CHM

Guide to the Frank da Cruz Kermit records

Creator: Francis da Cruz
Dates: 1968-2011, bulk 1977-1988
Extent: 32.64 linear feet, 21 record cartons, 5 manuscript boxes, 1 newspaper box
Collection number: X6335.2012
Catalog number: 102721894
Collection processed by: Jack Doran, December, 2019
Finding aid prepared by: Jack Doran and Sara Chabino Lott
Sponsor: Processing of this collection was made possible through generous funding from the National Archives' National Historical Publications & Records Commission: Access to Historical Records grant.

Abstract

The Frank da Cruz Kermit records consist of organizational and administrative materials related to Columbia University's Kermit project, documents that provide a historical context to the project, Kermit books and manuals published by Frank da Cruz and his colleagues, press and publicity concerning Kermit, Kermit software, and standards related to Kermit or the general development of the character and data-set standards fields.

Administrative Information

Access Restrictions

The collection is open for research.

Publication Rights

Museum's collection must be obtained jointly from both the copyright holder (if applicable) and the Computer History Museum as owner of the material.

Languages

Collection is predominantly in English, but there are some materials in Chinese, Finnish, French, German, Japanese, Portuguese, Russian, and Swedish.

Preferred Citation

[Identification of Item], [Date], Frank da Cruz Kermit records, Lot X6335.2012, Box [#], Folder [#], Catalog [#], Computer History Museum.

Immediate Source of Acquisition

Gift of Frank da Cruz, 2011.

Repository

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Biographical/Historical Note

Francis (Frank) da Cruz was born in Washington D. C. on November 10, 1944. Da Cruz, whose parents were both in the military, grew up in rural Virginia as well as on Army bases in Germany. He was first exposed to computer programming while a member of the US Army in the early 1960s. He began attending Columbia University in 1966 and received a BS in Sociology and later a Master's degree in Electrical Engineering and Computer Science. Da Cruz was an employee and faculty member of Columbia from 1974, when he began in the Computer Center, until his layoff in 2011.

In 1981 da Cruz began working on the 30-year project known as Kermit. Kermit is a file transfer and management protocol, and communications software tools set which was initially developed by da Cruz and Bill Catchings. Kermit was intended to facilitate the ability of Columbia's students to save their work and move those files between diverse computers on campus that used different character sets, file systems, and communications. Conversion between EBCDIC and ASCII character sets was one of the earliest functions built into Kermit. The first file transfer with Kermit occurred in 1981 and Columbia University coordinated the development of Kermit for many different computers both inside and outside of the University, and distributed the software for free. In 1986 the University officially founded the Kermit Project which took over version development and started charging a fee for commercial use. By 1988 Kermit was available on more than 300 computers and operating systems. Columbia University ceased

supporting the Kermit Project in 2011 and released it to open source. The project was named after the fictional character in The Muppet Show television series with permission from Henson Associates, Inc.

Scope and Content of the Collection

The Frank da Cruz Kermit records consist of materials related to Columbia University's 30-year Kermit project. Spanning 1968 through 2011, with the bulk of the material dated between 1977 and 1988, the collection contains subject files that provide context to the Kermit project, articles and papers published in magazines, newsletters, newspapers, and professional journals, correspondence, publicity material, books on Kermit written mostly by da Cruz and his colleagues, including some drafts and early proof material, software, including different versions and platforms, updates, and utilities, material related to character and data-set standards, user guides and course material, manuals for various terminals and modems, and guides, directories, and instructional materials related to APRANET.

Arrangement

The collection is arranged into 4 series:

> Series 1, Kermit project files, 1977-2011, bulk 1983-1988
> Series 2, Standards, 1979-2003, bulk 1983-1989
> Series 3, Manuals, 1972-2001, bulk 1977-1995
> Series 4, Networking publications, 1978-1988

Indexing Terms

Columbia University
Da Cruz, Frank, 1944-
File Transfer Protocol (Computer network protocol)
Kermit project

Separated Material

Physical objects were separated from the archival material. To view catalog records for separated material search the CHM catalog at http://www.computerhistory.org/colletions/search.

Related Collections at CHM

Kermit oral history panel, Lot X6479.2012, catalog number 102746411.
Joe Doupnik oral history, Lot X6479.2012, catalog number 102746462.

Related Collections at Other Repositories

Frank da Cruz collection, UA#0172, accession number 2010.2011.M086, University Archives, Columbia University.

