

---

## **Finding Aid to the Berkeley Software Distribution Records, , bulk 1974-2005**

Finding Aid written by Josh Schneider

The Bancroft Library

University of California, Berkeley

Berkeley, California, 94720-6000

Phone: (510) 642-2933

Fax: (510) 642-7589

Email: [uarchive@library.berkeley.edu](mailto:uarchive@library.berkeley.edu)

URL: <http://www.lib.berkeley.edu/BANC/UARC>

© 2007

The Regents of the University of California. All rights reserved.

---

## Finding Aid to the Berkeley Software Distribution Records, , bulk 1974-2005

### Collection Number: CU-551

University Archives, The Bancroft Library

University of California, Berkeley  
Berkeley, California

Finding Aid Written By:

Josh Schneider

Date Completed:

March 2007

© 2007 The Regents of the University of California. All rights reserved.

---

### Collection Summary

**Collection Title:** Berkeley Software Distribution records

**Date (bulk):** bulk 1974-2005

**Collection Number:** CU-551

**Creators :** University of California, Berkeley. Computer Systems Research Group.McKusick, Marshall Kirk.

**Extent:** Number of containers: 10 cartonsLinear feet: 12.5

**Repository:** The Bancroft Library

University of California, Berkeley

Berkeley, California, 94720-6000

Phone: (510) 642-2933

Fax: (510) 642-7589

Email: [uarchive@library.berkeley.edu](mailto:uarchive@library.berkeley.edu)

URL: <http://www.lib.berkeley.edu/BANC/UARC>

**Abstract:** The Berkeley Software Distribution records, 1974-2005, comprise technical manuals, drafts, and notes pertaining to the Berkeley Software Distribution (BSD) operating system, a UNIX derivative developed at the University of California, Berkeley, from 1974-1995. A limited number of inscribed published materials are included, as are a vast quantity of magnetic data reels and CD-ROMs containing complete distributions of the operating system from various stages in its development.

**Languages Represented:** Collection materials are in English

**Physical Location:** Many of the Bancroft Library collections are stored offsite and advance notice may be required for use. For current information on the location of these materials, please consult the Library's online catalog.

### Access

Collection is open for research.

### Publication Rights

All requests to reproduce, publish, quote from or otherwise use collection materials must be submitted in writing to the Head of Public Services, The Bancroft Library, University of California, Berkeley, 94270-6000. Consent is given on behalf of the University Archives as the owner of the physical items and is not intended to include or imply permission from the copyright owner. Such permission must be obtained from the copyright owner. See:

<http://bancroft.berkeley.edu/reference/permissions.html>. Restrictions also apply to digital representations of the original materials. Use of digital files is restricted to research and educational purposes.

### Preferred Citation

[Identification of item], Berkeley Software Distribution Records, CU-551, The Bancroft Library, University of California, Berkeley.

### Alternate Forms Available

There are no alternate forms of this collection.

### Related Collections

---

Records of the Department of Electrical Engineering and Computer Science. (CU-39.3)

### **Indexing Terms**

The following terms have been used to index the description of this collection in the library's online public access catalog.

Berkeley BSD (Computer file)

FreeBSD

Haley, Charles B

Jolitz, William Frederick

Joy, Bill, 1954-

McKusick, Marshall Kirk

OpenBSD (Electronic resource)

Open source software--Law and legislation--United States

Quarterman, John S., 1954-

University of California, Berkeley.--Computer Systems Research Group

UNIX (Computer File)

### **Acquisition Information**

The Berkeley Software Distribution Records were given to the Bancroft Library by Marshall Kirk McKusick on October 27, 2005.

### **Accruals**

No additions are expected.

### **System of Arrangement**

Arranged to the container level.

### **Processing Information**

Processed by Josh Schneider in 2006.

### **Organizational History**

AT&T's Bell Labs began development on the UNIX operating system in 1969. In 1973 an early release was distributed free-of-charge to a number of educational and research institutions, including UC Berkeley. Berkeley Software Distribution (BSD) began as a UNIX derivative, created by researchers and students at the University of California, Berkeley, as supplements to the UNIX operating system developed at AT&T's Bell Labs.

