition to the yearly registration fee, do not spend more than \$35 to \$50 per year to park a site. As mentioned earlier, some domain registration companies also offer basic hosting services.

Is It Available?

You might have already heard that the simple domain names in the coveted **.com** top-level domain are heavily picked over. Before you get too attached to a specific name, you should do a search to see if it is still available. All of the domain name registration sites feature a domain name search right on the front page. This is the first step for setting up a new domain.

If “your-domain-name” at “.com” is not available, try one of the other top-level domain suffixes, such as **.org**, **.info**, or **.us**. You may also try variations on the name itself. For example, if *littlechair.com* hadn't been available, I might have been willing to settle for *littlechaironline.com* or *littlechaircentral.com*. Registrar sites typically provide a list of available alternatives for you.

If you have your heart set on a domain name and a budget to back it up, you could offer to purchase the domain from its owner. To find out who owns a domain name, do a WhoIs search on that domain. The WhoIs database lists the name and contact information for every domain (unless the owner paid extra to keep the contact information private). You can find a WhoIs search function on most registrars' sites or use the one at ICANN (whois.icann.org).

Dot What?

The majority of websites that you hear about end with **.com**, but there are other suffixes available for different purposes. The most common top-level domains in the United States are the original six generic TLDs established in the 1980s:

| | |
|-------------|--------------------------|
| .com | Commercial/business |
| .org | Nonprofit organization |
| .edu | Educational institutions |
| .net | Network organizations |
| .mil | Military |
| .gov | Government agencies |

Since then, ICANN has delegated scores of two-letter country code TLDs (such as **.eg** for Egypt and **.hu** for Hungary) and more than a thousand “generic” TLDs (including **.info**, **.biz**, **.museum**, **.travel**, **.jobs**, **.wow**, **.pro**, and **.cat**, just to name a few). To learn more about the application and approval process, and to see a list of current TLDs, visit the ICANN Generic Top-Level Domains site at newgtlds.icann.org.

■ TIP

Because there are so many sources for domain names, it is easy to end up with domains registered with several different companies. While there is no rule against this, people who maintain multiple domains find it more convenient to have all their names registered at the same place. This makes it easier to handle billing and keep up with expirations and renewals. Keep in mind that it is possible to move your domain registration from one registrar to another if you want to consolidate later.

FINDING SERVER SPACE

ISPs Versus Hosting Services

There are two types of internet services, and they are easily confused.

An **ISP** (internet service provider) is the company you go to if you want access to the internet from your home or office. You can think of an ISP as a provider of a pipeline from your computer to the internet via cable modem, DSL, or ISDN connections.

In this chapter, we're talking about **hosting services**. Their business is based on renting out space on their computers. They take care of the server software, keeping the lines working, and so on. They also provide email accounts and may include special features such as mailing lists or e-commerce solutions for your site. There are thousands of hosting services out there.

For your pages to be on the web, they must reside on a web server. It is possible to run web server software on your desktop computer—in fact, every Mac comes with web server software installed, and the same is true for almost all GNU/Linux distributions, and, to some extent, Windows. However, it is better to rent space on a server that is dedicated to the task. (If you work at home, there's a good chance that your ISP prohibits or puts limitations on running a web server on your home account anyway.)

Looking for space on a web server is also called finding a **host** for your site. Fortunately, there are many hosting options, ranging in price from free to many thousands of dollars a year. The one you choose should match your publishing goals. Will your site be business or personal? Will it get a few hits a month or thousands? Do you need services such as e-commerce or streaming media? How much can you (or your client) afford to pay for hosting services?

If you are working as a freelancer, your clients will probably assume the responsibility of setting up server space for their sites. Smaller clients may ask for your assistance in finding space, so it is good to be familiar with the available options.

In this section, I'll introduce you to some of the options available for getting your web pages online. This should give you a general idea of what type of service you need. However, you should still count on doing a fair amount of research to find the one that's right for you.