Collection Contents
Series 1, Kermit project files, 1977-2011, bulk 1983-1988

This series contains files directly related to the Kermit project and maintained by da Cruz during his time at Columbia University. The first and largest subseries is "Subject file." Though much of the material in this subseries is unique, there is some subject overlap with other subseries (i.e. in the case of books vis a vis the subseries "Publications"). The subseries "Publicity" consists primarily of write ups about Kermit, its development, and capabilities, but also includes articles about Kermit and related platforms from trade journals and Columbia University publications. The subseries "Publications" consists of Kermit protocol and software books and manuals written by Frank da Cruz, Christine Gianone, and others, as well as books and manuals that discuss Kermit in some capacity. The subseries "Software" is made up of diskettes and CD-ROMs containing different versions of Kermit as well as miscellaneous updates and utilities. With the exception of the subseries "Subject file," which was artificially created, Da Cruz's original order has been maintained. This series is arranged into four subseries:

> Subseries 1.1, Subject file, 1977-2000, bulk 1983-1993
> Subseries 1.2, Publicity, 1983-2003, bulk 1983-1993
> Subseries 1.3, Publications, 1983-1998
> Subseries 1.4, Software, 1980-2002, bulk 1982-1986

Subseries, 1.1, Subject file, 1977-2000, bulk 1983-1993
This is an artificially created series consisting of materials that did not fit into any series or subseries previously established by da Cruz. Original folder titles have been maintained except in cases where they were changed for the purpose of clarity. There may be some overlap with materials found in other series of this collection. For instance, the materials collected in the folders *Books: Kermit: a file transfer protocol*… may also exist among the supplemental materials in the corresponding titled folders in Subseries 1.3, "Publications." The *Historical file* contains a unique collection of materials related to Kermit's history, and the *Soviet seminar* folders reflect the enthusiasm on the part of da Cruz and others of generating international interest in Kermit. This series is arranged alphabetically by folder title.

Subseries, 1.2, Publicity, 1983-2003, bulk 1983-1993
This subseries consists of articles and clippings about Kermit's PC and Mac capabilities, articles published in professional journals, proof material for books published by da Cruz and Christine Gianone, press releases, newsletters from Princeton and Columbia, printouts of online copy related to Kermit and its history, and Digital press catalogs and other publications related to Kermit.

Subseries, 1.3, Publications, 1983-1998
This subseries consists primarily of books and manuals about Kermit protocol and software written by both Frank da Cruz and Christine Gianone, various texts published on Kermit and the implementation of Kermit, and books and other publications that mention and/or discuss Kermit.

Subseries, 1.4, Software, 1980-2002, bulk 1982-1986

This subseries consists of various Kermit releases, updates, and utilities in various floppy sizes as well as CDROMs.

Series 2, Standards, 1979-2003, bulk 1983-1989

This series consists of books and manuals related to character and data-set standards, as well as telecommunications standards. These are significant to the development of Kermit specifically but also provide a historical collection of computational deciphering. Included is a nearly complete set of the International Telegraph and Telephone Consultative Committee (CCITT) manuals, various European Computer Manufacturers Association (ECMA) publications, and a collection of different additions of the Unicode Standard manual from 1991 to 2003. The original order has been maintained.

Series 3, Manuals, 1972-2001, bulk 1977-1995

This series consists of user guides and instructional materials collected by Frank da Cruz over the course of his career. The bulk of the series is made up of manuals for various terminals from 1972 to 1990, and then a general collection of manuals with an emphasis mainly on software and programming. There are also a number of folders containing manuals for modems as well as instructional materials for UNIX and C users. The original order has been maintained.

Series 4, Networking publications, 1978-1988

This series consists primarily of guides, directories, and instructional materials related to APRANET, but also includes a general guide written by Frank da Cruz and Christine Gianoni titled, *Understanding Data Communications Protocols and Software*. The original order has been maintained.

Catalog Number	Title	Date

<div align="center"><u>Folder List</u></div>

<div align="center">Kermit project files: Subject file</div>

	Catalog Number	Title	Date
Box 1	102796734	Apple	1983-1986
Box 2	102796759	Apple II Kermit	1990-1993
Box 2; 3	102796751	Asynchronous protocols	1977-1987
Box 7	102796811	Books : administrative records	1984-1990
Box 3	102796770	Books : Kermit : a file transfer protocol : book reviews	1985-1990
Box 6	102796806	Books : Kermit : a file transfer protocol : draft and layout	ca. 1986
Box 3	102796805	Books : Kermit : a file transfer protocol : original art	ca. 1987
Box 6	102796808	Books : Kermit : a file transfer protocol for universities	1984
Box 7	102796810	Books : miscellaneous book reviews	1990-1992
Box 2	102796762	Byte magazine articles	1983-1986
Box 3	102796772	Character sets opinion	1989
Box 5	102796827	C-Kermit	2001-2005
Box 7	102796818	C-Kermit 6.0 release	1996-1997
Box 7	102796815	Club Kermit	1986-1992
Box 7	102796812	Columbia University Center for Computing	1983; 1988-1990
Box 2	102796744	Commodore 64	1983-1984
Box 2	102796758	Computer Sciences Corporation	1991-1993
Box 6	102796823	Copy license for Kermit software	2010
Box 6	102796825	Correspondence	1986-2000