Between 1977-1980, UC Berkeley released four software distributions. While the first two releases (known as 1BSD and 2BSD) contained mostly additions to AT&T's UNIX architecture, the next release, 3BSD was a full-fledged operating system, although it still depended heavily on AT&T's proprietary UNIX source code.

In 1980, based on the success of the 3BSD operating system, the Defense Advanced Research Projects Agency (DARPA) agreed to provide UC Berkeley with funding to development a standard UNIX platform for future DARPA research. The Computer Systems Research Group (CSRG) was formed to lend greater organization to the existing effort. From 1980-1992, a number of major software distributions were released by the CSRG, including 4BSD, 4.1BSD, and 4.2BSD, as well as Net/1 and Net/2.

Over time, less and less of the operating system depended upon the original AT&T source code. By the release of Net/2 in 1991, CSRG developers believed that it was no longer necessary for users of their operating system to also buy UNIX licenses from AT&T, which had been a requirement in earlier releases. AT&T disagreed, and in 1992 (the same year BSD was ported to the Intel 80386 architecture) they sued BSDi, a corporation founded by several former members of CSRG which had distributed, sold licenses to, and provided commercially support for a version of the BSD operating system. AT&T claimed BSDi's distribution included proprietary code and trade secrets. Soon after, AT&T filed a second suit, against the University of California. Following Novell's purchase of the AT&T subsidized laboratory that specialized in UNIX in 1993, the suit was settled in 1994. As part of the settlement, two forms of 4.4BSD were released in June of that year: the freely distributable 4.4BSD-Lite containing no AT&T source code, and 4.4BSD-Encumbered, available only to those who had purchased AT&T licenses.

In 1995, following the release of 4.4BSD-Lite Release 2, the Computer Systems Research Group was dissolved, ending development of BSD at UC Berkeley. Although official university development halted in 1995, a number of unaffiliated user groups around the world continued to develop BSD code under a variety of projects, including FreeBSD, NetBSD, and OpenBSD.

- 
- 1969 AT&T's Bell Labs begins to develop the UNIX operating system under the direction of Dennis Ritchie and Ken Thompson.
  - 1973 Bell Labs distributes earliest version of UNIX operating system along with the source code. It is free to academic and research institutions.
  - 1974 Under the direction of Professor Bob Fabry, UC Berkeley orders and installs Version 4 UNIX on its first UNIX-ready computer system, a PDP-11/45.
  - 1977 Graduate Student Bill Joy assembles and distributes tapes containing the first Berkeley Software Distribution (1BSD), an add-on to Version 6 UNIX.
  - 1978 Second Berkeley Software Distribution (2BSD) is released.  
First VAX system capable of running the UNIX 32/V operating system is installed at UC Berkeley.
  - 1979 Third Berkeley Software Distribution (3BSD) is released. Although it owes much to the initial port of UNIX to the VAX architecture, UNIX/32V, it is the first complete BSD operating system developed and distributed by the University of California Berkeley.  
AT&T begins to sell UNIX commercially  
UC Berkeley becomes new center of non-commercial UNIX research.
  - 1980 Success of 3BSD prompts Defense Advanced Research Projects Agency (DARPA) to provide UC Berkeley with funding for the development of a standard UNIX platform for future DARPA research.  
Bob Fabry founds the Computer Systems Research Group (CSRG) at UC Berkeley.  
Fourth Berkeley Software Distribution (4BSD), containing numerous improvements to the 3BSD operating system, is released by CSRG in October.
  - 1981 4.1BSD is released in June.
  - 1982 Bill Joy leaves CSRG to co-found Sun Microsystems.  
BSD daemon mascot, a creation of Marshall Kirk Mckusick, first appears on covers of printed materials distributed by USENIX.
  - 1983 4.2BSD released in August. It contains a modified version of BBN's preliminary TCP/IP implementation, as well as the new Berkeley Fast File System created by Marshall Kirk McKusick.
  - 1986 4.3BSD released in June. Following release, a decision is made to move away from VAX platform.
  - 1989 Networking Release 1 (Net/1) is released. It is the first UC Berkeley-developed operating system that does not require users to obtain a separate license from AT&T.
  - 1991 Networking Release 2 (Net/2) is released following an eighteen month effort led by BSD developers Keith Bostic, Mike Karels, and Marshall Kirk Mckusick to replace all AT&T elements of the BSD operating system, which would allow the entire system to be freely redistributable. All but 6 files are free of AT&T code at time of release.
  - 1992 BSD is ported to the Intel 80386 architecture.  
AT&T sues BSDI, a group which distributes a commercially supported version of BSD, claiming BSDI's distribution includes proprietary code and trade secrets.  
AT&T sues the University of California, Berkeley.
  - 1993 Novell purchases the AT&T subsidiary lab specializing in UNIX.
  - 1994 University reaches settlement with Novell.  
4.4BSD released in June in two forms, the freely distributable 4.4BSD-Lite containing no AT&T source, and 4.4BSD-Encumbered, available only to those who have purchased AT&T licenses.
  - 1995 4.4BSD-Lite Release 2 marks final release from UC Berkeley.  
Computer Systems Research Group dissolves, ending development of BSD at UC Berkeley.  
Unaffiliated user groups continue to develop BSD code under a variety of projects, including FreeBSD, NetBSD, and OpenBSD.

