

dspinellis.github.io/unix-history-man/



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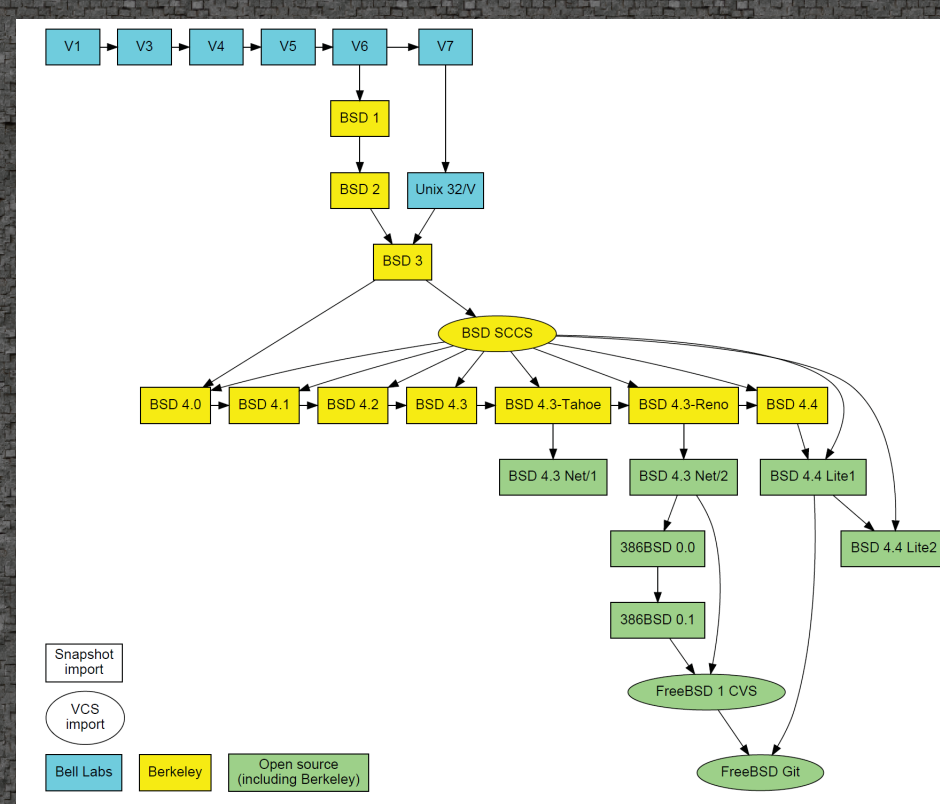
