

How to Set Up and Run Your Own Web Server

By Joe Lawson, ProMatrix Corporation

If you have a DSL or Cable modem, you can run your own web server on a computer in your home or office.

Tip: You may already be running a web server on your computer and don't know it. If you are running a computer with Windows XP Pro, Windows 2000 or Windows Server 2003 and have installed Internet Information Services, you are running a web server on that computer. If you do not have a firewall that is blocking port 80, your web server is already accessible to anyone who can figure out the computer's IP address. Of course, you don't want to be running an unsecured web server that you don't know about. This document tells you how to run a secure web server that allows Internet users to access only the webs that you want them to access.

Everything You Need to Know

You will find everything you need to know to set up and maintain your own web server at the excellent website [DSL/Cable Webserver](#).

I suppose I could just end this document here since the DSL/Cable Webserver site does provide everything you need to know. But since I've been through the process of setting up my own web server on a Cable modem, I think I can share some practical knowledge about the process that will help you. Also, since you are probably in the same business as me (VFP software development), you are probably using similar software and hardware. My experience in configuring my software and hardware to support a web server may be helpful to you.

I suggest that you stop reading this document at this point and visit the [DSL/Cable Webserver](#) site. Then, when you have a better understanding of what's involved in setting up your own web server, read the rest of this document to get my practical tips for self-hosting your webs.

My Web Servers

Let me begin by telling you about the webs I self-host.

I have a LAN in my home that uses a Linksys router to connect two wired computers, three wireless computers and two wireless Tivos to the Internet via a Cable modem. I run a web server on one of the wired computers to host a family website to share photos and family news with relatives scattered around the world. We even have a discussion group on the website. It works great.

I also host webs on my web server for several groups in which I participate. There are a total of four webs running on the web server with no problems.

Before I started running my own web server for the family web, I paid a little less than \$20 per month for about four years to have it hosted by a professional web host. I only updated the family web a few times a year, and it rarely got more than a few hits per week. So, using my own web server for the family web clearly made sense if only to save the \$20 per month.

Computer

I had an extra computer on my home LAN that was much more than adequate to run a web server. It's an AMD Athlon XP 2000+, 1.67 GHz with 1GB RAM. Its main hard drive is 160GB, and it has a secondary 120 GB hard drive. This computer is only used for several hours a week by anyone. I use it primarily to store backup files.

If I had not had an extra computer, I would have set up the web server on the desktop computer that I use at home. With the relatively low level of activity on the webs I host, running a web server on the same computer that I use with VFP, VPME, Word, Excel, Foxfire, Rhapsody, etc. is entirely feasible.

You really don't need a very powerful computer to run a web server that just serves up html pages. Chances are that you have a computer sitting around that would work just fine as a semi-dedicated web server.

ProMatrix.com

If my home web server goes down for a few hours or even for a few days, it really doesn't matter.

If ProMatrix.com were to go down for a few days, it would matter. Therefore, we use a professional web host for ProMatrix.com, but I am thinking about the possibility of hosting ProMatrix.com on a web server in our office. We already run an NNTP server on a computer in our office to host the ProMatrix Newsgroups. Since we have an office Internet connection that is faster than a T1 line, putting ProMatrix.com on our own web server may make sense.

The main concerns that are keeping me from running ProMatrix.com on a web server in our office are:

- If the web server crashes at night or on weekends when no one is in the office and if the problem cannot be fixed remotely, someone will have to go to the office to fix the problem.
- When we release software updates, the volume of downloads from the ProMatrix web increases dramatically. I'm not sure that an office web server could handle the load, but it might. I plan to test it.

.NET

We do have a web server in our office that we use to test our .NET development projects. That web server is accessible from the Internet, but it's currently private and used only for our testing.

Since XML web services are a fundamental part of .NET, you will need a web server for testing if you plan to start developing with VisualStudio.NET. For that reason alone, you may want to set up a web server that can be accessed over the Internet.

Backup

Believe it or not, we get several emails a month from ProMatrix users who tell us that they need to download VPM again because their hard drive crashed, and they don't have a backup of VPM. I find that astonishing. I am a stickler for backing up my computer software and data, and you should be too.

