TECHLOGIC
SOLUTIONS
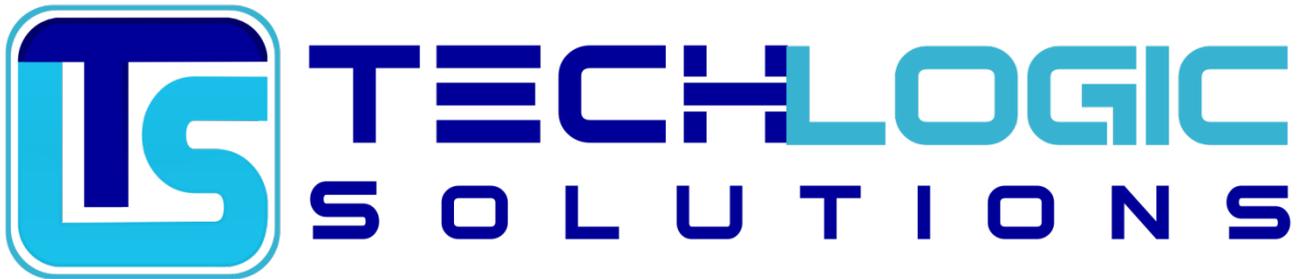
Linux Web Hosting Manual & Guide

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© Tech Logic Solutions Inc.

12-16715 Yonge St. • Suite 279

Newmarket, Ontario Canada L3X 1X4

Table of Contents

Chapter

1

1   Overview

1.1 Domain Name Usage & Registration

Tech Logic Solutions handles all domain name registration documentation and filings with InterNIC for you. You need not do anything in regards to you domain name registration except to confirm the domain registration or transfer request when they email for your approval. Domain name registrations and transfers normally take approximately up to 24-72 hours from the time you create your Tech Logic Solutions account, until the time the registration is completed. If you do not confirm the registration or transfer of the domain name, your registration will be delayed until such time that you do such. If you do not have access to the email address that InterNIC has on file for your account, if it is already registered (not applicable to new accounts), you may need to fax them instead. Tech Logic Solutions will supply you with all necessary details required for the fax documentation. Once your domain name is activated, you will be able to use yourdomain.com instead of your IP number. We highly recommend that you use yourdomain.com instead of your assigned IP number. As our customer base grows, it is very possible that your domain might be moved from one machine to another, thus changing your IP address from time to time. Accounts that do not come with the static dedicated IP option can be accessed in the following methods for HTTP access: http://64.202.117.173/~username

FTP access is gained via logging into the server's main IP address, with your assigned username and password, until such time that your own domain name has fully propagated. Non-Domain name accounts, such as yourname.techlogicsolutions.com, have no waiting period for name propagation.

1.2 Company Contact Info

Email Contact Info:

Support Dept.: support@techlogicsolutions.com
Sales Dept.: sales@techlogicsolutions.com
Billing Dept.: billing@techlogicsolutions.com
Domains Dept.: domains@techlogicsolutions.com
System Admin. Dept.: sysadmin@techlogicsolutions.com
Administration Dept.: president@techlogicsolutions.com
Webmaster: webmaster@techlogicsolutions.com

Mailing Address:

Tech Logic Solutions Inc.
12-16715 Yonge St. Suite 279
Newmarket, Ontario
Canada L3X 1X4

Please include the login name and/or domain name you are referring to when you write to support. We can't necessarily always tell from your e-mail address, unless we happen to remember working with you before, and we may need to know in order to help. If appropriate, tell us exactly what file(s) you are referring to.

1.3 What Do You Offer?

Tech Logic Solutions offers storage space for web pages with global public access to those pages over the Internet. We also offer a limited form of program execution known as "cgi-bin". Our servers are running on the latest version of Apache Lightspeed web server software over the latest release of the Red Hat Linux operating systems. Apache responds to web page fetch requests from remote browsers while Linux is one of several variants of the Unix operating system.

1.3.1 Web Space

Every customer gets his own password protected username under Linux. By logging in to his username, you the customer gains access to his web storage space. Every username "owns" a structure of disk subdirectories in the Linux file system. The "root" of this structure is the "home" directory, found at path

"/home/username". Note that this is somewhat similar to the MS-DOS directory structure except that there is no drive letter and forward slashes are used instead of backward slashes.

Inside the home directory is a subdirectory named "public_html". Every customer has his own separate "public_html" subdirectory. Files placed in "public_html" are visible to remote browsers over the Internet. As many clients are used to having their main directory referred to as "www", we have created another directory as such. When www is attempted to be accessed, the directory is automatically redirected to the correct public_html directory.

