

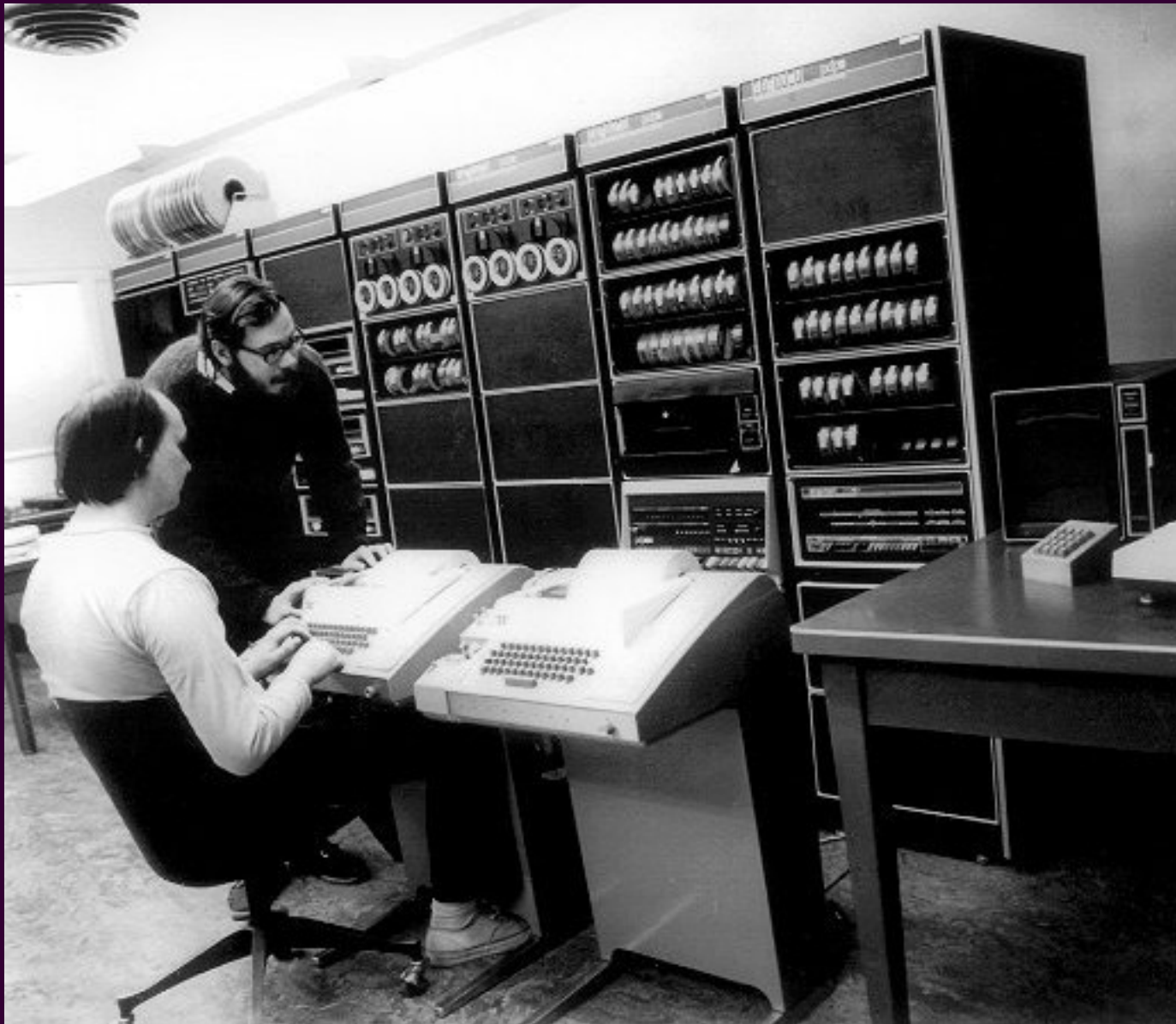
```
$ date
```

```
Dom Jan 29 15:00:00 BRST 2017
```

```
$ cd coding_rights/workshops/
```

```
$ ./clit.sh
```

UNIX



Ken Thompson and Dennis Ritchie work on Unix at a PDP-11/20 at Bell Labs (1972)

<http://www.computerhistory.org/revolution/minicomputers/11/366>

THE
UNIX
PROGRAMMING
ENVIRONMENT

Brian W. Kernighan
Rob Pike

PRENTICE HALL SOFTWARE SERIES

SECOND EDITION

THE

C



PROGRAMMING
LANGUAGE

BRIAN W. KERNIGHAN
DENNIS M. RITCHIE

PRENTICE HALL SOFTWARE SERIES



Unicode

AT&T UNIX PC (1985)



DATA 2:

