

Ian Darwin's One-Page Unix Handout

<https://darwinsys.com/>

*Nix (Unix/Linux) is the best operating system for most purposes. OpenBSD is my favorite.

The three main varieties of *nix 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: <https://openbsd.org/>.

MacOS is probably the largest-volume commercial Unix system *per se*.

Android has a Linux kernel, iOS has a BSD-based kernel: so *everyone has *nix in their pocket*.

MacOS open sources parts of their kernel and userland but none of the famous Mac UI stuff.

There are too many Linux distributions to list: Ubuntu and Fedora are 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 may want know about:

darwinsys.com/ - my web site

darwinsys.com/openbsd/unixResources.html - longer, more complete version of this

www.openbsd.org/ - the OpenBSD main site

ubuntulinux.org/ - the Ubuntu main site (see also the Kubuntu version)

opengroup.org/ - the Open Group (owns the UNIX trade mark, the POSIX standard...)

usenix.org/ - the technical association of UNIX/Linux users

kde.org/ - the K Desktop Environment - very comprehensive

libreoffice.org/ - complete, free, compatible office suite

asterisk.org/ - complete, free, full-function "PBX" (telephone system) for UNIX

www.android.com/ - complete free Linux- cell phone system (devices from vendors & carriers)

<https://mozilla.org>: Thunderbird email, Firefox browser (see book: *Don't Click on the Blue E*)

Graphics: OpenClipArt.org, Gimp, Scribus,

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

Languages:

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

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

Others: R, C/C++, Perl; Tcl/TK, Ruby, Smalltalk, Haskell, you name it...

Security:

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

<https://openssh.org> if you don't have SSH in your system.

Web Sites:

Never build web sites using the CGI shown in the 396 final exercise - too slow, labor-intensive and insecure!

Java + (JSF/Spring MVC/Struts2) + (Tomcat or JBoss or Jakarta EE) - or -

Python + Django - or - Apache httpd + either Ruby + Rails - or - Perl + (Mason or Catalyst)

Books:

In addition to O'Reilly (<https://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) , GTABUG (gtabug.ca), TAUG (taug.ca), Java Users (jug.org)

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

Commercial: Best Buy (Yonge & Dundas)

College St. west of Spadina - a dozen or so discount computer shops

Books: ChaptersIndigo stores 10-15 minutes from the Learning Tree Education Centre: 1) Go north to the Eaton Center mall, upper level near the middle.