For example, when a browser asks for URL http://yourname.com/page.html, Apache looks for the file /home/username/public_html/page.html and sends it out. If you have not registered "yourdomain.com" with InterNIC and specified Tech Logic Solutions as its domain server, then the remote browser must ask for URL http://techlogicsolutions.com/~username/page.html to get the page, or the dedicated static IP number that you were supplied. Please be advised that static IPs may change from time to time, due to server re-arrangements that sometimes are necessary. Usernames/logins are always the first 8 digits of your domain name, or the domain name itself if it is less than 8 digits.

Example:
The username for yourdomain.com would be "yourdoma". The username for here.com would be "here". Passwords are always 4-10 digits in length, as supplied by you or generated by us during setup.

Now that we know where the files have to be located in order to be visible from the Internet, just how do we put the files there? There are several ways, depending on the local computer. For the MacIntosh, a program called "Fetch" is used. Documentation on Fetch is not yet available. However, note that the binary mode referred to throughout the manual corresponds to the 'raw' mode in Fetch.

For MS-DOS systems, communications programs such as ProComm emulate dumb terminals for connection to Linux (See 1.3.1.1).
For UNIX systems, use rlogin to connect (See 1.3.1.2).
For Microsoft Windows systems, use FTP (See 1.3.1.3). This is the easiest method.

1.3.1.1 Ms-Dos Dumb Terminal Access

Set up your dumb terminal program under MS-DOS to connect to your local access provider. Log into your UNIX shell account and then use rlogin to get to

your domain userid. Now follow the procedures under 1.3.1.2 immediately below.

1.3.2 Unix Shell Access

After you have used rlogin to get to your domain userid, you should be at the shell prompt in your home directory. Type cd www to enter your www directory. Then use rz to upload files into your www directory. Please do not upload web files into your home directory!

One way to update pages is to enter your account with the command rlogin -8 -l user yourdomain.com where user is your userid. This enables 8 bit access so zmodem can work. (Note this is the letter l, not the number 1.) Then type rz -a to upload a file or files to your directory. Type rz -ao if you wish to overwrite a file that is already there. You can edit files offline using a DOS editor and then upload them and test them before going offline.

The advantage of this over ftping is that you can then immediately run other shell commands after the files have been transferred. For example, you may wish to use lynx to test them or mail to send someone mail.

Note that the sequence rlogin -8 -l user yourdomain.com plus typing in your password SHOULD be done via a modem script. You really don't want to be typing this stuff on a daily basis. Name your script "yourdomain". (Just be sure that the disk where your script is kept is physically guarded.)

1.3.2.1 Ms Windows Access

This method is nearly intuitive and almost idiot-proof. You need an FTP program, many of which are available at Download.com. We recommend CuteFTP or WS_ftp. Then double-click on the FTP icon. This will bring up a "session profile" form. Under hostname, fill in your domain name (yourdomain.com, for example). Under username, fill in your username. Under password, put in your password. Make sure the checkbox for "Anonymous Login" is CLEARED.

At the bottom of the form, under "initial directories", you may specify which directories you want to work with on your local system and on your remote system. Under "remote host", specify /home/username/public_html. Under "local PC", specify the DOS path where your web files are located.

Hit the OK button. This will cause you to be connected to your domain account. The right side of the screen will show the files in your public_html directory

while the left side will show your local PC files. To send a file from your local PC to your remote domain public_html directory, click on the file you want to send and then click on the right arrow button. To send a file the other way, click on the left arrow button.

You will see three transfer mode options on the screen labeled "ASCII", "Binary" or "Auto"(based on file ext). Leaving this on "Auto" is the preferred choice. For all text files, including html files, and perl cgi programs, be sure to select "ASCII" so the end-of-line conventions are handled correctly. Graphic/image files and sound files should be transferred in binary mode.

1.3.2.2 The "home" page & html

The filename of your home page should be index.htm or index.html. You must try them both, for each account may be set up differently. However, one of the two is sure to work. The web server will automatically send the file at path /home/username/public_html/index.htm or /home/username/public_html/index.html when a browser specifies http://yourdomain.com.

To learn how to write HTML, get Laura LeMay's books "Web Publishing with HTML in a Week", and "More Web Publishing with HTML in a Week" . Both are published by SAMS.

1.3.2.3 FTP Space

All accounts, except non static IP accounts, come preset up with an ANONYMOUS ftp area where files can be uploaded or downloaded by anyone in the world without a password. This area is necessarily separate from web space and password protected ftp space for obvious reasons. If you want both upload and download anonymous ftp, you may want a read-only subdirectory for distributing files and a separate write-only subdirectory for receiving files. This is to prevent files that you are distributing from being destroyed accidentally, and to prevent files uploaded to you from being distributed to others before you examine them. The location of this directory is /home/username/public_ftp/

Thru hosting browser control panel, you may also set up individual logins for extra FTP users, whom can have access to a special subdirectory of your public_html directory. See the control panel instructions for information how to go about this.