Thu Jan 1, 1:07 am



jeffry 362 > cd /bin

jeffry 363 > ls

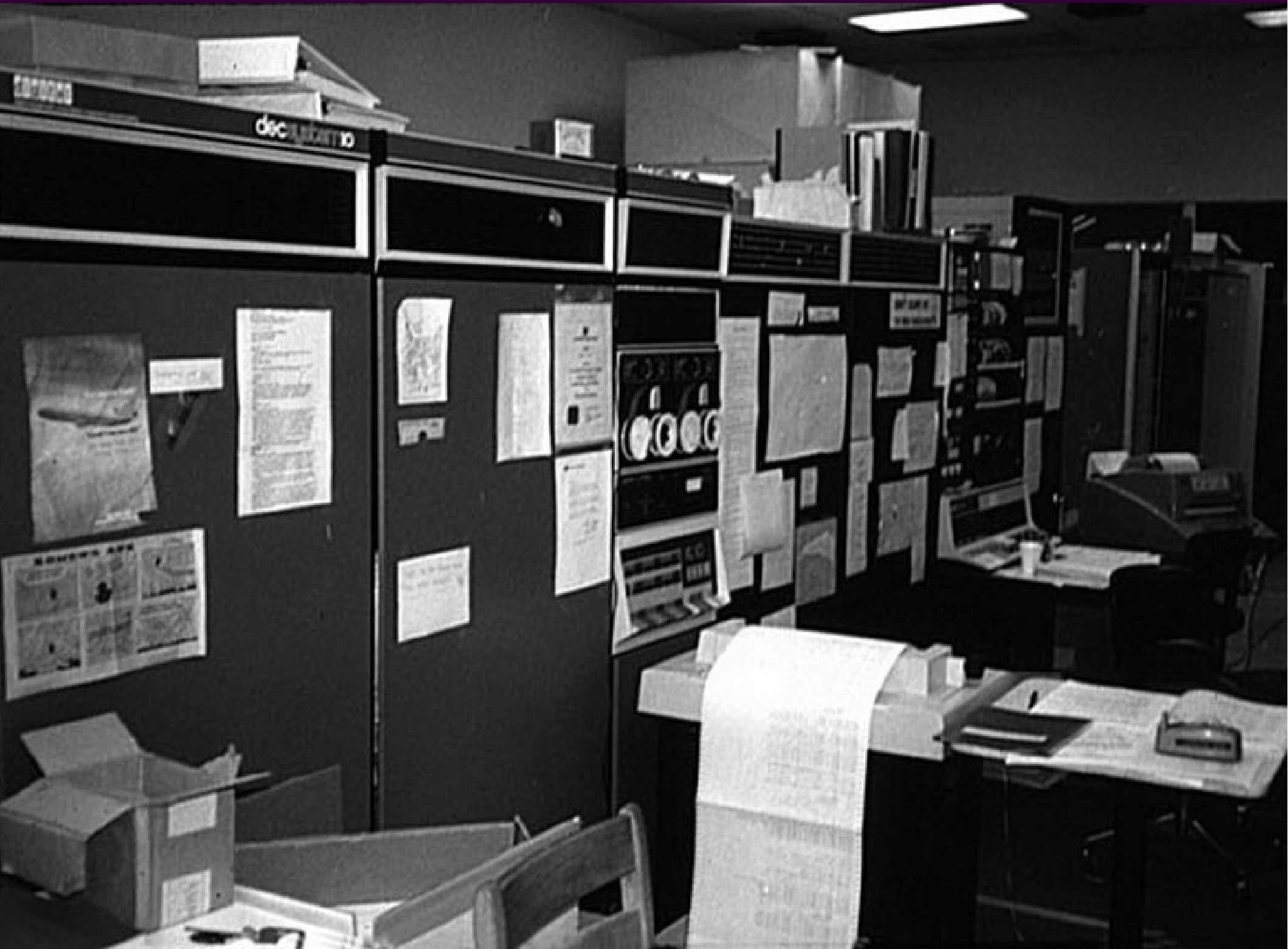
basename	echo	ls	red	telinit
cat	ed	mail	rm	time
chgrp	env	nc68k	rmail	touch
chmod	expr	noog	rudir	true
chown	false	mkdir	rm	tty
clear	fgrep	old	sed	u370
cmp	file	mv	sh	u3b
convert	find	newgrp	size	uname
cp	grep	nice	sleep	vax
cpio	head	nohup	sort	vi
date	kill	od	stty	nc
dd	ksh	passwd	su	nho
df	ld	pdpl1	sun	unlessneg
diff	linc	pr	sync	write
dirname	ln	ps	tail	
du	login	pwd	tee	

jeffry 364 > exit

UNIX PHILOSOPHY & HACKERS

More of the Unix philosophy was implied not by what these elders said but by what they did and the example Unix itself set. Looking at the whole, we can abstract the following ideas:

1. Rule of Modularity: Write simple parts connected by clean interfaces.
2. Rule of Clarity: Clarity is better than cleverness.
3. Rule of Composition: Design programs to be connected to other programs.
4. Rule of Separation: Separate policy from mechanism; separate interfaces from engines.
5. Rule of Simplicity: Design for simplicity; add complexity only where you must.
6. Rule of Parsimony: Write a big program only when it is clear by demonstration that nothing else will do.
7. Rule of Transparency: Design for visibility to make inspection and debugging easier.
8. Rule of Robustness: Robustness is the child of transparency and simplicity.
9. Rule of Representation: Fold knowledge into data so program logic can be stupid and robust.
10. Rule of Least Surprise: In interface design, always do the least surprising thing.
11. Rule of Silence: When a program has nothing surprising to say, it should say nothing.
12. Rule of Repair: When you must fail, fail noisily and as soon as possible.
13. Rule of Economy: Programmer time is expensive; conserve it in preference to machine time.
14. Rule of Generation: Avoid hand-hacking; write programs to write programs when you can.
15. Rule of Optimization: Prototype before polishing. Get it working before you optimize it.
16. Rule of Diversity: Distrust all claims for "one true way".
17. Rule of Extensibility: Design for the future, because it will be here sooner than you think.



GNU IS

NOT

UNIX

From CSvax:pur-ee:inuxc!ixn5c!ihnp4!houxm!mhuxi!eagle!mit-vax!mit-eddie!RMS@MIT-0Z
From: RMS%MIT-0Z@mit-eddie
Newsgroups: net.unix-wizards,net.usoft
Subject: new UNIX implementation
Date: Tue, 27-Sep-83 12:35:59 EST
Organization: MIT AI Lab, Cambridge, MA

Free Unix!

Starting this Thanksgiving I am going to write a complete Unix-compatible software system called GNU (for Gnu's Not Unix), and give it away free(1) to everyone who can use it. Contributions of time, money, programs and equipment are greatly needed.

To begin with, GNU will be a kernel plus all the utilities needed to write and run C programs: editor, shell, C compiler, linker, assembler, and a few other things. After this we will add a text formatter, a YACC, an Empire game, a spreadsheet, and hundreds of other things. We hope to supply, eventually, everything useful that normally comes with a Unix system, and anything else useful, including on-line and hardcopy documentation.

GNU will be able to run Unix programs, but will not be identical to Unix. We will make all improvements that are convenient, based on our experience with other operating systems. In particular, we plan to have longer filenames, file version numbers, a crashproof file system, filename completion perhaps, terminal-independent display support, and eventually a Lisp-based window system through which several Lisp programs and ordinary Unix programs can share a screen. Both C and Lisp will be available as system programming languages. We will have network software based on MIT's chaosnet protocol, far superior to UUCP. We may also have something compatible with UUCP.