	Catalog Number	Title	Date
		Kermit project files: Subject file	
Box 2	102796755	CP/M	1990-1993
Box 3	102796765	CP/M-80	1983-1993
Box 2	102796752	CP/M-86	1983-1985
Box 3	102796771	cu20b to cunixc conversion	1988
Box 1	102796729	Cyrillic characters	1990-1991
Box 2	102796750	Data General AOS/VS	1992
Box 3	102796774	Data General AOS/VS Kermit	1990-1992
Box 2	102796748	DEC-20 Kermit	1983-1984
Box 4	102796804	DECSYSTEM-20	undated
Box 3	102796787	DECUS Japan	1987
Box 6	102796809	DECUS symposium : Anaheim, California	1984
Box 4	102796778	DECUS symposium : Switzerland	1988-1990
Box 3	102796788	Decus U.S. DECsystem Spring 1977 reports	1977
Box 3	102796786	DECUS U.S. : Nashville, TN	1987
Box 3	102796768	Digital Press reviews	1989
Box 2	102796749	Doomsday Kermit	1992
Box 2	102796747	DX protocol	1983-1988
Box 6	102796824	End of the Kermit project, The	2006-2011
Box 3	102796773	Fast-paced Kermit April 1992	1992-04
Box 1	102796742	Fortran	1983-1984
Box 2	102796763	Hands-on introduction to Kermit class	1987

	Catalog Number	Title	Date
		Kermit project files: Subject file	
Box 1	102796733	Historical file	1981-1988
Box 2	102796760	IBM Lanacs	1990
Box 1	102796738	IBM virtual machines (VMs)/Cambridge Monitor System (CMS)	1983-1986
Box 3	102796775	IEEE and ACM membership	1988-1989
Box 3	102796785	I-Kermit listserv reports	1987-1989
Box 3	102794370	Info-Kermit	ca. 1988-1993
Box 6	102796826	Internet Kermit service	2000
Box 2	102796754	ISO-8859-1	1989
Box 6	102796780	Japan Kermit talk	1988
Box 1	102796731	Kanji characters	1990-1991
Box 6	102796819	Kermit 95 1.1.17 patch	1998
Box 1	102796743	Kermit courses	1986-1987
Box 6	102796781	Kermit distribution center technical report	undated
Box 1	102796737	Kermit for PDP-11	1981-1988
Box 7	102796816	Kermit News	1995
Box 2	102796746	Kermit projects (miscellaneous)	1983-1989
Box 2	102796761	Kermit p-system	1985
Box 7	102796817	Kermit technical discussions	1988-1989
Box 2	102796757	Kermit-12	1989-1990
Box 2	102796756	Kermit-370	1989-1992
Box 6	102796779	Kermsrv	1986-1989

	Catalog Number	**Title**	**Date**
		Kermit project files: Subject file	
Box 1	102796732	Locking shift mechanism	1991
Box 3	102796767	Marketing	1986-1990
Box 3	102796769	McNamara, John	1986-1990
Box 1	102796739	Michigan Terminal System (MTS)	1983-1984
Box 7	102796813	Micro Europe conference	1986
Box 1	102796735	MSDOS	1983-1988
Box 1	102796741	Multics Programming Language One (PL/I)	1983-1984
Box 3	102796807	Muppets calendar	1981
Box 3	102796766	pro-350 Kermit	1983-1984
Box 1	102796740	Programming Language One (PL/I)/PRIME systems	1983-1989
Box 4	102796776	Soviet seminar	1983-1995
Box 2	102796764	Table of processes (top)/Unix	1987
Box 2	102796753	Telecommunication devices for the deaf	1987-1991
Box 7	102796814	Telecommunications software courses	1986-1991
Box 4	102796777	TEX and METAFONT : new directions in typesetting	1979
Box 1	102796730	Uncompleted projects	ca. 1984-1992
Box 2	102796745	University of California San Diego Pascal	1983-1984
Box 1	102796736	UNIX Kermit	1983-1985