1.3.2.4 Telnet/SSH Account

A telnet/ssh account is just another name for a Unix/Linux username. You need at least one to be able to upload/download your html files. When you sign up with Tech Logic Solutions, you get a username and password. You may ask for more than one such username. Regular accounts include one; additional setups are available for an additional charge.

Multiple telnet/ssh accounts are useful when more than one staff member will be working on the domain. You may wish to set it up so that different accounts have different security levels. For example, you could make it so only one telnet account could access your listserver data. For those of you wishing sophisticated access control, we will be happy to create additional groups for your domain. That may not make sense to those of you who are not Unix veterans, but it can allow you to have one account able to access only one directory while your others can access all directories, including that one.

Some of the programs available at the shell prompt are mail, a primitive email program, and pine, a much more powerful email program, ftp, to FTP onto other sites, telnet, to telnet onto other sites, and lynx, a text-only WWW browser, pico, an easy to use text editor.
NOTE: Telnet is disabled due security reasons - Please use SSH access.

1.3.2.5 Cgi-bin Access

"CGI" stands for "Common Gateway Interface", a fancy name meaning computer programs running on the web server that can be invoked from a WWW page at the browser. The "bin" part alludes to the binary executables that result from compiled or assembled programs. It is a bit misleading because cgi's can also be Unix shell scripts or interpreted languages like Perl.

A typical use for cgi is the processing of online forms. When the user fills in the boxes on the form and hits the SUBMIT button, the cgi program specified in the html will be run at the server, and the information in the boxes become available to the program as parameters. The program, being a program, can then do anything the programmer wanted it to do.

"cgiemail", for example, is a canned program written in C that gathers up the contents of the boxes on the form and emails them to a specified destination, then sends a WWW page confirming the action.

"imagemap" is another common use for cgi. Here, the X-Y coordinates of the

pointer on an image are correlated with a specification table, so that clicking on different parts of the image will result in different links being followed.

Other cgi's might ask for a password, check the password and then access a database for requested information. What it does is up to the programmer, but we do ask that the cgi's are reasonable in their usage of CPU time and memory. While we do not require that they be submitted for approval first, out of control programs that hog the CPU and system resources will be hunted down and killed by our system monitors.

Standard pre-installed system cgi's reside in the Tech Logic public cgi-sys subdirectory. Your personal cgi's reside in a web subdirectory named cgi-bin directory under your public_html directory. If your domain is named company.com, you would then access your scripts as http://www.yourdomain.com/cgi-bin, while the pre-installed system scripts are located at http://www.yourdomain.com/cgi-sys. You may need to set up the preinstalled scripts thru your browser control panel to see the correct HTML that is used for such. The browser control panel will walk you thru the simple processes.

See chapter three for more details on CGI.

1.3.2.6 Real Audio (Server & Real Video Server)

Real(Servers are real time audio and/or video transmission/playing systems. A digital audio or video stream is transmitted from the server over the internet to the destination and played immediately, rather than being stored to disk first and then played. With this feature, visitors to your website need not wait for several minutes, or longer, to listen to an audio file, or view a video file, while the large file is downloading. With Real (technology) the audio/video starts playing from the first few bytes of data that is downloaded. This is called streaming technology.

Each Real (audio or video file you wish to transmit requires two files: a metafile with extension .ram, and the digital audio or video clip itself, with extension .ra. The .ram file holds one or more lines of ASCII text, each of which references the .ra file to be played when the .ram file is accessed by the browser.

Entries in .ram files have the form:
http://yourdomain.com/realaudio/filename.ra or
http://yourdomain.com/realvideo/filename.ra

Place your .ram and .ra files in the realaudio, or realvideo, subdirectory under your public_html directory. .ram files must be uploaded in ASCII mode while .ra files must be uploaded in BINARY mode. You may then access these files at http://www.yourdomain.com/realaudio/filename.ram or http://www.yourdomain.com/realvideo/filename.ram

1.3.2.7 Capture Mail for Domain

Thru the browser control panel, you can configure your account to redirect all mail for your domain to arrive at one email address. You may also configure all mail not specified otherwise to arrive at the "default" address. If no mail address is specified to capture all your non-specified mail, the mail will automatically default to your account username mailbox.

1.3.2.8 TechLogic SMTP Mail Server

Tech Logic Solutions has a sophisticated SMTP Mail Server mailing system. In addition to being able to have nearly unlimited auto-responders by simply adding text files to your browser control panel, you can also redirect mail for everyone in your domain by simply clicking a few buttons.

Auto-Responder Example
An auto-responder is set up thru the browser control panel with the email address of help@yourdomain.com and says: We offer you help. Mail to help@yourdomain.com will return the message "We offer you help". These messages can be any size, even 100K!

