CS114: Lecture 11
Miscellany

HW4 out, due Halloween

please take a cookie

Course Evaluation

- http://www.engineering.cornell.edu/TAEval/survey_new.cfm

- Regular engineering course evaluations at end of semester

A few more commands

- Documentation
  - `apropos` – look for manpages about something
  - `info` – GNU alternative to man (hypertext)
- Security
  - `umask` – default permissions for created files
  - `su` – switch user
- Scheduling
  - `cal` – text calendar
  - `crontab -e` – schedule timed events

Editing on shell command-lines

- Ctrl-A = start of line (home)

- Ctrl-E = end of line (end)

- Ctrl-F/Ctrl-B = forward/backward (right/left arrow)

- Works in many UNIX editing environments

Cygwin

- Compile and run UNIX programs under Windows

- Emulates UNIX system calls

- Easy installation

- Full UNIX toolset, many applications

X Window

- UNIX GUI
- You're looking at it (OpenOffice is an X application)
- Expects 3-button mouse
    - Ctrl-left/middle/right click on Xterm

- ssh -X

- Important to use &

Wildcards vs Regular Expressions

- ?
- *

- [0-9a-z]
- {abc,def}

- .
- .*

- [0-9a-z]
- abc|def
- (ab)* (ab)+ (ab)? (ab){2,5}
- Basic vs Extended
  - Basic: \+\? \| \(\) \{ \}

UNIX versus Windows (general)

UNIX	Windows
/path/to/file	\path\to\file
mountpoints	drive letters
cd -> home	cd -> no change
-options	/options
LF (\n)	CR-LF (\r\n)
EOF=Ctrl-D	EOF=Ctrl-Z
.tar.gz	.zip
.so	.dll

UNIX versus Windows (commands)

UNIX	Windows
ls	dir
cp	copy
rm	del
diff	cmp
mv	move, rename
cat	type
more, less	more

Review I

- Paths, directories, ls, cd, pwd
- Permissions, security, users, groups
- $PATH, finding and running commands, built-ins
- Shells, echo, Wildcards, `backticks`
- Shell variables, environment variables, .cshrc
- Redirection < > Pipes | Append >>
- Jobs, processes
- Text files, grep, regular expressions

Review II

- Sed, awk
- Mountpoints, softlinks
- Exit status; test; if/then/else/fi; for; while
- Shell arguments; option processing; case; expr
- Packages: tar/gzip
- Networking tools

That's all, folks!

- HW4 due on Halloween (a week and a half)
- No more office hours – e-mail if you want an appointment
- Thanks, it's been fun!