I backup the main computers that I use every day. If you are going to run a web server (particularly, one that collects data), you need to back up frequently, if not every day. You can't afford to lose any data. The best product that I have found for daily backups is Norton Ghost. Norton Ghost maintains an image of an entire hard drive. If the drive crashes, you only need to install a new hard drive and then restore the backup image to get back to where you were the last time you backed up the drive.

I have Norton Ghost installed on all our computers that get regular use. On computers that experience daily data changes, Norton Ghost automatically runs an incremental backup every night. On a regular basis, we copy the backup files to DVDs for onsite and offsite storage.

Our computers have two hard drives. One drive is our main drive for software installation and data storage. The second drive's primary purpose is to hold the Norton Ghost backup files.

If my main computer hard drive crashes, I can buy a new hard drive, install it and restore the entire drive in just a few hours. After restoring the drive using Norton Ghost, my hard drive has on it everything that was on it at the time of the previous night's backup.

If you are going to run a serious web server or any other kind of server on the Internet, you need good backup software and a backup plan. Then, you need to faithfully implement the backup plan.

ProMatrix User Websites

One of the things I like to do is check out ProMatrix user websites – I’m just nosy that way. Many of you have email addresses that provide your web domain name. When I see such an email address, I usually check out the web.

I believe it is safe to say that almost all of the ProMatrix user webs that I have seen could be easily hosted on the user’s own computer via a DSL or Cable modem. The user webs that I’ve seen are basically just serving up information on html pages. For the most part, ProMatrix user webs are not engaged in ecommerce, and they are not offering large files for download.

Most ProMatrix user webs don’t experience a heavy volume of hits and are not mission-critical to the user’s business. While every webmaster wants his web to be accessible 24/7, most ProMatrix users wouldn’t experience a significant business disruption if their webs were down for a few hours each month because their cable modem or the power to their office went out.

While the professional web hosts tout that their webs are up 99.9999% of the time, how many webmasters really would suffer if their webs were only up 95% of the time? The answer is very few. So, fear of a web being inaccessible every now and then shouldn’t be a roadblock for most webmasters in making the decision to self-host their webs.

Based on what I’ve seen, most ProMatrix user webs are ideal candidates for self-hosting. While the most visible benefit of self-hosting is the costing savings, I believe that the most valuable benefit for ProMatrix users is the experienced and knowledge gained in using Internet technology.

I guess I’m sounding a little like an evangelist for self-hosting, and I don’t mean to do that. After all, I have nothing to gain if you do or don’t self-host. However, I do like to provide ProMatrix users with valuable tips, and I do believe that many ProMatrix users would benefit from self-hosting. In the end though, only you can sort through your unique circumstances to determine whether self-hosting is right for you.

What You Need to Have and Do

The [DSL/Cable Webserver](#) site describes in detail everything you need to run a web server. However, I would like to expand on the recommendations of the DSL/Cable Webserver site and give you my list of what I think you need to self-host an important website.

If you are thinking about setting up a web server to host an important web via a DSL/Cable modem, here’s what I believe you need to successfully host your web:

- **DSL/Cable ISP That Allows Servers:** You may have a fast DSL/Cable modem but not be able to run a web server because your ISP doesn’t allow you to run servers. Check your agreement with your ISP. If your DSL/Cable ISP doesn’t allow you to run a web server, you need to move to a level of service (usually, Business Class) with your existing ISP or find a new ISP that allows servers.
- **DSL/Cable ISP That Blocks Port 80:** If your agreement with your ISP allows servers, your ISP may still block port 80. Port 80 is the door that anonymous browsers use to access your web server. Generally, Cable ISPs in the U.S. allow servers and do not block ports. With DSL ISPs, it’s a different story. For example, Verizon DSL residential service blocks ports 80 (web servers), 25 (email servers) and 21 (FTP servers). However, Verizon DSL business services do not block ports. Nevertheless, if your ISP blocks port 80, all is not lost. There’s something called “web forwarding” that will solve the problem. Web forwarding is discussed later in this document.
- **Semi-dedicated Computer:** You don’t need a dedicated computer, but you do need a computer that you can leave on 24/7 and that won’t be rebooted frequently. You also don’t want anyone running applications on the computer that will max out the CPU usage.
- **Router:** If you have more than one computer accessing the Internet via your DSL/Cable modem, you probably already have a router managing Internet access. One of the most important things a router can do for you is provide a hardware firewall that protects your computers’ ports from the Internet bad guys. Your router also forwards Internet requests to the LAN computer that you want to receive them. You can get very good routers with wireless capability for less than \$100 from