In Your Own Backyard

If one of these scenarios describes you, you may have server space there for the taking:

Company servers

If you are working as an in-house web designer, there will likely be a server associated with your company that you can use for site-testing purposes. I've heard of companies (mostly small startups) giving employees a little space on their servers to publish personal project sites, although I wouldn't count on it.

Student account

If you are a student, you may be given some space to publish personal pages as part of your school account. Ask the department that gives you your email account how to take advantage of web space and whether there are limitations.

Professional Hosting Services

If you work on a commercial site or if you are just serious about your personal web presence, you will need to rent server space from a professional hosting service. What you're paying for is some space on one of their servers, an amount of bandwidth per month, and technical support. They may also provide such additional services as mailing lists, shopping carts, and so on. The hosting service is responsible for making sure your site is online and available around the clock, 24/7.

Hosting companies usually offer a range of server packages, from just a few megabytes (MB) of space and one email address to full-powered e-commerce solutions with lots of bells and whistles. Of course, the more server space and more features, the higher your monthly bill will be, so shop wisely.

The advantages to using a professional hosting service include these:

- Scalable packages offer solutions for every size of website. With some research, you can find a host that matches your requirements and budget.
- You get your own domain name (for example, learningwebdesign.com).

On the downside, finding the right one requires research. In addition, robust server solutions can get expensive, so you need to shop wisely and watch out for hidden charges and promotional rates that go up sharply after some amount of time.

There are hundreds of hosting companies to choose from, but a few of the best-known and highest-reviewed professional hosting companies as of this writing include the following:

- Dreamhost (dreamhost.com)
- InMotion Web Hosting (www.inmotionhosting.com)
- 1&1 Web Hosting (www.1and1.com)
- Media Temple (mediatemple.net)
- Amazon Web Services (aws.amazon.com)

Shopping for Hosting Services

When you set out to find a host for your site, you should begin by assessing your needs. Once you've identified your needs, it's time to do some hunting. First, ask your friends and colleagues if they have hosting services that they can recommend. There's nothing like firsthand experience from someone you trust. After that, research. The following sites provide reviews and comparisons of various hosting services; they can be good starting points:

- CNET Web Hosting Provider Reviews (www.cnet.com/web-hosting/)
- TopHosts.com (www.tophosts.com)

The following are some questions you should ask yourself or your client when shopping for hosting plans:

Is it a business or personal site?

Some hosting services charge higher rates for business sites than for personal sites. Make sure you are signing up for the appropriate hosting package for your site, and don't try to sneak a commercial site onto a personal account.

Do you need a domain name?

Check to see whether the hosting company will register a domain name for you as part of the package price. This saves you a step and the extra charge for domain registration somewhere else.

Do you need a dedicated server?

Most hosting plans are for shared servers, which, as it sounds, means that your site will share space on a computer with many other sites. For most sites, this is fine, although it is important to be aware that excessive traffic to another site on the server may impact your site's performance. Larger commercial sites where performance is critical opt for a dedicated server so they can take advantage of the full processing power of that machine. Dedicated server plans tend to be significantly more expensive than shared plans, but it may be money well spent for processing-intensive sites. Another alternative is cloud hosting, which I discuss in more detail in the **"Cloud Hosting"** sidebar.

How much traffic will you get?

Be sure to pay attention to the amount of data transfer or visitors you're allowed per month. To stay competitive, many hosting companies offer unlimited bandwidth for all of their package tiers. Less expensive plans typically have caps on bandwidth or the number of visitors, so be sure to

Cloud Hosting

Instead of having your website residing on a single server computer, you may opt to have it hosted in the "cloud." Cloud hosting refers to server clusters that share computing across multiple computers. It's a bit abstract, and more difficult to visualize than your files sitting on a computer in an office somewhere, so it's better to focus on the benefits of cloud hosting:

- The hosting plan is easier to scale because you can add and remove services on an as-needed basis.
- There is less downtime because you aren't depending on the functionality of a particular computer. If one server fails, another steps in as a backup.

- Pricing is usually lower than dedicated servers, although it depends on how many bells and whistles you add to the package.