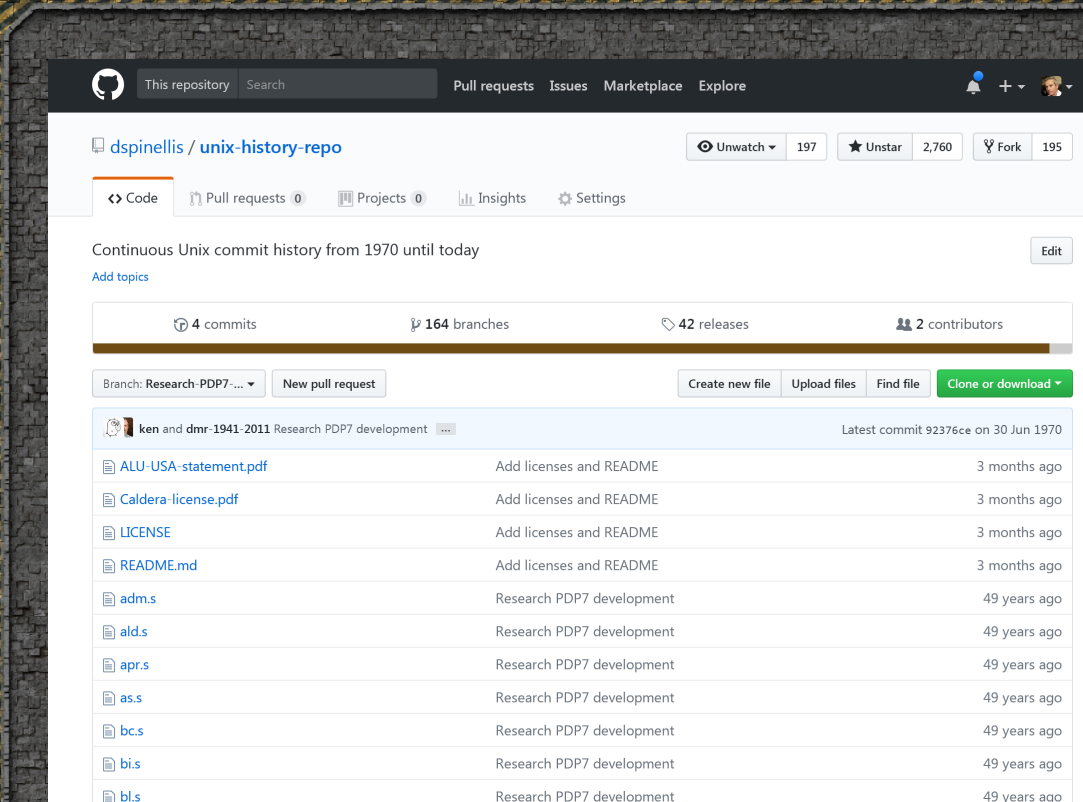
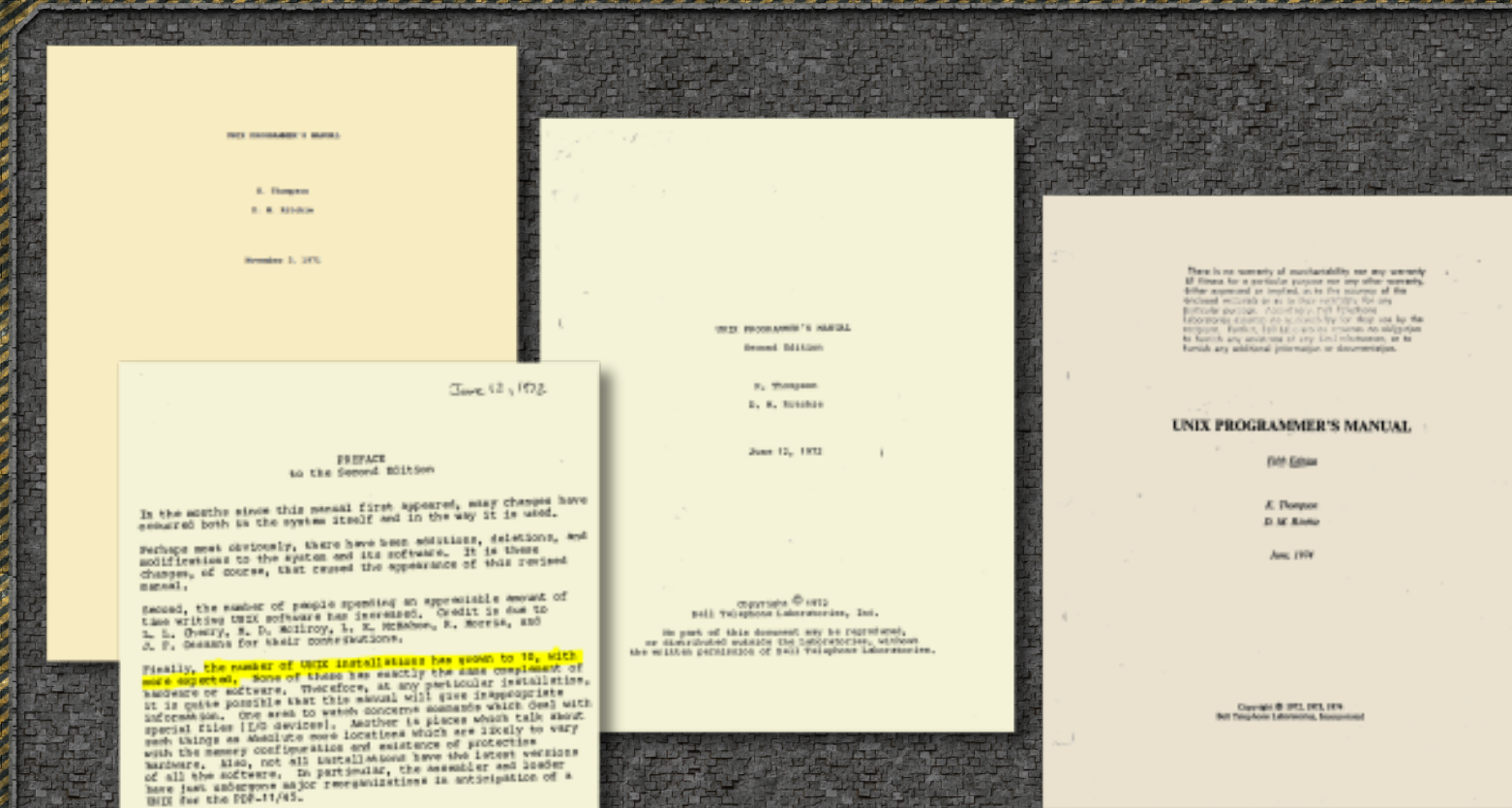
Documented Unix Facilities Over 48 Years

