

# Ian Darwin's One-Page Unix Handout

## <http://www.darwinsys.com/>

Unix is the best operating system for most purposes. OpenBSD is my favorite version.

The three main varieties of Unix are: Commercial (System V), Berkeley (BSD), and Linux. System V and Berkeley are descendants of the One True UNIX; Linux is a clone.

There are several commercial System V derivatives: Sun Solaris, HP/UX, IBM AIX, ...

There are four main BSD derivatives: OpenBSD, NetBSD, FreeBSD and MacOS.

OpenBSD is free; best known for security and code correctness: <http://www.openbsd.org/>.

MacOS and Solaris are the largest-volume commercial Unix systems.

Solaris is 99% open source; MacOS open sources parts of their kernel and userland but none of the famous Mac User Interface stuff.

There are too many Linux distributions to list: KUbuntu (KDE Ubuntu) is my current favorite.

Most of this is *free software*. If you use freeware and find it useful, please consider *making a donation to the organization* (only MacOS, Solaris and Ubuntu have guaranteed funding).

### Some web sites you should know about:

[www.darwinsys.com/](http://www.darwinsys.com/) - my web site

[www.darwinsys.com/openbsd/unixResources.html](http://www.darwinsys.com/openbsd/unixResources.html) - longer, more complete version of this

[www.openbsd.org/](http://www.openbsd.org/) - the OpenBSD main site

[www.ubuntulinux.org/](http://www.ubuntulinux.org/) - the Ubuntu main site (use the Kubuntu version)

[www.opengroup.org/](http://www.opengroup.org/) - the Open Group (owns the UNIX trade mark, the POSIX standard...)

[www.usenix.org/](http://www.usenix.org/) - the technical association of UNIX/Linux users

[www.kde.org/](http://www.kde.org/) - the K Desktop Environment - very comprehensive

[www.openoffice.org/](http://www.openoffice.org/) - complete, free, compatible office suite

[www.asterisk.org/](http://www.asterisk.org/) - complete, free, full-function "PBX" (telephone system) for UNIX

[www.openmoko.org/](http://www.openmoko.org/) - complete free Linux- cell phone system (hardware at [openmoko.com](http://openmoko.com))

Mozilla.org: Thunderbird email, Firefox browser (see also the book: *Don't Click on the Blue E*)

Graphics: OpenClipArt.org, Gimp, Scribus,

Open Source repositories: [sourceforge.net](http://sourceforge.net), [codehaus.org](http://codehaus.org), [dev.java.net](http://dev.java.net), [fsf.org](http://fsf.org), more...

### Languages:

Java - <http://java.sun.com/>; Groovy (scripting for Java) <http://groovy.codehaus.org/>

Perl - <http://www.perl.com/>

Others: C/C++, Python; Tcl/TK, Ruby, Smalltalk, you name it...

### Security:

[www.sans.org](http://www.sans.org) - very commercial but gives useful alerts via free email list

ClamAV - Clam Anti Virus - free, open source, free updates.

SSH - never use telnet or rlogin over the public internet, use SSH instead (see

[www.openssh.org](http://www.openssh.org) if you don't have SSH in your UNIX system.

### Web Sites:

Do not build web sites using the CGI tools shown in the final exercise - it is too slow and too labor-intensive. Use one of the following:

Java + (Spring or Struts) + (Tomcat or JBoss or Geronimo)

Ruby + Rails + Apache

Perl + Apache MOD\_PERL + (Mason or Catalyst)

### Books:

In addition to O'Reilly (<http://www.oreilly.com/>), ChaptersIndigo.ca and Amazon.ca, check:

The *Unix CD Bookshelf* (has *Unix Power Tools*, *sed & awk*, and *Perl* books)

### Local User Groups:

NewtLUG ([newtlug.linux.ca](http://newtlug.linux.ca)) , GTABUG ([gtabug.ca](http://gtabug.ca)), TAUG ([taug.ca](http://taug.ca)), Java Users ([jug.org](http://jug.org))

### Toronto Learning Tree Education Centre - Local "Buying Computer Stuff" Info:

Commercial: Best Buy (next door in Ryerson), Future Shop (~2 blocks North on Yonge)

College St. west of Spadina - two dozen discount computer shops

Other computer discount places listed in **Hub**, free in gray newsboxes.

**Books:** Two ChaptersIndigo stores 5-10 minutes on foot from the Learning Tree Education Centre: 1) Go south in the mall, upper level; 2) World's Biggest (Go north to Edward St).