Cloud hosting plans are most appropriate for dynamic, data-driven sites with a lot of performance demands, but there is no reason why you couldn't host a personal site in the cloud if the price is right.

The most well-known cloud hosting service is Amazon EC2, one of the products offered by Amazon Web Services (AWS) (aws.amazon.com). Other popular options are Heroku (www.heroku.com) and Linode (www.linode.com). Most of the larger hosting companies offer cloud hosting options in addition to their shared and dedicated server plans.

check for such limits if you anticipate a lot of traffic or if you are serving videos or other data-intensive files. I once ran a popular site with a number of movies that turned out to have over 30 GB of data transferred a month. Fortunately, I had a service with unlimited data transfer, but with another hosting company I could have racked up an extra \$500 per month in fees.

How many email accounts do you need?

Consider how many people will want email at that domain when you're shopping for the right server package. If you need many email accounts, you may need to go with a more robust and higher-priced package.

Do you need extra functionality?

Many hosting services offer special website features—some come as part of their standard service, and others cost extra money. They range from libraries of spiffy scripts (for email forms or guestbooks) all the way up to complete, secure, e-commerce solutions. When shopping for space, consider whether you need extra features, such as shopping carts, secure servers (for credit card transactions), a streaming media server (for streaming audio and video), mailing lists, and so on.

Do you feel comfortable with their level of technical support?

Take a look at the hosting company's policies and record on technical support. Do they provide a phone number (preferable), live online chat with technicians, or just an email address for customer service? It is important to know that your hosting company will be there to answer your questions promptly.

Will they do regular backups?

Ask whether the hosting company does regular backups of your data in case there is a problem with the server.

Do you want to be a reseller?

If you run a web design business and anticipate finding server space for multiple clients, you may want to become a hosting reseller. Many hosting companies have programs in which they provide multiple server plans at discount prices. You can pass the savings along to your clients or mark up the price to compensate yourself for the administrative overhead. Check to see that they can bill your clients directly, so you won't be stuck with the paperwork.

Do you need help with design and development?

If you need a site but aren't up for doing a big design, you might choose one of the hosting services that specialize in providing templates and drag-and-drop interfaces for building pages. Some also offer e-commerce and other advanced features. A few of the most popular services include Squarespace ([squarespace.com](https://www.squarespace.com)), Wix ([wix.com](https://www.wix.com)), and SiteBuilder ([sitebuilder.com](https://www.sitebuilder.com)). The downside to using sites that generate pages for you is

Free Hosting

Depending on your site and situation, it may be possible to find professional web hosting for free. Here are a few examples, but you may do a little research to find more options:

- If you have a public GitHub account, you can host a static site for free on GitHub Pages. See pages.github.com for more information.
- Dreamhost (dreamhost.com) offers free shared hosting services to nonprofit organizations.
- SiteBuilder (sitebuilder.com) offers free shared hosting if you have five or fewer pages and are willing to have their ads on your pages.

that they may lock you into their hosting because you can't just pack up your HTML files and leave. This goes for any hosting service that offers page-building tools.

Hosting Costs

You may be wondering how much professional hosting costs. It's difficult for me to give you even a ballpark estimate because the price ranges from \$0 (see the sidebar **"Free Hosting"**) to hundreds or thousands of dollars per month, depending on the scale and purpose of the site.

For a shared server plan, expect to pay anywhere from US\$3 to US\$20 per month (as of 2018). Shopping around can make a big difference to your pocketbook. Prices go up from there, depending on data usage and extra services. For example, dedicated server plans tend to start around US\$120 per month. Basic cloud hosting is a bit less expensive than dedicated servers, but additional features will add to the cost.

WRAPPING IT UP

In this article, we've looked at options for securing your own domain name directly from registrars or from your site hosting company. We also discussed options for top-level domains and alternatives for when your first-choice domain isn't available. We moved on to look at options for finding server space (hosting plans) to get your site online. You should know the difference between shared, dedicated, and cloud hosting plans, and you have some strategies for selecting a hosting plan that is right for your site.