

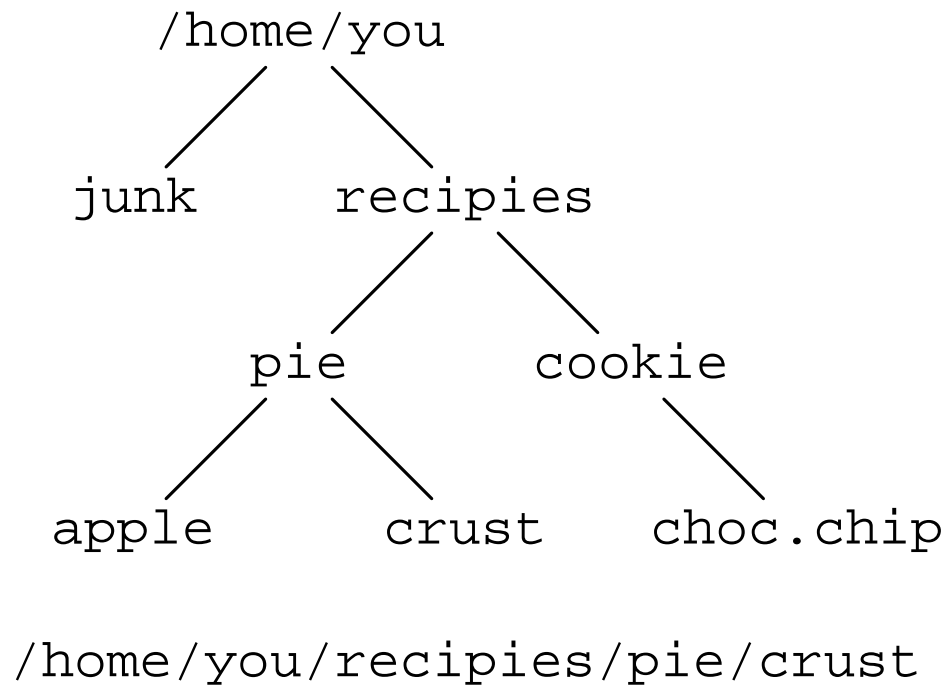
An Introduction to Linux/Unix

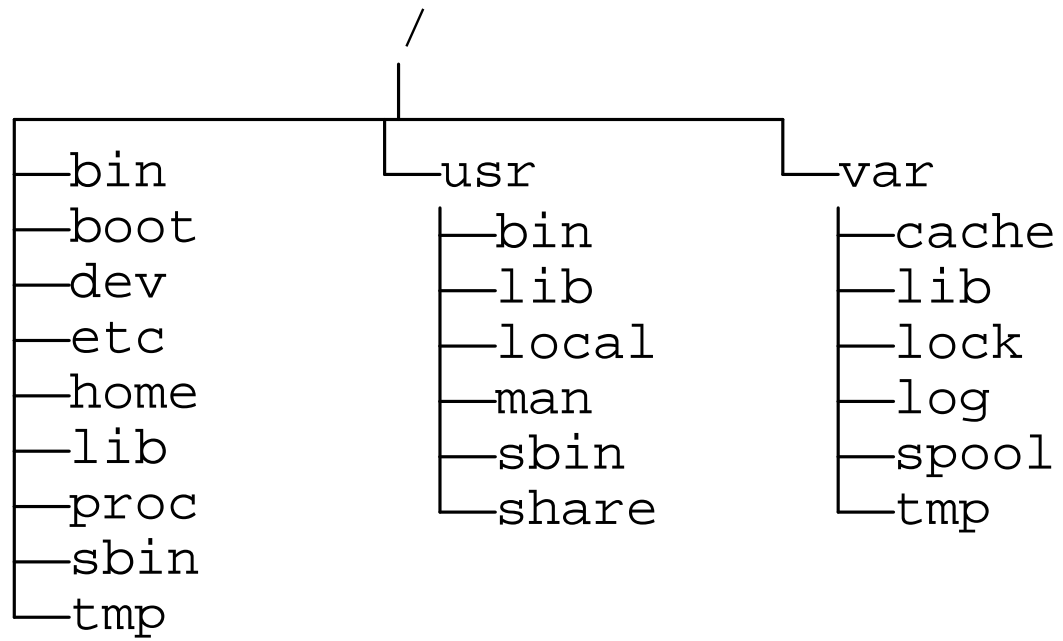
The Charlottesville Unix User Group

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The Filesystem





The Shell

The “kernel” is the part of the operating system that controls the resources of the computer and allocates them among its users (people and programs). All Unix/Linux commands are entered through the “shell.” This is an ordinary program that sits between you and the facilities forms a layer between the user and the facilities of the kernel.

sh – The Bourne Shell — First shell; developed at AT&T.

csh – The C Shell — An alternate shell; developed at Berkeley.

ksh – The Korn Shell — A Bourne-like shell with some features borrowed from the C shell; developed at AT&T.

bash – The Bourne-Again Shell — The GNU project’s modern Bourne-like shell; the most common shell found on Linux systems.

tcsh – The TCSH Shell — A modern, improved version of the C shell; provides an alternative to bash.

Basic Commands

`ls dir` — list directory

`ls -l dir` — (long format)

`cd dir` — change directory

`cp from to` — copy

`mv from to` — move

`rm file` — remove (beware!)

`rm -r dir` — remove (beware!!!)

`pwd` — print working directory

`mkdir dir` — make directory

`cat [file]` — concatenate (display contents)

`more` — display contents one screen at a time

`less` — “more” with more features

`man` — manual (online documentation)

Translating DOS to UNIX

DOS	UNIX	DOS	UNIX
dir	ls	cls	clear
del	rm	copy	cp
move / rename	mv	type	cat
cd	cd	more < file	more file
md	mkdir	rd	rmdir
win	startx		

- DOS directory names are separated by a backslash (\). Unix directory names are separated by a forward slash (/).
- Unlike DOS, commands and their arguments *MUST* be separated by a space. For example, `cd /` doesn't work, but `cd /` does.

Online Documentation

Man pages Most documentation is in the form of manual (man) pages. Use the “man” command to access this documentation.

Info documents Almost all GNU software has documentation in the form of “info” files. Use the “info” command, or similar utility, to access this documentation.

HTML Many version of Linux and Unix store their online documentation in HTML. Therefore, it can be read using any available web browser.

Logging In:

host login:

Password:

Users:

Root — The system administration account. Root “owns” the entire system. *Do not do your daily work as root!!*

User account — Your normal “working” account. Each user has a separate account.

Logging Out:

exit or logout — Logout out of the system

shutdown -h now — Halt (turn off) the system (must be done as root)

shutdown -r now — Reboot the system (must be done as root)

The X Window System

Network Transparent — Programs running on remote hosts can be displayed on the local screen

Sever — The locally running program controlling the screen

Client — An X program or application; may be running on another machine

DISPLAY — Environment variable specifying the name of the display (e.g.,
`tim.mycompany.com:0`)

Window Manager — Program (client) that controls the layout of windows on the screen (twm, kwm, fvwm, windowmaker, afterstep, enlightenment)

Session Manager — Program (client) that controls the entire X windows session