FREE
SOFTWARE

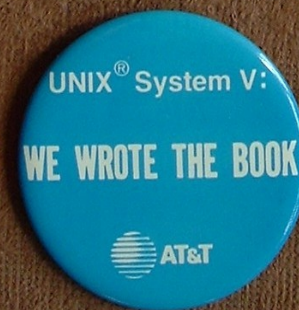
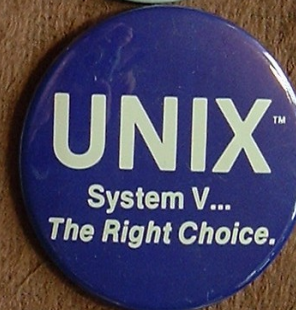
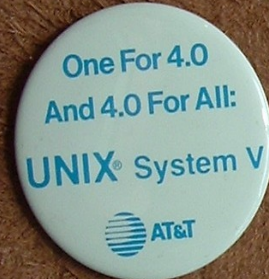


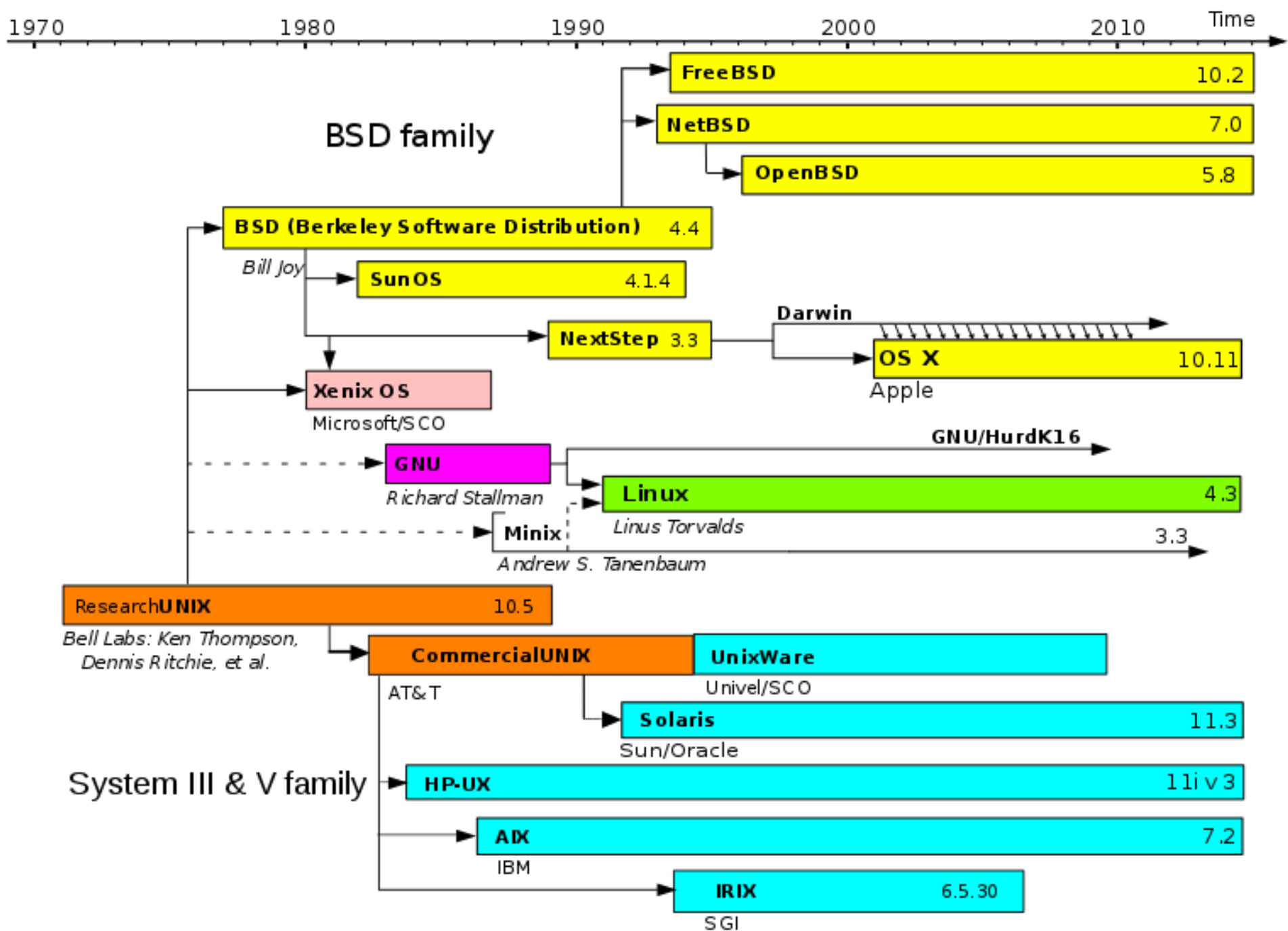
WHAT YOU'RE REFERRING TO AS
LINUX

IS IN FACT, GNU/LINUX, OR AS I'VE RECENTLY TAKEN TO CALLING IT, GNU PLUS LINUX. LINUX IS NOT AN OPERATING SYSTEM UNTO ITSELF, BUT RATHER ANOTHER FREE COMPONENT OF A FULLY FUNCTIONING GNU SYSTEM MADE USEFUL BY THE GNU CORELIBS, SHELL UTILITIES AND VITAL SYSTEM COMPONENTS COMPRISING A FULL OS AS DEFINED BY POSIX. generator.net