Alias/Forwarding Example
Setup thru the browser control panel mail from "fred@yourdomain.com" to be redirected to "5555555@hotmail.com ", by simply clicking a button this would redirect mail for fred@yourdomain.com to 5555555@hotmail.com, etc. Mail to a user that was not set up as a pop account nor as an alias/forwarder would be sent to the default user.

1.4 How Do I Use This Program?

Note that with the exception of the description of using Eudora, the commands you are told to type in this section assume you have logged on to your hosting server with telnet or rlogin.

1.4.1 Mail Related Items

1.4.2 Mail

READING - Type mail to see if you have any mail. If you have any mail hit enter multiple times and all your messages will be displayed.
SENDING - type mail -s "juice" yourdomain@yourdomain.com<juice.msg to send the message juice.msg with the subject juice to yourdomain@yourdomain.com.
Type mail -s "juice" yourdomain@yourdomain.com juice is good . To send the message juice is good with the subject juice to yourdomain@yourdomain.com
Type mail yourdomain@yourdomain.com juice is good . To send the message juice is good with no subject to yourdomain@yourdomain.com

1.4.2.1 Pine

Type pine to enter a more advanced mail program.
Type L to select Folder List and then inbox to see what messages that you have received.

The rest of this program is quite easy to use. Why use mail instead? Mail has the advantage that it is easy to send files that you composed off line plus it is easy to read many files at once into a log file that you then read off line.

1.4.2.2 Eudora mail program runs under MS Windows

Eudora connects to the mail server over the Winsock. Mail may be composed and read offline, but make sure that Winsock is running before attempting to send or receive mail.

After Eudora has been installed, it must be configured to point to the Tech Logic mail server. To do this, start Eudora and select "Special" from the menu bar. Then select "Settings". Most of the options are self-explanatory.

- Leave the entries for PH and Finger blank.
- Fill in username@yourdomain.com for your POP account (username replaced with your username and yourdomain.com replaced with your domain name).
- Fill in SMTP server as mail.yourdomain.com, where yourdomain.com is replaced with your domain name. Note: Some ISPs will not let you use any other SMTP server other than their own, so you may have to use your ISPs mail server instead. Contact your ISP for information as to the location of their mail server.

- Under advanced network features, select 90 seconds for your network timeout.
- The option save password should be checked.
- The authentication style should be password option.
- Under connection method, do not check the offline option.

If you have multiple email addresses, you can install a separate copy of Eudora for each email address. Newer versions of Eudora allow for multiple personalities. You can enter each POP/Login email account as a separate personality and download mail from all or some of these accounts at the same time.

Eudora "Light" is freeware offered by Qualcomm and can be downloaded over the net. Eudora "Pro" must be purchased. Search for Eudora under Google for details on how to obtain a copy.

1.4.3 Managing the Linux Account

1.4.3.1 Symbolic Links (redirecting file access)

To link one file to another in the same directory:
Type ln -s fred.htm index.htm to redirect all file accesses from index.htm to the file fred.htm, while you are in that directory.

To link a file in your current directory to a file in another directory:
Type ln -s /home/username/public_html/directory/joe.htm index.htm to redirect all file accesses from index.htm to the file fred.htm in the other directory, while you are in the index.htm directory.

1.4.3.2 Passwd (changing your password)

Type passwd to change your password. Or type passwd username to change that of one of your ftp users or pop accounts. You may also change your passwords thru the control panel.

1.4.3.3 Zip/Unzip

Type zip to zip files and unzip to unzip files. This program is compatible with the zip program for DOS. For example:
$ zip myzip file1 file2 file3

This puts the files file1, file2, and file3 into a new zip archive called myzip.zip. On the other hand, if you had the archive myzip.zip and wanted to get back the files:

$ unzip myzip

Typing zip or unzip by itself will give you a usage summary, showing nearly all the options available.

1.4.3.4 Du (disk usage)

The Unix command du -s directory shows how much disk space is used by a directory and everything below it. However, you may also check such on the front of your browser control panel for a pre-calculated figure. If you have an anonymous FTP area, also check du -s /home/username/public_ftp to see how much space your anonymous FTP users are using.

Chapter

2

2 Solutions to Common Problems

2.1 Access Logs

"I can't find my access log!"

They are located at /etc/httpd/domlogs/yourdomain.com. So, the access log for snoopy.com is in /etc/httpd/domlogs/snoopy.com. You can link that file to a file in your directory structure, so that you may view it thru your browser. This log file is severely analyzed through all the control panel statistics programs, so hard viewing of the file is not really needed.

2.2 Error Logs

"I can't find my error log?"

Use the built in Error Log Report in the Analog statistics program in your browser hosting control panel.

2.3 Cgi-bin Scripts

"Where do I put my cgi-bin scripts?"