Linksys, D-Link and Netgear. I like Linksys products, but I've used D-Link and Netgear routers with success.

- **Uninterruptible Power Supply:** Unless you don't mind your computer, router and modem shutting down when you have a momentary power outage, a UPS is mandatory. For less than \$100 you can purchase a UPS that will maintain power to the devices that are vital to keeping your web server going during brief power failures.
- **Firewall and Virus Software:** Even if you have a router that provides a firewall, every computer that can access the Internet should have a software firewall as a backup and virus software that can detect and handle viruses, worms, Trojans, etc. When you run Internet servers, you must open ports that may make your servers vulnerable to hacker attacks. Good firewall/virus software can alert you to hacker attacks and protect against them. I use Trend Micro's Pc-cillin Internet Security 2005, but there are other firewall and virus software products like ZoneAlarm and McAfee that will work just fine. Trend Micro has good pricing on multiple license purchases. Check out [CNET's reviews](#).
- **Web server Software:** If you plan to use your web server with .NET web services and if you can afford it, I recommend putting Windows Server 2003 on your web server computer and using IIS 6.0 included in Windows Server 2003 as your web server software. If your budget is more modest, you can use IIS 5.1 included in Windows XP Pro, but there are connection issues that you will have to consider. A reasonable free web server software choice is Apache 2.0 for Windows. Because the choice of web server is very important, I'll discuss it more later in this document.
- **Domain Name:** While Internet users can browse your web using the IP address assigned to you by your ISP, you won't want them to do that. Therefore, you will want to come up with unique names for your webs and register them with a domain name registration service like [Network Solutions](#). For a list of registration providers visit the [Domain Names](#) page on the open directory project.
- **Domain Name Server:** When you register a domain name, you will need to tell the registrar what domain name servers will be used to provide the Internet with the IP address where the webs associated with your domain names can be found. Use [ZoneEdit](#) for your domain name servers. ZoneEdit is free for your first five domain names and its service is great. ZoneEdit supports Dynamic DNS (which is something you will probably need to use), web forwarding and mail forwarding. Even if you don't run your own web server or use ZoneEdit, visit the [ZoneEdit FAQ page](#) because it will teach you a lot about domain management.
- **Dynamic DNS:** When you add a domain at ZoneEdit, you must enter the IP address of the computer/router where your web server is located. If you are using a DSL/Cable modem, you probably have a dynamic IP address that can change without notice. Dynamic DNS is necessary when you have a dynamic IP address. With Dynamic DNS, you install software on your web server computer that contacts the DNS provider (e.g., ZoneEdit) each time your IP address changes in order to update the DNS entry for the domain hosted by your web server. One of the benefits of using ZoneEdit is that it can handle Dynamic DNS. Visit the [ZoneEdit Dynamic DNS FAQ](#) to learn more. I use the shareware product [DynSite](#) on my home web server to manage my dynamic IP address from my cable modem provider.
- **Static IP Address:** Setting up your web server is a little simpler and, I guess, slightly more reliable if you have a static IP address assigned by your DSL/Cable ISP. With a static IP address, you don't need Dynamic DNS. You will have to pay more for a static IP address. Business class accounts with DSL/Cable ISPs normally include one static IP address. We have a static IP address for our ProMatrix NNTP server and web servers.
- **Open Port 80:** Browsers expect to find web servers on port 80. If you have a router firewall and a software firewall on your web server computer as recommended, by default port 80 will be blocked to incoming traffic on both firewalls. You will need to open up port 80 to incoming traffic on both firewalls.
 - In your router's administration web pages, you should find a page labeled something like "Port Range Forward". On that page, you can open up port 80 by adding a record that identifies the local IP address of the web server computer on your LAN to which port 80 requests should be forwarded.

