

Web Hosting 101

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Congratulations! You've made a website!

Now where will it live?

- It will live on a webserver which hosts the website
- You will be able to access the website using the domain name

What will you need to host a website?

- A FTP (File Transfer Protocol) program
 - This software will transfer files from your computer to the server
- A web server
 - Rented file space on a hosting company's web server
- A domain name
 - The address where you content will be served

FTP (File Transfer Protocol)

- An insecure protocol for transferring files from one host to another over the internet
- De facto method of file transfer between hosts
- SFTP (Secure File Transfer Protocol)
- FTP programs: FileZilla, WinSCP, SmartFTP, Cyberduck, and many more . . .
- *a protocol is a system of rules which defines how data is exchanged between computers. The devices need to agree on the format of the data that is being exchanged
- *a host is device that is connected to the internet or a local network

Local (Serv-U Product Screenshots) X

/ > Users > josh > Documents > Serv-U Product Screenshots >

Up Dir
Upload
New Dir
Delete
Views
Synchronize

Folders

Applications
Desktop
Documents
Blogs In Progress
Josh Photos
Microsoft User Data
Serv-U Product Screenshots
SW HR
Virtual Machines.localized
WebEx
Downloads
Library

001_FTP_151...

002_FTP_151...

002_MFT_151...

0313_serv-U_...

0313_serv-U_...

banner525x1...

Remote (Audio & Video) X

/ > Audio & Video >

Up Dir
Download
New Dir
Delete
Views

Folders

Audio & Video
Files
Photos
Logos
Upload

Name	Size	Type
ReadMe....	280	TXT File
Serv-U M...	46.91 MB	MOV File
Serv-U M...	1,979.59 KB	MP3 File
Serv-U M...	20.44 MB	MP4 File
Serv-U M...	71.04 MB	MPG File

Search

Transfer X

Pause
Resume
Cancel
Remove
Remove All
Workers: 5

Operation	Name	Transferred	Completion	Source Path
Complete	Download (7 of 7 complete)	100% (544.17 KB of 544.17 KB)	00:00:00 (544.17 KB/sec)	/Photos/
Complete	0313_serv-U_diagrams_...	100% (265.34 KB of 265.34 KB)	00:00:00 (265.34 KB/sec)	/Photos/0313_serv-U_diagra...
Complete	0313_serv-U_diagrams_...	100% (90.25 KB of 90.25 KB)	00:00:00 (90.25 KB/sec)	/Photos/0313_serv-U_diagra...
Complete	banner525x133_thwack...	100% (17.43 KB of 17.43 KB)	00:00:00 (17.43 KB/sec)	/Photos/banner525x133_thw...
Complete	ftp-voyager-free-tool-s...	100% (34.65 KB of 34.65 KB)	00:00:00 (34.65 KB/sec)	/Photos/ftp-voyager-free-tool...
Complete	FTPVoyager-Logo-Text_...	100% (20.44 KB of 20.44 KB)	00:00:00 (20.44 KB/sec)	/Photos/FTPVoyager-Logo-Te...
Complete	PADFile_Screenshot_640...	100% (115.75 KB of 115.75 KB)	00:00:00 (115.75 KB/sec)	/Photos/PADFile_Screenshot_6...
Complete	ReadMe.txt	100% (287 bytes of 287 bytes)	00:00:00 (287 bytes/sec)	/Photos/ReadMe.txt

HTTP (Hypertext Transfer Protocol)

- An application layer protocol for transmitting hypermedia documents such as HTML
- Designed for communication between web browsers and web servers
- Follows the client-server model
 - Client opens a connection to make a request, and then waits to receive a response
- *Application layer: abstraction layer that specifies the shared communications protocol and interface methods by hosts on a network ([Read more](#))

What is a web server?

- Can refer to both hardware and software, or both working together
- Hardware: A computer that stores webserver software and a website's component files (HTML docs, CSS sheets, JS files)
 - Connects to the internet and supports physical data interchange with other devices connected to the web
- Software: controls how web users access hosted file.
 - HTTP server which understands URL and HTTP (the protocol your browser uses to view webpages)
 - Can be accessed via the domain name of the website it hosts. Delivers the content of the website to the user's end device

What is a domain name?

- Human readable address for any webserver on the internet
- Any internet connected device has an IP address, ie 173.194.121.32, but domain names provide a more memorable and informative means of accessing the webserver
- Top level domain, sub domain, label
 - (www).(mysite).(com)

Where can you get a domain name?

- How to buy a domain name
 - Pay for the right to use a domain for one or more years
 - Registrars register and keep track of technical information related to domain names
 - Domain.com, Bluehost, GoDaddy, Network Solutions, DreamHost, etc.

DNS Refreshing

- Domain Name System
 - Turns domain names into IP addresses
 - Allows browsers to access websites
- DNS Servers store DNS databases of every domain name world wide
- All DNS servers refer to a few special servers called “authoritative name servers”, “top-level DNS servers”
 - Each DNS Server that knows about a given domain name stores that info for some time before it is refreshed
 - May take some time for DNS Servers to get up to date changes in domain names
 - Some web hosting services may need you to enter the name server for your domain name in order to update it

Hosting Options

- Hosting services: Network Solutions, Pair Networks, Bluehost
- Github Pages
 - Host your website on git
- Heroku
 - Requires Github proficiency, good for applications built using Node.js

Website Emulators

- Emulate a web development environment
- Let you enter HTML, CSS, and JavaScript, and then display the result of that code as a website
- JSFiddle, JS Bin, CodePen
- Good for sharing code and learning