

UNIX Development Boot Camp

- Shell

- sh, bash, csh, ksh
- Basic commands
 - * ~~System traversal~~ - Rob
 - ed
 - pwd
 - ls / ls -l / ls -al
 - ~~... ~ notation~~
 - ~~Running programs~~
 - ./runPWDPProgram
 - programs in \$PATH
 - * ~~File handling~~
 - cat
 - ~~more/less~~
 - vi (intro) pico nano
 - mv
 - cp
 - scp
 - rsync (not packaged with all distros)
 - * ~~Searching~~
 - ~~find (ROB)~~
 - ~~grep (ROB)~~
 - * ~~Process info?~~
 - ~~top (not totally standard) (ROB)~~
 - ~~ps (tricky, mention pgrep, pkill) (ROB)~~
 - kill (SEAN)
 - * Other
 - screen (not packaged with all distros) (SEAN)
 - test
 - strings
 - tee
 - sort (SEAN)
 - uniq (SEAN)
 - * Scheduling tasks (SEAN)
 - crontab

- at / atq / atrm
 - Where to find stuff...
 - * /usr
 - * /usr/bin
 - * /sbin
 - * man heir(1).
 - ~~Magic numbers and the difference between a script and a binary~~
 - * ~~executable~~
 - ~~file(1)~~
 - ~~#!~~
 - * ~~Scripts (ROB)~~
 - ~~Permissions (ROB)~~
 - * ~~Commands~~
 - ~~chmod~~
 - ~~chgrp~~
 - * ~~Why 1777 is for idiots.~~
 - ~~Piping~~
 - * ~~What is stdin/stdout~~
 - * ~~Usage of —i and i, ii, 2i&1~~
 - ~~Help... man(1)~~
 - Making backups...
 - * tar + gz
 - ssh magic
 - * ~~Why it should be used instead of telnet~~
 - * authorized keys
 - * Mention tunnelling as a teaser.... have a handout with more info?
 - The differences between shells (a short history)
- Editors
 - Modal
 - * vi
 - * vim
 - Interactive
 - * pico

- * emacs
 - IDE
 - * eclipse (Rob)
- GCC Development
 - Compilation
 - * gcc
 - * g++
 - Building
 - * make(1)
 - Debugging
 - * ldd
 - * nm
 - * gdb
 - * gprof
 - * Special Sauce
 - systrace
 - ktrace/kdump
 - dtrace (probably leave that out... kinda nutty)
- Source Control (SEAN)
 - Poor man's
 - * cp a.c a.old
 - * Upgrade poor man's
 - cp a.c a.c.'date + %Y%m%d%H%M%S'
 - * Compile script to make it painless.
 - Comparisons...
 - * diff
 - * patch
 - * sdiff
 - Now let's grow up a little.
 - * CVS/RCS
 - * SVN