WHAT YOU'RE REFERRING TO AS
LINUX IS IN FACT GNU/LINUX

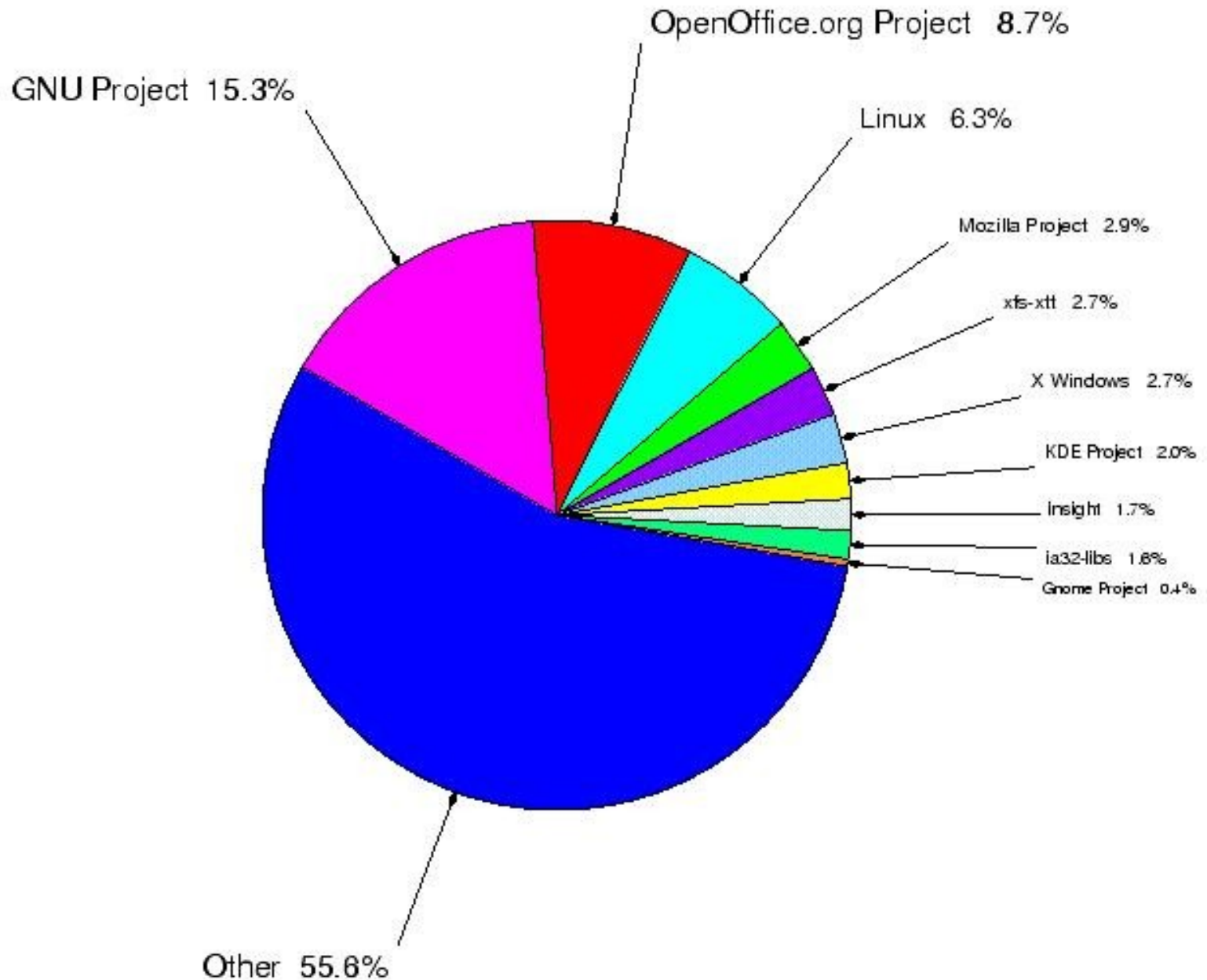
OR AS I'VE RECENTLY TAKEN TO
CALLING IT, GNU PLUS LINUX





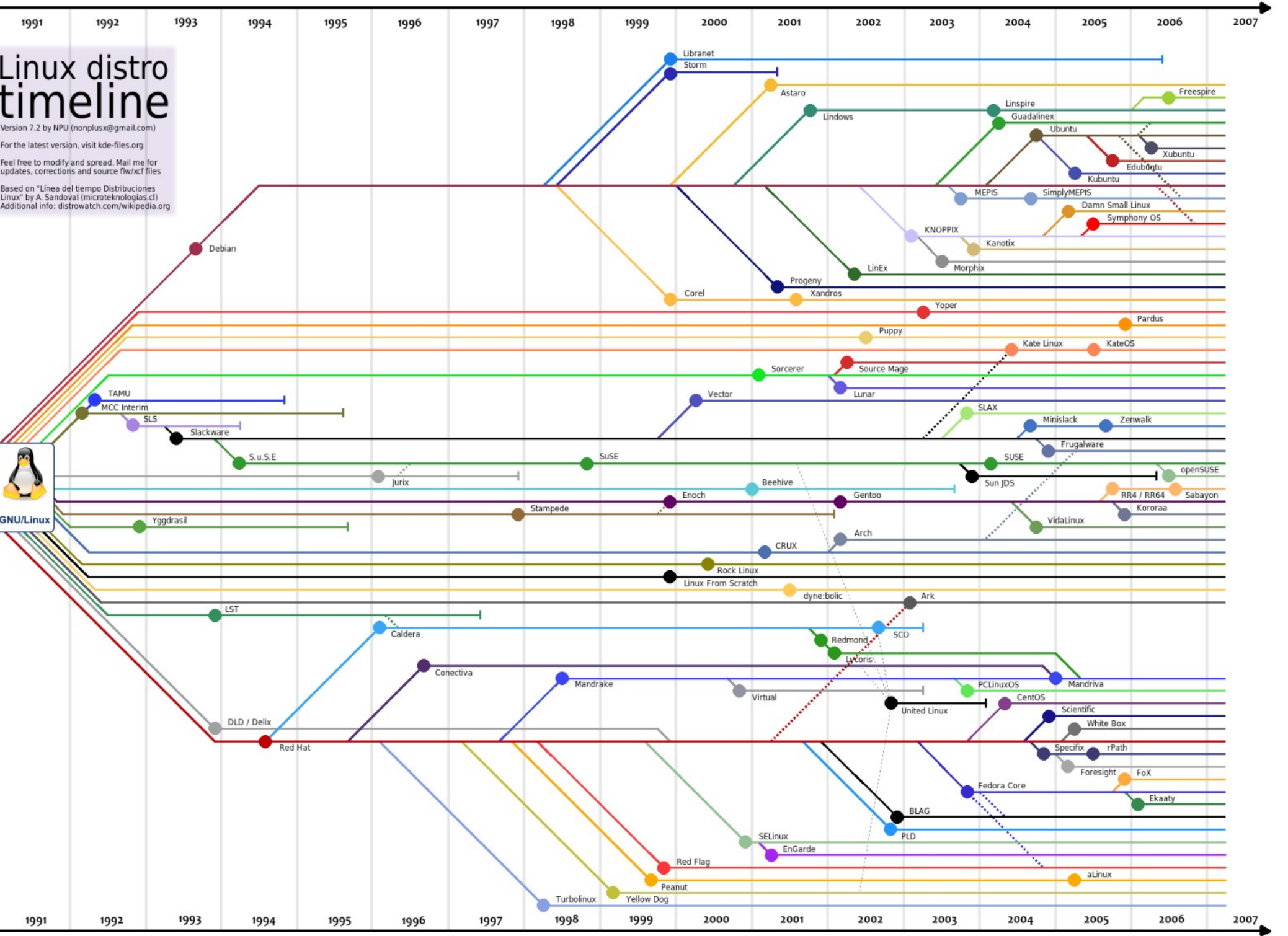
https://en.wikipedia.org/wiki/Unix_wars

Composition of Debian GNU/Linux 3.1 "sarge"