Put them in the subdirectory cgi-bin which should be under your public_html directory. You may then call them thru a browser as http://www.yourdomain.com/cgi-bin/your.cgi

"I don't have a cgi-bin directory!"

Make it by typing mkdir cgi-bin while in your public_html directory.

"How do I access cgi-bin scripts in the cgi-bin directory?"

If your domain name is bart.com, and the script itself is called your.cgi, access them as http://www.bart.com/cgi-bin/your.cgi

"Hey! /cgi-bin/ doesn't work for me!"

Ask us to activate your cgi-bin directory.

2.4 Perl Scripts

"I am being told file not found" "I am being told No such file or directory"

Upload your Perl script in ascii mode, not binary mode. Use rz -a for telnet users, or the ascii mode for ftp users. Sometimes it seems like this is asked about once a day, so we're going to repeat it, loudly. Upload your Perl script in ascii mode, not binary mode. Use rz -a for telnet users, or the ascii mode for ftp users.

"I get errors such as Literal @sdfsdf now requires backslash at ./test.rob line 2, within string Execution of ./test.rob aborted due to compilation errors."

Place a "\" before such offending @ characters. This is an incompatibility between Perl 5 and Perl 4. Alternatively you could change the first line in your Perl program from #! /usr/bin/perl to #! /usr/bin/perl4. The correct path to perl is /usr/local bin/perl OR /usr/bin/perl. Both usually lead to access to Perl, however, try changing it if your script is not working.

2.5 Image Maps

"Hey! my image maps don't work!"

This is a proper imagemap reference: <img src="djonly.gif" ISMAP>

Possible mistakes:

- You didn't use NCSA format.
- Instead of saying djonly.map, you included your domain name or other information in your reference. (Sometimes causes problems.)
- You forgot to use the extension .map.
- You forgot the word ISMAP.

- You forgot to include the default line as the first line in your image map.
- When specifying rectangles, you didn't include the small numbers first, as in 0,0 100,100.

2.6 Anonymous FTP

"Where should I store files for anonymous ftp access?"

Put files in the directory named public_ftp in your root directory. This will allow a file to be accessed by a customer with ftp://yourdomain.com/yourfile.

2.7 Setting Permissions

"Hey, how do I stop people who are not in my group from reading a directory?"

Type chmod o-r directory while you are in the directory above it.

"I don't care if people in my group can read my directory, but I don't want them to write in it!"

Type chmod g-w directory while you are in the directory above it.

"Who is in my group?"

In general, each domain has its own group. If you find you are in the group users, let us know if you wish for your domain to have its own group.

"Tell me more about permissions, they sound neat!"

To list the access permissions of a file or directory, type ls -ls *. r=read access, x=execute access, w=write access. The first three letters apply to you, the second three letters apply to your group, the last three letters apply to everyone else. Execute access enables you to run programs or enter directories.

Examples of using chmod: PEOPLE PERMISSIONS u = the file's user (or owner) r = read access g = the file's group x = execute access o = others w = write access a = the user, the group, and others. chmod a+w = let everyone write to the file chmod go-r = don't let people in the file's group or others to read the file chmod g+x = let people in the file's group execute the file.

2.8 Post Not Implemented

"I am getting the message 'POST not implemented'. Help!"

You probably are using the wrong reference for cgiemail. Use the reference "/cgi-sys/cgiemail/mail.txt"

Another possibility is that you are pointing to a cgi-bin script that you have not put in your cgi-bin directory. In general this message really means that the web server is not recognizing the cgi-bin script you are calling as a program, it thinks it is a regular text file.

2.9 Don't Have Permission to Access /

This error message means that you are missing your index.htm (...or index.html) file.
Note that files that start with a "." are hidden files. To see them, type ls -al.

2.10 MS FrontPage Publish Errors

"I am having problems publishing with MS FrontPage. It will not accept my login, and seems to just hang there...?"

Submit a support ticket or Email support@techlogicsolutions.com and ask us to reinstall the FrontPage extensions and the FP Email extensions.

2.11 Email is Disappearing

"I seem to not be getting my email?"

Make sure to check your default email login pop. Double check to see where your default email is being sent to thru the control panel. Make sure you do not have a pop and a forwarder for the same email address, for you can only choose one or the other, not both. Make sure that you do not have a pop or forwarder set up for that email address that you forgot about.

2.12 Cannot Log into Email POP3 Account

Submit a support ticket or Email support@techlogicsolutions.com and ask us to run fixpop and ln -s /usr/local/etc/cpanel/bin/popsh /bin/pinesh. Send us your email address, username, and password to all pop accounts you need corrected.