- On your web server computer's firewall software interface, you should find a page on which you can enter a record to open port 80 for that computer. The page you need may be titled something like "Firewall Profile – Exception List".
- **Static IP Address for Web server Computer:** By default, routers assign dynamic local IP addresses to the computers connected to them. That means that the IP address assigned to your web server computer by the router is subject to change. But the Catch-22 is that when you open port 80 on the router and assign it to your web server computer, you have to enter the web server computer's local IP address. If you allow the router to assign a dynamic local IP address to the web server computer, you will have to manually change the port 80 assignment every time the local IP address of your web server computer changes. What you must do to deal with this situation once and for all is to assign a static local IP address to your web server computer. Here's how:
 - First, you will need to read your router's documentation to find out what static IP addresses you can assign. Generally, the permitted static IP address range will be 192.168.xx.2 – 192.168.xx.99 where xx is a number expected by the router. Some routers want the last segment of the IP address to be a multiple of 5. So, a static address IP address of 192.168.xx.20 will usually work.
 - The next thing you need to do is open the web server computer's Network Connections dialog from its Control Panel. Open the Properties dialog for the Local Area Connection for the network card that is connected to the router. Select Internet Protocol (TCP/IP) and then click the Properties button. Select "Use the following IP address". Check your router documentation, but usually you can enter the following if you're using Windows XP:
 - IP Address: 192.168.xx.20, where xx is unique to the router; see router documentation.
 - Subnet mask: 255.255.255.0
 - Default gateway: 192.168.xx.1, this should be the local IP address of the router; check the router documentation
 - Select "Use the following DNS server addresses" and in the Preferred DNS server box enter the same IP address that you entered for the Default gateway.
- **Default.ASP Redirection Page:** You say you only have one IP address but you want to host more than one website with each site having its own domain name? Well, there's a way to do that using what I call a "Default.ASP Redirection Page" regardless of what web server software you are using. I'll show what you need to include in your Default.ASP redirection page later in this document.
- **Email** – One of the benefits of professional web hosts is that they provide email servers that allow you to easily use your domain name in your email address. For example, our email addresses use @promatrix.com, which looks more professional than @yahoo.com. If you self-host and want to have email addresses that use your domain name, there are several ways to do that:
 - The simplest way is to use ZoneEdit's MailForward service. People can send email to you@yourdomain.com and ZoneEdit's email server will forward the email to your yahoo, hotmail or whatever email address.
 - A more complicated approach, but one that gives you more control, is to set up your own email server on your web server computer. There's free email server software out there (e.g., [MailEnable Standard Edition](#)) that will do the job for you.
- **Web Authoring Software:** Most of you probably already have web authoring software. So, I'm primarily mentioning it here because web authoring software needs to be on any list of what you need to host your own web. Obviously, you've got to be able to create web pages. I have both MS FrontPage 2003 and Macromedia Dreamweaver. I primarily use FrontPage because:
 - I've been using FrontPage since its first release almost 10 years ago and I'm used to it;
 - FrontPage 2003 was a big improvement on the product and gives me everything I need;
 - We develop products for Microsoft Visual FoxPro, and we try to stick with Microsoft software because it generally works better with VFP; and

- FontPage uses the same IDE style as all the other Microsoft software that I use; I am familiar with that style and I like it; when I use a different interface style like the one found in Dreamweaver, I miss the Microsoft style.
- **Basic Internet Knowledge:** You need some basic knowledge about how the Internet works. One of the main purposes of this document is to give you that knowledge.

What You Need to Know

In this section I'll present some basic ideas you need to know about how the Internet works, and I'll give you some useful tips.

Servers and Clients

The Internet is all about servers and clients.

Web servers, email servers, ftp servers, NNTP servers and other kinds of servers are running on computers all over the Internet and are waiting for clients to ask for something to serve.