Total: 9.053 US\$billion (Year 2000)

Data from Libre Software Engineering (<http://libresoft.urjc.es/Results>)



Linux distro timeline

Version 7.2 by NPU (nonplusx@gmail.com)

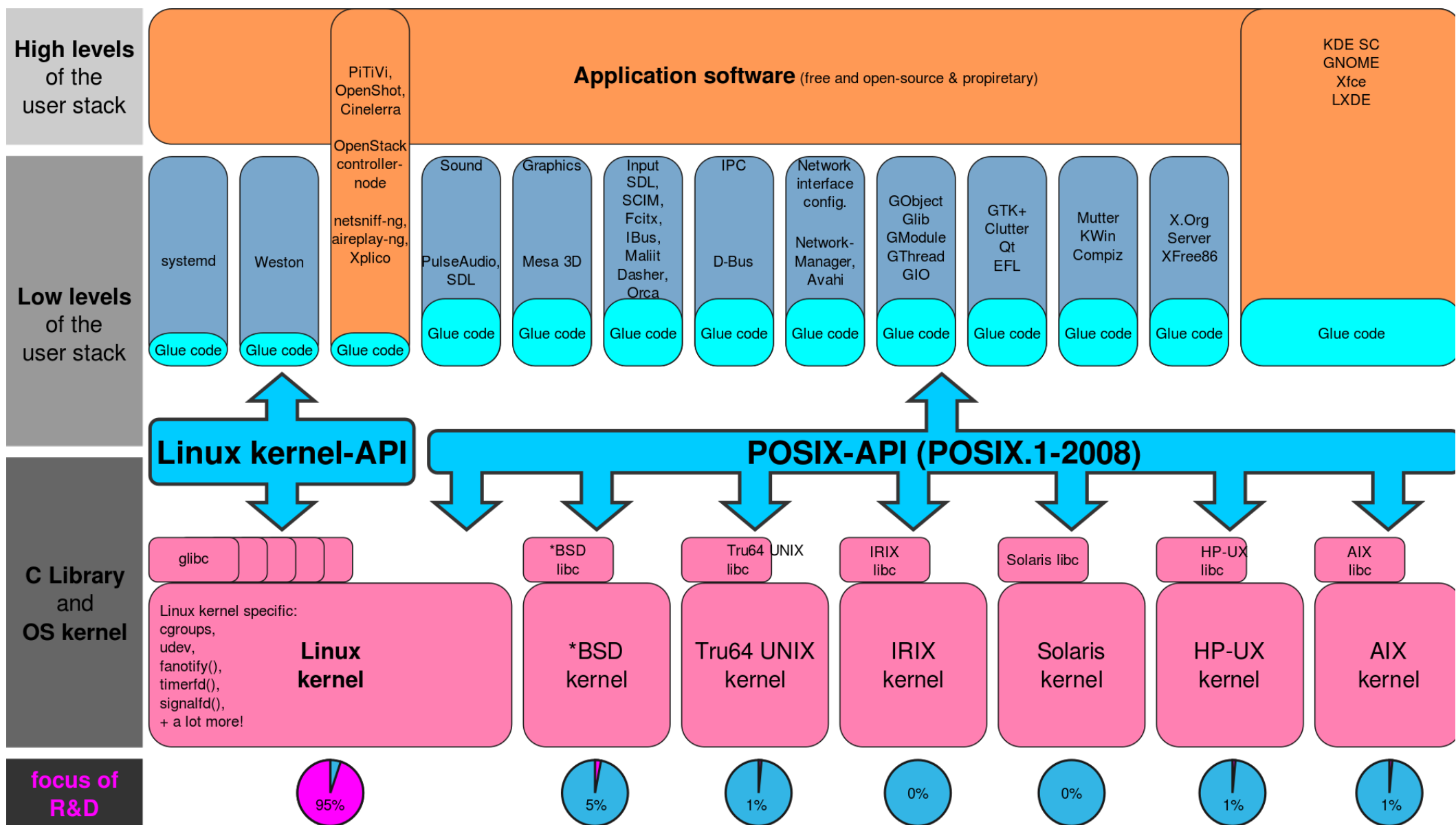
For the latest version, visit kde-files.org