2.13 My Domain Name Does Not Work

Check "http://www.tracert.com/cgi-bin/ping.pl with your domain name, and see if it is accessible for the servers included there. If it is being found by the large majority of servers there, than there is something wrong with your ISP's DNS, or someone on the backbone between Tech Logic Solutions and your ISP. We can do nothing in this situation, and you must wait for the error to correct itself. If the domain name is not being found, please check the InterNIC Registry to see if your domain name registration/transfer has been completed.

If it has NS1.TECHLOGICSOLUTIONS.COM & NS2.TECHLOGICSOLUTIONS.COM on the bottom of the registration, then the transfer is completed. If it has different name-servers mentioned there, or no registration appears at all, the domain name is not transferred/registered yet, and you must wait for such. Transfers/Registration takes normally 24-72 hours. If your registration says "On Hold", then you have not paid your InteNIC domain registration fees, and they have shut down access to your domain.

Chapter

3

3   Security: How do I Implement it?

3.1   Secure Web Pages

How do I secure all web pages in a directory?

Please use the browser control panel interface for password protecting your web pages. Or via telnet, if your home directory is yourlogin, create a file named .htaccess in your web directory that contains the following:

```
AuthUserFile /home/yourlogin/.htpasswd
AuthGroupFile /dev/null
AuthName ByPassword
AuthType Basic
<Limit GET POST>
require user pumpkin
</Limit>
```

Then in your home directory, type htpasswd -c .htpasswd pumpkin. This will enable you to secure the directory so that only user pumpkin can enter this directory. You may well want any of the user/password combinations you created in your .htpasswd file to allow access. Just say require valid-user instead of require user xxx in .htaccess and any of the users you created will be able to access the files.

Note that you want to store the .htpasswd file in your home directory so it is hidden from others. The one drawback to putting your .htpasswd file in your home directory is that you will have to slightly lower the security of your home directory. Go to /home and type chmod +x yourlogin. The web server needs execute permission on to read the .htpasswd file.

3.2   Secure Passwords

How do I create a secure password?

Make it at least 6 characters long. Include at least one number, capital letter, or punctuation mark in the name. Passwords can be a maximum of 10 digits.

3.3   Secure FTP Directories

How do I create secure ftp directories?

To make a directory named direct that can only be accessed by userid fred, go to the directory above direct and type chown fred direct. If you wish for only fred to read and write in it, type chmod 700 direct. If you wish to allow others to read these files you can type chmod a+rx direct after typing the first command.

The above only works if you are fred. If you are not, but fred is in your group, ask us to make a new group for you and fred, your2grp. Then you can chgrp your2grp direct, and chmod g=rwx direct. If you do not wish anyone else to be able to read these files, use chmod o-rx direct.

To list the access permissions of a file, type ls -l file, and for a directory, ls -ld directory. r=read access, x=execute access, w=write access. After the first letter or hyphen (for file type), the first three letters apply to you, the second three letters apply to your group, the last three letters apply to everyone else. Execute access enables you to run programs or enter directories.

Examples of using chmod: PEOPLE PERMISSIONS u = the file's user (or owner) r = read access g = the file's group x = execute access o = others w = write access a = the user, the group, and others. chmod a+w = let everyone write to the file chmod go-r = don't let people in the file's group or others to read the file chmod g+x = let people in the file's group execute the file.

3.4   Secure CGI-BIN Directories

How do I secure all pages in a cgi-bin directory?

To stop people from being able to read your scripts under all circumstances, end your CGI scripts with the name .cgi.

3.5   Secure Socket Layer (SSL)

How do I use SSL security on a webpage or form?

The webpage form that you want to be secure must be called via the secure server. The images in the webpage must also be called via the secure server. This is done by calling the files in the following format: If your file is normally http://www.yourdomain.com/order.htm then the page must be called as https:// www.yourdomain.com/order.htm. order.htm can be replaced with any file you are calling, including image files that you are trying to secure. Notice the "s" in "https", this means you are in a secure area. To secure a domain or folder or sub domain or all in one you will need to purchase a SSL Certificate for your domain. If you get a broken key instead of an image file that should appear, it is because you have secured the page, but have not secured an image or your background.

If the webpage you are trying secure is a form, the action the form performs (form method=post action=http....) must be a secure action as well (form method=post action=https....).

Chapter

4

4 Uploading and Downloading Files

4.1 Interfacing with Tech Logic Solutions

In all the sections below, a distinction is made between transferring ASCII files and binary files. This is important -- you must transfer files in the appropriate mode.

Perl scripts and HTML files are ASCII files, along with many others. If you use a plain text editor to work with a file, it's an ASCII file. It's not terribly important to transfer HTML files in ASCII mode, but it is important for Perl scripts.

GIFs and JPEGs, as well as audio and video files, are binary files. They must be uploaded in binary mode, or will be corrupted. Files that look like garbage in a plain text editor and require a more advanced program to edit are not ASCII files, and must be transferred in binary mode.