**Scope and Content of Collection**

The Berkeley Software Distribution records, 1974-2005, comprise technical manuals, drafts, and notes pertaining to the Berkeley Software Distribution (BSD) operating system, a UNIX derivative developed at the University of California, Berkeley, from 1974-1995. A limited number of inscribed published materials are included, as are a vast quantity of magnetic data reels and CD-ROMs containing complete distributions of the operating system from various stages in its development.

Many of the materials in this collection derive from a relatively early period in the history of computer software research and development in the San Francisco Bay Area and at the University of California, Berkeley, in particular. The BSD project at the University of California, Berkeley, produced a groundbreaking operating system, whose longevity and list of descendents underscore its many innovative technological achievements. As a product of cooperation between the University of California, Berkeley, and AT&T, BSD served as a testing ground for the legal implications of

---

university/corporate relationships in computer software development.

---

Series 1 **Distribution materials 1974-1994**

**Physical Description:** Carton 1-4

**Arrangement**

Arranged hierarchically by distribution. Further arranged chronologically.

**Scope and Content Note**

This series comprises the bulk of print materials in the collection. It consists mainly of research data, printouts, and technical reports documenting the development of the Berkeley Software Distribution operating system at the University of California, Berkeley from 1974-1994.

---

Subseries 1 **4.1 BSD 1974-1981**

**Physical Description:** Carton 1

**Arrangement**

Arranged hierarchically.

---

Subseries 2 **4.2 BSD 1982-1985**

**Physical Description:** Carton 2

**Arrangement**

Arranged hierarchically.

---

Subseries 3 **4.3 BSD 1986-1990**

**Physical Description:** Carton 3

**Arrangement**

Arranged hierarchically.

---

Subseries 4 **4.4 BSD 1988-1994**

**Physical Description:** Carton 4

**Arrangement**

Arranged hierarchically.

---

Series 2 **BSD manual drafts and miscellaneous files 1985-1994**

**Physical Description:** Carton 5

**Arrangement**

Arranged hierarchically. Further arranged chronologically.

**Scope and Content Note**

This series includes drafts of BSD programming/operating manuals in various states of completion, as well as miscellaneous files covering a limited range of topics.

---

**Series 3 Published print materials 1989-2005**

**Physical Description:** Carton 6

**Arrangement**

Arranged chronologically.

**Scope and Content Note**

This series includes published BSD programming/operating manuals inscribed by their respective authors.

**Series 4 Non-print materials Circa 1980-2000**

**Physical Description:** Carton 7-10

**Arrangement**

Arranged as received.