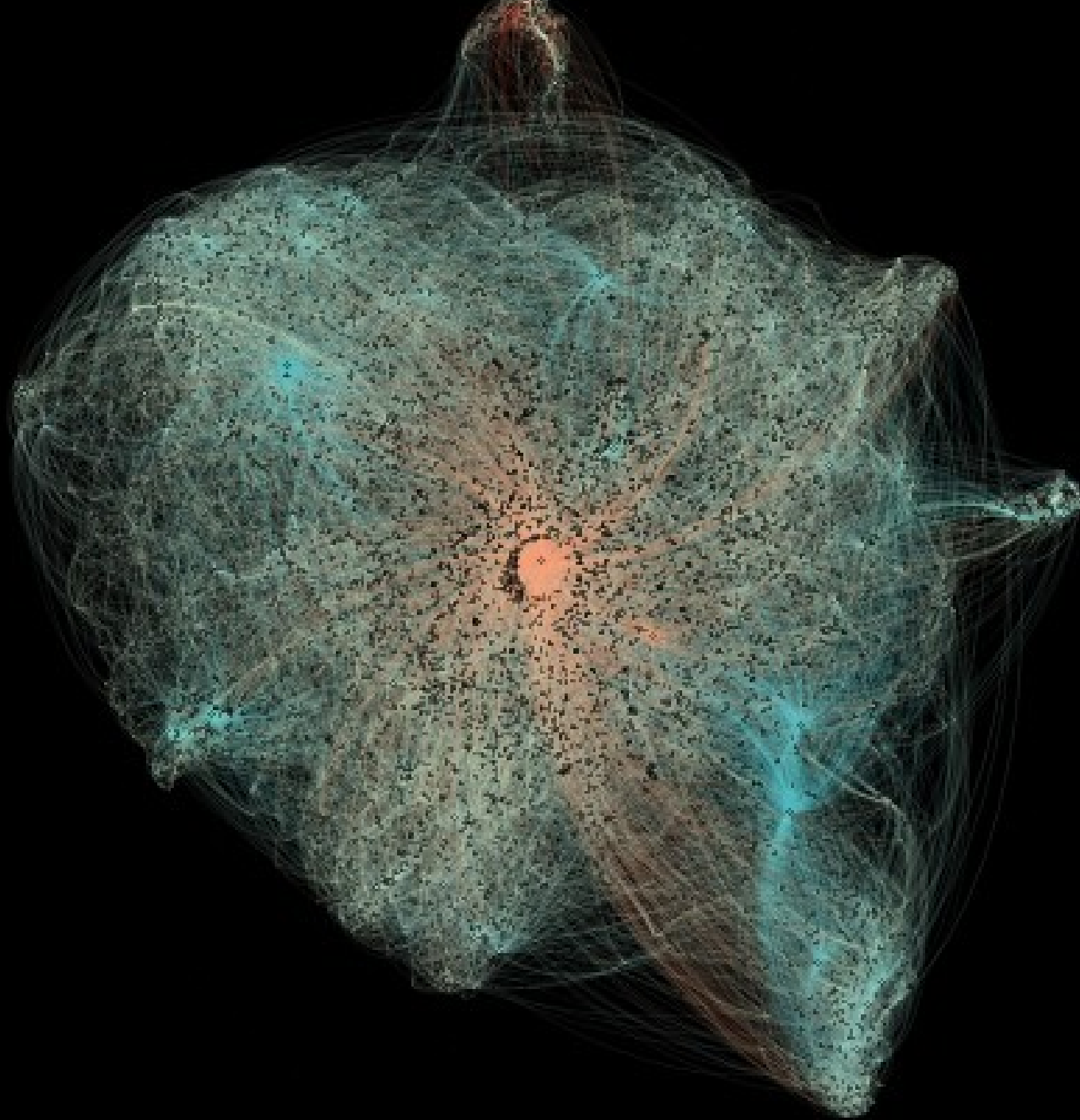
Feel free to modify and spread. Mail me for updates, corrections and source fw/xcf files

Based on "Línea del tiempo Distribuciones Linux" by A. Sandoval (microtecnologias.cl)

Additional info: distrowatch.com/wikipedia.org

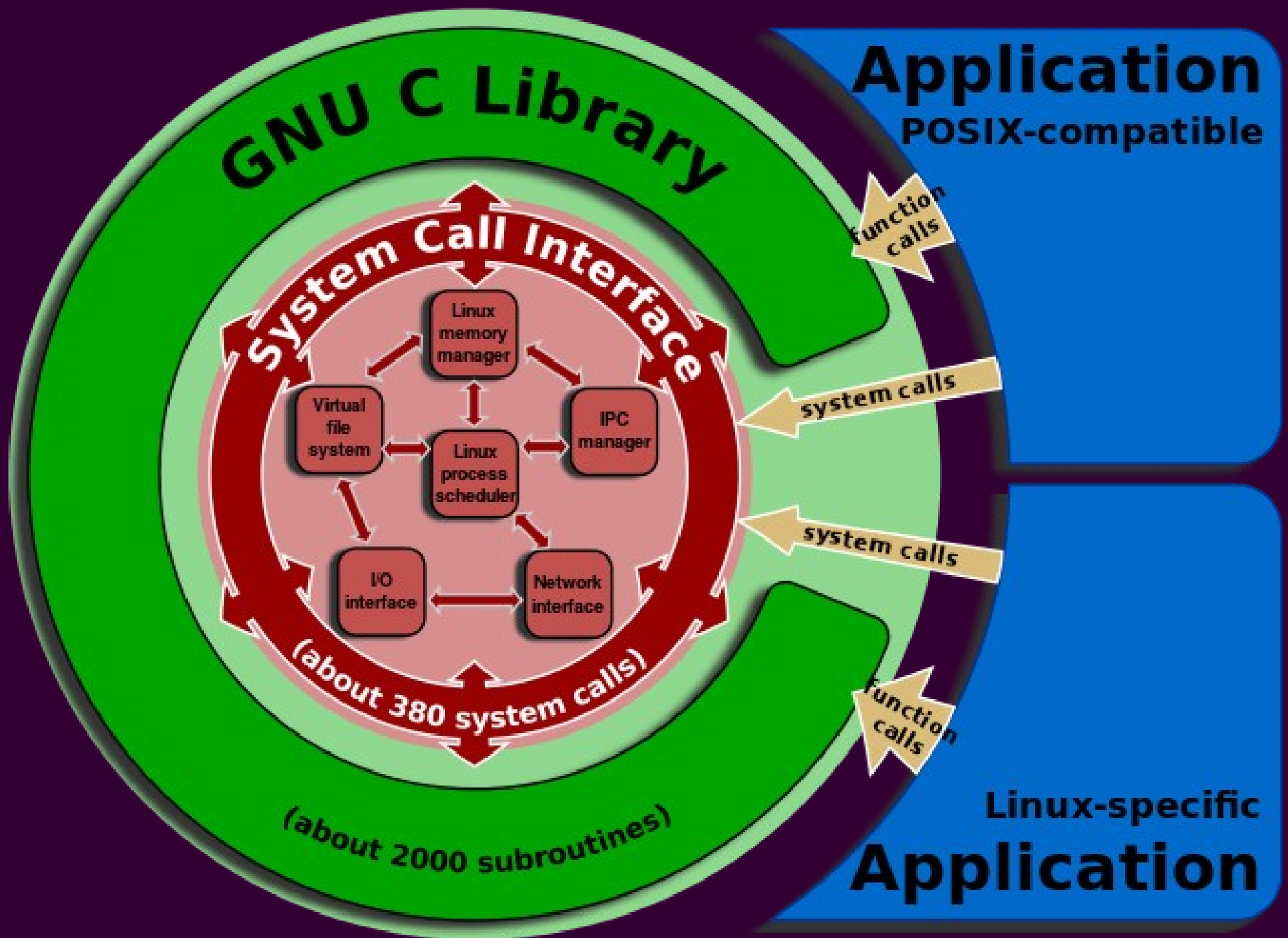






<https://tech-foo.blogspot.com.br/2013/01/visualising-ubuntu-package-repository.html>

libc6



glibc 2.2.4 Release Notes

Aug 16, 2001, 14 :55 UTC (73 Talkback[s]) (69471 reads)