4.2 FTP – Graphical Interface (ws-ftp, fetch etc.)

Users with graphical interfaces can run a program such as ws_ftp, cuteFTP, or fetch to interface with your domain. Just log into your domain name with your username and password.

See 1.3.2.1 MS Windows Access in Chapter One for details.

4.3 FTP – Shell Interface

For Unix users, at the shell prompt, type ftp your-domain.com. Then enter your username and password when prompted.

ASCII files (text)
Type ascii to make sure you are in ascii mode.
Type put filename to put a file.
Type get filename to get a file.

Binary files (graphics)
Type binary to make sure you are in binary mode.
Type put filename to put a file.
Type get filename to get a file.

4.4   Telnet – Graphical Interface

Simply run the program on your machine that contains telnet in its name. Then log onto your-domain.com (or .net or .org) with your userid and password.

Once logged on, you may use the following commands (assuming your telnet program knows or can be taught about ZMODEM, which often isn't the case):

ASCII files (text)
Type rz to put a file.
Type sz -a filename to get a file.

Binary files (graphics)
Type rz filename to put a file.
Type sz -b filename to get a file.

4.5   Telnet – Shell Interface

At the shell prompt, type telnet -8 your-domain.com. Then enter your userid and password when prompted. Once logged on, you may use the following commands:

ASCII files (text)
Type rz filename to put a file.
Type sz -a filename to get a file.

Binary files (graphics)
Type rz filename to put a file.
Type sz -b filename to get a file.

Go up and read 6.1. It's covered there. So why this section? If this seems obvious, sorry, but probably the single biggest type of problem we have to correct or tell users to do over is problems caused by having the wrong mode active. We needed this in big letters so you'd find it.

Macintosh users: in Fetch, the binary mode referred to throughout the manual is 'raw'. The other option uploads too much data, corrupting the file.

In case you're wondering what the fuss is about -- aren't text files standardized? -- Here's the explanation. While ASCII is a standard for encoding text, it does not specify how to end lines. There are two obvious candidates in the ASCII character set: CR and LF. *nix machines, such as the TechLogic WWW machines, use LF to terminate lines. Macintoshes use CR. DOS, Windows, and NT machines use CR LF (both, in that order). When transferring files between machines of different types, you need to account for this, hence ASCII mode. To avoid damaging binary files (where the bytes don't have the ASCII semantics) there is binary mode.

Chapter

5

5   JSP/Servlets Information

5.1 Tomcat TLS Faq

Apache Tomcat.

Tomcat is the servlet container that is used in the official Reference Implementation for the Java Servlet and JavaServer Pages technologies. The Java Servlet and JavaServer Pages specifications are developed by Sun under the Java Community Process.

Tomcat 4.0 implements a new servlet container (called Catalina) that is based on completely new architecture. The 4.0 release implements the Servlet 2.3 and JSP 1.2 specifications.

You can store your own classes and Jars with Tomcat. You can place them in public_html/web-inf as defined by the Tomcat documentation.

You can find the Tomcat documentation at the following location:
http://jakarta.apache.org/tomcat/tomcat-4.0-doc/appdev/index.html

JDBC Connection String:

```
<%@ page import="java.sql.*" %>
Connection connection = null;
Class.forName("org.gjt.mm.mysql.Driver").newInstance();
connection = DriverManager.getConnection(
"jdbc:mysql://localhost/db_name?user=db_username&password=<PASSWORD
HERE>");
```

Chapter

6

6 Frequently Asked Questions

Q: What are all the files and directories in my home directory?

A: public_html   This is your web directory. Place all your web files in there.

    www   This is the same directory. They are aliased/linked to each other.

    public_ftp   This is your anonymous ftp directory. Users can only download from this directory the files that you place there.

    public_ftp/incoming   This is the anonymous user upload area.

    public_html/webstore   This is the WebStore Shopping Cart directory.

    public_html/webstore4   This is the WebStore 4.0 Shopping Cart directory.

    _private   This is part of MS Frontpage Extensions. DO NOT TOUCH.

    _vti_*   These are parts of MS Frontpage Extensions. DO NOT TOUCH.

    public_html/cgi-bin   This is your cgi-bin directory. Put all of your own scripts here. This is not the location of the preinstalled scripts.

cpanel	This is your Control Panel. DO NOT TOUCH. You may utilize the control panel thru: http://www.yourdomain.com/cpanel/login
.xfm	This is your part of your Control Panel. DO NOT TOUCH. You may utilize the control panel thru: http://www.yourdomain.com/cpanel/login
.lists	This is your Mailing List information. DO NOT TOUCH. You may utilize the control panel thru: http://www.yourdomain.com/cpanel/login
.mail	This is your Mail information. DO NOT TOUCH. You may utilize the control panel thru: http://www.yourdomain.com/cpanel/login

Q: How do I run my own CGI programs?
A: Put your CGI programs in the cgi-bin directory.
* The cgi-bin should automatically change the permissions to chmod 755 for you

A special note - this does not apply to FrontPage webs, follow normal cgi instructions

The location of preinstalled scripts is /cgi-sys.