TL;DR: 405 726 RECORDS,
IDENTIFYING THE EVOLUTION OF
15 596 UNIX FACILITIES OVER 93
RELEASES IN 48 YEARS. 193 781
UNIQUE URIS POINT TO 48 250
DISTINCT MANUAL PAGES

INPUT

SOME MANUAL PAGES ARE ONLY AVAILABLE IN PRINTED FORM. THE MACHINE-READABLE SOURCE CODE HAS BEEN LOST, PROBABLY FOREVER.

**MOST MANUAL PAGES ARE AVAILABLE
AS TROFF SOURCE CODE IN THE UNIX
HISTORY REPOSITORY**



PROCESSING

THE CONTENTS OF PRINTED MANUAL PAGES WERE ENTERED BY COPYING, EDITING, AND CORRECTING OPTICAL CHARACTER RECOGNITION TEXT. FOR EXAMPLE, CORRECTIONS INVOLVED CHANGING THE NUMBER 1 WITH THE LETTER L.

DATA FROM LATE BSD RELEASES, 386BSD, AND FREEBSD RELEASES WERE OBTAINED BY LOOKING FOR TROFF MANUAL PAGE FILES AND FILTERING OUT NOISE WITH A CUSTOM SHELL SCRIPT

DATA FROM EARLY RELEASE SNAPSHOTS WERE EXTRACTED WITH CUSTOM SHELL SCRIPTS AND THEN HAND-EDITED. THIS PROCESS IS DOCUMENTED IN THE COMMIT MESSAGES OF THE CORRESPONDING DATA FILES

