

# Ian Darwin's One-Page Unix Handout

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

Unix is the best general-purpose operating system. 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 their kernel but not the famous Mac User Interface.

There are too many Linux distributions to list: Kubuntu (KDE Ubuntu, [www.kubuntu.org/](http://www.kubuntu.org/)) is my 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 version of this

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

[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)

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

Graphics: OpenClipArt.org, Gimp, Inkscape, Scribus,

Open Source repositories: sourceforge.net, codehaus.org, dev.java.net, fsf.org, more...

### Languages:

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

Python - <http://www.python.org/>

Others: C/C++, Perl, Tcl/TK, Ruby, Smalltalk, Fortran, COBOL, 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; see <http://www.openssh.org/>

### Web Sites:

Do not build web sites using the CGI tools shown in the final exercise - too slow and too labor-intensive.

Use: Java + (Seam or Spring or Struts) + (Tomcat or JBoss AS or Geronimo)

Python + (Django or Zope or others); Ruby + Rails + Apache; Perl + Apache + Mason ...

### 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)

### Toronto 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).