Q: How do I use cgiemail, and Formmail?
A: CGIemail:This is a program that will email you the forms filled out from the web. Please use formmail.cgi while we rewrite the section on CGIemail. Formmail is a very easy to use form processor, simply place the following on any page after entering your domain.

```
<FORM METHOD=POST ACTION="http://yourdomain.com/cgi-
sys/FormMail.cgi">
<input type=hidden name="recipient" value="sales@yourdomain.com">
<input type=hidden name="subject" value="Order">
<input type=hidden name="redirect" value="http://yourdomain.com/">
<input type=hidden name="return_link_title" value="Back to Main
Page">
```

Be sure to replace yourdomain, with your real domain name.

Q: How do I use counters, clocks, and calendars?
A: Please use your control panel to create a counters, clocks, and calendars. There is a huge selection of styles available. http://www.yourdomain.com/cpanel/login

Q: How do I use the anonymous ftp site?
A: This is preset up with every account. Your anonymous FTP account is the public_ftp directory in your root directory. You can create user specified logins in your public_html directory thru the browser control panel interface.

Q: How do I create email aliases and forwarders?
A: Please use your control panel to create an alias/forward. http://www.yourdomain.com/cpanel/login

Q: How do I use the auto-responders?
A: Please use your control panel to create an auto-responder. http://www.yourdomain.com/cpanel/login

Q: How do I see who is using my auto-responders?
A: The original email that that your visitor sent to receive your auto-responder message will wind up in your default mailbox, unless you set up a pop or forwarder of the same name as the auto-responder. You can then see who requested an auto-responder, by the email that you have received.

Q: How do I create a mailing list?
A: Please use your control panel to create mailing lists. http://www.yourdomain.com/cpanel/login There may be extra charges if your mailing list is very large - more than 1000 subscribers).

Q: How do I use Real Audio(tm) and Video(tm)?
A: Real Audio(tm) and Video(tm) is available for a small extra charge
Information was supplied in section 1.3.2.6

Q: How do I change my login password?
A: Please use your control panel to change your passwords.
http://www.yourdomain.com/cpanel/login

Telnet to your domain. After you've logged on, type "passwd" to change
your password. You can exit the telnet session by typing "exit".

Q: How do I check the web usage stats for my domain?
A: Please use your control panel to check your stats.
http://www.yourdomain.com/cpanel/login

**Q: I need to configure my mail reading program so I can access my
emails. What are the proper settings?**
A: Assume your domain is fred.com
Smtp = mail.fred.com
pop = username@fred.com
*** Replace username with what the control panel gave you as your
login.
from = anyname@fred.com
passwd = was chosen in "pass" field of control panel pop setup

Q: What is the correct path to perl(and other programs)?
A: perl5: /usr/bin/perl
perl5.003: /usr/bin/perl5.003
perl5.004: /usr/bin/perl5.004
sendmail: /usr/sbin/sendmail
date: /bin/date
java: /usr/bin/java
python: /usr/bin/python

**Domain paths using example if your domain was fred.com and
username is fred**

- Main dir: /home/fred/public_html/
- Cgi-bin: /home/fred/public_html/cgi-bin
- Main dir: /home/username/public_html
- Cgi-bin: /home/username/public_html/cgi-bin

Q: How do I create my own "404 Not found" error page?
A: Please use your control panel to create error pages.
http://www.yourdomain.com/cpanel/login

Make a file called .htaccess in the your public_html dir. (if it exists just add the line)
Add this line:
ErrorDocument 404 /404.html
and you can edit /home/username/public_html/404.html

Q: How do I use the SSL server for my order form?
A: Normally, any text (such as your credit card number) sent from your browser to the web server is sent as plain text. This means that a hacker could potentially intercept (however unlikely) the information sent from your browser and read it. However, by using a secure server, the information is encrypted before it is sent from your browser. It would be practically impossible for anyone to decrypt it without knowing the key. Please use a secure server only when necessary, you will need to order an SSL certificate for your domain.

Q: What are the basic Frontpage settings?
A: assume your domain is fred.com
location to publish to: fred.com (note if the domain is not active use the ip# we assigned)
FTP server name: fred.com
Directory path: /home/fred/public_html/
or
Directory path: /fred/public_html/
Username: fred
Passwd: As-sent-to-you or try normal one.

Q: What are the basic Msql settings?
A: mSQL is installed, however it is not supported in Linux due to the complexity of the program.