[illegible]

```

commit d9144014291b0a93738a30132c1c6503857
Author: dionidis Spinellis <dd@dsbaue.gr>
Date: Thu Mar 15 15:45:06 2018 +0200

    Separate section from name in hand-crafted files

    Implemented by running:
    sed -i -s 'man/[1-9][a-z]*(\.\/)\([[:punct:]]\|\/\|2\|3\|4\)' [F83] Research-V0

commit 1a5c8e59750904da15933f74d1d9da0f07
Author: dionidis Spinellis <dd@dsbaue.gr>
Date: Wed Mar 1 18:33:13 2017 +0200

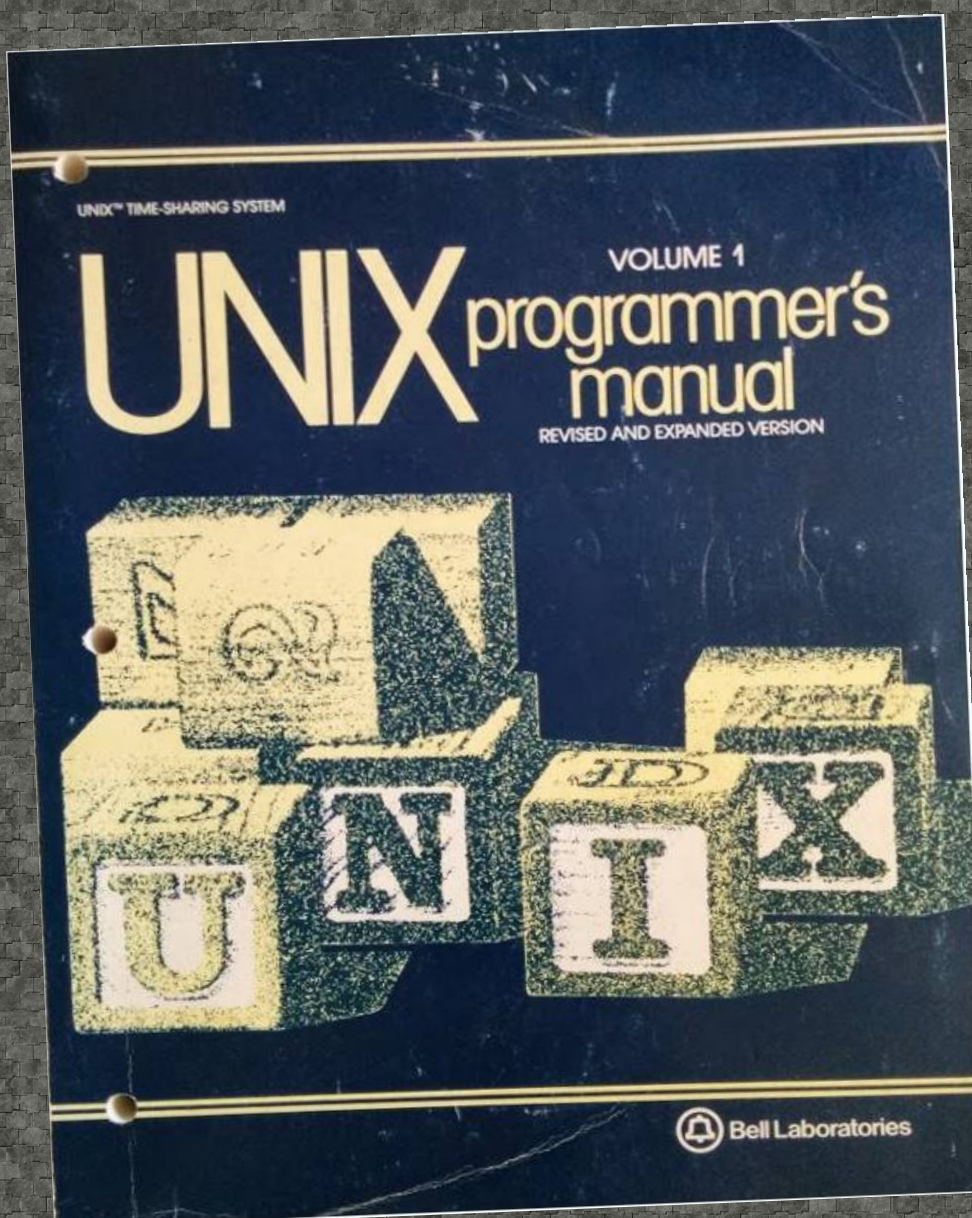
    Remove non-man page entries

commit 3d2ca0b235aac42ff94d48c5130870a025f6d8
Author: dionidis Spinellis <dd@dsbaue.gr>
Date: Sun Feb 26 22:21:10 2017 +0200

    Add BSD-4

    git ls-tree --name-only -r BSD-4-usr/man | grep '^man/[1-9]' | sort -