Web browsers, email readers and newsgroup readers are clients that you use to ask the Internet servers for web pages, email and newsgroup messages.

Up to this point, you have probably mainly been an Internet client consuming what the Internet servers have to offer. Now, you may become a server offering up your web pages to clients.

Servers and clients are a simple concept, and I'm probably telling you something you already know. However, I think it is important to your understanding of how the Internet works to keep in mind that it's all about servers and clients.

IP Addresses

IP stands for Internet Protocol. IP addresses are how computers that access the network find each other.

- **Internet IP Addresses:** Every device connected to the Internet, including computers and routers, requires an IP address to identify its location, or address, on the Internet.
 - When a client wants something from a server, the client needs to know the server's IP address. When the server wants to serve something to a client, the server needs to know the client's IP address.
 - When someone wants to access a web on your web server over the Internet, they will enter your web's domain name in their web browser address box and through a series of communications among Internet servers dedicated to the task, your domain name will be translated to the IP address of the router to which your web server computer is attached.
- **Network (Local) IP Addresses:** Every device in an IP-based network (e.g., your LAN) requires an IP address to identify its location, or address, on the network.
 - Normally, your router assigns IP addresses dynamically to the computers on your LAN. The local dynamic IP addresses look like 192.168.xx.1nn where xx is specific to your router and nn is the number assigned to a computer. The router's network IP address is usually 192.168.xx.1.
 - When you let your router assign IP addresses dynamically, a particular computer's IP address may change if the router is restarted or if computers are restarted.
 - You can manually assign static local IP addresses that never change to the computers on your LAN instead of letting your router assign dynamic IP addresses. You should manually assign a static local IP address to any computers on your LAN that will be Internet servers, such as your web server computer. I showed you earlier in this document how to manually assign a static local IP address to a computer on your LAN.

Ports

As I said above, when a client wants something from a server on the Internet, the client needs to know the IP address where the server resides. That's not all the client needs to know, however. The client also needs to know what door on the server computer it needs to enter to find the server at home. The door on a computer that leads to a server is called a "port".

I guess you could say that the Internet is based on expectations because clients expect to find specific kinds of servers at specific ports. For example, web browsers expect to find web servers at port 80. Therefore, you will want to have your web server software sitting at port 80 waiting for browser requests because browsers are going to come knocking at port 80, and if your web server isn't at port 80, browsers will find no one at home.

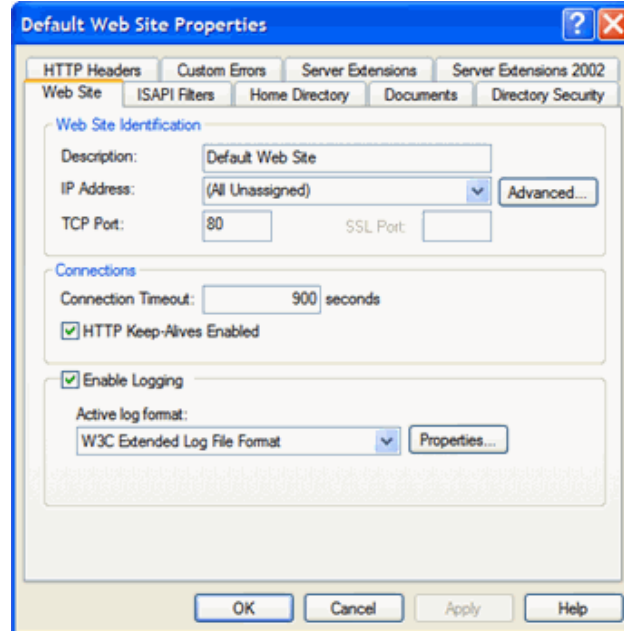
Email clients expect to find email servers at port 25. FTP clients expect FTP servers at port 21. NNTP newsgroup clients expect NNTP servers at port 119.

So, you can see that:

- Your IP address is the address on the Internet where clients expect to find your server computer; and
- Ports are the addresses on your server computer where clients expect to find particular kinds of servers. It's your job to make sure that the Internet servers you run are located at the expected ports and that the ports are open.