To: GNU libc testers
Subject: glibc 2.2.4
From: Ulrich Drepper <drepper at redhat dot com>
Date: 15 Aug 2001 22:09:23 -0700

Release 2.2.4 of the GNU C library is now

<ftp://sources.redhat.com/pub/glibc>

and (hopefully soon)

<ftp://ftp.gnu.org/pub/gnu/glibc>

and all the mirror sites around the globe

The new files are

[glibc-2.2.4.tar.bz/2](#)
[glibc-linuxthreads-2.2.4.tar.bz/2](#)
[glibc-2.2.3-2.2.4.diff.bz/2](#)

and for those following the test releases

[glibc-2.2.4pre3-2.2.4.diff.bz/2](#)

The patch from 2.2.3 is pretty big but a changes. The code which did changed main fixed. There are only a few new features

And now for some not so nice things.

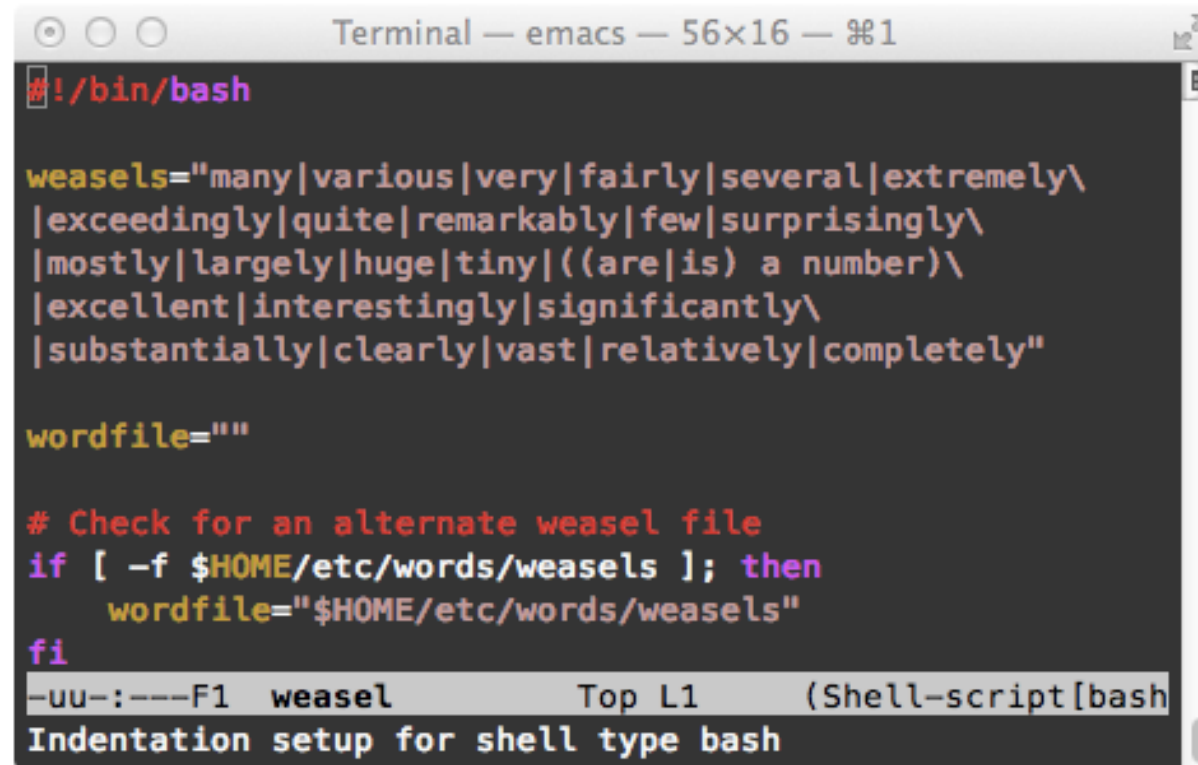
Stallman recently tried what I would call a hostile takeover of the glibc development. He tried to conspire behind my back and persuade the other main developers to take control so that in the end he is in control and can dictate whatever pleases him. This attempt failed but he kept on pressuring people everywhere and it got really ugly. In the end I agreed to the creation of a so-called "steering committee" (SC). The SC is different from the SC in projects like gcc in that it does not make decisions. On this front nothing changed. The only difference is that Stallman now has no right to complain anymore since the SC he wanted acknowledged the status quo. I hope he will now shut up forever.

The morale of this is that people will hopefully realize what a control freak and raging manic Stallman is. Don't trust him. As soon as something isn't in line with his view he'll stab you in the back. *NEVER* voluntarily put a project you work on under the GNU umbrella since this means in Stallman's opinion that he has the right to make decisions for the project.

The glibc situation is even more frightening if one realizes the story behind it. When I started porting glibc 1.09 to Linux (which eventually became glibc 2.0) Stallman threatened me and tried to force me to contribute rather to the work on the Hurd. Work on Linux would be counter-productive to the Free Software course. Then came, what would be called embrace-and-extend if performed by the Evil of the North-West, and his claim for everything which lead to Linux's success.

As an interactive shell, bash is a terse language for initiating and directing computations.

As a scripting language, bash is a domain-specific language for manipulating and composing processes and files.