```



THE UNIX MANUAL SECTIONS AND THE PROVIDED RECORDS

Section	Contents	Elements	URLs
1	User commands	1494	34 836
2	System calls	457	12 472
3	C library functions	8 643	70 931
4	Devices and special files	1 224	25 111
5	File formats and conventions	315	9 208
6	Games et. al.	187	2 322
7	Miscellanea	106	1 779
8	System maintenance procedures and commands	995	26 990
9	System kernel interfaces	2 173	14 621

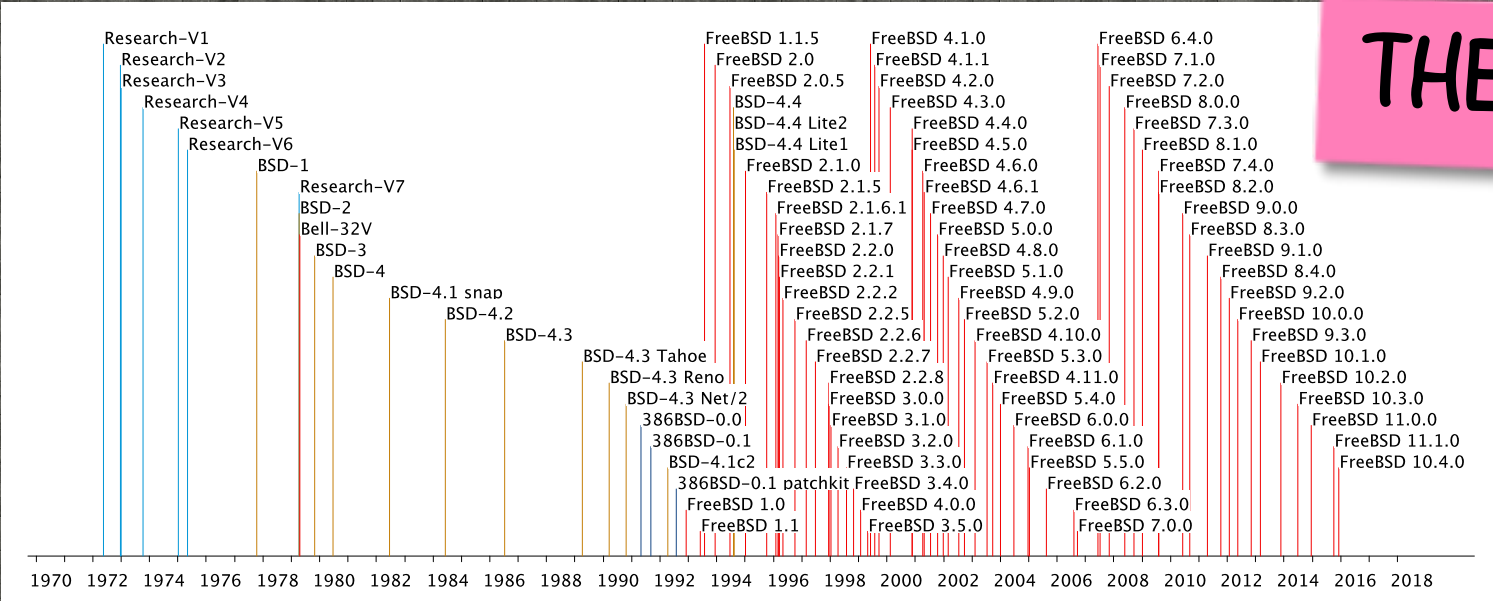
93 FILES, ONE PER RELEASE

FreeSD-0.0	FreeSD-0.1	FreeSD-0.1-patch	Ref-32v
BSD-1	BSD-2	BSD-3	BSD-4
BSD-4.1_snop	BSD-4.1_c2	BSD-4.2	BSD-4.3
BSD-4.3_Net.2	BSD-4.3_Reno	BSD-4.3_Tahoe	BSD-4.4
BSD-4.4_Link1	BSD-4.4_Link2	FreeSD-1.0	FreeSD-1.1
FreeSD-1.1.5	FreeSD-2.0	FreeSD-2.0.5	FreeSD-2.0.6
FreeSD-2.1.5	FreeSD-2.1.4.1	FreeSD-2.1.7	FreeSD-2.2.0
FreeSD-2.2.1	FreeSD-2.2.2	FreeSD-2.2.5	FreeSD-2.2.6
FreeSD-2.2.7	FreeSD-2.2.8	FreeSD-3.0	FreeSD-3.1
FreeSD-3.2.0	FreeSD-3.3.0	FreeSD-3.4.0	FreeSD-3.5.0
FreeSD-4.0.0	FreeSD-4.1.0	FreeSD-4.1.1	FreeSD-4.2.0
FreeSD-4.3.0	FreeSD-4.4.0	FreeSD-4.5.0	FreeSD-4.6.0
FreeSD-4.6.1	FreeSD-4.7.0	FreeSD-4.8.0	FreeSD-4.9.0
FreeSD-4.10.0	FreeSD-4.11.0	FreeSD-5.0	FreeSD-5.1
FreeSD-5.2.0	FreeSD-5.3.0	FreeSD-5.4.0	FreeSD-5.5.0
FreeSD-6.0.0	FreeSD-6.1.0	FreeSD-6.2.0	FreeSD-6.3.0
FreeSD-6.4.0	FreeSD-7.0.0	FreeSD-7.1.0	FreeSD-7.2.0
FreeSD-7.3.0	FreeSD-7.4.0	FreeSD-8.0.0	FreeSD-8.1.0
