

Announcements

- Midterm #1 will take place next Wednesday Oct 11 in lecture.
- Fugu – “F-Secure” for Mac OS X
<http://rsug.itd.umich.edu/software/fugu/>

Transfer Modes in FTP

- Files can be transferred either as ASCII text or as binary data.
 - you must indicate choice
 - wrong choice may cause the new file to be bad
- ASCII mode:
 - for transferring ASCII text
 - the actual character is transferred, rather than the binary value of it; translation takes place if needed
- Binary mode:
 - when you don't want the character based translation
 - data files of an application for example

ftp in Windows

- Start → command prompt
- Type ftp <Host>
- Commands
 - help – list of available commands
 - help <commandName> - information about commands
 - dir – contents of directory
 - cd <directoryName> - changes to directory
 - quit - exit

FTP File Systems

- There are two file systems which you are working with during a file transfer, the local one and the remote one.
 - local file system's "current working directory"
 - Use `lcd` to find the local current working directory
 - remote system's "current working directory"
 - Use `pwd` to find the current remote working directory
 - changing remote directory: `cd`
 - changing local directory: `lcd`
 - listing remote directory: `dir`
 - listing local directory: `!dir`

FTP Server

- Listening at port 21
- Can reach that daemon by using telnet
 - if you specify the port number
- Transfer Speed Factors
 - Internet traffic
 - Size of file
 - Speed of network connections
 - Your connection - you to your local net, local net to Internet
 - Their connection - them to their local net, local net to Internet
 - Machine speed
 - Both yours and theirs
 - Server load
 - How many users are trying to download file “now”

Transferring Files Using F-Secure

- The local and remote directories represented by the upper and lower windows.
- You can drag and drop your files/folders
- Notice how you can specify the local/remote directories.
- As in the previous ftp discussion, you have to specify the appropriate transfer mode (you will see icons at the top representing each transfer mode).

ssh (command line)

- ssh can be used in linux and other systems (e.g., Unix, Mac OS) to establish a remote connection to a computer
- Data is encrypted
- Usage
ssh -l <YourDirectoryID> <hostName>
- Let's do a demo of this command

scp (command line)

- scp allow us to transfer files.
- It is available in grace and other systems (e.g., Unix, Mac OS) to establish a remote connection to a computer in order to transfer a file.
- Data is encrypted
- Usage
scp <fileName> <directoryID>@<host>:<targetDirectory>
- Example
scp messageTwo fearTheTurtle@wam.umd.edu:
- Let's do a demo of this command

On How Web Servers Works

- The following link provides a description on how web servers works.

<http://www.cs.umd.edu/class/fall2005/cmsc433/HowWebServersWork.html>

- Let's go over the description.