Now you know that web browsers are expecting to find your web server on port 80. Here's what that means to you:

- **Web Server Port:** Your web server software must be set to TCP Port 80. By default all web servers are set to port 80. If you're running IIS and you want to check, open your Control Panel, open Administrative Tools and open Internet Information Services. Bring up the Default Web Site Properties dialog. The dialog should look like this with the TCP Port entry set to 80.



- **Router and Software Firewalls:** The main job of your router and software firewalls is to make sure that your computers' ports are closed to incoming traffic. You need to make sure that port 80 is open in both firewalls to incoming http:// requests. In the case of the router, you need to make sure that incoming requests for port 80 are forwarded to port 80 on the web server computer on your LAN. I showed you how to open port 80 and forward port 80 requests to your web server computer earlier in this document.

Tip: Port 80 should never be open unless you are intentionally using it to serve web pages. If you open port 80, you must keep current with the latest security patches for your operating system and web server.

Web Forwarding

As I said earlier, some ISPs block incoming port 80 traffic before it reaches their customers. This is done for several reasons:

- The prevalence of malicious port 80 Trojans makes outside access to port 80 dangerous. Many Windows users are inadvertently running or have not applied security updates to Microsoft's web servers. Active scanning by self-propagating worms is constantly attempting to locate and infect such servers.
- Also, the terms of service of many ISPs forbids end-users from offering web servers to the Internet. Blocking incoming traffic to port 80 is a way to enforce ISP policies.

So, how can you run a web server if your ISP blocks port 80? Don't worry, you can still run one by using ZoneEdit's web forwarding. Here's what you do:

- Sign up and get started with [ZoneEdit](#).
- Make your web server listen on a port number like "6000" or "5000". Make the change on the Default Web Site Properties dialog if you're using IIS.
- Check to see if your web server works in a browser by using an URL like: `http://3.4.5.6:6000/`, where 3.4.5.6 is the real IP address of your router and 6000 is the port number that your web server is listening on.
- Add the IP Address of your router in ZoneEdit: "ww2.domainname.com" points to "IP address".
- Add a Web Forward entry for your domain called "www.domainname.com" that points to `http://ww2.domainname:6000/`.

ZoneEdit recommends turning cloaking off in this case. Letting people know they are going to `http://ww2.domainname.com:6000` is usually OK, and it allows the browser to perform better.

Default.ASP Redirection Page

If you only have one IP address but you want to host more than one website with each site having its own domain name, you can do it by making a Default.asp redirection page the default document in your web's root, or home, directory.

If you installed Internet Information Services on your web server computer, your web's root directory will be `c:\Inetpub\wwwroot`.

To handle two webs with two domain names, in the root directory create a default.asp page with the following lines of code at the top of the page before the `<html>` tag:

```
<%
sname=Request.ServerVariables("SERVER_NAME")
sname = ucase(sname)
if InStr(sname,"DOMAINNAME1") <> 0 then
response.redirect "web1directory"
elseif InStr(sname,"DOMAINNAME2") <> 0 then
response.redirect "web2directory"
end if
%>
```

Where, DOMAINNAME1 and DOMAINNAME2 are the parts of the two domain names before the period. For example, if your webs were promatrix.com and lawson.net, the entries would be "promatrix" and "Lawson", with the quotes.

And where, web1directory and web2directory are the names of the subdirectories in which the pages for each web can be found. For example, if you stored the pages of the promatrix.com web in the directory

c:\inetpub\wwwroot\promatrix, the entry in place of “web1directory” would be “promatrix”, with the quotes.

For each additional web you have, repeat lines 6 and 7.

After these lines of code, the page needs to have the html tags required for any blank html page.

This works because when a browser makes a request to a web server for a web, the domain name requested is passed to the web server.

Tip: ASP stands for “active server pages”. An ASP web page is just like an html page except that you can put script code in it that is run on the web server before sending html to a browser.

Web server Software

If you plan to use your web server with .NET web services and if you can afford it, I recommend putting Windows Server 2003 on your web server computer and using IIS 6.0 included in Windows Server 2003 as your web server software.