FreeSD-8.2.0	FreeSD-8.3.0	FreeSD-8.4.0	FreeSD-8.5.0
FreeSD-9.1.0	FreeSD-9.2.0	FreeSD-9.3.0	FreeSD-10.0
FreeSD-10.1.0	FreeSD-10.2.0	FreeSD-10.3.0	FreeSD-10.4
FreeSD-11.0.0	FreeSD-11.1.0	Research-V1	Research-V2
Research-V3	Research-V4	Research-V5	Research-V6
Research-V7	Research-V8		



EACH FILE CONTAINS RECORDS WITH THE FACILITY'S SECTION, ITS NAME, AND A URI ASSOCIATED WITH ITS SOURCE CODE. ADDING A PREFIX TO THE URI GIVES YOU A UNIX HISTORY REPOSITORY GITHUB URL TO FETCH OR VIEW THE CODE

THE DATA SET



DATA SET USES

Section	Name	URI
1	date	Research-V4/man/man1/date.1
2	open	Research-V3/man/man2/open.2
2	socket	BSD-4_2/usr/man/man2/socket.2
2	jail	FreeBSD-release/4.11.0/lib/libc/sys/jail.2
3s	fopen	Research-V7/usr/man/man3/fopen.3s
4	vga	386BSD-0.1-patchkit/usr/src/usr.sbin/keymap/lib/co.4
5	vgafont	386BSD-0.1-patchkit/usr/src/usr.sbin/keymap/lib/vgafont.5
6	tetris	BSD-4_4_Lite2/usr/src/games/tetris/tetris.6
c78		FreeBSD-release/9.0.0/share/man/man7/c99.7
8	dump	Research-V4/man/man8/dump.8
9	VFS	FreeBSD-release/2.2.0/share/man/man9/VFS.9

INTERACTIVE SCROLLABLE, SORTABLE, AND EXPANDABLE TIMELINES OF FACILITIES, LINKED TO THE MANUAL PAGES, CAN BE USED IN QUALITATIVE STUDIES

AS AN EXAMPLE OF A QUANTITATIVE VIEW, THESE DIAGRAMS SHOW THE EVOLUTION IN THE NUMBER OF UNIX FACILITIES OVER KEY RELEASES