A screenshot of a terminal window titled "Terminal — emacs — 56x16 — %1". The terminal shows a bash script snippet with syntax highlighting. The script defines a variable 'weasels' with a list of adverbs, sets 'wordfile' to an empty string, and checks for an alternate weasel file in the user's home directory. The terminal also shows a status bar at the bottom with the text: "-uu-:---F1 weasel Top L1 (Shell-script[bash Indentation setup for shell type bash".

```
#!/bin/bash

weasels="many|various|very|fairly|several|extremely\
|exceedingly|quite|remarkably|few|surprisingly\
|mostly|largely|huge|tiny|((are|is) a number)\
|excellent|interestingly|significantly\
|substantially|clearly|vast|relatively|completely"

wordfile=""

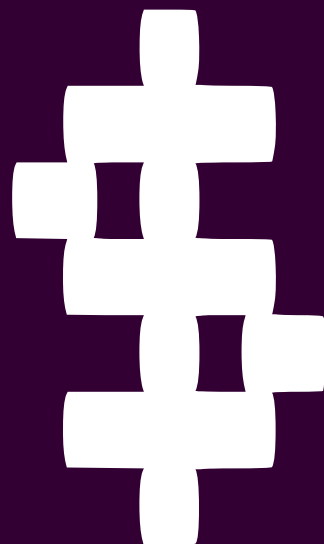
# Check for an alternate weasel file
if [ -f $HOME/etc/words/weasels ]; then
    wordfile="$HOME/etc/words/weasels"
fi

--uu-:---F1 weasel Top L1 (Shell-script[bash
Indentation setup for shell type bash
```

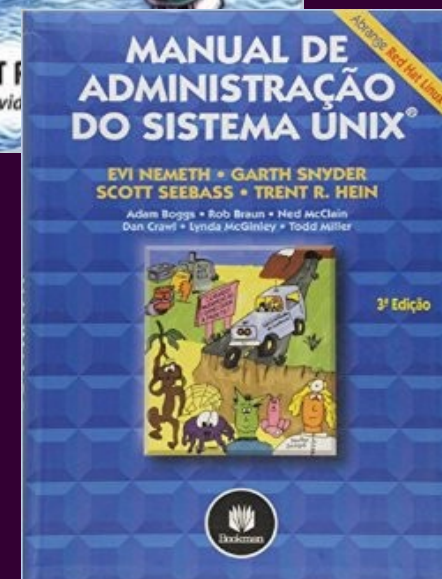
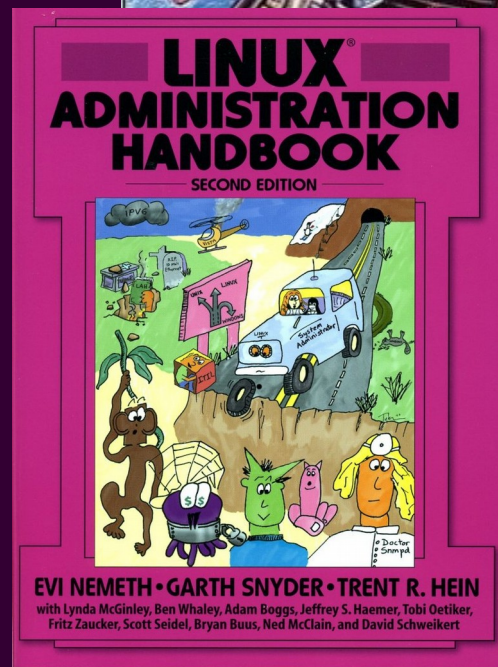
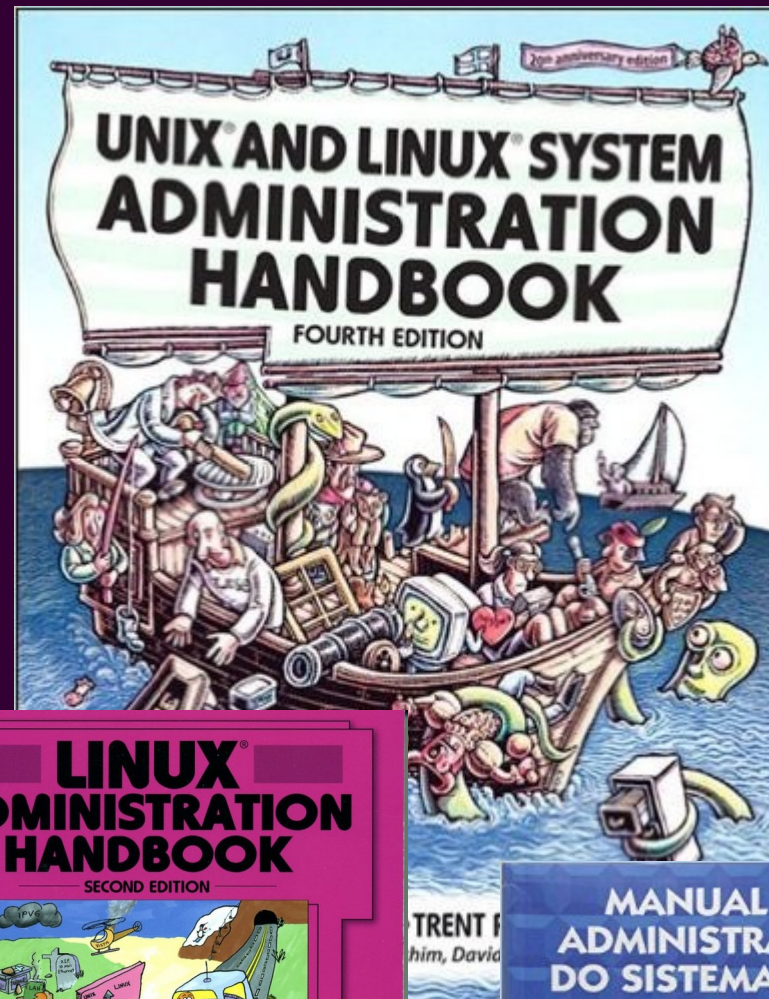
Bash is baroque. Bash is brittle. Bash is indispensable.

Bash was not designed.

It's not fair to say that bash has evolved either: it retains and utilizes all of its vestigial appendages.



Evi Nemeth



“As a case in point, the ps [command] used by Linux is a trisexual and hermaphroditic version that understands multiple option sets and uses an environment variable to tell it what universe it’s living in.”

– Evi Nemeth, Unix and Linux System Administration Handbook



Software

Godmother of Unix admins Evi Nemeth presumed lost at sea

'Sails shredded last night,' last message from doomed ship



5 Jul 2013 at 23:17, [Iain Thomson](#)



Obit The New Zealand authorities have formally called off the search for the sailing cruiser *Nina*, and say its seven-person crew, which includes Evi Nemeth who for the last 30 years has written the system administration handbooks for Unix and Linux, is now presumed lost at sea.

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$$= (0)(0)(-1) = 0$$