Tip: If you are making your living as a FoxPro developer, you should have an MSDN Professional or Universal subscription. An MSDN Professional subscription is the most affordable way to ensure that you have the latest tools a Microsoft developer needs. A Windows Server 2003 Standard and Enterprise license is included with an MSDN Professional subscription.

If your budget is more modest, you can use IIS 5.1 included in Windows XP Pro, but there are connection issues that you will have to consider.

Having said that, XP Pro allows 10 concurrent connections to the computer. That means that 5 users to the web site maximum as most browsers (IE & NS) take 2 connections every time they connect to your server. Dumping IIS and installing Apache will not resolve this issue as the number of connections is controlled at the OS level and not the application level.

There is a little known workaround to this problem. You can disable HTTP-Keep-Alives in the Default Web Site Properties dialog, and that will allow the server to server more pages more quickly thus reducing the amount of "Server Too Busy" errors.

DSL/Cable Modem Speed

A DSL/Cable modem has a different download and upload speed. Download speeds are much faster than upload speeds, but it's the upload speed that matters when you are hosting a web server.

Unfortunately, some DSL/Cable modem vendors advertise only the download speed. We have heard of cable modems that advertise a 4 Mbps download speed, which is very fast, but that provide an upload speed of only slightly more than .1 Mbps, which is quite slow for a broadband connection. If your upload speed is only a little more than .1Mbps and you want to host a web-server, you'll be limited in what else you can do with your broadband connection (such as, VOIP, other servers, etc.).

It's safe to say that all advertised download and upload speeds are faster than the speed your modem will actually experience. It's helpful to know your actual speed. To test your modem speed, you need to test both the download and upload speeds. You can test both speeds at the [Toast Net Performance Test Page](#).

Knowing your upload speed will help you gauge the ability of your modem to act as a web server and will help you know how much additional bandwidth your modem can provide for other Internet activities. If your upload speed isn't much more than .1 Mbps and if you want to install Vonage VOIP, you may want to think twice before setting up a web server.

eCommerce

If you plan to run a business web, sooner or later you will think about using your web to sell products and/or services and to process credit card transactions.

To keep things simple, my advice is to find a turn-key online service that will provide a shopping cart and credit card processing all on the service's website. If you try setting up a shopping cart on your web, you

will need an SSL certificate and that makes things more complicated than they need to be. Look for a solution that puts the shopping cart on the turn-key services web, not on yours.

Use your favorite Internet search engine and search for “online shopping cart and credit card processing”.

Some of the factors you should consider in comparing and choosing a turn-key eCommerce solution include:

- Credit card processing fee.
- Time it takes for credit card sales to be deposited in your bank account.
- Suitability of the shopping cart for your products and sales.
- Ability to make your shopping cart look like your web.
- Ability for product fulfillment (e.g., if you sell software to be downloaded after the sale, can the service handle the download fulfillment?).
- Reputation – do a Google Groups search; dissatisfied customers like to vent on newsgroups; however, remember that few satisfied customers ever comment on their satisfaction.

Securing Your Web Server

If you run a web server, your web server should be secure:

- If you keep current with your OS and server software security updates;
- If your router and software firewalls block all unused ports; and
- If your firewall/virus software handles network viruses and intruder attacks.

One other step I take on my web server computer is to not share any of the computer’s hard drives.

However, I still want to be able to access the hard drives of my web server computer from other computers on my LAN. Windows allows me to do that by providing a hidden share for each hard drive. The hidden share is denoted by a \$ following the drive letter (e.g., C\$). On the computers that I want to access the web server hard drives, I map a network drive to the hidden share (e.g., \\webserver\C\$). I also connect using a different user name, which involves setting up a user and password on the web server for that purpose.

Conclusion

If you have a business website that must handle high volume traffic and complex eCommerce, you won’t want to run your website through a DSL/Cable modem; you should use a professional web host. However, if you are a FoxPro developer who merely wants to make your presence known to the world via the Internet, a website running on one of your LAN computers accessed by a DSL/Cable modem should work just fine.