	Catalog Number	Title	Date
Kermit project files: Publicity			
Box 8	102794346	Publicity 1	1986-1999
Box 9	102796782	Publicity 2	1984-1986; 1991-1994; 2003
Box 10	102796783	Publicity 3	1983-1997
Box 11	102796784	Publicity 4	1986-2002
Box 8	102796797	Publicity binder 1	1986-1993
Box 8	102796798	Publicity binder 2	1988-1991
Kermit project files: Publications			
Box 13	102796789	Books that discuss Kermit	1986-1998
Box 12; 13	102796790	Kermit protocol and software	1987-1997
Box 14	102794371	Other Kermit publications and articles	1983-1995
Kermit project files: Software			
Box 27	102794350	Apple II Kermit	undated
Box 27	102794348	C86 Kermit source code	undated
Box 27	102794320	CC-DOS / MS-DOS Kermit version 2.32/A	undated
Box 27	102794378	C-Kermit	1985; 1997; 2000; 2002
Box 27	102794358	C-Kermit and MS-DOS Kermit Assembler Source Code	undated
Box 27	102794347	CP/M 2.2 release 7 03/18/1986 Kermit.com bootable	undated
Box 27	102794363	CP/M-86 Kermit	undated
Box 27	102794360	CTOS Kermit	undated
Box 27	102794353	DEC Rainbox Kermit CP/M & MS-DOS	undated

	Catalog Number	**Title**	**Date**
		Kermit project files: Software	
Box 27	102794356	EasyK Version 1.10 (Kermit Made Easy)	1987
Box 27	102794365	HP 3000 Kermit	undated
Box 27	102794321	Independent Television News ACT Apricot Kermit	undated
Box 27	102794376	INTERTEC SuperBrain DOS Diskette	1980
Box 27	102794374	Ivo Welch	1984-1985
Box 27	102794355	Kaypro Kermit	undated
Box 27	102796791	Kermit 95	1996
Box 27	102796792	Kermit 95+	2000
Box 27	102796793	Kermit 95+	2002
Box 27	102794357	Kermit for ATT7300	undated
Box 27	102794361	Kermit for P/OS	undated
Box 27	102794362	Kermit from Lancaster University	undated
Box 27	102794380	Kermit HP-150	1983; 1985
Box 27	102794349	Kermit PDP-11 boot disks	undated
Box 27	102794372	Kermit-11 binaries	1986-07
Box 27	102794379	Miscellaneous Kermit diskettes	1982-1994
Box 27	102794381	Miscellaneous Kermit diskettes	1988; 1990; 1992
Box 27	102794377	Miscellaneous original Kermit diskettes	1984-1988
Box 27	102794318	MS II Pro revision 3 Kermit - MS version 2.28	undated
Box 27	102794319	MS-DOS Kermit; MS-DOS Kermit version 2.29; MS-DOS Kermit	undated

	Catalog Number	Title	Date
		Kermit project files: Software	
		version 2.29B; MS-DOS Kermit version 3.01	
Box 27	102794359	PC Format	undated
Box 27	102794351	RML Kermit	undated
Box 27	102776946	RML Kermit V 1.22	undated
Box 27	102794375	SB Kermit	1985-06-06
Box 27	102794366	VAX/VMS Kermit-32	undated
Box 27	102794354	Vector Graphics Kermit	undated
Box 27	102794352	VT180 Kermit	undated
Box 27	102794373	Windows Kermit from William S. Hall	undated
		Standards	
Box 17	102796801	Character-set standards	1979-1996
Box 17	102796796	International Telegraph and Telephone Consultative Committee (CCIT) and International Telecommunication Union (ITU-T) telecommunications standards relating to modems	1990-1997
Box 15	102796794	International Telegraph and Telephone Consultative Committee (CCITT) blue books, vols. II-VI	1989
Box 15; 16	102796795	International Telegraph and Telephone Consultative Committee (CCITT) blue books, vols. VII-VIII	1989
Box 19	102794364	Other data communications standards and collections	1980-1987
Box 17	102796803	Other Publications Related to Character Sets	1980; 1989; 1995
Box	102796799	Other standards	1987-1988
Box 18	102796800	Proprietary Data Sets	1987, 1990, 1994-1995

	Catalog Number	Title	Date
Standards			
Box 18	102796802	Unicode	1991; 1992; 1996; 2000; 2003
Manuals			
Box 20	102794343	Manuals 1	1976-1993
Box 21	102794344	Manuals 2	1977-1995
Box 25; 26	102794368	Modem manuals	1977-2001
Box 23	102794367	Terminal manuals 1	1972-1990
Box 24	102796820	Terminal manuals 2	1979-1981; 1984; 1986
Box 22	102796821	UNIX and C manuals	1988; 1999
Networking publications			
Box 22	102796822	Networking publications	1978-1985; 1988